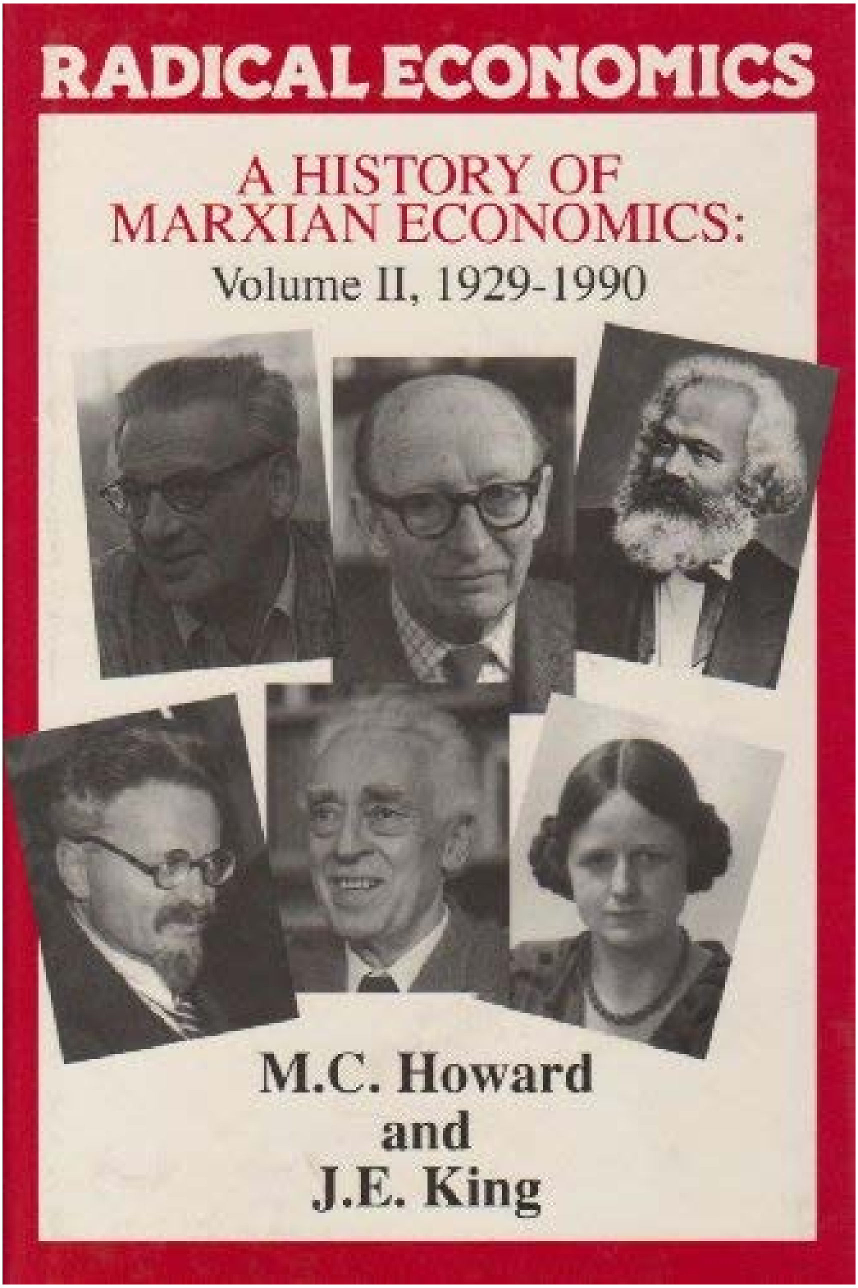
A HISTORY OF MARXIAN ECONOMICS:
VOLUME II, *1929–1990*



1992

A History of Marxian Economics

Volume II, 1929–1990

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Princeton University Press
Princeton, New Jersey

Published by
Princeton University Press
41 William Street, Princeton,
New Jersey 08540

Printed in Hong Kong

Library of Congress Cataloging-in-Publication Data
(Revised for v. 2)
Howard, Michael Charles, 1945–
A history of Marxian economics.
Includes bibliographies and indexes.
Contents: v. 1. 1883–1929 — v. 2. 1929–1990
1. Marxian economics—History. I. King, J. E.
(John Edward) II. Title.
HB97.5.H659 1992 335.4 88–39312
ISBN 0–691–04250–0 (v. 1)
ISBN 0–691–00377–7 (pbk. : v. 1)
ISBN 0–691–04303–5 (v. 2)
ISBN 0–691–00396–3 (pbk. : v. 2)

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Part V CURRENT CONTROVERSIES

Acknowledgements

We are greatly indebted to Peter Beilharz, Shaun Hargreaves Heap, John Jaworsky, Tania Korovkin, Peter Kriesler, Ramesh Kumar, Fred Lee, John Lodewijks, Bruce MacFarlane, Fadle Naqib, Brian Pollitt, John Singleton, Peter Skott and Noel Thompson for helpful suggestions and criticism. Earlier versions of several chapters have been published in academic journals: Chapter 1 in *History of Political Economy*; Chapter 16 in *Review of Political Economy*; Chapter 17 in *Review of Social Economy* and Chapter 18 in *International Journal of Social Economics*. Thanks are also due to the staff in the inter-library loans departments of the libraries of La Trobe University and the University of Waterloo, and to Keith Povey for editorial services. Colleen Knight, Karen Musselman and Ann Wendt provided efficient secretarial services and a Canadian Social Sciences and Humanities Research Council general research grant aided with research expenses.

M. C. HOWARD
J. E. KING

Introduction

In the first volume of this book, published in 1989, we considered the history of Marxian economics from the death of Karl Marx in 1883 until 1929. This second volume brings the history up to the present day. It is in many ways a very different kind of story. The works of German and Russian Marxists dominated the first volume because they virtually monopolised intellectual discussion in Marxian economics prior to 1929. Beginning in the 1930s, however, the centre of gravity of theoretical analysis began to shift westwards, so that in the post-war era the heartlands of Marxian political economy now lay in Western Europe and North America. New problems also arose in this period, and elements of Marx's economics which had earlier received scant attention were elevated to greater prominence; for this reason we deal in some of the following chapters with literature which antedates the years with which this volume is principally concerned. At the same time, Marxian political economy became less well-defined as non-Marxian ideas were used to overcome analytical deficiencies or otherwise strengthen Marxian analysis. Perhaps the most dramatic change after 1929, though, was the way in which theoretical developments in Marxian economics became detached from successful revolutionary practice. Early Bolshevism was unique in the sense that those who made a revolution in the name of Marx were frequently theorists of the highest calibre; this combination has not recurred.

This, however, is not how matters appeared in 1929, which was a year of considerable promise for Marxism. In the East, Stalin secured the seizure of power in 1917 by carrying through a 'revolution from above' which created a new mode of production, rapidly accelerated economic development, and gave birth to a new orthodoxy. In the West, the onset of the Great Depression promised both the economic collapse of capitalism and the ending of Soviet isolation. If practice and experience were the measures of a theory's worth, Marxists could take heart from events while liberals might rightly have feared that their social and intellectual worlds were shattering. But these appearances proved illusory. Stalinist Marxism, which is outlined in Chapter 2, was theoretically weak and, according to the Marxian critics reviewed in Chapter 3, either a guise for a new exploitative order or a social formation that was socialist only in potential and already showed signs of degeneration. The post-war years have confirmed that these views were essentially correct, but already in the 1930s there were clear signs that Soviet Marxism was pathological. It is something of a paradox, though, that Marxian theorists themselves led the way in documenting this phenomenon; conservatives and liberals have been much stronger on condemnation than analysis. On the other hand, contemporary Marxian explanations of the Great Depression, which are outlined in Chapter 1, proved to be disappointing; although they were sometimes insightful, rather little progress was made in comprehending the economics of capitalist crisis. Despite the fact that Marxian economists were better-equipped than mainstream theorists to deal with crisis theory, it was from the ranks of the latter that the most notable intellectual development occurred: namely, Keynes's *General Theory*.

The failure of Stalinism should not occasion great surprise. Marx's ideas were never meant to serve as an ideology of modernisation, and his own account of the transformation brought about by industrialisation virtually precludes the possibility that Marxism could be adapted to the task while retaining its integrity. The deficiencies in Marxian work on the Great Depression are more difficult to explain, but probably result in part from hostility to subjectivist theory. While this hostility is to a large extent rationally founded, it did create difficulties in analysing realisation problems, which must involve an insufficiency of demand and thus reflect expenditure *decisions*. It is true that, after 1917, Marxists of various shades did become more aware of the 'subjective factor', but in the 1930s theorists limited their concerns to its role in the superstructure and in revolutionary politics, and did not qualify their objectivism in economic analysis. It was only in the post-war years that Marxian economists became more aware of the importance of treating economic phenomena as the result of actions which may not be fully determined by structure; and only then did they come to recognise that, even if economic behaviour is structurally determined, it is nevertheless important to have a disaggregated description of the mechanisms through which it takes place.

Part II of this book outlines the most significant innovation, the incorporation of Keynesian theory into Marxism. Chapter 4 reviews the ways in which Marxian economists believed that capitalism had changed in the post-war years, while Chapter 5 considers the complex relationship between Keynes and Marx. Both chapters provide the background for understanding how the principle of effective demand has contributed to Marxian economists' understanding of the 'long boom' in Western capitalism. Two of the three principal accounts – the theory of monopoly capital outlined in Chapter 6, and the analysis of the arms economy in Chapter 8 – involve ideas which are recognisably Keynesian. The third theory, based on

Marx's treatment of the falling rate of profit, is very much a fundamentalist reaction to any form of Keynesian revisionism, and maintains that whatever is valid in the theories of monopoly capital and the arms economy is best understood in terms of the production of surplus value rather than its realisation, which is a secondary issue to which Keynesian ideas are necessarily limited. There are important elements of truth in this claim, but grounding it in Marx's analysis of the falling rate of profit is a grave weakness. In the 1890s Tugan-Baranovsky showed that Marx's law was really no law at all; this has been repeatedly confirmed over the last 60 years, as Chapter 7 documents. To reassert in the face of this the relevance of the falling rate of profit, as analysed by Marx, has done much damage to the intellectual credentials of Marxian political economy.

At the same time as they analysed the 'long boom', Marxian economists tried to explain why capitalist dynamism had not extended to the Third World. Chapters 9 and 10 of Part III provide an account of theories of underdevelopment, in which it was argued that (contrary to the view held by most Marxists before the Second World War) the very nature of the world economy precluded autonomous development in the periphery. Undoubtedly much support for the new position derived from the fact that revolutions led by Marxists occurred in backward countries like Russia and China; the theory of underdevelopment seemed able to explain this, while earlier forms of Marxism could not. Indeed, some critics of Marxism saw this as evidence that classical Marxism was fallacious. But this was incorrect. Prior to the First World War, Marxists had argued that socialism and backwardness were incompatible, and experience has borne this out very well. In addition, although early Marxists did not in general recognise the possibility that Marxism itself might become an ideology of a new class society, the very structure of their theory allowed for this eventuality, and many Marxists quickly accepted that it had actually occurred in Soviet Russia after 1917. A similar reaction occurred in the late 1970s in relation to the theory of underdevelopment, which we discuss in Chapter 11. In this context, too, there was a 'return to Marx', but the resulting criticism of the neo-Marxian theory of underdevelopment produced some of the very best work in the period under review, and could in no way be dismissed as obscurantism.

Nevertheless, Chapters 9, 10 and 11 do indicate that a dramatic change has taken place in the nature of Marxian political economy, since successful revolutionary action and its theoretical comprehension have become separated. What Leszek Kolakowski writes of Mao Tse Tung is in fact true of the economic ideas of Third World revolutionaries in general: they have been 'extremely primitive and clumsy, sometimes even childish; in comparison, even Stalin gives the impression of a powerful theorist'.[1] Many Western Marxists have agreed – though rarely explicitly – and have in effect repudiated Marx's eleventh thesis on Feuerbach:[2] that is, their concern has been less to change the world than to understand it. The great expansion of universities in Western Europe and North America during the 1960s greatly facilitated this trend, for it allowed the institutionalisation of theoretical Marxism outside socialist parties and brought into being a 'Left Academy' substantially isolated from political activity. Whatever the implications for Marx's theory of praxis, there was the beneficial consequence of allowing Marxism to retain intellectual credibility, rather than succumbing wholly to the stultifying dictates of practice.

Sometimes the results were quite unexpected. They certainly did not conform to the views of those extreme anti-Marxists who saw only a fifth column of academic bigotry. Their error became most evident in the debates on value theory in the 1960s and 1970s, which are discussed in Part IV: it was precisely Marxians who dominated what has become the single most important critique of Marx's formal economic theory. However, by coupling this with an attack on traditional neoclassical economics they were able also to argue that only a materialist reconstruction of political economy allowed the truths of Marxism to be preserved and integrated with those of Keynes. Mainstream theorists were put on the defensive and, although they fought back with some success, neoclassical theory was modified in the process. Moreover, the controversies showed that some convergence between Marxian economics and neoclassical theory could occur. Marxian political economy had clearly come of age in terms of methodological rigour, and this allowed substantial agreement about what was invalid both in Marx's own economics and in early neoclassical theory, even if that agreement did not extend to modern versions of these paradigms. This may be regarded as a general trend, since increasing rigour and a convergence with non-Marxian economics is also manifest in the issues discussed in Part II and in Chapter 11.

'Rational choice Marxism', which forms the subject of Chapter 17, is an extreme version of these tendencies, where the tools of analytical philosophy and neoclassical economics are used to treat established issues of Marxian political economy. Many of the claims made by the rational choice Marxists are exaggerated, but new light has been shed on a host of issues which concern both Marxians and liberals: the nature of rationality, the limitations of structuralism, the meaning of exploitation, and the means through which economic theory might advance. All these matters are however contentious, as are the other two subjects treated in the final part of this book: the causes of slowdown in the growth of advanced capitalist economies since the early 1970s, and the feasibility of socialist economic organisation. Marxian analyses of the 'second slump' are considered in Chapter 16, and the economics of post-capitalist society in Chapter 18. In both cases the teleological and optimistic strands evident in earlier Marxism have succumbed to a more analytical and robust hard-headedness, as can be seen by comparing discussions of these issues over time. The relative sophistication of some of the writers dealt with in Chapter 16 may be set favourably against the work of their predecessors who analysed the Great Depression. In addition, the complex problems which Marxian economists now accept as necessarily involved in organising a socialist economy represent a sharp contrast with both the unworldly confidence of many Bolsheviks in 1917 and the unimaginative authoritarianism of the Stalinists.

Notes

1. L. Kolakowski, *Main Currents of Marxism, Volume III. The Breakdown* (Oxford: Clarendon Press, 1978), p. 494.
2. T. B. Bottomore and M. Rubel (eds), *Karl Marx: Selected Writings in Sociology and Social Philosophy* (Harmondsworth: Penguin, 1963), p. 84.

Part I

The Great Depression and Stalinism

1
Marxian Economics and the Great Depression

I The Last Crisis of Capitalism?

The Great Depression was by far the most severe economic crisis in the history of capitalism. In the United States real GNP fell by 9.9 per cent in 1930, a further 7.7 per cent in 1931, and by 14.8 per cent in 1932. In the latter year industrial production in both Germany and the US was no less than 47 per cent below its 1929 level (for the other capitalist powers the collapse was less complete, but nevertheless severe).[1] Marxian economists asked two questions about this cataclysm. What did it mean for the future of the capitalist system and the prospects for socialism? And how could it be explained consistently with Marx's theory of crisis? Neither question was simple. Marx's theory of capitalist crisis was nowhere well worked out, nor, indeed, even organised systematically, while the political history of the 1930s involved novel developments. The most notable phenomena were the success of fascism in Germany, the New Deal in the United States and the growth of state intervention elsewhere. They raised once again the question of the state's role in modern capitalism and the basis of mass support for reaction or reform rather than revolution.

There was no agreement among Marxian theorists concerning the nature of the crisis. Initially, at least, German Social Democratic economists found little to be excited about. The Great Depression was 'neither Young-crisis nor rationalisation-crisis, nor total breakdown of the capitalist system nor herald of the world revolution', Fritz Naphtali wrote in 1930, 'but *typical crisis of the capitalist system with historical peculiarities*, as are revealed by every crisis'.[2] In the following year Karl Kautsky attacked radical elements in the German SPD (Social Democratic Party) who argued that only socialism could end the crisis: 'This view reminds me of people who, in a cool wet summer, assume that it will never get warm and that a new ice age is beginning.'[3] As with all previous crises, a recovery was inevitable; it would increase the economic and political strength of the working class sufficiently to ensure that the current crisis would be the last of its kind. 'We have every reason to expect', Kautsky concluded, 'that the coming prosperity will introduce an era of lasting well-being, lasting security and rapidly progressing adjustment of the production process to the needs of the working class, an era which we must characterise as the proletarian revolution.'[4] Instead fascism triumphed in Germany, while elsewhere recovery was slow and incomplete, but neither Kautsky nor the SPD's leading economic theoretician, Rudolf Hilferding, appear to have revised their remarkably complacent interpretation of the depression.[5]

Most Marxists, however, agreed with Friedrich Pollock of the Frankfurt Institute that the Great Depression was deeper, geographically more extensive and longer-lasting than its predecessors, even that of 1873–9, and that it therefore needed a special explanation.[6] A minority pointed to the existence of 'long waves' of capitalist development. In addition to the accepted 7–10 year trade cycle, it was suggested, there were regular fluctuations over half a century. During the long downswing, cyclical booms were weaker, and depressions stronger and more protracted, than in the upswing of the long wave. This notion originated before the First World War with the Russian Marxist Alexander Helphand (Parvus). In the 1920s it attracted the attention of both German economists such as de Wolff and Wagemann and, in the Soviet Union, the former Social Revolutionary N.D. Kondratiev, after whom the 50 year cycle has come to be named.[7] Very approximately, long upswings were identified with the periods 1851–73 and 1896–1914 (or 1920), and the corresponding downswings were located in 1826–50, 1873–95 and from 1920 onwards. A long-wave explanation of the Great Depression was advanced, somewhat tentatively, by Fritz Naphtali, and with much more confidence by the Austro-Marxist Otto Bauer, both stressing the role of falling agricultural prices in long downswings.[8] But this hypothesis received little support, Pollock, for example, dismissing long waves as 'metaphysical', and as depending upon 'unreliable generalisations' from isolated circumstances.[9]

If the crisis represented neither the downturn of a regular trade cycle nor the amplification of such a depression by the Kondratiev long wave, there seemed to be no grounds for expecting a sustained recovery in the rate of accumulation, or in output and employment. It could be argued, therefore, that capitalism was doomed, either to protracted stagnation or to imminent economic breakdown. In general the breakdown thesis in its strict sense – the assertion that profitable growth would soon become impossible, for narrowly economic reasons – was more widely supported before 1914 than thereafter, though it had been advocated with great vigour by Henryk Grossmann on the very eve of the Wall Street crash.[10] However, by the mid-1930s the official Soviet line, enunciated by Stalin at the 17th Party Congress, referred to 'a depression of a special kind', with a 'limited revival'

**Biography of
Friedrich Pollock**

Pollock was born in Freiburg in 1894, the son of a Jewish merchant. Initially he trained for a commercial career, but after 1918 he studied economics and politics at Munich, Freiburg and Frankfurt, where he wrote a dissertation on Marx's theory of money. From 1924 onwards Pollock worked with Carl Grünberg, the patron of the Frankfurt Institute, and was acting Director of the Institute in 1928–30. Pollock visited the Soviet Union in 1927 at the invitation of David Riazanov, and drew upon his field research in a major book on Soviet planning which appeared two years later. Hitler's seizure of power drove Pollock to New York with his friend Max Horkheimer and the other leading members of the Frankfurt School, whose principal economic theorist he had become. Pollock was a strong critic of economic determinism, and in his analysis of state capitalism he asserted the primacy of political and ideological influences. After 1945 he lived for a while in California before returning to Germany. He died in Switzerland in 1970.

which amounted to neither a real recovery nor a relapse into the depth of the slump. In the words of the Comintern's leading economic spokesman, Eugen Varga, the Great Depression had 'caused a profound disturbance of the entire capitalist system, initiated a new and higher stage of the general crisis of capitalism and resulted in the maturing of the objective pre-requisites for the revolutionary crisis'. The former theoretician of the Left Opposition, Evgeny Preobrazhensky, temporarily back in favour in the early 1930s, concurred: 'if it does not lead to a world war, or is not interrupted by a technological revolution, a general economic crisis under monopolism must outgrow its economic framework and become a general social crisis of the entire historical system of capitalism'. Renewed expansion in some parts of the capitalist world (for example in the United States) might be possible, but only at the expense of others (especially Britain and France).[11]

More independent Marxists took a similar line. While recognising that 'decline is not collapse', the maverick American Communist Lewis Corey nevertheless saw the Depression as proof of increasing instability and a growing tendency for stagnation, indicating a 'final, permanent crisis' for the capitalist system.

In Germany Natalie Moszkowska interpreted the increasing severity of crises as evidence of the danger of a permanent crisis, which testified to the impending downfall (*Niedergang*) of capitalism. Her compatriot, Fritz

**Biography of
Lewis Corey**

Born Louis Fraina in Italy in 1892, Lewis Corey (who adopted the name in 1926) came to the United States at the age of three. He was brought up in poverty in New York, leaving school at fourteen. Corey was active in the Socialist Party, Socialist Labor Party and Industrial Workers of the World, and was in 1919 briefly jailed for his earlier anti-war activities. He was one of the first members of the US Communist Party, but resigned in 1922 in protest against its subservience to Moscow; however, he remained a Marxist for more than a decade. Corey worked first as a clerk and proof-reader, then as a researcher and editor, as educational director for a trade union, and (in 1942–51) as professor of economics at Antioch College. Although now a liberal, and a vociferous anti-Communist, Corey was under intense pressure from McCarthyite investigators at the time of his death in 1953.

Sternberg, found three reasons for believing that recovery would be exceptionally difficult: new overseas markets were no longer available; the unprecedented impoverishment of salaried employees, civil servants and the independent middleclass had removed an important built-in stabiliser; and the sheer scale of unemployment and real wage cuts made the revival of domestic demand unusually problematical.[12]

A few Marxists went even further. Both Trotsky and the Council Communist, Paul Mattick, referred to the Depression as the 'death agony' of capitalism. 'For the first time', Mattick wrote in 1933 in the programme of the Industrial Workers of the World, 'in the final phase of capitalism surplus value no longer suffices to sustain both a sufficient wage level and the necessary accumulation.' Not only did this represent the objective economic conditions for proletarian revolution, it forced humanity to choose between 'Communism or Barbarism'. In similar vein Trotsky saw the Great Depression as a dramatic vindication of his 'conception of the epoch' inaugurated by the First World War, which signified that the further development of the productive forces in Europe was constrained by the nation-state structure of advanced capitalism. Expressing himself in the language of Lenin's *Imperialism*, he wrote:

> The life of monopolistic capitalism in our time is a chain of crises. Each crisis is a catastrophe. The need for salvation from these partial catastrophes by means of tariff walls, inflation, increase of government

spending, and debts lays the ground for additional, deeper and more widespread crises. The struggle for markets, for raw materials, for colonies makes military catastrophes unavoidable. All in all, they prepare revolutionary catastrophes . . . there is no doubt that the 'theory of collapse' has triumphed over the theory of peaceful development'.[13]

There was evidently some imprecision here. What is meant by the 'new and higher stage of the general crisis of capitalism'? Is increasing *instability* consistent with *stagnation*? What, exactly, is a 'permanent crisis'? These questions were not satisfactorily answered by any of these writers. Trotsky in particular relied on rhetoric and assertion, and failed to provide any solid economic argument to support his view that a new epoch of proletarian revolution had begun in 1917 (see Chapter 13 of volume I of this book). His secretary for much of the 1930s, Jean van Heijenoort, writes of a possible 'lack of confidence on Trotsky's part in his command of economics', an impression confirmed by Sternberg's account of his informal tutorials with Trotsky in 1934.[14]

By far the most coherent theory of stagnation came (in 1942) from the pen of Paul Sweezy. Emphasising mass underconsumption and the curtailment of investment opportunities, it owed as much to liberal theorists like J.M. Keynes and Alvin Hansen as it did to Marx,[15] while also drawing heavily on Hilferding and Lenin. Like many Marxist writers, Sweezy was more interested in qualitative than in purely quantitative economic change, and pointed to the emergence of a new stage of capitalist development. He criticised Hilferding and Lenin for mistakenly generalising, in their notion of 'finance capital', a specific, brief phase of banker dominance over industry to characterise twentieth-century capitalism as a whole (see Chapters 5 and 14 of volume I of this book). Anticipating his later collaboration with Paul Baran, Sweezy proposed the term *monopoly capital* to encapsulate the era of giant corporations, price rigidity, growing profit margins, sluggish investment and rising selling costs to offset the tendency to underconsumptionist stagnation.[16] Natalie Moszkowska's concept of *late capitalism* was quite close to this.[17]

By comparison with the European Marxists, Sweezy's treatment was 'economistic', and he paid relatively little attention to the increasing economic role of the state. For Otto Bauer, drawing heavily on contemporary German experience, the Great Depression had been the herald of a new *bureaucratically directed monopoly capitalism*. The limited industrial recovery in Europe after 1932 had been based upon expanding armaments expenditures, Bauer argued, together with rigid state control of both foreign trade and domestic price and wage formation. Defunct banks had been nationalised, and through its special employment measures the government had gained control over what had become a 'military reserve army' of the unemployed. A return to the liberal capitalism of free competition and free trade was impossible, Bauer believed, and the rise in the state's economic power was irreversible. But the new system offered only the appearance of economic planning, not the reality; it could only suppress the fundamental contradictions of the capitalist economy, and could not overcome them. A new world war was inevitable.[18]

Eugen Varga turned to Lenin's account of wartime capitalism (and implicitly to that of Bukharin) to reach a conclusion similar to Bauer's: 'The principal results of the efforts to overcome the crisis artificially (and of all capitalist economic policy during the crisis) is [*sic*] the intervention of the state in every detail of economic life in favour of the ruling classes in general, and of monopoly capital and the big agrarians in particular. Monopoly capital makes use of its control of the state machinery to effect a systematic shift of national income in its favour and to rob the state treasury in various ways and under all sorts of pretexts. "State capitalist" tendencies have grown considerably. A transition from monopoly capitalism to a "state war-monopoly capitalism", as Lenin called capitalism in the period of the First World War, is taking place to a certain extent.

Biography of Eugen Varga

Born in Budapest in 1879, Varga studied in Budapest, Berlin and Paris, joining the Hungarian Social Democratic Party in 1906. In 1918 he became Professor of Political Economy at the University of Budapest, and in the following year served as People's Commissar of Finance and then as Chairman of the Supreme Economic Council of the short-lived Hungarian Soviet republic. On its overthrow Varga fled to the Soviet Union, where he worked for the Comintern and soon became its most prominent economic spokesman. In 1927 Varga began a 20-year term as chairman of the Institute of World Economics in Moscow, and editor of its journal. A prolific author from the early 1920s onwards, he was elected to the Soviet Academy of Sciences in 1939. His unorthodox views on the post-war prospects for capitalism cost Varga his official positions in 1947 and forced a total recantation two years later. After the death of Stalin, however, Varga's rehabilitation was rapid and complete, earning him the Order of Lenin twice (in 1954 and 1959), a Stalin Prize (in 1954) and a Lenin Prize (in 1963). He died in October 1964.

'In fact the present situation of capitalism very much resembles that during the World War . . . the preparations for the next world war dominate the economic policy of all nations more and more.' *State war-monopoly capitalism* is thus distinguished by the predominance of military considerations in economic policy, and by a substantial growth in the economic power of the state.[19] Like Bauer, Varga insisted that capitalism remained profoundly contradictory.

Lewis Corey, who used the terms 'state capitalism', 'monopoly capitalism' and 'monopoly state capitalism' interchangeably,[20] denied that the system represented a new social order:

> The 'national planning' which accompanies state capitalism is not planning in any real sense, for planning depends upon abolition of the anarchy of private profit relations; it is merely piecemeal aid to capitalist industry and planned limitation of output to prevent complete breakdown and a revolt of the workers. State capitalism is an unworkable compromise between the old and the new (a negative expression of the need for a new social order) and aggravates the antagonisms of declining capitalism.

As we have seen, Trotsky, for all his other differences with both Bauer and Varga, took a similar view. Since the basic contradiction was that the productive forces had outgrown the bounds of the nation state, any solution to the crisis through state economic management was impossible. New imperialist wars were inevitable unless proletarian revolution intervened.[21]

A radically different view was expressed by Friedrich Pollock. Initially Pollock had emphasised capitalists' opposition to planning, which would convert them into rentiers and, by exposing its parasitic nature, threaten the legitimacy of their privileged position.[22] But he soon came to stress the increasing economic functions of the state, citing the Roosevelt National Industrial Recovery Act as a prime example. Neither a new world war nor complete economic breakdown could be regarded as inevitable, Pollock argued. A planned, stable capitalist economy was entirely possible, given a further growth of state regulation and a corresponding transformation of the political system. Power would be increasingly concentrated in the hands of an economic oligarchy. The middle class would lose its independence, while technological unemployment and labour market segmentation would blunt the strike weapon and destroy the proletariat's will to resist. 'What is coming to an end', Pollock concluded in 1933, 'is not capitalism but merely its liberal phase. Economically, politically and culturally, there will in the future be less and less freedom for the majority of mankind.' Parliamentary government would give way to plebiscitary dictatorship, and the burgeoning apparatus of psychological mass control would render the state apparatus independent of all classes, allowing it to assume an autonomous [*unparteiisch*] position over and above society.[23]

By 1941 Pollock was writing of a new *state capitalism* in which the market no longer controls production or distribution, and economic laws have disappeared. These functions are now vested in the state, which regulates economic life to ensure the full employment of resources using a 'pseudo-market' as one of its instruments. State capitalism 'signifies the transition from a predominantly economic to an essentially political era . . . the profit motive is superseded by the power motive' to which profit is subsidiary, and capitalists are reduced to rentiers.[24] Pollock identifies two variants of the new system. In a democratic state capitalism the state is controlled by the people, while in the totalitarian version it is the tool of a 'new ruling group' of top business management, the leading state bureaucrats (including the military) and the upper echelons of the (single) party apparatus. Pollock expects the latter to triumph. In a dystopia similar to George Orwell's *1984*, war and preparations for war are paramount, since the system cannot survive mass unemployment but must also hold back the living standards of the masses, lest increased leisure offers 'more opportunity for critical thinking, out of which a revolutionary spirit might develop'.[25] Subject to these conditions state capitalism faces no insurmountable economic barriers, for 'we are unable to discover any inherent economic forces, "economic laws" of the old or a new type, which could prevent the functioning of state capitalism . . . we may even say that under state capitalism economics as a social science has lost its object'.[26]

Closely related to this is the question of fascism. For Karl Kautsky, who never understood its appeal to big business, fascism was an irrational product of economic backwardness, suited to Italian but not to German circumstances.[27] At the other extreme Pollock saw fascism as a paradigm of the new social order, in which politics had established primacy over economics and the state had come to dominate economic life. This was the majority position in the Frankfurt School,[28] but a minority of Pollock's colleagues, notably Herbert Marcuse and Franz Neumann, took the more orthodox Marxist line that fascism was a form of capitalist dictatorship. In his influential book *Behemoth*, Neumann dismissed 'state capitalism' as a contradiction in terms, and described the contemporary German economy as *totalitarian monopoly capitalism*.[29] This conclusion, 'substantially identical' with that of Paul Sweezy on the nature of Nazi Germany and having close affinities with Hilferding's concept of *totalitarian state economy*,[30] resembled the official communist position. Trotsky's analysis was more subtle, recognising the petit-bourgeois basis of Fascism, but its conclusions were much the same. For most Marxists fascism was 'the open, terrorist dictatorship of the most reactionary, most chauvinist and most imperialist elements of finance capital', as Dimitrov told the Seventh World Congress of the Comintern.[31] In Lewis Corey's words, 'Fascism is merely the old order, only more so and without the progressive features which that order formerly possessed.'[32] The contrast with Pollock could not be more pronounced.

II The Causes of the Great Depression

Since there was so little agreement about the nature of the Great Depression, it is hardly surprising that no single theory of its causes commanded general support. Writing in 1942, Paul Sweezy distinguished two types of crisis: those resulting from the tendency for the rate of profit to decline, and those due to difficulties in the realisation of surplus value.[33] It is, however, apparent from Sweezy's presentation that there are two distinct crisis theories under each heading, making four in all. The rate of profit may decline either because of a tendency for technical progress to force up the organic composition of capital faster than the rate of exploitation, as stressed by Marx in volume III of *Capital*; or as a result of a declining rate of exploitation, due to a rate of capital accumulation fast enough to exhaust the reserve army of the unemployed and drive up wages, which Marx hints at in volumes I and III.[34] Realisation problems may arise both because of disproportionalities between the different branches of production, and in consequence of a deficiency in aggregate demand caused by underconsumption.[35] These theories are not necessarily mutually exclusive: Sweezy himself rejected the first and third versions in favour of the second (for short-term fluctuations) and the fourth (as a theory of secular stagnation). Nor, as will become apparent, were they all entirely independent of each other. But they are sufficiently distinctive for there to have been considerable controversy over their suitability as Marxist explanations of the depression, and for them to require separate discussion.

Before 1929 the first variant of the falling rate of profit argument had generally been accepted, but only rarely was it taken seriously as a theory of crisis. Some economists on the fringes of Marxism had indeed rejected the entire analysis, suggesting that capitalists would (in the absence of rising wages) adopt a technical innovation only if the rate of profit would be *raised* by so doing.[36] Among orthodox Marxian political economists, however, it was standard practice to accept Marx's analysis as a correct exposition of the consequences of technical change, without deeming it at all relevant to capitalist crises: the most extreme example of this is Rosa Luxemburg, but there are many others.[37] Hilferding did connect the falling rate of profit and the occurrence of crises, but without emphasising it (he relied to a greater extent on disproportionalities).[38] With only rare exceptions this neglect was repeated in the 1920s, and in the case of Soviet economists such as Varga it continued throughout the following decade. Richard Day's thorough survey of the contemporary Russian-language literature on the Great Depression yields just one reference to the falling rate of profit.[39]

This began to change in 1929 with the publication of Henryk Grossmann's massive text on breakdown theory. Grossmann's numerical model, based on a 1913 article by Otto Bauer, was one in which technical progress requires capitalists to increase their constant capital at a rate of 10 per cent per period and their variable capital by only 5 per cent. He assumed a constant rate of exploitation, and had little difficulty in showing that accumulation would eventually (after 35 periods) become impossible due to a shortage of the surplus value needed to finance it.[40] In his numerical example crisis breaks out when capitalist consumption falls to zero, and this occurs while the rate of profit (though declining) is still positive. For this reason it is perhaps incorrect to characterise Grossmann as a falling rate of profit theorist in the strict sense, but the mechanism underlying his analysis is identical with that of volume III of *Capital.* Grossmann was severely criticised by communists, Social Democrats and independent Marxists alike,[41] but within a few years the rising organic composition of capital began to play a prominent role in several Marxian crisis theories. First into the arena was Lewis Corey, who cited official statistics to demonstrate a sustained increase in the organic composition in the United States both in the long term (from 1849 to 1914) and in the build-up to the Great Depression: 'In 1923–29, constant capital in manufactures rose over four times as much as variable capital: 24.4% compared with 5.7%.' This could be offset by an increased rate of exploitation, Corey admitted, but only exceptionally would the rate of profit fail to decline. Between 1923 and 1931 it had, in fact, fallen from 9.2 per cent to less than zero[42] (though, as we shall see, Corey attributed part of this decline to realisation difficulties). In Britain, first John Strachey and then Maurice Dobb invoked the falling rate of profit as one element in their, somewhat eclectic, theories of crisis, while on the Continent Otto Bauer was drawing similar conclusions from the rapid post-war rationalisation of capitalist production.[43]

There was, however, no shortage of dissenters from this position. For the first time, writers within the Marxist mainstream disputed the validity of Marx's argument. Rather oddly, no one raised against Corey the obvious objection that his empirical evidence was suspect, since it related to prices rather than to labour value magnitudes. Instead the law was challenged at the theoretical level. Moszkowska pointed out that the mere fact of a fall in the rate of profit was insufficient support for the volume III analysis, since the decline might have occurred for quite different reasons (for example, as the result of realisation difficulties).[44] She also criticised Marx's conclusions on the grounds that – as Tugan-Baranovsky and Bortkiewcz had suggested – the productivity growth associated with technical progress would produce a *rising* rate of profit, unless real wages rose rapidly enough to keep the rate of exploitation unchanged. It made as much sense, she argued, to speak of a 'law of the rising rate of exploitation' as of a 'falling rate of profit'.[45] Marx himself had discussed the countervailing tendencies which operated against the tendency for the profit rate to fall. The 'cheapening of the elements of constant capital' would lower the organic composition, while a reduction in necessary labour time would raise the rate of exploitation.[46] For Sweezy and – more hesitantly – Dobb, these factors made it impossible to draw any

**Biography of
Maurice Dobb**

Dobb was born in London in 1900, into a Nonconformist family of small businessmen. Educated at Charterhouse and Pembroke College, Cambridge, he first joined the Independent Labour Party, becoming a Communist in 1922 after he had moved to the London School of Economics as a research student. Dobb remained an active and loyal (though sometimes critical) member of the Party throughout his life, serving on the editorial boards of *Labour Monthly*, *Modern Quarterly*, *Marxism Quarterly* and *Marxism Today*. He returned to Cambridge in 1924 as a lecturer and spent the rest of his life there, becoming a Fellow of Trinity College in 1948 and University Reader in Economics in 1959. Dobb was an early visitor to the Soviet Union and published two important books on the Soviet economy, together with major works on the history of economic thought, planning theory, economic history and economic development. Something of an outsider at Cambridge, Dobb was nevertheless elected Fellow of the British Academy. He died in 1976.

firm conclusions about the long-run tendency of the rate of profit, and rendered Marx's law of doubtful validity as a theory of crisis (see Chapter 7 below).[47]

A declining profit rate could be deduced, with much greater confidence, from a *fall* in the rate of exploitation due to rising real wages in conditions of prosperity. This 'overaccumulation' theory can be traced back to Marx, and was revived by Otto Bauer in 1913 (see Chapter 6 of volume I of this book). It offers a clear and plausible model of cyclical fluctuations along the following lines. Accumulation commences while there is still a substantial reserve army of the unemployed, relatively low real wages, and high rates of exploitation and of profit. Although constant capital is accumulated more rapidly than variable capital, the demand for labour power expands. The reserve army shrinks, and real wages begin to rise. Soon they outstrip the growth in the productivity of labour, depressing the rate of exploitation and lowering the profit rate. This chokes off investment and brings accumulation to a halt. Unemployment increases, real wages fall, the rate of exploitation recovers, and the rate of profit rises again, allowing the cycle to repeat itself.[48] Moszkowska had argued in these terms in her first book, though she abandoned the position in her later works.[49] Strachey cited the increase in real wages at the peak of the trade cycle as decisive evidence against underconsumptionism,[50] while both Sweezy and Dobb regarded overaccumulation as the principal element in Marxian crisis theory (without using the term).[51]

As a theoretical possibility over-accumulation was difficult to deny, but its empirical relevance was another matter. Corey and Varga cited US statistics to show that unemployment had remained high, and real wages had been stagnant, in the years leading up to 1929. Both saw this as evidence that underconsumption rather than overaccumulation lay behind the Great Depression.[52] However, before this – the most common Marxist interpretation of the slump – can be examined, it is useful to deal with the disproportionality variant of realisation theory because it sometimes became indistinguishable from a theory of underconsumption.

The anarchy of capitalist production had long been regarded by Marxists as a major cause of economic crisis. Since investments are undertaken by individual capitalists in isolation from each other, with no overall plan to guide their decisions or to render them consistent with each other, overproduction in particular sectors is almost unavoidable and is likely to spill over into other branches of industry, giving rise to general overproduction. The exact mechanism by which this comes about was never fully specified. No more than orthodox theorists did Marxian economists have a precise conception of effective demand and the multiplier process. However, they were much closer to these concepts than was pre-Keynesian orthodoxy, and the notion of disproportionality also allowed them to recognise the functional role of crises in capitalist economies. Crises have a cathartic effect, eliminating false investments and restoring the correct proportions in accordance with the 'law of value' (that is, establishing an allocation of resources such that the rate of profit tends towards equality in all industries).[53]

Elements of a disproportionality theory are found in both Otto Bauer's and Fritz Naphtali's accounts of capitalist rationalisation in the 1920s. Naphtali and Fritz Sternberg took the argument further by linking it to the growth of monopoly which, they argued, had made matters worse by encouraging overinvestment in initially profitable monopolised industries and transferring the full burden of the necessary adjustments to the competitive sector.[54] According to Friedrich Pollock, state support for ailing monopolists further weakened the system's automatic self-stabilising capacities. It introduced a form of 'guaranteed capitalism', in which the regulatory power of competition, operating through the inflicting of ruinous losses upon unsuccessful enterprises, was no longer effective. This was one of the most important reasons why the Great Depression had proved so intractable.[55] It also indicated a serious weakness in the *General Theory*, Pollock believed. Keynes's analysis of investment-goods and consumer-goods industries in aggregate led him to ignore the problems of proportionality between their various branches, and thus to misjudge the laws of disturbance of the capitalist economy.[56]

Preobrazhensky's explanation of the crisis hinged on the proposition that disproportionalities had become much more serious in the new, monopoly, stage of capitalism. Under competitive conditions resources could be moved quickly from one branch of the economy to another through the stimulus of the price mechanism, and the general level of output responded rapidly to increases in aggregate demand. In monopoly capitalism, however, resource mobility was impeded and demand fluctuations had asymmetrical effects: output fell when demand decreased, but an increase in demand raised prices rather than production. There were several reasons why investment, in particular, was slow to expand in reaction to growing demand. Monopolists held huge reserves of excess capacity, which discouraged new investment. Barriers to entry made the establishment of new enterprises more difficult. Inefficient units of production took longer to be eliminated, and the increasing weakness of a conservative and bureaucratic trade union movement reduced the incentive to innovate which was previously provided by rising wages. Hence crises were more intense, and recovery slower, than in the competitive phase of capitalist history. Even the temporary breathing-space offered by the growth of non-capitalist demand (here Preobrazhensky cites Rosa Luxemburg) was no longer available to monopoly capitalism.[57]

Since the turn of the century, however, disproportionality theory had been highly controversial among Marxian economists, as it seemed to carry revisionist implications. If crises resulted from anarchic individualism, they could presumably be overcome through the collective planning of accumulation by capitalists themselves, either privately or in association with the state. This prospect of a largely crisis-free capitalism had attracted first Eduard Bernstein and then the theorists of 'organised capitalism' after 1914, while simultaneously repelling revolutionary Marxists from Luxemburg to Lenin and Varga.[58] Somewhat inconsistently, Natalie Moszkowska raised against disproportionality explanations of the depression both the increase in private planning under monopoly capital and the effective regulatory function which continued to be exercised by the price mechanism; she even cited Hayek on the latter point. Moszkowska contrasted what she termed the old and new theories of disproportionality. The new theory stressed the imbalance between wages and profits, between consumption and saving, and hence between investment- and consumer-goods industries. 'If the old theory looks for the cause of the crisis in production, the new theory looks to distribution . . . Low wages and high profits weaken the power to consume and encourage accumulation.' For Moszkowska, disproportionality meant underconsumption.[59]

Her theory of crisis may be summarised as follows. Competition between capitalists reduces real wages, either absolutely or in relation to profits. Thus the rate of exploitation rises, making it increasingly difficult for capitalists to find sufficient consumption demand for them to realise the surplus value contained in their commodities. So long as real wages grow less rapidly than labour productivity, there is disequilibrium in the market for labour power. This gives rise to disequilibrium in commodity markets, causing a growing disproportion between production and consumption. One result is an increase in circulation costs, as capitalists try desperately to create demand through various forms of sales promotion.[60] In monopoly capitalism underconsumptionist forces are stronger as, due to the suppression of price competition, the rate of exploitation rises even if money wages remain constant.[61] Moszkowska denies that underconsumptionism entails stagnation rather than sharp fluctuations in economic activity. She argues that the necessary adjustment of production to consumption is achieved, temporarily, in each cyclical downswing, by the operation of three endogenous stabilisers: the maintenance of consumption spending by unemployed workers and non-capitalist classes; the growing importance of fixed costs, which means that productivity falls faster than income payments; and an intensification of the sales effort and a corresponding increase in wages of unproductive workers.[62]

A more sophisticated underconsumptionist theory was provided by Otto Bauer, who made explicit much of what Moszkowska's analysis had left implicit. Bauer begins with the assumption that the savings propensity of capitalists is much greater than that of the working class (which tends to zero):

> The relation between the development of mass consumption and the development of social production is thus determined by the relation between wages and profits. The slower the sum of wages and the faster the sum of profits in society grows, the slower is the growth of mass consumption and the faster the growth of the social productive apparatus.

Thus everything hinges upon the relative shares of wages and profits. If profits increase faster than wages, so that the rate of exploitation rises, saving grows more rapidly (and consumption less rapidly) than output.[63]

Bauer formalises these insights in the first-ever mathematical model of underconsumption to come from a Marxist writer. He defines accumulation as the difference between net output and consumption. If the rate of exploitation increases, accumulation will accelerate. This gives the *actual* increase in productive capacity. The increase in capacity which is *required*, however, is related to the growth in consumption by a coefficient which 'depends on the prevailing degree of development of technology', and corresponds loosely to the accelerator coefficient of Keynesian macroeconomic theory. Bauer concludes that, so long as the growth of consumption lags behind the growth of income, actual accumulation will exceed what is needed, so that 'society's constant capital grows faster than the requirement for constant capital for the production of the increase in consumption; consumption lags behind the capacity to produce'. The eventual result is a crisis of underconsumption.[64]

Communist theoreticians were inclined to repudiate such arguments on the grounds both of textual authority and political expediency. As to the first, Marx himself had denounced underconsumptionist theories of crisis as 'sheer tautology', and had pointed to the increase in real wages which commonly occurred at cyclical peaks and produced crises of overaccumulation.[65] As to the second, underconsumptionism was attacked as a counter-revolutionary heresy which encouraged the belief that crises could be overcome by reformist methods, through raising wages, without abolishing the capitalist mode of production. It was a doctrine 'adapted to the tasks of Social-Democratic practice', as one party textbook pronounced.[66] Against this, the ambiguities of Marx's own position were also recognised.[67] He shared with the underconsumptionists both the rejection of Say's Law and the belief that crises ensued when 'consumption lags behind the development of production under capitalism', and so expressed 'the contradiction between the social character of production and the capitalist form of appropriation'.[68] Thus Paul Sweezy, a non-party scholar sympathetic to the communist movement, took over Bauer's model in its entirety,[69] while Corey and Varga argued in a similar, if less elegant, way. Corey linked technical progress, the resulting increase in the organic composition of capital, growing productivity, and a chronic increase in the rate of exploitation which:

> imposes limitations upon the purchasing power and consumption of the workers. Wages always lag behind profits, and wages always fall relatively to output and profits. This measurably restricts the growth of markets, creates disproportions in the output of means of production and means of consumption and sets in motion the forces of cyclical crisis and breakdown.[70]

Varga insisted that the rising unemployment created by the increasing organic composition had led to the absolute, not merely relative, immiseration of the working class: 'The relatively declining power of consumption of capitalist society therefore also puts limits to the sale of the means of production . . . The limitedness of the power of society to consume, the proletarian situation of the masses, is the cause of all true crises of overproduction'. This was the official Soviet explanation of the Great Depression.[71]

III Conclusion

Varga was unusually single-minded; only the later Moszkowska shared his commitment to an underconsumptionism which excluded all other variants of Marxian crisis theory. Most writers combined two or more of the four approaches considered in the previous section and even Moszkowska, in her 1929 text, slid effortlessly from underconsumptionism to what we have described as 'overaccumulation', but used the term itself to denote her rather uneasy synthesis of the two analyses.[72] Bauer and Corey added a volume III-style falling rate of profit theory to their underconsumptionism, while Fritz Naphtali drew upon both the latter theory and on disproportionality. Dobb and Sweezy were equally eclectic. Only the falling rate of profit explanation was completely rejected by Sweezy, while elements of all four crisis theories are mingled in Dobb's subtle, if rather confusing, discussion.[73]

Several writers attempted an explicit synthesis. Sweezy's was probably the most coherent, adding overaccumulation as a source of short-run fluctuations to underconsumption as the root cause of secular stagnation. Preobrazhensky's contribution was also impressive, going well beyond the generally vague idea of disproportionality to formulate a rather convincing theory of underinvestment in monopoly (as compared with competitive) capitalism. At the other extreme came Strachey's baffling conclusion: 'It is of the nature of capitalism's present dilemma that consumers' demand may be *simultaneously* too low to provide a market, and too high to allow of profitable production. This is what Marx meant when he spoke of the contradictions of capitalism.'[74] It is impossible to accept the notion that effective demand may be, at one and the same time, too high *and* too low. It is, however, possible, first that demand will normally be *either* too high *or* too low; and second that the equilibrium level of demand represents a knife-edge, departure from which in either direction is self-perpetuating. Otto Bauer came closer to such a model of macroeconomic instability in his discussion of government intervention in the era of bureaucratically directed monopoly capitalism. The state could not overcome the basic contradictions of capitalism, Bauer argued. If its intervention served to raise the rate of exploitation, underconsumption would ensue, while state action which reduced the rate of exploitation would spark off a crisis by lowering the rate of profit.[75] However, Bauer made no attempt to formalise this intuition, and it would be both wrong and unnecessary to read into his work the theoretical advances of a later generation.[76]

Nevertheless, despite their differences and hesitations, Marxian economists had done rather well by comparison with neoclassical theorists, both in explaining the developments of the inter-war years in general and in accounting for the specific problem of the Great Depression in particular.[77] The reasons are not difficult to understand. Orthodox economists had no overall social theory which went beyond the cosmopolitan liberalism of the nineteenth century, so that world wars and fascism were entirely outside their paradigm. By contrast the Marxists had a much more sophisticated framework within which to understand such phenomena.

There was between the wars considerable depth and variety in orthodox non-Marxian analysis of the trade cycle.[78] But non-Marxian orthodoxy was wedded to a theory which maintained that deficiencies in effective demand were impossible. Those economists who favoured public work projects can be admired for their intuition, but prior to 1936 they had no coherent theoretical rationale for them. The analytical impediments faced by the Marxists were less serious. Crises were an integral part of their perspective, and Marx's economics provided many points of departure from which they could be explained. If anything their problem was the exact opposite to that faced by the non-Marxians: an embarrassment of riches. Hence the diversity of views which emerged.

Nonetheless, Marxist analyses of the Depression proved deficient, and the ultimate reason is similar to that applying in the case of bourgeois economics: they lacked an adequate theory of effective demand. Marx himself had both employed a neoclassical conception of demand and provided an excellent critique of it, indicating that it was not generally valid. He had also formulated a quantity-constrained conception of workers' demand for consumption goods, but he had not extended this to other categories of demand, nor had he consistently accepted any version of underconsumptionism.[79] The Marxists of the 1930s failed to overcome these defects, but the dominant strands of disproportionality and underconsumptionism indicated that they were working towards doing so. In this sense Joan Robinson was correct to conclude (in 1942) that: 'Marx, however imperfectly he worked out the details, set himself the task of discovering the laws of motion of capitalism, and if there is any hope of progress in economics at all, it must be in using academic methods to solve the problems posed by Marx.'[80] Robinson's 'academic methods' were, of course, those of Keynes.

Post-war discussion of other questions raised in this chapter is considered in Part II. The ways in which Marxian economists tried to understand the structural changes in modern capitalism are outlined in Chapter 4. Chapter 6 provides an account of the theories of monopoly capitalism and underconsumption as they were modified to explain the 'long boom' after 1945. Developments in the theory of the falling rate of profit are assessed in Chapter 7 and, finally, in Chapter 8 we analyse the Marxian literature on the significance of military expenditure. Some of these issues will reappear in Part III, as they were adapted to explain the apparent lack of capitalist development in the Third World, and again in Chapter 16, in the context of the so-called 'second slump' of the 1970s. First, however, we turn to the other major events of the 1930s which were of concern to Marxian political economy: the nature of the Soviet mode of production and the Stalinist claim that it represented genuine socialism.

Notes

1. M. Bleaney, *The Rise and Fall of Keynesian Economics* (London: Macmillan, 1986), pp. 41–52.
2. F. Naphtali, *Wirtschaftskrisis und Arbeitslosigkeit* (Berlin: Dietz, 1930), p. 23; original stress.
3. K. Kautsky, 'Um die Einheit', *Vorwärts* 11 October 1931.
4. K. Kautsky, introduction to the 3rd ed of his *The Proletarian Revolution*, published as 'Die Proletarische Revolution', *Der Kampf*, 24 (1931), pp. 292–7.
5. W. Gottschalch, *Strukturveränderungen der Gesellschaft und Politisches Handeln in der Lehre von Rudolf Hilferding* (Berlin: Drucker & Humblot, 1962), p. 196; cf. Bleaney, *Rise and Fall*, Ch. 2; A. Sturmthal, *The Tragedy of European Labour 1918–1939* (London: Gollancz, 1944), pp. 72–7; R.A. Gates, 'German Socialism and the Crisis of 1929–33', *Central European History* 7 (1974), pp. 332–59; H. James, *The German Slump: Politics and Economics 1924–36* (Oxford: Oxford University Press, 1986).
6. F. Pollock, 'Bemerkungen zur Wirtschaftskrise', *Zeitschrift für Sozialforschung* 2 (1933), pp. 324–5.
7. Naphtali, *Wirtschaftskrisis*, p. 12; Pollock, 'Bemerkungen', p. 325n; cf. E. Mandel, *Long Waves of Capitalist Development* (Cambridge: Cambridge University Press, 1980) and L. Trotsky, 'The Curve of Capitalist Development' (1923) in Trotsky, *Problems of Everyday Life* (New York: Monad Press, 1979), pp. 272–80.
8. Naphtali, *Wirtschaftskrisis*, pp. 11–13; O. Bauer, *Zwischen Zwei Weltkriegen?* (Bratislava: Eugen Prager Verlag, 1936), pp. 22–42.
9. Pollock, 'Bemerkungen', p. 325; cf. N. Moszkowska, *Zur Kritik Moderner Krisentheorien* (Prague: Michael Kacha, 1935), p. 102.
10. H. Grossmann, *Das Akkumulations- und Zusammenbruchsgesetz des Kapitalistischen Systems (Zugleich eine Krisentheorie)* (Leipzig: C.L. Hirschfeld, 1929); cf. P.M. Sweezy, *The Theory of Capitalist Development* (New York: Monthly Review Press, 1970; first published 1942), ch. XI, and F.R. Hansen, *The Breakdown of Capitalism* (London: Routledge & Kegan Paul, 1985).
11. E. Varga, *The Great Crisis and its Political Consequences: Economics and Politics* (New York: Howard Fertig, 1974; first published 1935), pp. 13, 73–4; E.A. Preobrazhensky, *The Decline of Capitalism* (Armonk, NY: M.E. Sharpe, 1985; first published in Russian in 1931), pp. 111, 117–18, 164–6.
12. L. Corey, *The Decline of American Capitalism* (London: John Lane, The Bodley Head, 1935), pp. 12, 218; Moszkowska, *Zur Kritik Moderner Krisentheorien*, pp. 101–2; F. Sternberg, *Der Niedergang des Deutschen Kapitalismus* (Berlin: Rohwolt, 1932), pp. 151–3.
13. L. Trotsky, 'The Death Agony of Capitalism and the Tasks of the Fourth International' in Trotsky, *The Transitional Programme for Socialist Revolution* (New York: Pathfinder Press, 1974), pp. 111–52; Trotsky, *The Living Thoughts of Karl Marx* (London: Cassell, 1940), p. 23; P. Mattick, 'Die Todeskrise des Kapitalismus' (1933), in K. Korsch, P. Mattick and A. Pannekoek, *Zusammenbruchstheorie des Kapitalismus oder Revolutionäres Subjekt* (Berlin: Karin Kramer Verlag, 1973), pp. 100–12; cf. A. Pannekoek, 'Die Zusammenbruchstendenz des Kapitalismus' (1934), in ibid, pp. 20–45.
14. J. van Heijenoort, *With Trotsky in Exile: from Prinkipo to Coyoacan* (Cambridge, Mass.: Harvard University Press, 1978), p. 56; F. Sternberg, 'Conversations with Trotsky', *Survey* 47 (1963), pp. 146–59. For a trenchant critique of Trotsky on this question see G. Hodgson, *Trotsky and Fatalistic*

Marxism (Nottingham: Spokesman Books, 1975), pp. 22–7 and J. Molyneux, *Leon Trotsky's Theory of Revolution* (Hassocks: Harvester, 1981), pp. 175–9.

15. Sweezy, *Theory*, pp. 214–36; cf. A.H. Hansen, 'Economic Progress and Declining Population Growth', *American Economic Review* 29, 1939, pp. 1–15.
16. Sweezy, *Theory*, pp. 269–86; cf. P.A. Baran and P.M. Sweezy, *Monopoly Capital* (Harmondsworth: Penguin, 1966), and below, Ch. 6.
17. Moszkowska, *Zur Kritik Moderner Krisentheorien*, pp. 26, 102; cf. Moszkowska, *Zur Dynamik des Spätkapitalismus* (Zurich: Verlag 'der Aufbruch', 1943), and Corey, *Decline of American Capitalism*, pp. 168–9. Similar ideas were expressed by the Soviet economist E. Preobrazhensky in 1931; see R.B. Day, *The 'Crisis' and the 'Crash': Soviet Studies of the West (1917–1939)* (London: New Left Books, 1981), pp. 213–8.
18. Bauer, *Zwischen*, pp. 47–8, 66–79.
19. Varga, *The Great Crisis*, pp. 68–9; cf. Day, *The 'Crisis' and the 'Crash'*, pp. 269–70 and C. Gannage, 'E.S. Varga and the Theory of State Monopoly Capitalism', *Review of Radical Political Economics* 12, 1980, pp 36–49.
20. Corey, *Decline of American Capitalism*, pp. 12, 95, 394.
21. L. Corey, *The Crisis of the Middle Class* (New York: Covici-Friede, 1935), p. 218; Hodgson, *Trotsky and Fatalistic Marxism*, pp. 24, 31.
22. F. Pollock, 'Die Gegenwärtige Lage des Kapitalismus und die Aussichten einer Planwirtschaftlichen Neuordnung', *Zeitschrift für Sozialforschung*, 1, 1932, p. 27.
23. Pollock, 'Bemerkungen', pp. 346–53.
24. F. Pollock, 'State Capitalism: Its Possibilities and Limitations', in A. Arato and E. Gebhardt (eds), *The Essential Frankfurt School Reader* (Oxford: Blackwell, 1978), pp. 71–94; the article was first published in 1941. See also Pollock, 'Is National Socialism a New Order?', *Studies in Philosophy and Social Science*, 9, 1941, pp. 440-55.
25. Ibid, pp. 73, 89–90.
26. Ibid, pp. 86–7; cf. Ch. 3 below and J. Burnham, *The Managerial Revolution* (New York: J. Day, 1941), Ch. 9.
27. M. Salvadori, *Karl Kautsky and the Socialist Revolution 1880–1938* (London: New Left Books, 1979), pp. 341–3.
28. M. Jay, *The Dialectical Imagination* (London: Heinemann, 1973), pp. 154–5; cf. D. Held, *Introduction to Critical Theory* (London: Hutchinson, 1980), pp. 282–95, and Hansen, *Breakdown of Capitalism*, pp. 66, 97–8.
29. F. Neumann, *Behemoth: The Structure and Practice of National Socialism* (London: Gollancz, 1942); cf. Jay, *Dialectical Imagination*, pp. 161–5 and Held, *Introduction*, pp. 52–65.
30. Sweezy, *Theory*, p. 337n; cf. ibid, p. 341, where Sweezy repudiates his earlier use of 'state capitalism' to describe the Nazi regime; Sweezy, 'The Illusion of the "Managerial Revolution"', *Science and Society*, 6, 1942, pp. 6–10; and R. Hilferding, 'State Capitalism or Totalitarian State Economy', in C. Wright Mills (ed.), *The Marxists* (Harmondsworth: Penguin, 1963), pp. 323–41; the article was first published in 1941.
31. Cited by J.M. Cammett, 'Communist Theories of Fascism 1920–1935', *Science and Society*, 31, 1967, pp. 149–63; cf. L. Trotsky, *The Struggle Against Fascism in Germany* (New York: Pathfinder, 1971) and Preobrazhensky, *Decline of Capitalism*, ch. 11.
32. Corey, *Decline*, p. 513.
33. Sweezy, *Theory*, pp. 145–6.
34. Ibid, pp. 100–6 and 209–13; and 147–55, respectively.
35. Ibid, pp. 156–62 and 162–89 respectively.

36. M. Tugan-Baranovsky, *Studien Zur Theorie und Geschichte der Handelskrisen in England* (Jena: Fischer, 1901), pp. 197-231; L. von Bortkiewicz, 'Value and Price in the Marxian System', *International Economic Papers* 2, 1952, pp. 36-51 (first published 1907). See also B. Croce, *Historical Materialism and the Economics of Karl Marx* (London: Cass, 1966), pp. 142–58 (an essay first published in 1899); see also volume I of this book, Ch. 10; and Ch. 7 below.
37. R. Luxemburg, 'The Accumulation of Capital: An Anti-Critique', in K. Tarbuck (ed.), R. Luxemburg and N. Bukharin, *Imperialism and the Accumulation of Capital* (London: Allen Lane, 1972), p. 76n; cf. K. Kautsky, 'Krisentheorien', *Die Neue Zeit*, 20, 1901–2, pp. 37–47.
38. R. Hilferding, *Finance Capital* (London: Routledge & Kegan Paul, 1980; first published 1910), pp. 257–6, and Chs 5 and 6 of volume I of this book.
39. Varga, *The Great Crisis*, p. 23; Day, *The 'Crisis' and the 'Crash'*, p. 188 (reporting the views of one B. Livshits).
40. Grossmann, *Das Akkumulations*, pp. 119–22; cf. O. Bauer, 'Die Akkumulation von Kapital', *Die Neue Zeit*, 31, 1913, pp. 831–8, 862–74, translated in *History of Political Economy*, 18, 1986, pp. 87–110. A full discussion of Grossmann's model and its reception is given in Ch. 16 of volume I of this book.
41. See respectively E. Varga, 'Akkumulation und Zusammenbruch des Kapitalismus', *Unter Dem Banner Des Marxismus*, 4, 1930, pp. 74–6; H. Bauer, 'Ein Neuer Zusammenbruchstheoretiker', *Der Kampf*, 22, 1929, pp. 270–80; and F. Sternberg, '*Der Imperialismus' und Seine Kritiker* (Berlin: Soziologische Verlags-Anstalt, 1929), pp. 26–7.
42. Corey, *Decline*, pp. 113–29.
43. J. Strachey, *The Nature of Capitalist Crisis* (London: Gollancz, 1935), pp. 324–6; M.H. Dobb, *Political Economy and Capitalism* (London: Routledge, 1937), pp. 94–9, 108–14; Bauer, *Zwischen*, pp. 55–6, 62–6.
44. Moszkowska, *Zur Kritik*, pp. 50–2.
45. Moszkowska, *Das Marxsche System: Ein Beitrag Zu Dessen Aufbau* (Berlin: Verlag Hans Robert Engelmann, 1929), pp. 118–19; Moszkowska, *Zur Kritik*, pp. 46–7; cf. Sweezy, *Theory*, pp. 100–108.
46. K. Marx, *Capital*, volume III (Moscow: Foreign Languages Publishing House, 1962), Ch. XIV.
47. Sweezy, *Theory*, pp. 100–8; Dobb, *Political Economy*, p. 112.
48. Bauer, 'Die Akkumulation', pp. 104–8 of the English translation.
49. Moszkowska, *Das Marxsche System*, pp. 128, 142–3.
50. Strachey, *Nature of Capitalist Crisis*, p. 320.
51. Sweezy, *Theory*, pp. 147–55; Dobb *Political Economy*, pp. 123–5.
52. Corey, *Decline*, pp. 74–93; Varga, *The Great Crisis*, pp. 86–98.
53. Tugan-Baranovsky, *Studien zur Theorie*, pp. 27–32; Hilferding, *Finance Capital*, pp. 257–66; cf. Ch. 10 of volume I of this book.
54. O. Bauer, *Kapitalismus und Sozialismus Nach dem Weltkrieg* (Vienna: Wiener Volksbuchhandlung, 1931) p. 199; Naphtali, *Wirtschaftskrisis*, pp. 13, 20–1; F. Sternberg, 'Die Weltwirtschaftskrisis', *Weltwirtschaftliches Archiv*, 36, 1932, p. 127.
55. Pollock, 'Die Gegenwärtige Lage', pp. 11–14, and 'Bemerkungen', pp. 329–30.
56. E. Baumann, 'Keynes' Revision der Liberalistischen Nationalökonomie', *Zeitschrift für Sozialforschung* 5, 1936, pp. 384–403 ('Baumann' is a pseudonym for Pollock and Kurt Mandelbaum).
57. Preobrazhensky, *Decline of Capitalism*, Chs 1–3 and 5 (the latter summarises a long and rather involved argument).
58. E. Bernstein, *Evolutionary Socialism: A Criticism and an Affirmation* (New York: Schocken Books, 1961); R. Luxemburg, *Reform or Revolution* (New York:

Pathfinder Press, 1970); Day, *The 'Crisis' and the 'Crash'*; Sweezy, *Theory*, pp. 156–62; see also Chs 4 and 14 of volume I of this book.
59. Moszkowska, *Das Marxsche System*, p. 159; cf. ibid, pp. 153–4, and Moszkowska, *Zur Kritik*, pp. 63–9, 87.
60. Moszkowska, *Das Marxsche System*, pp. 115–17, 129–30, 148–9, 183–4; cf. Moszkowska, *Zur Kritik*, pp. 8, 102 and Preobrazhensky, *Decline of Capitalism*, pp. 66–8, 75–6.
61. Ibid, pp. 24–5; cf. Naphtali, *Wirtschaftskrisis*, pp. 25–7.
62. Moskowska, *Zur Kritik*, pp. 99–100; cf. Corey, *Decline*, pp. 118–29.
63. Bauer, *Zwischen*, pp. 51–2.
64. Ibid, pp. 351–3.
65. Cited by Dobb, *Political Economy*, pp. 89–94 and Strachey, *Nature of Capitalist Crisis*, p. 320.
66. M. Wolfram (ed.), *Political Economy: Marxist Study Courses* (Chicago: Banner Press, 1976; first published *c.*1933), pp. 360–5.
67. Dobb, *Political Economy*, pp. 115–21.
68. Wolfram, *Political Economy*, pp. 380–2.
69. Sweezy, *Theory*, pp. 186–9.
70. Corey, *Decline*, p. 117; cf. Sternberg, 'Die Weltwirtschaftskrisis', pp. 112–18, and (at a more popular level) A. Rochester, *Rulers of America: A Study in Finance Capital* (London: Lawrence & Wishart, n.d., ? 1937), pp. 286–298.
71. E. Varga, *Two Systems: Socialist Economy and Capitalist Economy* (London: Lawrence & Wishart, 1939), p. 89; cf. Varga, *The Great Crisis*, pp. 19–23, and Day, *The 'Crisis' and the 'Crash'*.
72. Moszkowska, *Das Marxsche System*, pp. 122–3. (To increase the confusion, Grossmann also used 'overaccumulation' to summarise his theory of the falling rate of profit.)
73. For Dobb's own subsequent dissatisfaction with *Political Economy and Capitalism*, see M.H. Dobb, 'Random Biographical Notes', *Cambridge Journal of Economics*, 2, 1978, p. 119.
74. Strachey, *Nature of Capitalist Crisis*, p. 328; original stress.
75. Bauer, *Zwischen*, p. 71; cf. ibid, pp. 55-6, and Bauer, 'Die Akkumulation', pp. 104–8 of the English translation.
76. See e.g. M. Bronfenbrenner, ' "Das Kapital" for the Modern Man', *Science and Society*, 29, 1967, pp. 419–38.
77. On orthodox theories of the Depression, see G. Haberler, *Prosperity and Depression* (New York: Columbia University Press, 1941), W.E. Stoneman, *A History of the Economic Analysis of the Great Depression in America* (New York: Garland, 1979) and K. Kim, *Equilbrium Business Cycle Theory in Historical Perpective* (Cambridge: Cambridge University Press, 1988).
78. G. Barrett, 'Equilibrium Business Cycle Theory in Historical Perspective', *History of Economic Thought Society of Australias Bulletin*, 9, 1988, pp. 24–9. (We owe this reference to John Lodewijks.)
79. M.C. Howard and J.E. King, *The Political Economy of Marx* (Harlow: Longman, second edition, 1985), 2nd edn, pp. 209–11.
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2
The Political Economy of Stalin

I The Stalinist System

As the Great Depression engulfed the economies of Western capitalism, the rate of growth in the Soviet Union dramatically accelerated. Between 1928 and 1937 industrial production increased threefold, rising from less than one-third of national product to nearly one-half. It more than doubled again between 1937 and 1953, constituting close to 60 per cent of total output at the time of Stalin's death. Only through large investments was this made possible. On average, over 20 per cent of output was devoted to accumulation in each year. The consumption of workers and peasants fell sharply; it was not until the early 1950s that real wages regained their level of 1928, while peasant living standards fell even more, and took longer to recover.[1]

Accompanying the 'great leap' forward, a 'revolution from above' established a new mode of production. The grain crisis which began in late 1927 brought measures of procurement reminiscent of War Communism, and was followed after 1928 by a policy aiming to 'eliminate the kulaks as a class' and quickly to collectivise peasant agriculture.[2] This was substantially achieved by 1934, and virtually completed by the end of the 1930s. It brought with it the requisite political control over the allocation of agricultural output, so removing the constraint on the expansion of industry which had operated through much of the 1920s. Rapid industrialisation in its turn allowed a significant mechanisation of agriculture to take place during the 1930s.[3] Renationalisation of non-agricultural enterprises occurred simultaneously with collectivisation, and administrative allocation largely replaced market transactions. A series of five year plans became the guiding force for most production.

Nevertheless the 'command economy' was only imperfectly planned. In the early years especially, voluntarism and war imagery were pervasive; there were 'no fortresses . . . Bolsheviks cannot capture'.[4] Output targets were raised without regard to capacity limits, pressure for overfulfilment was intense, and 'shock tactics' were employed on specific projects. Concepts of proportionality and equilibrium were condemned as 'bourgeois prejudices', and the standards set by science were considered inappropriate on the grounds that they failed to take full account of the 'enthusiasm of the masses'.[5] Stalin justified the high tempo by the threat of imminent imperialist attack and the intensity of the class struggle on the home front. Failures to attain output forecasts were concentrated in low-priority sectors by diverting inputs into heavy industry if their outputs fell below planned targets.[6]

Social policies were moulded to facilitate economic transformation and political domination. Residues of workers' control in industry were completely eliminated, to be replaced by 'one-man management', and new legislation on work discipline was draconian. Inequality increased significantly, not only in monetary remuneration but also through the provision of special retail outlets and social services for the upper echelons of administration, the reinstatement of ranks in the armed forces, and the encouragement of traditional family relationships. The penal system lost its educative character and 'labour correction camps' (the gulag) became integral parts of the economic system – the consequence in large part of the repression of peasant resistance to collectivisation, purges of 'counter-revolutionaries', and the severe penalties governing the theft of state property. Organs of internal security swelled both in size and in powers to meet the needs of running the gulag and to ensure general surveillance of a people suffering immense deprivation.[7]

The magnitude of the repression was staggering. Between 1929 and 1937 11 000 000 peasants died as a result of *dekulakisation* and collectivisation. In the years of the 'blood purges', 1936–8, 5 000 000 people were arrested for political reasons, of whom at least 1 000 000 were shot and 2 000 000 died in prison. The decade after 1929 was one in which Stalin effectively wiped out all the 'old Bolsheviks', including many Stalinists as well as those who had constituted the various opposition groups in the 1920s. Peasants were controlled through a system of internal passports and subsisted only on the produce of their private plots, so that agrarian relations of production approximated those of serfdom. The prison camps housed more than 10 000 000 inmates at the end of the 1930s, and it would be no exaggeration to say that their conditions of life were analogous to those of slavery.[8]

The cultural diversity evident in the NEP (New Economic Policy) period did not survive it. The arts, the natural sciences and Marxism itself all became subject to the party line. The cult of Stalin was married to that of Lenin, and ultimately overshadowed it. Stalin was proclaimed the leading Marxist theoretician, universal genius and chief source of inspiration for progressive humanity.[9] Purges decimated the institutes of economic research and agencies of planning which had produced work of the very highest quality in the 1920s, beginning with the so-called 'geneticist' school who pointed to the constraints posed by past economic development, the importance of market relationships, and the costs of rapid structural change. Their opponents, the teleologists, who emphasised the transforming potential of state planning using administrative measures, were initially less severely treated, but the expression of such ideas after the relative stabilisation of the regime in the later 1930s often met with a similar fate. Mathematical economics in the Soviet Union suffered a severe setback, and even loyal ideologues like Eugen Varga could fall from favour if their work was deemed revisionist.[10]

Yet, despite all the attempts at regimentation, social and intellectual autonomy was not wholly eradicated. Much of what subsequently became orthodoxy in Marxism–Leninism originated from below, entering into state ideology only after the protagonists of rival positions sought official adjudication. This was also true for Marxian political economy, research on which never became completely barren. Even the 'blood purges' after 1936 had a 'popular' dimension, which partially escaped attempts to confine it to channels laid down by the Stalinist centre. The social, economic and cultural transformation initiated from above frequently met with genuine enthusiasm from below, often motivated by a variety of Utopian ideals.[11]

These sentiments were endorsed by Stalin's 1935 proclamation that socialism had been realised in the Soviet Union. This was reaffirmed by the new constitution a year later, which also claimed to be the 'most democratic in the world'.[12] Neither were arbitrary occurrences; the path of socialist construction, its success and its consolidation, all found expression in Stalin's theoretical work. And insofar as there was a self-consciousness of achievement, it lay here; there was no rival intellectual system which shared official conclusions, yet provided an alternative understanding of their meaning and significance.

II Stalin's Political Economy

Rather surprisingly, Stalin never claimed to have made original contributions to Marxian theory. He always presented the ideas to which he was committed as genuinely Leninist, and in need of no further innovation. Moreover, Stalin continually justified his policies after 1923 as carrying out the 'behests' of Lenin,[13] while it was precisely Stalin's commitment to the Bolshevik cause and, by implication, to his own ideas, that Lenin valued.[14] It is this fealty which accounts for the pronounced dogmatism evident in some of Stalin's writings, and his background as a professional revolutionary in the underground was no doubt conducive to establishing such a commitment.

Equally surprising, given the immense economic transformation over which Stalin presided, is that his political economy is much lighter on the 'economic' than on the 'political'. This is true even when measured by the standards of other Russian Marxists, whose economics were always intensely political compared to the work of German Marxists (see volume I of this book). In particular, Stalin's published works include virtually no discussion of the methods of central planning; criteria of investment appraisal and choice of technique; measures for dealing with uncertainty and disequilibria; or problems of information flow and the absence of rational price valuations. Many Soviet economists were, of course aware of the difficulties which arose with the command economy and were forced to adopt procedures to deal with them, but the totalitarian environment in which they worked naturally inhibited deep inquiry and open debate. Western Marxian economists like Maurice Dobb did publish valuable work on these issues, and other Marxists less sympathetic to Stalinism (as well as fiercely anti-Marxian economists) were able to highlight deep contradictions in the Stalinist mode of production. However, because these ideas had no impact within the Soviet Union until after Stalin's death, and were frequently part of a broader liberal attack on Marxism, or were the work of Stalin's Marxian opponents, we defer consideration of these matters to Chapters 3 and 18 below. In this chapter we focus only on Stalin's Marxism.

Stalin's interpretation of Leninism was neither unproblematic nor always his own creation. He borrowed extensively from others. During the years of the NEP he lent heavily on Bukharin and, even before his break with the Right in 1928, he used ideas that had originated in the analysis of the Left Opposition. His *Problems of Leninism*,[15] which more than any other work established his theoretical credentials after 1924, may have been indebted to Ksenofontov's attempt to systematise Lenin's thought.[16] Stalin was even capable of employing some of Trotsky's original insights on the causes of the Russian revolution, and attributing them to Lenin. In consequence Stalin's Marxism was highly eclectic and this, together with the complexity of Lenin's ideas (which Stalin often ignored), contributed to the belief of his defeated opponents that he used ideas only as instruments in his struggle for personal power.[17]

Nevertheless, Stalin's intellectual endeavours should not be so lightly dismissed. He valued theory for exactly the same reason as did other Marxists. It provided 'the power of orientation, and an understanding of the inner relation of surrounding events . . . it alone can help practice to realise . . . how and in which direction classes are moving'.[18] Furthermore, by the early 1920s the quality of Lenin's own thought had markedly declined, and Stalin's codification of his ideas as a whole provided a coherence which was sufficiently robust to accommodate the sharp changes in policy brought about by successive crises. For the most part Stalin's writings were lucid and displayed considerable knowledge of Lenin's works. His criticism of his rivals, including Trotsky, frequently located genuine weaknesses, which he could sometimes express with polemical skill. Even if he proved to be an intellectual dwarf compared to the theorist of permanent revolution, Stalin was certainly not the ignoramus Trotsky made him out to be.[19] While he obviously changed his policies over time, it is arguable as to whether at the theoretical level he deviated from Leninist, or even Marxian, principles as they were commonly understood, or whether the instability of his ideas was especially pronounced compared to that of Lenin himself, or to Bukharin, Zinoviev, Kamenev, and most other leading Bolsheviks. Even after his death in 1953, Stalin's interpretation of Leninism remained the foundation of Soviet ideology, despite the fact that his successors carried out a 'de-Stalinisation' in other areas.

Stalin's background as a party organiser inside Russia, isolated from the emigré centres of Western Europe, also helps to account for the relatively late emergence of a Marxism associated with his name.[20] It begins to appear as a distinct formation only in 1924, in the wake of successive defeats of the international revolution, and after the death of Lenin, which posed the issue of succession. The axis on which all else hinged was the definition of Leninism as the 'Marxism of the era of imperialism'. Stalin criticised those Bolsheviks who, in contrast, emphasised the purely Russian roots of Lenin's thought, or who considered Lenin's original contribution as the integration of the peasantry into revolutionary theory.[21] According to Stalin, Leninism was a genuine development of Marxian political economy as a whole. Owing to the recent emergence of monopoly capitalism, Stalin argued, neither Marx nor Engels had properly appreciated the transformation engendered by imperialism.[22] Only Lenin had worked out the qualifications which this made necessary in classical Marxism, and these were of relevance to the working class throughout the world, not just to the Russian proletariat.[23]

Stalin made no contribution whatsoever to resolving the ambiguities and weaknesses in Lenin's treatment of imperialism (see Ch. 13 of volume I of this book). But from his uncritical perspective Stalin did, quite reasonably, locate the core of the doctrine in the theory of uneven development applied to capitalism as a world system.[24] The resulting 'wars of redivision' meant that capitalism as a whole had become a regressive force locked in epochal crisis.[25] However, Stalin argued, precisely because of this unevenness there was no prospect of impending collapse at all points simultaneously, as Marx and Engels – writing before the imperialist stage of capitalist development – had believed probable. Capitalism could only be overthrown sequentially, as the 'weakest links' snapped. Nor would these necessarily be the most advanced countries in terms of economic development; Stalin noted that the strains and stresses of the world economy worked out in a more complex manner, but no more than Lenin did he specify in general terms what determined 'weakness'.[26]

For Stalin Russia had been the first to experience proletarian revolution because of the peculiarities in her historic development, which had concentrated the contradictions of imperialism on the Tsarist empire in the First World War.[27] It was unlikely that the next advance against capitalism could be repeated in exactly the same form. In the East the extent of imperialist penetration made a section of the colonial bourgeoisie a revolutionary force, and successful anti-imperialist revolutions, although allied with the Soviet Union and incapable of being purely bourgeois, would only come under proletarian dominance at a later stage. Prior to this, these revolutions were simply the 'reserves' of successful socialist revolution.[28] In the West, proletarian revolution was held back through the corrupting influence of super-profits on the 'aristocracy of labour', and the treachery of social democratic leaders. The forces which would ultimately radicalise the working class were at work but developing slowly, particularly in the imperialist centres.[29] All this meant, however, that for both East and West the principles of Bolshevik party organisation were essential to ensure the success of the cause of socialism.[30]

Thus Stalin used Lenin's ideas to argue for a form of Russian exceptionalism, while at the same time claiming universal relevance for Bolshevik theory. He charged Trotsky, with some justification, with failing to appreciate Lenin's conception of uneven development and inappropriately generalising Russian experience. Thus Trotsky promulgated an adventurist revolutionary strategy which failed to locate the nodes at which the contradictions of imperialism would emerge. This threatened to weaken the forces of anti-imperialism as whole, including the Soviet Union.[31] At the same time, Stalin argued, the Left Opposition had failed to recognise the strengths of the Russian revolution itself. It was precisely uneven development (in the Leninist sense) that allowed 'socialism in one country', as Lenin had realised as early as 1915 and confirmed in his last writings.

The divisions within imperialism could be used to ensure temporary peace for the Soviet Union, during which it could build socialism on its home ground.[32] This did not repudiate the ultimate need for revolution on a world scale, Stalin maintained, but it did place international revolution in proper perspective. He argued that the contradictions of capitalist encirclement could be partitioned into internal and external dimensions.[33] *Petit-bourgeois* relations within Russia posed the threat of counter-revolution, but the peculiarities of Tsarist development had endowed the country with large-scale industry in the hands of the proletarian state, allowing a largely autarkic development which could overcome the internal contradictions of backwardness, and would culminate in the 'complete' building of socialism.[34] 'Final' victory could be ensured, however, only through world revolution, which would remove the threat of military intervention by capitalist powers that threatened to roll back any domestic successes of socialism, no matter how advanced.[35] The Soviet Union could, therefore, never jettison the international proletariat, but the country's march forward was not inhibited by isolation.

Indeed, Stalin argued that the converse was true. Since the consolidation of the Soviet state had succeeded only through the support of the Western proletariat in limiting imperialist aggression, 1917 had been in effect an international revolution.[36] Moreover, it had broken the unity of the world economy, and the globe had become divided into two blocs: the forces of imperialism on the one hand, and those of anti-imperialism, headed by the Soviet Union, on the other.[37] The most assured way of expanding the latter was by demonstrating that socialism could be built successfully in the Soviet Union, as this would weaken the hold of reformist social democracy over the working class. An important corollary was that the interest of the international proletariat was identical to that of the Soviet state. According to Stalin, there was no point at which they could diverge.[38]

Thus Stalin reversed the previously understood relationship between the Russian and international revolutions, and in doing so fused Soviet nationalism (sometimes Russian nationalism) with the cause of world socialism.[39] It was not so much that he subordinated the Comintern to Soviet domestic interests – as he has been frequently charged – but that he identified these interests with those of the proletariat as a whole. And, as at virtually every other point in his argument, he provided chapter and verse from Lenin to legitimise it.

According to Stalin the building of socialism itself had to conform to two principles: the party must increase its unity,[40] and industrialisation must be rapid, autarkic and biased toward heavy industry. The vanguard role of the party was identified with the dictatorship of the proletariat (and, after the 'achievement of socialism' in 1936, with the dictatorship of the working people). Here Stalin did no more than express an axiom shared by all Bolsheviks. However, he did stress to an unusual degree the belief that isolation and backwardness continually generated 'deviations' of both Left and Right, so that purges were a continuing necessity of self-defence.[41] There were also other threats to the purity of the party and state administration. Cadres tended to become subject to bureaucratic inertia, as well as to the temptations of power which led them to abuse their positions.[42] And, in relying on bourgeois specialists, the regime made use of a potentially traitorous stratum of the old society.[43] Institutions of internal party discipline, allied with 'criticism from below' and the creation of 'red specialists' were, therefore, all essential to the building of socialism.[44]

Stalin's remarks on these problems of party politics and administration were not confined to the 1920s, when they assisted in securing the dominance of his own faction. They continued into the 1930s, and suggest some of the motivations that lay behind the great purges after 1934, which also engulfed large sections of those who had supported him over the previous decade. They are of some ideological relevance as well. In recognising an important role for 'criticism from below', Stalin was able to form a bridge with Lenin's *State and Revolution*, and his employment of popular hostility to 'big-wigs' indicates that Mao's Cultural Revolution, despite all its novel features, rested upon a well-established Stalinist practice.[45]

'Socialism in one country' was also held to require industrialisation of a specific type. Given its significance as an international emblem, and its internal social basis, Stalin maintained that the Soviet Union would not duplicate the exploitative methods used by capitalism.[46] He never provided criteria by which the health of a specifically socialist industrialisation might be assessed, but the employment of his argument against Preobrazhensky's theory of primitive socialist accumulation in the 1920s carried some force against the Left Opposition.[47] However, since Stalin repeated his argument several times after his 'left turn', more was involved than the polemical requirements of the factional fight. In particular, he was concerned to stress the need for autarkic development, in the belief that any attempt to integrate Soviet production into the world market threatened to create a condition of 'dependency' (see chapter 9 below). It was here, more than at any other point, that his economic policy differed from the views of Trotsky, who considered the extensive use of the world economy to be essential in achieving high labour productivity.[48]

The emphasis upon self-sufficiency accorded with Bukharin's strategy for socialist progress under the NEP, to which Stalin gave broad support prior to 1928.[49] Nonetheless, after 1925 he began to separate himself from Bukharin's gradualism and his bias towards the production of consumption goods, asserting instead that industrialisation must be both rapid and concentrated upon heavy industry.[50] The completion of post-war reconstruction in 1926, and the 'war scare' from 1927 onwards, reinforced these commitments.[51] But throughout this period Stalin failed to integrate his position on industrialisation with the constraints inherent in the NEP which brought about the grain crisis in 1928 and 1929. His writings reveal great confusion, for example, referring both to the peasant market for consumer goods and to heavy industry as the 'foundation' of modernisation. In discussing the importance of heavy industry, however, Stalin did show awareness of those relationships which Feldman later expressed in the mathematical model of growth published in 1928 which is now generally recognised to be a brilliant formalisation and extension of Marx's reproduction models.[52]

Feldman's two-sector model was built on very restrictive assumptions and dealt with a closed economy in which the capital stock was the principal factor limiting growth. He proved that the higher the proportion of this capital stock in department I, relative to department II, the greater would be the rate of growth of the economy as a whole. Consequently an acceleration of the growth rate required the concentration of investment in the department producing capital goods. Feldman also proved that once a desired growth rate had been achieved, it could be sustained by allocating investment between the two departments in the same proportion as the capital stock was distributed. The growth of consumption goods would then be equal to that of capital goods. An apparently paradoxical conclusion followed: an increase in the steady state growth rate of consumption requires a concentration of current investment in capital goods production.

Soviet economic development after 1928 appears to conform to Feldman's model, and to be the result of a conscious policy on the part of Stalin. Investment was concentrated in department I, and in 1952 Stalin reasserted the necessity to focus investment in heavy industry until Soviet per capita income exceeded that of Western capitalist countries.[53] Nevertheless, in the later 1920s Stalin completely failed to see that the 'applied Tuganism' inherent in any position which stressed the importance of heavy industry contradicted the underconsumptionist arguments which Bukharin used against the Left Opposition to claim instead that servicing the peasant market was the real basis for economic advance (see Chapters 9, 10 and 15 of volume I of this book). Furthermore, Feldman's model is not especially relevant for understanding the Stalinist economic system, for it assumed that relations of proportionality would be maintained. The 'high-tempo-taut planning' policies after 1928 scarcely accord with Feldman's equilibrium perspective; nor did the concentration upon the needs of defence. Feldman's justification for the priority of department I rested upon the greater growth in consumption which would occur from the initial diversion of resources into capital-goods production. Nevertheless, Feldman's model has provided enthusiasts of the Soviet Union, like Maurice Dobb, with an important argument. Coupled to his idealised presentation of the Stalinist command economy (see section III below), Dobb used it to demonstrate the superiority of socialist industrial development over that of capitalism,[54] and his analysis has proved to be exceedingly influential (see Chapters 9 and 18 below).

Soviet industrialisation also exhibited a bias in favour of capital- intensive techniques of production. This reflected the goal of 'catching up and overtaking' advanced capitalist countries, as well as the traditional Marxist belief in the superior efficiency of large-scale organisation. But Dobb again sought to humanise the issue. He argued that, in conditions where the size of the investable surplus was the binding constraint on faster economic growth, it was rational to choose techniques which maximised the surplus, and that these would tend to be more capital-intensive than those techniques which maximised current output or employment.[55] As with a concentration of investment in department I, any initial cost in terms of forgone consumption would be temporary and compensated by higher consumption later. This is true but, as Michal Kalecki pointed out, the adoption of Dobb's criterion for the choice of technique might involve, in addition, lower output and reduced employment in the early phase of the growth process; a development strategy based on unemployment and wasted resources was undesirable. Kalecki also claimed that the course of technical change narrowed the difference between the technology which maximised surplus and that which maximised employment, so that in practical terms Dobb's argument was becoming increasingly unimportant.[56]

This last point is contingent upon the exact form taken by technological change. It does not, in any case, undermine Dobb's principle of investing so as to maximise the surplus, which raised familiar problems of inter-temporal choice: lower output, consumption and employment today, higher (perhaps very much higher) output, consumption and employment in the future. In fact, so far as Soviet development was concerned, neither Dobb nor Kalecki was especially relevant. There is little evidence that the size of the investable surplus seriously inhibited Soviet growth under Stalin. Indeed, the reverse was true: investment ran ahead of the economy's capacity to absorb it, unnecessarily intensifying deprivation and generating massive inefficiencies (see Chapter 18 below). But the drive to increase the surplus did not reduce output or generate unemployment.

The 'war scare' of 1927 also engendered a modification in Stalin's views on imperialism. He departed from Bukharin's theory that post-war capitalism had stabilised, in favour of a neo-Luxemburgist position which explained Western aggressiveness in terms of the persistent need for new markets, arising from severe underconsumption. This was to remain Stalinist doctrine throughout the 1930s and, although it dovetailed with Stalin's commitments on Soviet industrialisation, at the end of the 1920s it further distanced him from the Bukharinist Right, while moving him closer to the views of the Left Opposition. However, it was mainly to Varga that he turned for theoretical elaboration as to why capitalist stabilisation was at an end (see Chapter 1 above).[57]

As to the internal destabilisation brought on by the grain crisis at home, Stalin appears to have had no inkling of its occurrence. He realised that faster industrial growth would require more marketings from agriculture but optimistically believed, like most of the Left Opposition, that these could be achieved through voluntary collectivisation on a mechanised basis over a long period of time.[58] Trotsky was undoubtedly correct in charging that Stalin had blundered into the crisis, and that his radical solution for it was purely 'empirical'.[59] It was only after he had decisively abandoned the NEP in practice that Stalin rationalised his 'revolution from above', and provided the doctrine of 'socialism in one country' with a content different from that which had prevailed in the 1920s.

Nevertheless, the form of this doctrine accorded with an invariant principle of Stalin's Marxism: he explained sharp changes not as the consequence of mistakes but as required by newly-emerging stages of development.[60] Stalin applied the principle to Lenin's intellectual development, arguing that Leninism had been fully formed as early as 1905, if not earlier; changes after this were only apparent, making manifest what had been latent as revolutionary developments passed through new stages, each the inevitable outcome of its predecessor.[61] So far as the grain crisis was concerned, Stalin maintained that it was precisely the success of the socialist advance which was responsible. Progress towards socialism under NEP had 'intensified the class struggle' as bourgeois elements made last-ditch attempts to preserve their positions.[62] Since it was precisely the function of the socialist 'superstructure' to create the 'base', the state had intervened decisively in the class struggle through a 'revolution from above'.[63] Not only were the kulaks 'liquidated as a class' but many bourgeois elements in the industrial sector were eliminated through nationalisation and the prosecution of those specialists who resorted to 'wrecking' in the face of 'advancing socialism'. Thus was born a new era in which 'socialism in one country' leapt forward on the basis of collectivised agriculture and the planned economy.

The doctrine of the 'intensifying class struggle' has been the butt of much ridicule, since it disguised major reversals in policy and was broadly applied in the repression of Stalin's opponents.[64] However, it should not have been so readily dismissed by the Trotskyists. The original formulation of the theory of permanent revolution implied that the consolidation of proletarian power, and not revolution itself, would prove most difficult in backward Russia: having overthrown the rural *ancien régime* through the dictatorship of the proletariat, the peasantry would violently resist measures necessary to its further advance (see Chapter 12 of volume I of this book). Under the NEP Trotsky modified his position, playing down the need for a confrontation between the proletariat and the peasantry and accepting that collectivisation might be achieved on a voluntary basis, provided that the policies of the Left Opposition prevailed.[65] Nowhere did he or others in the Left Opposition adequately respond to Bukharin's claim that 'super-industrialisation' would require a second revolution which could succeed only through wholesale terror.[66]

For his part Stalin did not deny that his policies now accorded with much of what the Left Opposition had favoured in the 1920s but, he explained, their position had been inappropriate to that earlier stage of development. On the other hand, Stalin argued, Bukharin and the 'Right deviation' failed to appreciate that the NEP stage had been traversed, so that their attempts to preserve past policies were equally anachronistic.[67] Stalin was therefore willing to reinstate members of the Left Opposition into the party if they recognised their errors, and he likewise accepted the recantations of the Right, provided that all this was acted out in a suitably grovelling manner.

By the mid-1930s the output of the (state-owned) industrial sector was approximately equal to that of agriculture (allowing the Soviet Union to claim the status of an 'industrial country'); the vast majority of peasants were collectivised; and private ownership of the means of production had become insignificant. The proclamation of socialism was reasonable enough, given Stalin's belief that it could be achieved in a single country (see section III below).[68] Capitalist encirclement was used to explain its problematic features. In particular, the continued existence of the state and the need for harsh repression reflected the desperate resistance of counter-revolutionary forces sustained by the remnants of 'bourgeois consciousness'. Voicing a doctrine usually associated with Mao Tse-Tung, Stalin claimed that the class struggle had not ceased with the success of 'socialism in one country', and it could not do so until the 'final' victory of socialism on a world scale.[69]

The 'complete' victory of socialism in the Soviet Union, however, put the transition to communism (in a single country) on the agenda. Stalin detected embryonic signs of its emergence in the high productivity of the Stakhanovite workers,[70] and after 1935 occasionally gave guidance on the appropriate trajectory to the higher stage of human liberation.[71] But the Nazi invasion in 1941, and the subsequent needs of post-war reconstruction, did not allow an extended discussion of the problem until the late 1940s. Much of it hinged on an issue which provoked controversy from the very beginning of Bolshevik rule: the place of the law of value under socialism. Many theorists argued that it had no role; socialism meant the end of commodity production, and therefore of value forms. This view tended to be associated with the belief that the Soviet state was unconstrained in transforming socio-economic relations. During the 1930s, when the claim that there were 'no fortresses . . . Bolsheviks cannot capture' was dominant, it received wide support.[72] In 1943, however, an unsigned article in the journal *Pod Znamenen Marxizma* argued that all this was mistaken, and that the law of value would cease to constrain economic development only with the advent of communism. Although far from profound, or even clear, this article caused something of a stir in the West. It was republished (in English) in the *American Economic Review* in the following year, and received extensive commentary.[73] Marxist interpretations varied enormously. On the one hand, Raya Dunayevskaya claimed that the acceptance of the law of value by Soviet economists indicated that a new non-socialist social order had solidified, which required ideological modification in order to legitimise the extensive inequality that prevailed.[74] On the other hand Isaac Deutscher, writing some years later, maintained that it meant the contradictions of the degenerated workers' state were maturing,[75] much as Trotsky had forecast (see Chapters 3 and 18 below).

When Stalin intervened in the Soviet debate during 1952[76] he denounced Utopian voluntarism and opted for economic gradualism. Soviet socialism, he held, was governed by objective laws – including the law of value – which could be consciously applied but not overcome within socialism. Stalin gave no guidance as to how such laws could be identified, but the fact that they were known and deliberately used was the meaning of socialist freedom, to be contrasted with the blind anarchy that prevailed under capitalism. Commodity relations (albeit non-capitalist ones) still played a part in the distribution of consumer goods, and in the relationship between state industry and the collective farms. It would be an epoch before the kolkhozes could be transformed into state enterprises and commodity relations eradicated, although the introduction of barter to replace money transactions might soon begin. As with all other measures of the new transition, this was to be introduced from above by the socialist state, and Stalin ignored the fact that the marketing targets of the collective farms and the relevant rates of 'exchange' had been fixed from the centre for the past 20 years. In general, Stalin maintained, since the Soviet Union still lagged behind advanced capitalism, substantial progress towards Communism could take place only after the Western economies had been overtaken and industry could be concentrated on the production of consumption goods. Until then, he asserted, the law of socialist accumulation held. The rate of growth of department I must exceed that of department II; otherwise 'the national economy cannot be continuously expanded'. This was obviously a garbled version of Feldman's growth equations, but was subsequently repeated in similar form by Soviet texts on political economy.[77]

In effect Stalin's position was analogous to that which he held in the early years of the NEP. There was to be no further revolutionising of economic relations; the Soviet Union would 'grow over' into the higher stage of communism, and the imperfections of socialism would 'wither away'. However, there were ominous signs that he was preparing to enforce his conservatism against radicals in the bureaucracy by a new purge, as in the later 1930s.[78] Fortunately for those who had been rash enough to take up positions contrary to Stalin's own, the great dictator died in March 1953, before he could put any such designs into practice on an extensive scale.

III Stalinism and Marxism

For over a quarter of a century the international communist movement, and fellow-travellers the world over, regarded Stalin as the supreme theorist of Marxism and the Soviet Union as the living embodiment of the socialist project. Leading Marxist economists outside the Soviet Union, such as Maurice Dobb and Ronald Meek, shared these sentiments, although in both cases they were more restrained and academic than was typical of communists during the period of Stalin's rule. Dobb never participated in the 'cult of the personality', and was in fact somewhat critical, especially of the high tempo which characterised the first five year plan.[79] His works were factually useful and generally well-received by non-communist economists. Dobb articulated the case for the command economy in terms which could be readily appreciated in the light of the Great Depression and the Second World War. What he clearly failed to do, however, was to use Marxism as a *critical* theory, and the overall picture which he presented bore little resemblance to the reality of Soviet totalitarianism.

Dobb did not deviate significantly from Stalinist orthodoxy on essential matters. In the late 1920s he echoed official views favouring Bukharin's strategy for economic development against that of Preobrazhensky, and claimed that NEP was fully in line with Leninism.[80] After the 'revolution from above', Dobb rationalised it in the same terms as Stalin, and similarly misrepresented the ideas of his opponents. What criticisms he made had frequently been voiced by Stalin himself. But the multi-faceted repression which was employed to accelerate industrialisation was either ignored or relegated to uninformative footnotes, justified by the threat of war and counter-revolutionary activity, or presented in technical-functional terms.[81] Dobb showed no sympathy for workers' control, or political democracy, and identified socialism with nationalisation and central planning.[82] The degree of inequality and priviledge was played down. In short, Dobb presented a bloodless version of events which were in fact anything but tranquil.

A genteel pro-Stalinism also characterised much of the work of Ronald Meek. However, unlike Dobb he paid much more attention to Stalin's ideas, claiming that *Economic Problems of Socialism* represented a major contribution to Marxism. Meek readily agreed that Stalin's views on the persistence of commodity relations and the law of value differed from those of Marx and Engels. It was precisely here, Meek argued, that Stalin made his contribution. The Russian revolution had succeeded in circumstances of backwardness, unimaginable in the nineteenth century. But this meant that commodity production and value relations still held sway. Stalin was commended for recognising this, and for restraining the more Utopian economists who worked to push forward at an adventurist pace.[83] That this was clearly a gross distortion of Stalin's originality was in fact apparent even in Meek's own exposition, which outlined the preceding debate on the theory of value in the Soviet Union (see section II above).

No more than Dobb did Meek deal adequately with the horrors of Stalinism, but neither did they produce the crude apologetics and blatant lies typical of the fellow-travellers. Unlike the communists, the fellow-

Biography of Ronald Meek

Ronald Meek was born in Wellington, New Zealand, in July 1917. Here, at University in the 1930s, Meek read law and economics. Beginning in 1946 he studied under Piero Sraffa for a PhD at Cambridge. In 1948 Meek moved to the University of Glasgow to take up a post in the Department of Political Economy. He remained there until his appointment to the Tyler Chair of Economics at the University of Leicester in 1963, which he held until his death in 1978. Although he left the Communist Party in 1956, Meek continued to publish extensively on many topics in Marxian political economy.

travellers' allegiance to the Soviet Union coincided with Stalin's rise to power, which they saw as the triumph of scientific social engineering over Bolshevik radicalism and class violence. They rarely claimed to be Marxists, and did not provide any economic analysis of the Soviet Union, Marxist or otherwise. For the most part they were social democrats, liberals, Christians and pacifists, who preferred to admire Soviet socialism from a distance, without commitment to their local communist parties and comfortable in their own very bourgeois condition of existence. Orchestrated by the Soviet propaganda machine, their performances rarely missed a note, and highlighted the deeply authoritarian sentiments which sometimes underpinned the values of the Enlightenment.[84]

It was precisely Stalin's opponents within Marxism who were both the most analytical and the most critical (see Chapter 3 below). Unwilling to take Stalin's theory seriously, they regarded his ideas as a ridiculous perversion of Marxism, and frequently associated them with a betrayal of the revolution's ideals. The arguments which they expressed, and the Stalinist defences, have continued to inspire the fierce controversies which have raged over the relation of Stalinism to Marxism, and the inevitable or contingent nature of Stalin's dictatorship.

There is abundant evidence available to sustain a variety of interpretations. The intellectual sophistication of Lenin, Bukharin and Trotsky can easily be contrasted with the vulgarities of Stalin; the 1920s clearly involved a much milder form of dictatorship than that of the 1930s; and Stalin's rise to dominance can be convincingly presented as resulting from the obvious mistakes of his opponents, not the least of which was their underestimation of his ambition and abilities. On the other hand, the orthodox Marxian vision of socialism had always leaned towards authoritarianism despite the libertarian elements apparent in Marx's own thought.[85] Moreover, textual exegesis can link Stalin's analysis to that of Lenin, and indeed to parallel ideas in Bukharin and Trotsky;[86] historians can identify the ruthlessness and authoritarian strands in early Bolshevism; and it is easy to argue that the problems of economic development precluded measures very different from those implemented by Stalin. The arguments can in fact be permuted to provide support for, or refutation of, very different theories of Stalinism. Lying behind the indeterminacy are methodological and substantive problems general to historical analysis, but they also include the deficiencies of Marxism itself.[87]

Practice is one possible criterion by which these issues may be resolved, especially since Stalin himself was quite prepared to be judged by results. He pointed to apparently cast-iron achievements: private ownership of the means of production had been effectively eradicated, the Soviet Union had been transformed from a agrarian to an industrial society, and the country had not only emerged victorious against the Nazi onslaught, but had simultaneously extended socialism beyond its borders.[88] Nevertheless, critics have legitimately pointed to tenacious elements of barbarism, continuing state repression, and the vast inequalities that arose (not simply persisted) after Stalin's revolution from above.[89] However, each of these claims is problematic when measured against the classical conception of socialism. Marxists had traditionally defined socialism to include what Stalin appealed to, and exclude what the critics emphasised, in support of their arguments. Soviet development, therefore, resulted in a novel social formation and neither Stalinists nor their Marxian opponents ever squarely faced the question of whether this itself did not undermine historical materialism.

Marxian critics have sometimes taken a different tack and distinguished the achievements of Stalin from his 'crimes', arguing that the latter qualified the successes.[90] But while this may make sense in terms of a liberal humanist perspective, it is not a coherent notion within Marxism itself. Insofar as Marxists have concerned themselves with ethics they have tended to minimise the importance of means and focused upon ends, and they have been only too well aware that progress comes through the negative.[91] Moreover, Stalin's terror is not easily separated from his positive accomplishments. Although the repression involved an element of randomness, and the dominance of ideology inflicted considerable damage on scientific advance,[92] both addressed real problems of economic development: the resistance of hostile forces, the appalling lack of labour discipline, the absence of a national culture, and the centrifugal tendencies within the bureaucracy. They were exacerbated by the lack of information available to Stalin and his entourage, arising in part from a highly inefficient administrative machine whose grip on the country was sometimes surprisingly loose.[93]

By connecting the ideal of liberated society with the class struggle, Marxists have reduced the problem of legitimate revolutionary action to that of specifying the interests of the proletariat. Marx appears to have had no doubts that this concept was an unambiguous social fact, and did not probe the issue in any depth. Subsequent Marxian treatments have ranged from the highly sophisticated Hegelian version found in Lukács's *History and Class Consciousness*,[94] to the crudities of Stalin's identification of the proletarian cause with the expansion of heavy industry in the Soviet Union;[95] there have also been accounts that fall between these two extremes, including Lenin's *What is to be Done*?[96] The issue has also been joined to three others, relating the interest of the proletariat to (i) the interests of particular proletarians, (ii) the interests of classes which are not proletarian but are oppressed,[97] and (iii) the form of rule by which the dictatorship of the class is exercised. No theorist has resolved these problems (see Chapter 3 below). In consequence, to claim or deny that the Stalinist organisation of political power and strategy of economic development is in accordance with the interest of the proletariat necessarily becomes insecure.

These deficiencies of Marxism were used by Stalin to legitimise his rule. At one crucial juncture, however, he appears to have crossed the Rubicon. In the mid-1930s he charged his Bolshevik adversaries with being conscious counter-revolutionaries in league with the intelligence services of imperialist powers. Trotsky was assassinated and Zinoviev, Kamenev and Bukharin, together with most other old Bolsheviks, were all subsequently executed on this pretext. Evidence was fabricated, confessions were achieved through the use of torture, and the historical record falsified.[98] It all smacked of a Thermidor, and many Marxists have not unreasonably seen it in such terms (see Chapter 3 below).

Nevertheless even these events had an orthodox rationale, which was sometimes hinted at by the more sensitive Stalinists, who maintained only that the Bolshevik opposition to Stalinism was objectively counter-revolutionary, not that the oppositionists were conscious agents of imperialism. Whatever their intentions, the outcome of their policies would have been a weakening of the Soviet Union and, thus, of the international proletariat; hence the substance of the charges made against them was valid.[99] The form in which the allegations were expressed was conditioned by the cultural backwardness of the masses, of which all Bolsheviks – Stalinists and anti-Stalinists alike – were only too well aware. This required the use of parables, in which the objective effects became transformed into subjective aims. A similar rationale might also have been used to legitimise the official falsifications of history, the censoring of Lenin's writings, and the provision of erroneous statistics on living standards.

All this illustrates the extent to which Marxism underwent a metamorphosis in its journey from critical theory to state ideology. Prior to achieving power it had always been presumed that truth and proletarian advance went hand in hand. Marxists never imagined the possibility that honesty itself might threaten their rule. The contradiction, however, did materialise at an early stage, well before Stalin's rise to dominance. The Kronstadt revolt of 1921 was suppressed as counter-revolutionary and the Kronstadt sailors were condemned as 'white-guardists' for demanding the reactivation of the programme on which the Bolsheviks themselves had stood in 1917.[100]

None of this implies that Bolshevism is identical to Stalinism, or that Stalinism was the only possible development of Bolshevism. But it does mean that Stalinism can be classed as a form of Marxism on much the same grounds as other versions of Bolshevism. It was a body of theory which sought to inform and master socialist practice. In an inhospitable environment the imperatives of achieving power penetrated into the theory, and under Stalin's rule they became increasingly degenerate. However, Stalin was never able to monopolise Marxism, and the same deficiencies in theory which facilitate the claim of Stalinism to be a Marxism, allowed alternatives – even other Bolshevisms – to become subversive doctrines in relation to the reality of Stalinist power. It is to these Marxian contemporaries of Stalin that we turn in the next chapter. Post-Stalin developments are discussed in Chapter 9, section II, and Chapter 18 below.

Notes*

* References to J.V. Stalin's *Works* (Moscow: Foreign Languages Publishing House, 1953–55) are indicated by *WS*, followed by volume number; *Marxism and the National and Colonial Question* (London: Lawrence & Wishart, 1936) by *MNCQ*; *History of the Communist Party of the Soviet Union (Bolsheviks), Short Course* (Toronto: Francis White, 1939) by *SC*; *Problems of Leninism* (Moscow: Foreign Languages Publishing House, 1953) by *PL*; and *The Essential Stalin: Major Theoretical Writings, 1905–52*, edited by B. Franklin (New York: Anchor, 1972) by *ES*. This chapter also partially overlaps with the period covered in Chapter 15 of volume I of this book. Readers are advised to consult this earlier chapter again before proceeding.

1. A. Bergson, *The Real National Income of Soviet Russia Since 1928* (Cambridge, Mass.: Harvard University Press, 1961); G.W. Nutter, I. Borenstein and A. Kaufman, *Growth of Industrial Production in the Soviet Union* (Princeton, NJ: Princeton University Press, 1962); V.G. Treml and J.P. Hardf (eds), *Soviet Economic Statistics* (Durham, NC: Duke University Press, 1972); R.A. Clarke and D.J.I. Matko, *Soviet Economic Facts, 1917–81* (London: Macmillan, 1983); P.R. Gregory and R.C. Stuart, *Soviet Economic Structure and Performance* (New York: Harper & Row, 1990).
2. *WS*, XII, pp. 147ff.
3. Much of this investment merely compensated for the decline in agricultural capacity brought about by the slaughter of livestock as peasants resisted collectivisation. For a survey of the role of collectivisation in Soviet economic development see Gregory and Stuart, *Soviet Economic Structure*, pp. 109–20, and M. Ellman, *Socialist Planning* (Cambridge: Cambridge University Press, 1989), pp. 92–130.
4. *WS*, XI, p. 62.
5. *WS*, XII, pp. 114-7, 125–6, 135ff, 149, 178, 195ff, 323ff; XIII, 13, 40, 43, 75; *PL*, pp. 668, 674.
6. *WS*, XI, p. 81; XII, pp. 184ff, 194ff, 357; XIII, pp. 41, 186, 198; *PL*, p. 657; A. Nove, *An Economic History of the U.S.S.R.* (Harmondsworth: Penguin, 1972), pp. 187–91, 201–2, 219ff.
7. T. Cliff, *Russia: A Marxist Analysis* (London: International Socialism, 1964), pp. 17–63; D. Filtzer, *Soviet Workers and Stalinist Industrialisation* (London: Pluto Press, 1986); M. Heller and A.M. Nekrich, *Utopia in Power* (New York: Summit Books, 1986), pp. 224ff, 259ff, 320ff; A. Solzhenitsyn, *The Gulag Archipelago, 1918–1956* (New York: Harper & Row, 1985).
8. R. Conquest, *The Great Terror: Stalin's Purge of the Thirties* (New York: Macmillan, 1973); Conquest, *The Harvest of Sorrow: Soviet Collectivization and the Terror-Famine* (Edmonton: University of Alberta Press, 1986); R. Medvedev, *Let History Judge: The Origins and Consequences of Stalinism* (New York: Columbia University Press, 1989); Solzhenitsyn, *The Gulag Archipelago*.
9. A representative example of such sycophancy is Central Committee, Communist Party of the Soviet Union, *Stalin* (New York: Workers Library Publishers, 1940).

10. N. Spulber (ed.), *Foundations of Soviet Strategy for Economic Growth: Selected Soviet Essays, 1924–1930* (Bloomington: Indiana University Press, 1964); N. Jasny, *Soviet Economists of the 1920s* (Cambridge: Cambridge University Press, 1972); A. Belykh, 'Mathematical Economics and Soviet Planning', *Carleton Economic Papers*, 1989; C. Gannage, 'E.S. Varga and the Theory of State Monopoly Capitalism', *Review of Radical Political Economics*, 12, 1980, pp. 36–49.
11. J. Barber, 'The Establishment of Intellectual Orthodoxy in the USSR, 1928-34', *Past and Present*, 83, 1979, pp. 141–64; S. Fitzpatrick (ed.), *Cultural Revolution in Russia, 1928-1931* (Bloomington: Indiana University Press, 1978); G.T. Rittersporn, 'Rethinking Stalinism', *Russian History*, 11, 1984, pp. 343–61; J. Arch. Getty, *Origins of the Great Purges: The Soviet Communist Party Reconsidered, 1933-1938* (Cambridge: Cambridge University Press, 1985); A.T. Baum, *Komsomol Participation in the Soviet First Five-Year Plan* (London: Macmillan, 1987).
12. *WS*, XII, pp. 141, 167-71, 270-82; XIII, pp. 5ff, 174–6, 178, 182, 211–19, 331ff, 340, 347ff; *SC*, pp. 320–1; *PL*, pp. 659, 679–80; Heller and Nekrich, *Utopia*, pp. 280, 289.
13. *WS*, VI, pp. 47-53, 71-196; VII, pp. 1, 15; IX, pp. 121ff, 157; X, p. 59; XII, p. 384; XIII, pp. 107, 177, 192ff, 259–60, 353; *SC*, pp. 268–9. See also H. Marcuse, *Soviet Marxism* (Harmondsworth: Penguin, 1971).
14. I. Deutscher, *Stalin* (Harmondsworth: Penguin, 1966), pp. 111, 114–15, 117–18, 120–1; R.C. Tucker, *Stalin As Revolutionary, 1879–1929* (New York: Norton, 1973), p. 197.
15. *WS*, VI, pp. 71–196.
16. Medvedev, *Let History Judge*, pp. 821-23; Tucker, *Stalin*, pp. 324–29.
17. In July 1928 Bukharin told Kamenev that Stalin was 'an unprincipled intriguer who subordinates everything to the preservation of power. He changes his theories depending on whom he wants to get rid of at any particular moment' (quoted in Heller and Nekrich, *Utopia*, p. 207). See also L. Trotsky, *Challenge of the Left Opposition (1928-29)* (New York: Pathfinder Press, 1981), pp. 204–9, 308–11, 383.
18. *WS*, XI, p. 92.
19. The charge was made repeatedly by Trotsky in the late 1920s and throughout the 1930s. See also Trotsky, *Stalin: An Appraisal of the Man and His Influence* (New York: Stein & Day, 1967), which is perhaps the worst of Trotsky's major works. (It was, however, unfinished at the time of his assassination in 1940.)
20. Prior to the 1920s Stalin's major theoretical work was on the nationalities question, and was heavily influenced by Lenin's ideas: see *WS*, II, pp. 300–81.
21. *WS*, VI, pp. 73, 99; VII, p. 13; X, pp. 97–103.
22. *WS*, VII, pp. 237–9; VIII, pp. 259ff, 312, 318; IX, pp. 91ff, 105ff, 113; *SC*, 168–9, 357; *ES*, pp. 439–40.
23. *SC*, p. 358.
24. *WS*, VIII, pp. 326–30.
25. *WS*, IX, pp. 105–8.
26. *WS*, VI, pp. 100–2, 414–16; VIII, pp. 265–6; IX, pp. 108ff; XII, pp. 143ff.
27. *WS*, VI, pp. 77, 130-6, 374; IX, p. 102; X, pp. 112, 247–50; *SC*, pp. 212–14.
28. *WS*, VI, pp. 15, 75, 97, 102–3, 143, 147–55, 308, 313; VII, pp. 108–10, 147–51, 224–6; VIII, pp. 19ff, 374ff, 382ff; IX, pp. 21, 117, 205–6, 225–31, 237–8, 244–50, 255, 261–3, 308–15, 337–9; X, pp. 11, 37. Stalin had seen the possible importance of revolutions in the East before other Bolsheviks brought it into their frame of reference; see *MNCQ*, pp. 62–7 and n. 37 below. A further discussion of this issue can be found in Chapter 9 below.

29. *WS*, VI, pp. 158, 308, 384; VII, pp. 21–9, 236; VIII, pp. 200, 212; IX, pp. 19, 125; *ES*, pp. 85–8. Between 1928 and 1934, however, Stalin took a more optimistic view of the prospects for proletarian revolution in Europe, and Comintern policy was radicalised. See D. Hallas, *The Comintern* (London: Bookmarks, 1985), Ch. 6; pp. 33–4 above; and Chapter 1 above.
30. *WS*, VI, pp. 74, 120–1, 177ff.
31. *WS*, VII, p. 207; VIII, pp. 80, 186ff, 233, 239, 258, 292ff. On Trotsky's differences with Lenin's conception of uneven development and his eventual move towards Lenin, see Trotsky, *Challenge of the Left Opposition (1926-27)* (New York: Pathfinder Press, 1980), pp. 152, 179; *The Third International After Lenin* (New York: Pathfinder Press, 1970), pp. 15–18; *Writings of Leon Trotsky (1932–33)* (New York: Pathfinder Press, 1972), pp. 116–17; and *The Living Thoughts of Karl Marx* (Greenwich, Conn.: Fawcett Publications, 1963), pp. 13–51; see also R.B. Day, *The 'Crisis' and the 'Crash': Soviet Studies of the West (1917–1939)* (London: New Left Books, 1981), pp. 31–3, 43–4, 48–51, 92.
32. *WS*, VI, pp. 161ff, 248, 391–2; VII, pp. 21, 27, 208, 258, 277–84, 289–95, VIII, pp. 102, 276, 328–30; IX, pp. 26, 144–7, 168, 332; X, pp. 295–6, 298; XIII, pp. 41–2; *SC*, pp. 168–9; Marcuse, *Soviet Marxism*, pp. 97–8.
33. *WS*, VII, pp. 111, 119–22, 209–12, 305; VIII, pp. 278, 340, 342; IX, p. 25.
34. *WS*, VI, pp. 109-10, 386; VII, p. 208; VIII, pp. 65ff, 228; IX, pp. 21–5; XI, p. 357; *SC*, p. 274.
35. *WS*, VI, pp. 80, 111, 391; VII, pp. 16–17, 119, 169, 208; VIII, pp. 65ff, 274, 342; IX, p. 25; XI, p. 357; *SC*, p. 274.
36. *WS*, VIII, pp. 102, 115, 193, 228, 276; IX, p. 333; X, pp. 53–4, 173ff, 243–4, 293.
37. *MNCQ*, p. 127; *WS*, VI, pp. 98, 149–55, 158, 277, 313, 391, 418-20; VII, pp. 94, 258, 288-95; VIII, p. 77; X, pp. 59–62, 220, 251ff, 293; X, pp. 173ff, 243–4, 293; XI, pp. 157, 212, 350-4; XIII, 25, 41–2, 96, 107, 387; *ES*, pp. 85–8, 467ff, 489ff.
38. *WS*, VI, pp. 51–2; VII, pp. 53–7, 169, 259, 303, 360; VIII, pp. 65ff, 77, 230, 284–5, 292–4; IX, pp. 23, 28–30, 55, 135, 144–7; X, pp. 47, 140, 247-50, 293, 337; XI, pp. 157, 311; XII, pp. 267–8, 334; XIII, pp. 25, 41-2, 96, 149, 156, 163–4, 172–4, 387; *PL*, pp. 695, 712; *SC*, pp. 263, 353ff; *ES*, pp. 408, 508-11.
39. *WS*, IX, p. 335; XI, p. 258; XIII, p. 25; *SC*, pp. 228, 247; *ES*, pp. 393ff. Russian nationalism emerged most strongly after 1941. However, with victory over the Nazis, Stalin launched a new ideological crusade for Marxism–Leninism and against some of the concessions of wartime; see Deutscher, *Stalin*, pp. 463ff.
40. *WS*, VI, pp. 2, 7ff, 20ff, 25, 45–6, 51, 190; IX, pp. 153, 317–18; X, pp. 7, 55–8, 207–9; XI, p. 53; XIII, p. 86ff.
41. *WS*, VII, p. 342ff; IX, pp. 1, 8, 10; XI, pp. 231ff, 280, 288–9, 293ff; XI, p. 239; XII, pp. 1ff, 46ff, 101–2, 362ff, 371ff; XIII, pp. 46, 211–19, 373; *SC*, pp. 306–8, 359.
42. *WS*, VI, pp. 261, 282–3; VII, pp. 161, 211–12, 312–14, VIII, pp. 40–51, 63–4, 142; IX, p. 162ff; X, pp. 319ff, 338ff; XI, pp. 12–13, 34, 70–1, 65, 75ff, 103–4, 133–9; XII, pp. 114–17, 179, 200–2, 311, 336; XIII, pp. 37, 54, 67, 75ff, 137, 220, 257, 331ff, 335ff, 375–83; *SC*, pp. 312–16, 327–9, 335–40, 346–50, 360; *PL*, pp. 661–4, 668, 673–7.
43. *WS*, VI, pp. 112–16; VII, p. 248; XI, pp. 57ff, 224, 239; XII, pp. 13, 71.
44. *WS*, VII, pp. 85–6, 136, 144, 153, 248; VIII, p. 145; IX, p. 319; XI, pp. 41, 61ff, 79–82, 224, 370; XII, pp. 13, 235, 309, 336; XIII, pp. 19, 37, 67ff, 259–60; *SC*, pp. 312–16, 322–4; *PL*, pp. 660, 666-8, 775–8, 783ff, 798ff.
45. *WS*, VIII, pp. 151–4; XI, pp. 31ff, 70–1, 75ff, 103–4, 133–40, 235; XII, pp. 14ff, 179, 321; XIII, p. 376; *SC*, p. 360.

46. *WS*, VII, pp. 198ff, 244, 297, 305–10, 363–4; VIII, 128–31; IX, pp. 135–8, 141, 174–6, 194–5; X, pp. 115–16, 128–30, 203–5, 298ff, 334; XI, pp. 165, 201, 256ff; XIII, p. 33ff; *SC*, p. 281.
47. *WS*, VIII, p. 302; IX, p. 48. Stalin later came to employ terms very similar to those he had criticised Preobrazhensky for using; see *WS*, XI, p. 165ff; XII, p. 52ff; and pp 34–5 above.
48. Not surprisingly, Soviet foreign trade had declined significantly by the end of 1930s; see Gregory and Stuart, *Soviet Economic Structure*, p. 17, and Nove, *Economic History*, p. 231.
49. *WS*, VII, pp. 136-42, 171–5, 252–60, 272–3, 394–5; VII, pp. 29–30, 117, 124–5, 155, 159, 177–80, 200, 305, 346, 381–9; VIII, pp. 30, 89–90, 83ff, 138ff, 149, 234ff, 299; IX, pp. 24, 77, 196–9; X, pp. 124, 202–3, 227ff, 260ff, 318–19.
50. *WS*, VII, pp. 132–4, 201–13, 258, 260, 306, 322–3; VIII, pp. 124ff, 129ff, 139, 156, 226; IX, p. 199; X, pp. 234, 298ff.
51. *WS*, IX, pp. 317–18, 328–30, 335–6; XI, pp. 97–8; Nove, *Economic History*, pp. 130, 136; A. Erlich, 'Stalin's Views on Economic Development', in E.J. Simmons (ed.), *Continuity and Change in Russian and Soviet Thought* (New York: Russell & Russell, 1955), pp. 81–99.
52. *WS*, XI, p. 256ff. Feldman's articles can be found in Spulber, *Foundations*, pp. 174–99, 304–31. Also see E.S. Domar, 'A Soviet Model of Growth', in *Essays in the Theory of Economic Growth* (Oxford: Oxford University Press, 1957), pp. 223–61, and Ellman, *Socialist Planning*, pp. 139–47. Feldman was arrested in 1937 and not released until 1953.
53. *ES*, pp. 445–502.
54. M. Dobb, *Economic Growth and Underdeveloped Countries* (London: Lawrence & Wishart, 1963); A. Erlich, 'Dobb and the Marx–Feldman Model', *Cambridge Journal of Economics*, 2, 1978, pp. 203–14.
55. M. Dobb, *An Essay on Economic Growth and Planning* (London: Routledge & Kegan Paul, 1960).
56. M. Kalecki, *Selected Essays on the Economic Growth of the Socialist and Mixed Economy* (Cambridge: Cambridge University Press, 1972), Ch. 10.
57. For Stalin's acceptance of Bukharin's doctrine on the stabilisation of capitalism see *WS*, VII, pp. 27, 34–5, 51ff, 91, 94, 240, 267–75; VIII, pp. 175–6. On the effect of the 'war scare' see *WS*, IX, pp. 317–18, 328–30; X, pp. 247, 282–8, 291–6; XI, pp. 209, 256ff. However, Stalin was not always consistent: see *WS*, X, pp. 221, 251ff; he finally came down definitively against the claim that capitalism had stabilised: see *WS*, XII, pp. 17, 242–62; XIII, pp. 288ff; *PL*, pp. 750.
58. *WS*, X, p. 298ff; XI, pp. 7–10, 85–8, 91, 125, 178–83, 188ff, 217–18, 236ff, 277ff; XII, pp. 61–2.
59. Trotsky, *Challenge (1928–9)*; *Writings of Leon Trotsky* (1929) (New York: Pathfinder Press, 1975). See also E.H. Carr, 'Revolution from Above', *New Left Review* 46, 1967, pp. 17–27; E.H. Carr and R.W. Davis, *Foundations of a Planned Economy, 1926–1929, Volume I* (Harmondsworth: Penguin, 1974), pp. 254–89; Nove, *Economic History*, pp. 147ff, 154, 161.
60 *WS*, XIII, p. 361; IX, pp. 207–23, 225–30; XI, pp. 43–4, 93, 151, 168–70, 221, 268, 279, 282, 365ff; XII, pp. 11ff, 29ff, 60ff, 68–72, 172ff, 184, 187, 288–98, 314, 318, 359–62; XIII, pp. 92, 103, 244ff; *SC*, pp. 276–9, 286ff; *ES*, pp. 426, 441.
61. *WS*, VI, pp. 368–9; *SC* pp. 20, 64, 73–7, 140, 160–4, 168–9, 184, 356. (He did not explain why Lenin had failed to develop an explicit theory of imperialism prior to the First World War.)
62. *WS*, XI, pp. 179-80; XIII, pp. 71ff, 211–19; *SC*, p. 291ff. Hints of this doctrine can be found in *WS*, IX, pp. 55, 328; X, pp. 140, 325; XI, p. 121.

63. *WS*, XII, pp. 153-5, 176ff, 294; *SC*, p. 305; *PL*, p. 796; *ES*, p. 408.
64. For example, in *WS*, X, p. 231 and XI, pp. 91, 279, Stalin accepted the orthodox view that a new technical basis was required for collectivisation. In *WS*, XII, pp. 159–60 he maintained that this, after all, was superfluous. According to Medvedev, *Let History Judge*, p. 222, 90 per cent of existing kolkhozes in 1929 were not mechanised.
65. In *Writings of Leon Trotsky (1930)* (New York: Pathfinder Press, 1975), p. 205, Trotsky ridiculed the idea of the 'increasing intensity of the class struggle'.
66. N.I. Bukharin, *Selected Writings on the State and the Transition to Socialism* (Nottingham: Spokesman Books, 1982), edited by R.B. Day, pp. 127, 135, 164, 175, 199, 301–51.
67. *WS*, XII, pp. 173ff, 359–62.
68. *WS*, VII, p. 310; IX, p. 23; XII, p. 241.
69. In *WS*, VI, pp. 125, 186, IX, p. 134; and XI, p. 326, Stalin accepted the idea of the 'withering away' of the state. He hinted that a modification of the doctrine might be required in *WS*, XII, p. 381, XIII, pp. 215–16, and repudiated it in *PL*, pp. 791–7; *ES*, pp. 439–41.
70. *PL*, pp. 665–6.
71. *WS*, XIII, pp. 349–50, 357ff; *PL*, pp. 764–5; *SC*, p. 346. Also see M. Lewin, *Political Undercurrents in Soviet Economic Debates: From Bukharin to Modern Reformers* (Princeton, NJ: Princeton University Press, 1974), p. 110.
72. A. Kaufman, 'The Origin of "The Political Economy of Socialism" ', *Soviet Studies* IV, 1952–3, pp. 243–72; J. Miller, 'A Political Economy of Socialism in the Making', *Soviet Studies* IV, 1952–3, pp. 403–3; I. Guelfat, *Economic Thought in the Soviet Union* (The Hague: Martinus Nijhoff, 1969).
73. 'Teaching of Economics in the Soviet Union', *American Economic Review* 34, 1944, pp. 501–30.
74. R. Dunayevskaya, 'A New Revision of Marxian Economics', *American Economic Review* 34, 1944, pp. 531–17. See also Ch. 3 below.
75. I. Deutscher, 'Dogma and Reality in Stalin's "Economic Problems" ', *Soviet Studies* IV, 1952–3, pp. 349-63.
76. *ES*, pp. 445–502.
77. *Political Economy. A Textbook Issued by the Institute of Economics of the Academy of Sciences of the USSR* (Moscow: Foreign Languages Publishing House, 1957), p. 721.
78. Deutscher, *Stalin*, p. 602; Medvedev, *Let History Judge*, p. 865ff.
79. M. Dobb, *Russian Economic Development Since the Revolution* (London: George Routledge & Sons, 1929); *Soviet Economic Development Since 1917* (New York: International Publishers, 1948).
80. Dobb, *Russian Economic Development*.
81. See, for example, Dobb, *Soviet Economic Development*, p. 291 for his treatment of the purges in the 1930s. This remained unchanged in the sixth edition (London: Routledge & Kegan Paul, 1966), p. 292.
82. It was not until Stalin's heirs began to favour economic reform that Dobb considered the advantages of extensive decentralisation at all seriously: see Dobb, *Soviet Economic Development*, 6th edn, Ch. 13.
83. R.L. Meek, 'Some Notes on an Interpretation of Stalin's Contribution to the Linguistics Controversy', *Soviet Studies*, 3, 1951, pp. 174–84; 'Stalin as an Economist', *Review of Economic Studies*, 21, 1954, pp. 232–9; *Studies in the Labour Theory of Value* (London: Lawrence & Wishart, 1956), pp. 256–84.
84. S. Webb and B. Webb, *Soviet Communism: A New Civilisation?* (London: Longman, 1935), volumes I and II. The views and actions of these and other fellow-travellers are extensively documented by D. Caute, *The Fellow Travel-*

lers: Intellectual Friends of Communism (New Haven, Conn.: Yale University Press, 1988); see also P. Hollander, *Political Pilgrims* (London: Harper Colophon Books, 1983).

85. N.W. Balabkins, ' "Der Zukunftsstaat": Carl Ballod's Vision of a Leisure-Oriented Socialism', *History of Political Economy* 10, 1978, pp. 213–32.
86. See N.I. Bukharin, *Economics of the Transformation Period* (New York: Bergman, 1971; first published in 1920) and L. Trotsky, *Terrorism and Communism* (London: New Park Publications, 1975; first published in 1920).
87. For an account that minimises the importance of Bolshevik doctrine to events, see E.H. Carr's multi-volume *A History of Soviet Russia* (London: Macmillan, 1950–1971 and Harmondsworth: Penguin, 1966–1976). A.G. Meyer, *Leninism* (Cambridge, Mass.: Harvard University Press, 1957) provides one of the better Stalinised interpretations of Lenin's thought, although Meyer himself is no Stalinist. Deutscher, *Stalin*, argues that, although Stalinism was very different from Bolshevism, it continued Bolshevism in the only way possible. This is further elaborated in Deutscher's three-part biography of Trotsky, *The Prophet Armed, The Prophet Unarmed, The Prophet Outcast* (Oxford: Oxford University Press, 1954, 1959, 1963). S.F. Cohen, *Bukharin and the Bolshevik Revolution* (Oxford: Oxford University Press, 1980) emphasises that there was a kinder and gentler Bolshevism which could have succeeded as an alternative to Stalinism; and Cohen, *Rethinking the Soviet Experience* (Oxford: Oxford University Press, 1985), pp. 3-37, provides an excellent, albeit restrained, critique of the totalitarian interpretation which has been dominant in Western sovietology.
88. *WS*, VI, pp. 84–5; XII, p. 353; XIII, pp. 98-100, 120, 186, 211–19, 231, 259–60, 355ff, 368, 371; *SC*, pp. 321–2, 327–9, 341, 352; *PL*, pp. 680–93, 702ff, 727, 802–3; *ES*, p. 401.
89. See, for example, L. Trotsky, *The Revolution Betrayed* (New York: Pathfinder Press, 1972; first published in 1937), and Ch. 3 below.
90. N.S. Khrushchev, 'Secret Report of the 20th Party Congress of the CPSU' in T. Ali (ed.), *The Stalinist Legacy* (Harmondsworth: Penguin, 1984), pp. 221–72; T. Ali, *Revolution from Above* (London: Hutchinson, 1988); Medvedev, *Let History Judge.*
91. This was certainly the case with the Bolsheviks. Lenin's position is outlined briefly in V.I. Lenin, *Selected Works* (Moscow: Foreign Languages Publishing House, 1951), vol. II, Part 2, pp. 482–4. Trotsky's main work is *Their Morals and Ours* (New York: Pathfinder Press, 1973; written in 1937-8). Stalin did not consider the issue of ethics at any length; see, however, *WS*, VI, pp. 116, 172; IX, pp. 194–5; X, pp. 237, 241; XI, p. 329; XII, pp. 182, 344; XIII, pp. 110–11.
92. The security organs had to meet targets specified in the plans, and this sometimes required replenishing the labour force of the gulag with whomever was 'available'; see Solzhenitsyn, *Gulag Archipelago.* For an account of the effects of Stalinist dogma on Soviet science see Z. Medvedev, *The Rise and Fall of T.D. Lysenko* (New York: Columbia University Press, 1969) and D. Joravsky, *The Lysenko Affair* (Cambridge, Mass.: Harvard University Press, 1970).
93. P. Flaherty, 'Stalinism in Transition, 1932-37', *Radical History Review* 37, 1987, pp. 41–68; S. Fitzpatrick, 'New Perspectives on Stalinism', *Russian Review* 45, 1986, pp. 357–73; T. von Laue, 'Stalin Reviewed', *Soviet Union* 11, 1984, pp. 71–92; H. Reichman, 'Reconsidering "Stalinism" ', *Theory and Society*, 17, 1988, pp. 57–90'; T. Skocpol, *States and Social Revolutions* (Cambridge: Cambridge University Press, 1979), pp. 206-35; Rittersporn, *Rethinking Stalinism*; Getty, *Origins*; Filtzer, *Soviet Workers.*

94. G. Lukács, *History and Class Consciousness* (London: Merlin Press, 1971; first published in 1923), p 51.
95. For example, Stalin writes 'of the unity between the interests of industrialisation (ie., of the proletariat) and the interests of the main mass of the labouring sections of the population' in *WS*, XIII, p. 21; see also XII, p. 344.
96. V.I. Lenin, *Collected Works* (Moscow: Progress Publishers, 1960–70), vol. V, pp. 349–520.
97. Stalin's remark on the proletarian–peasant alliance in 1927 is of some interest in this respect. He pointed out that it was required *not* to preserve the peasantry, but to transform it. See *WS*, IX, pp. 186–93.
98. L. Trotsky, *The Stalin School of Falsification* (London: New Park Publications, 1974; first published in 1932); *Writings of Leon Trotsky* (1936–37); *Writings of Leon Trotsky* (1937-38) (New York: Pathfinder Press, 1976); J. Dewey, *Commission of Inquiry into the Charges Made Against Leon Trotsky in the Moscow Trials* (New York: Merit, 1969); R.C. Tucker and S.F. Cohen (eds.), *The Great Purge Trial* (New York: Grosset & Dunlap, 1965); Medvedev, *Let History Judge*.
99. See the statements of Radek quoted in L. Trotsky, *Writings of Leon Trotsky* (1934–35) (New York: Pathfinder Press, 1971), p. 41; *Writings* (1936–37), pp. 318ff, 368, and *Writings of Leon Trotsky* (1938–39) (New York: Pathfinder Press, 1974), p. 154ff; see also J. Tuck, *Engine of Mischief: An Analytical Biography of Karl Radek* (New York: Greenwood Press, 1988). Stalin initially took an 'objectivist' position: see *WS*, VI, pp. 242–5, 265ff, 280; VII, pp. 30, 165–6; VIII, pp. 286–7; X, pp. 265, 365; XI, 365; XI, p. 330. But he also sometimes alluded to sinister motives: see *WS*, VI, pp. 367ff; VIII, pp. 242–3; XI, p. 330, and these became explicit in XII, pp. 362–4; XIII, p. 101ff; *PL*, p. 791; *SC*, pp. 136, 218, 324–5.
100. N. Harding, *Lenin's Political Thought* (London: Macmillan, 1983), pp. 268–74; I. Getzler, *Kronstadt 1917–1921: The Fate of Soviet Democracy* (Cambridge: Cambridge University Press, 1983).

3
The Soviet Mode of Production

I Anticipations

Marx and Engels had warned that a 'premature' seizure of power would put a proletarian government in an untenable position. Unable to carry out its own programme, it would be forced as a condition of survival to become an instrument of the bourgeoisie and complete the historical tasks of capitalism.[1] Exactly what process of degeneration this would involve, however, was left unspecified, and their brief comments throw little light on subsequent Soviet developments. While it might be claimed that Stalinist accumulation accomplished the function which historical materialism had assigned to capitalism, the regime was clearly no instrument of the bourgeoisie as conventionally defined. But it was less clear whether a classless society had emerged in the Soviet Union and, if not, what the new ruling class might be.

The anxieties of Marx and Engels had an immense influence upon their followers. Plekhanov, the Mensheviks, the 'legal Marxists', and social democrats throughout the world, all believed that bourgeois-democratic revolution alone was feasible in Russia. Prior to 1917 Lenin, too, shared this view, as did all the Bolsheviks except perhaps those closely associated with Bukharin. Orthodox Marxists of all shades of opinion realised that a Russian revolution might have peculiarly radical features, but before the First World War Trotsky and his followers were unique in believing that it could immediately enter the socialist phase (see Part II of volume I of this book).

However, in his early writings Trotsky coupled revolutionary radicalism with a vocal hostility to Bolshevism. Accepting with the Mensheviks the need for a loosely-structured mass party, Trotsky claimed that Lenin's blueprint in *What is to be Done?* introduced Jacobinism into social democracy. Lenin had substituted the party for the class. The logic of his ideas implied that 'the party organisation substitutes itself for the party, the Central Committee substitutes itself for the organisation and, finally, a "dictator" substitutes himself for the Central Committee'. Notwithstanding the prophetic quality of Trotsky's criticism, it is unlikely that he believed it applicable to any future proletarian government, even one drawn exclusively from Bolsheviks. Between 1905 and 1917, he conceived 'permanent revolution' to be a necessary process; whatever the programmes and structure of the revolutionary parties, they would be swamped by the development of genuine proletarian power, which they would be forced to support or be pushed aside. After 1914, if not before, Trotsky also claimed that working-class rule in Russia would in no way be 'premature' when viewed from the vantage point of the world capitalist economy.[2]

Trotsky's global perspective eventually penetrated Bolshevism and after 1917 all party theorists (as well as some Left Mensheviks like Julius Martov) denied that the Russian revolution was adventurist.[3] In their view the imperialist war had signalled the end of capitalism as a progressive force, and they confidently expected a series of proletarian revolutions quickly to follow their own. But neither Trotsky, nor Lenin, nor Bukharin ever explained exactly how the overthrow of capitalism in the advanced countries would overcome the obstacles to socialist construction in backward Russia. The omission is especially troublesome because Plekhanov had argued in the early 1880s that, irrespective of international support, attempts to modernise agriculture in Russia would bring the degeneration of any socialist government. But he did not elaborate as to the form this would take, and his argument was aimed against the populists, not the Marxists (see p. 140 of volume I of this book).

A similar point had been made much earlier by Bakunin as part of a general anarchist attack on Marxism. In his view the whole Marxian conception of the revolutionary process was suspect; the very notion of 'scientific socialism' implied elitism, and the idea of a dictatorship of the proletariat exercised though the medium of a centralised state was incompatible with human freedom.[4] Although in his account of the Paris Commune Marx implicitly accepted much of the anarchist case, he continued to oppose anarchism in practice. Throughout the heyday of orthodox Marxism the Marxists' contempt for their anarchist critics and their disregard of objective constraints to liberation continued. This was no doubt reinforced by the fact that most anarchists were unclear as to the specific consequences of following the state socialist path.

The Polish radical, Jan Machajski, was exceptional when in the 1890s he applied a crude historical materialism to Marxism itself. He argued that socialist intellectuals typically used the workers' movement for their own *petit-bourgeois* ends, and that successful revolution would therefore result in a new form of class rule in which the intelligentsia would constitute the ruling class.[5] This idea was destined to find a place in Marxism itself. As early as 1918 Kautsky was referring to the development of a 'new class' in the Soviet Union, although he made no attempt to delimit its specific characteristics or to assign it to a new mode of production.[6] Two decades later, however, materialist analyses of the novel forms of privilege were formulated, and Machajski's ideas were provided with a more secure foundation (see sections III and IV below).

Max Weber's writings on bureaucracy can be used to buttress these ideas, although most Marxists have been hesitant to do so because Weber considered extensive bureaucratisation to be the inevitable result of public ownership and a planned economy;[7] socialism as Marx had imagined it was simply not feasible (see Chapter 18 below). In 1911 Weber's pupil, Robert Michels, went further by formulating an 'iron law of oligarchy' after studying the organisation of German social democracy.[8] Kautsky implicitly tried to rebut these ideas in 1908, and Bukharin sought to meet the challenge head-on in 1920, but his argument was especially unconvincing in the circumstances of Bolshevik rule.[9] Subsequently Bukharin expressed concerns about bureaucratisation, but his remarks constitute no system; however, his ideas on state capitalism did become influential (see section IV below). Weberian ideas may have impressed Christian Rakovsky, who during the 1920s was a leading member of the Left Opposition. He went beyond Trotsky's own analysis of degeneration (see section II below) to argue that, even under the most favourable circumstances, bureaucratisation posed a real threat to the realisation of socialist ideals, and he started to view the Soviet bureaucracy as coalescing into a new ruling class. However, Rakovsky was unable to systematise his analysis, being forced under intense pressure to recant in 1933 and falling victim to Stalin's purges five years later.[10]

Concern about the integrity of the revolution arose within party ranks from the outset.[11] The concessions to imperialism embodied in the treaty of Brest-Litovsk, the development of the party dictatorship, the employment of 'bourgeois specialists' and tsarist officers, and schemes to militarise labour under War Communism, all fuelled misgivings on the left wing of the party. By 1922 even Lenin explicitly recognised that a bureaucratic deformation had occurred, and found it personified in Stalin's autocratic behaviour. According to Lenin the root cause lay in Russia's cultural backwardness, and in the face of this overwhelming reality he sometimes recognised the impotence of administrative measures to limit the decay.[12]

Throughout the 1920s discontent remained among party members, many of whom agreed with the exiled Mensheviks that restorationist forces were increasing in strength and were transforming both Bolshevik ideology and party organisation. But it was to a most unlikely figure that the oppositionists gravitated after 1923. Leon Trotsky, who, at the height of his powers during the civil war had been both the most authoritarian of all Bolshevik leaders and the harshest critic of their detractors, became the chief theorist of revolutionary degeneration. He also proved to be among the most steadfast, remaining hostile to the Soviet regime until his assassination in 1940, while many of his supporters defected to Stalinism.

II A Degenerated Workers' State?

Trotsky's attempt to come to grips with the degeneration of the revolution in the Soviet Union was made over an interval of nearly 20 years. Given the immense changes that occurred in this period, it is not surprising that his ideas altered over time. However, there were also certain basic parameters which never changed after the mid-1920s, and it is useful to consider these invariant characteristics before dealing with the historical evolution of his analysis between 1923 and 1940.

Like most Bolsheviks, including Lenin and Stalin, Trotsky believed the world capitalist economy to be in an epochal crisis. Also like them, he was always vague as to the underlying economic causes.[13] Trotsky was nevertheless quite explicit in recognising that his entire analysis hinged upon the validity of this view. He accepted that, if it were possible for international capitalism to attain a long-run stabilisation, his whole theory (including that applicable to the Soviet Union) would be undermined, and with it his analysis of the degeneration of the Soviet Union.[14]

The belief that objective economic conditions posed no constraint upon socialist revolutions gave Trotsky's Marxism a highly political character in the inter-war years. It was to inappropriate leadership that he pointed in explaining the delays, defeats and degeneration of the proletarian struggle.[15] The organisation he headed from 1923, and which ultimately formed the Fourth International in 1938, was considered the means by which this could be rectified. It sought to repeat on a world scale what Lenin's Bolsheviks had accomplished for Russia. Trotsky identified his theory of permanent revolution with Leninism, and saw it as the only truly revolutionary Marxism.[16]

Conditions in the Soviet Union were, according to Trotsky, only a special case of the general malaise in proletarian leadership. Degeneration was largely confined to the superstructure; it did not greatly affect economic relations. The mode of production was neither socialist nor capitalist, but transitional. However, the transition could successfully culminate in socialism only if the revolution were extended to Western Europe (see Chapter 15 of volume I of this book). Although the 'dictatorship of the proletariat' – or, as Trotsky usually referred to it, 'the workers' state' – continued, it had become bureaucratised under the domination of the party apparatus. He came to accept that the bureaucracy had some of the characteristics of a ruling class, in that its privileges and power extended beyond what was functionally necessary. But, he maintained, from a Marxian point of view it constituted only a social 'caste', with a non-exploitative, albeit parasitic, relationship to the proletariat.[17] Here Trotsky lent heavily on Marx's own claim that a bureaucracy could not constitute a social force in its own right, but remained dependent upon one or more genuine classes.[18] While this made sense in the context of a capitalist mode of production, Trotsky never provided an account of why the same contraints prevailed in the Soviet Union. In consequence, apart from appealing to Marxian formulas derived in different circumstances, he did not explain exactly what the bureaucracy was if it was not a ruling class, and his reference to 'caste', which implies a degree of permanency, was singularly inappropriate to the turbulent conditions of the inter-war years.

Trotsky regarded Stalin as little more than *primus inter pares*,[19] as someone whose ideas were deviations from Leninism and formed the ideology of the bureaucracy which it used in its struggle against genuine Bolshevism (that is, Trotskyism). Bureaucratic rule thereby weakened both the dictatorship of the proletariat in the Soviet Union and the revolutionary potential of the working class internationally, raising the probability of a capitalist restoration. 'Socialism in one country' was a thoroughly wrong-headed doctrine, and the only way forward was to concentrate upon the overthrow of capitalism internationally, guided by the theory of permanent revolution. Otherwise the intermediate social formation in the Soviet Union could never find stability; it would be continually wracked with crises, which would eventually overwhelm it.

Trotsky fluctuated in his explanation of bureaucratisation, mentioning in turn isolation, scarcity and demoralisation. Taken as a whole, however, his writings point towards closed-loop causation in which each contributory factor sustains the others.[20] Bureaucratisation arose from the failure of international revolution and the exhaustion of the working class in the civil war; it then reinforced both. The Comintern was mismanaged or sabotaged, increasing Russia's isolation. Simultaneously, by repressing revolutionary Marxist critics (that is, Trotskyists) the bureaucracy undermined the vanguard role of the party, demoralised the working class and thus further contributed to the bankruptcy of the Comintern. Soviet economic development was similarly thrown off course by bureaucratic inefficiency and privilege, and this in turn served to sustain the 'backsliding' elsewhere, which then bolstered inappropriate economic policies.

According to Trotsky the loop could be severed by resurrecting true Bolshevism. He seems never to have doubted that a genuine democratic centralism could rule in the party, which he imagined might ideally be composed of proletarian 'philosopher-kings' who would be insulated from whatever bureaucratisation in the state administration was required by conditions of backwardness. So conceived, the party would then constitute a real vanguard of the class, vibrant in theory and correct in its strategy and tactics for world revolution and economic development towards socialism.

Trotsky's perspective on the capitalist world economy had clearly taken shape by 1914, and his commitment to Bolshevism was secured in the civil war (see Chapter 12 of volume I of this book). However, it was Lenin who preceded Trotsky in detecting a bureaucratisation within the party. On the whole Trotsky followed Lenin's initiatives, but even at this very early stage there was a difference in diagnosis. While both saw the issue as a 'deformation' rather than as the existence of a distinct bureaucratic stratum, Trotsky regarded it as a new phenomenon and not, as Lenin did, one arising from the heritage of backwardness. At the end of 1923 Trotsky saw the problem as the party organisation inappropriately merging with the apparatus of the state, where some bureaucratisation was inevitable.[21] The fusion subordinated the political and theoretical tasks of the party to those of administration; by undermining internal party democracy, it precluded effective criticism. Bureaucratisation thereby exacerbated the dangers arising from isolation and NEP.[22]

It was upon the restorationist dangers of official party policies that Trotsky focused for the remainder of the 1920s. But during this period his analysis of bureaucratisation became more materialist; he began to link bureaucratisation to the pressures of non-proletarian classes, and to see the bureaucracy as a distinct stratum composed of individuals whose background and interests allowed an alliance with those bourgeois elements which were growing under NEP.[23] At the same time Trotsky came to view Stalin's doctrine of 'socialism in one country' as an ideology suited to the bureaucracy's desire for stability.[24] But he also recognised divisions within the bureaucracy. The Stalinist faction was classified as 'centrist', responding erratically to conflicting and alternating influences of opposed classes, while another section was more consistently pro-kulak.[25]

It was as a 'left turn' that Trotsky initially explained Stalin's break with the NEP during 1928 and 1929, and the 'revolution from above' after 1929.[26] The party leaders had allowed bourgeois forces to strengthen, and had brought about a situation bordering upon counter-revolution. But the pressure of the Left Opposition had split the bureaucracy, forcing the centrist faction to turn left to defend itself against the kulaks and to preserve its conservative interests, which were in opposition to those of genuine revolutionaries.[27] Behind this evaluation lay Trotsky's constant refusal to accept that the bureaucracy could become an independent historical actor.[28] Although he began to recognise that its own privileges rested upon non-capitalist economic relations, and that the doctrine of 'socialism in one country' had jettisoned its earlier Bukharinist content,[29] he thought it inconceivable for the bureaucracy itself to sustain a project that was neither bourgeois nor proletarian. The continuing repression against the Left Opposition, he believed, signalled that a turn to the right was bound to occur in the near future.[30]

For Trotsky this prospect was reinforced by his belief that the bureaucracy was completely devoid of genuine theory. Without internal party democracy it lacked an intimate connection with the proletariat and could only act 'empirically' according to the pressures of the immediate conjuncture.[31] The bureaucracy was therefore incapable of foreseeing the catastrophes which must result from its reckless and brutal manoeuvres. Since collectivisation had occurred in the absence of an advanced technical base, it could not end rural differentiation; the kulaks were bound to reappear. The adventurist tempo of industrialisation, Trotsky maintained, conflicted with the requirements for proportionality and was unsustainable.[32] Thus Stalin's attempt to bring about a revolution from above was plagued with contradictions, and the regime was on its last legs.[33]

One characteristic of Trotsky's stand which went unacknowledged was that on economic policy he was drawn closer to Bukharin. While he never equivocated in his support for Stalin against the Right,[34] Trotsky made much the same criticism of the emerging Stalinist system that Bukharin voiced. Both believed that administrative measures would be unable to overcome economic backwardness, that planning needed supplementation by market relations, and that in the long run bourgeois elements could be overcome only through 'economic' measures on the basis of a demonstrated superiority of socialist relations.[35] Bukharin and Trotsky therefore each favoured a return to the NEP as the economic form appropriate to the transition, which gave some credibility to Stalin's identification of the Right and Left Oppositions as a counter-revolutionary unity.

Although he never did come to terms with the radical and enduring nature of Stalin's revolution from above, by the mid-1930s Trotsky accepted that it had, after all, been partially successful. At the same time he believed that the fate of the international revolution called for a reassessment of the nature of the Soviet regime. He now drew a distinction between the internal and external role of the bureaucracy, and sought a more exact understanding of its character. The Nazi seizure of power in Germany appears to have initiated Trotsky's change of perspective. He had long considered Moscow's supervision of the Comintern to be incompetent.[36] In 1933, however, Trotsky went much further. He accepted that Soviet degeneration had reached the point where the bureaucracy deliberately undermined international revolution so as to facilitate accommodation with imperialism, and to protect its own position, which would be threatened by successful socialist revolution elsewhere. Externally the Russian bureaucracy had thus become a counter-revolutionary force; the Comintern was bankrupt, and a new International was required.[37]

Beginning in 1933, Trotsky began to describe the Stalinists as Thermidorians. Previously he had used the concept of Thermidor to mean the first stage of a successful bourgeois counter-revolution, and had denied that a Soviet version had actually taken place. Now he used the term to designate only a conservative stabilisation, and accepted that the Soviet Thermidor had begun as early as 1923.[38] The bureaucracy which Stalin personified and led was therefore now seen to play a dual role internally. It defended post-capitalist property relations, but it did so in a manner which preserved its own privileges. Thus, while the bureaucracy had betrayed the revolution, it had not overthrown it.[39]

This now became the crux of Trotsky's defence of the Soviet Union as a workers' state. Prior to 1933 he had justified support for the Soviet Union by claiming that the degeneration was rectifiable through reform: the Left Opposition could gain hegemony in the existing party and, having done so, peacefully eradicate the power of the apparatus.[40] Trotsky now jettisoned this view; the party, like the Comintern, was incapable of regeneration. A revolution was necessary to replace both with new Bolshevik organisations. But, Trotsky also argued, the revolution would have to be only 'political', not 'social'. The economic foundation of the workers' state remained intact; as before, it was only the superstructure that was degenerate.[41] Thus his conception of the dictatorship of the proletariat now involved nothing more than property relations. How far he was willing to go in this direction was made plain by his recognition that the Soviet regime acted in the same authoritarian and terroristic way as did fascist governments. However, he maintained, in their class essence they were poles apart because of the different property relations on which they rested: one was a degenerated workers' state, the other was a dictatorship of monopoly capital.[42]

To sustain this interpretation, property relations had to be interpreted very narrowly, and Trotsky ultimately took his stand on a purely juridical conception of property. Such formalism was not typical in his work, but it did reflect an aspect of his Marxism which he shared not only with Lenin and Stalin, but also with most theorists of the Second International. All tended to presume that social relations at work would not be fundamentally affected by a successful proletarian revolution. There would be better working conditions and higher pay, but the technology of production and the authority structure within the factory would be much the same as under capitalism.[43]

Trotsky's definition of a workers' state was such that it not only did not imply that workers actually controlled the state, it actually precluded those who held power from being a new class. The bureaucracy was a parasitic growth arising from within the proletariat itself. To support this view, Trotsky asserted that the bureaucracy played no independent role in production; the degeneration which it represented involved only distributional relations and the exercise of authority. And even here bureaucrats lacked the class characteristic of having the ability to pass on their privileges to their heirs.[44] While he did not rule out the possibility of the bureaucracy becoming a new bourgeois class by instituting private ownership, Trotsky tended to view its interests as a distinct stratum as resting upon nationalised property;[45] the thrust of his analysis was now that capitalist restoration in the Soviet Union was possible only through external intervention.[46] Thus Trotsky came very close to accepting Stalin's dichotomy of internal and external contradictions which underpinned the doctrine of 'socialism in one country' (see Chapter 2 above). He differed from Stalin only in how they might be resolved. Trotsky did not believe that the internal contradictions could be fully overcome by the bureaucracy, or that its foreign policy increased the security of the workers' state.

Indeed, he maintained, it was precisely on the international front that the bureaucracy was forced into a position which threatened its own long-term survival, and with it that of the Soviet Union. Its interests led it to jettison the cause of international revolution, but in so doing the bureaucracy strengthened the forces of imperialism.[47] At the same time internal policies constrained economic development. By the mid-1930s Trotsky recognised that industrialisation had been rapid, and that the planned economy had proved itself in practice.[48] But he maintained that bureaucratic dominance inhibited the realisation of its full potential. The attempt to run everything from the centre, the reliance on repression, and the diversion of resources into consumption for the privileged, all indicated that the forces of production were constrained by bureaucratic relations.[49] While this argument was inconsistent with Trotsky's claim that the bureaucracy played no independent role in production, he used it to insist that the contradiction between the forces and relations of production underlay the purges, and indicated a regime in crisis.[50]

Trotsky never explained exactly how the antagonism in the base was connected to the turbulence in the superstructure. He believed the repression of oppositionists to be at the heart of the terror, but also correctly recognised that it extended into the ranks of the Stalinists as well.[51] Trotsky had long maintained that a single dictator facilitated bureaucratic rule by overcoming internal divisions.[52] Since bureaucratic unity appeared to be breaking down, he tended to regard the purges as involving a civil war within the bureaucracy itself. But he did not elucidate how this related to his argument that the forces of production were being inhibited by bureaucratic organisation, which had now become central to his enduring claim that bureaucratic rule could not stabilise.

However unconvincingly, Trotsky was therefore able to reassert his view that only the spread of socialist revolution, coupled with genuine Bolshevik political practice, could ultimately save the workers' state in Russia. But, even on this issue, his treatment was contradictory. His view of Bolshevism was not only highly idealistic, it was also in tension with his criticism of the Bolsheviks' behaviour during and after 1917. Without Lenin, Trotsky argued, the party would have proved unable to take power, and after Lenin's illness and death many leading Bolsheviks had played an active role in the Thermidor.[53] Trotsky's commitment to Bolshevism thus ultimately came down to a matter of '*the* leader' and, in the absence of Lenin, to his own fall from power as the central event in the degeneration. He continually denied that this was the case,[54] but the logic of his own ideas provide a testament to it. Moreover, in the mid-1930s Trotsky implicitly recognised (albeit rather half-heartedly) that even under Lenin's control Bolshevism had been deficient, since the party's ban on factions in 1921 had facilitated bureaucratisation. However, as he also believed the prohibition to have been necessary, this did nothing for the coherence of his position.[55] In 1936 he added that a one-party state might not be the appropriate form for the dictatorship of the proletariat, and entertained the possibility of allowing other parties to function. Nevertheless, Trotsky limited this freedom to 'soviet' parties, and did not extend to them the right actually to rule.[56]

Only in the last two years of his life did Trotsky consider the possibility that a radical re-evaluation of Bolshevism might be called for. But even then his loyalty to its essentials remained evident, for he linked it to the validity of Marxism itself. The occasion for Trotsky's doubts was the appearance in 1939 of Bruno Rizzi's theory of bureaucratic collectivism.[57] Rizzi argued that the Soviet Union had developed a new mode of production that was neither capitalist, nor socialist, nor transitional (see section III below). It was emerging also within fascist states, and was evident in the collectivist tendencies of capitalist countries. Surprisingly, given his previous treatment of other critics with similar ideas, Trotsky did not dismiss this argument out of hand. Instead he admitted that bureaucratic collectivism was a theoretical possibility.[58]

How seriously Trotsky took the idea of bureaucratic collectivism is unclear. In 1939 and 1940 he repeated the positions he had spelled out in the mid-1930s,[59] and events in 1939 led him to reaffirm the validity of his analysis, even though in doing so he contradicted himself again. The sovietisation of eastern Poland after the Hitler–Stalin pact indicated that the bureaucracy was indeed an external revolutionary force. Not only did it continue to protect nationalised property at home; it had extended its mode of production beyond Soviet borders. Trotsky took this as evidence that Stalinism still represented the dictatorship of the proletariat, despite the fact that it undermined his earlier designation of the bureaucracy as a counter-revolutionary force internationally.[60]

In this period Trotsky also wrote his testament, proclaiming unshakeable faith in the communist vision,[61] and penned dogmatic defences of dialectical materialism against the revisionist ideas of James Burnham and Max Shachtman.[62] In all probability his relatively gentle treatment of bureaucratic collectivism reflected the fact that Rizzi had not called into question the Fourth International's position on the unconditional defence of the Soviet Union in the event of an imperialist attack. When others did so, Trotsky was quite merciless in his critique of their ideas.[63] Nor did Rizzi criticise dialectics; his commitment to Marxism was ambiguous,[64] but he suggested that bureaucratic collectivism could be rendered consistent with historical materialism, and that the socialist endeavour had only been postponed by one stage. Trotsky was evidently unwilling to grasp this nettle explicitly, and viewed the possibility of bureaucratic collectivism in less sanguine terms. In the end, he maintained, the issue of whether Russia was a degenerated workers' state or a new, bureaucratic collectivist mode of production would resolve itself in the outcome of the Second World War. Trotsky thus made the criterion of validity for his theory of the Soviet Union the same as that for his analysis of the imperialist epoch as a whole: if the war did not engender new socialist revolutions, or if it solidified and extended the existing Soviet system, the proletariat would have shown itself incapable of becoming a new ruling class. Marxists would then be reduced to resisting totalitarian slavery, but only on humanitarian grounds; there would be no prospect of communist liberation.[65]

III Bureaucratic Collectivism

Bruno Rizzi had been in sympathy with Trotsky's analysis of the Soviet Union for many years before breaking with him in 1939. Exactly what provoked him to do so is unclear, but a belief that the international proletariat was incapable of taking power – or, more accurately, of holding power in its own hands after a revolution – was obviously implicit in *La Bureaucratisation du Monde*, and was consistent with the record of working-class politics since 1914. Rizzi certainly did not dispute that capitalism was in the process of decay, and he did not challenge the factual record of Soviet development presented by Trotsky. Also, Rizzi was not alone; many other Trotskyists were coming to the same conclusions. In 1941 James Burnham presented a very similar thesis to that of Rizzi and he, together with Max Shachtman, resigned from the American section of the Fourth International in 1940.[66]

At the heart of *La Bureaucratisation du Monde* was a telling critique of Trotsky's claims that the only condition necessary for the dictatorship of the proletariat was that the state defended nationalised property, and that the precise configuration of politics only reflected the degree of purity or of degeneracy in the proletariat's dominance. Rizzi correctly argued that these propositions hinged on the belief, which Trotsky had not justified, that only the bourgeoisie or the proletariat could hold power in the current epoch. Once this was questioned, it became impossible to ensure that the dictatorship of the proletariat was in force unless workers themselves actually exercised authority; a third force might hold power, which was neither bourgeois nor proletarian.[67]

Rizzi coupled this argument with an examination of the concept of property ownership, which he saw as a form of power.[68] Since the control of the Soviet state was in the hands of the bureaucracy, and the bureaucracy had interests opposed to those of the proletariat – both points accepted by Trotsky – collective property was the property of the bureaucracy, not the proletariat.[69] The Soviet bureaucracy was then a specific type of property-owner, and in terms of Marx's own theory could therefore be regarded as a class.[70] It was not simply a parasitic growth from, and upon, the proletariat,

Biography of
Bruno Rizzi

Rizzi was born at Poggio Rusco, Italy, in 1901. He attended Milan Polytechnic in 1918 and began associations with various socialist groups. In the inter-war years he earned his living as a shoe salesman, and after the Second World War he went into manufacturing, ending up as a substantial proprietor before his death in 1977. During the 1930s he was generally impressed by Trotsky's writings, although there is also evidence that Rizzi was an anti-Semite and harboured fascist sympathies. *La Bureaucratisation du Monde* represents his only significant work; it was published privately in 1939 after the manuscript had been rejected by several commercial publishers.

as Trotsky claimed. By the very nature of its property the bureaucracy played on independent role in production. Five year plans were formulated, prices and wages set, investments decided and consumption determined in accordance with a distinct set of non-proletarian interests.[71] Thus Russian workers were exploited, and the form of their exploitation was historically new. The bureaucracy did not use bourgeois mechanisms. Instead, the relationship was directly one of 'class to class'; the ruling class was not divided into individual enterprises as in capitalism. The bureaucracy used the state itself to extract surplus labour and then distributed it according to a particular formula devised to suit its own interests.[72]

While the Soviet Union thus represented a unique mode of production, and a correspondingly unique class structure, according to Rizzi it was also the advanced form of a more general phenomenon. He detected embryonic manifestations of the same constellation in fascism and the New Deal.[73] Marx had been right in recognising that capitalism could not contain modern forces of production, Rizzi maintained; their further development did indeed require planning and nationalised property.[74] But Marx had been wrong in believing that this implied socialist forms of organisation and the rule of the proletariat. If these did materialise – and Rizzi suggested that they ultimately would[75] – they could do so only in post-collectivist society; post-capitalist society was bureaucratic collectivism.

In 1939 Rizzi's thesis had a compelling logic. It fitted with the experience of the Great Depression, the series of working-class defeats, the stabilisation of the Soviet Union and the rapid militarisation of Nazi Germany. Even in the post-war years there was plenty of evidence to sustain the general thrust of Rizzi's book. True, fascism had been rolled back, but the Soviet Union had been the principal force in accomplishing this, while the role of the state in Western capitalist economies was clearly increasing. Nevertheless there were also important weaknesses in Rizzi's argument, and by addressing them other Marxists have been able both to amend the idea of bureaucratic collectivism, and to provide a better understanding of the Soviet mode of production.

Rizzi did not explore in any depth the historical path to bureaucratic collectivism in the Soviet Union. At some points he repeats Trotsky's arguments, at others he leans towards the ideas of Machajski and Rakovsky.[76] More importantly, the rout of Nazism, the great boom in Western capitalism and the development of soviet-type economies in Eastern Europe, Asia and the Caribbean indicate that, insofar as bureaucratic collectivism was a general phenomenon, it was of a different sort than Rizzi thought. This criticism is reinforced by the fact that Rizzi never explained why underdeveloped Russia had perfected what he believed to be the most advanced mode of production; naturally, some Marxists have linked bureaucratic collectivism to backwardness rather than to modernity.[77]

On the other hand, so far as the Soviet Union is concerned there is one aspect of Rizzi's thesis which fits economic maturity rather better than it does the Stalinist transformation. Rudolf Hilferding raised the issue in 1938 by challenging whether the notion of class really applied to the Soviet Union. Hilferding designated the Soviet mode of production as neither capitalist nor socialist; it was instead similar to fascism, and he believed that it had reversed the structure of causation inherent in historical materialism. In the 'totalitarian state economy', as in 'organised capitalism', politics dominated economics.[78] Hilferding claimed that the bureaucracy was not a ruling class; it was the political instrument of an elite, centred around Stalin, which successfully dominated the apparatus through purges and used it for its own ends. Hilferding was unclear as to what these ends were, merely referring to the desire for power, but his point is still valid independently of this. Rizzi ignored the terror as employed against the bureaucracy, presenting it instead solely as an attack by the bureaucracy on others.[79] He was therefore able to regard bureaucrats as not only having similar structural positions, but also as exhibiting a degree of cohesiveness that in fact they lacked under Stalin. In other words, for Rizzi the bureaucracy constituted both a 'class in itself' and a 'class for itself'.[80] In fact the bureaucracy seems to have developed its own class consciousness and organisational autonomy only under the policy of 'stability of the cadres' proclaimed by Brezhnev in the 1960s. The process began with de-Stalinisation in the 1950s when something approaching the 'rule of law' was instituted to regulate intra-bureaucratic disagreements. But even under Khrushchev there was considerable occupational insecurity for individual bureaucrats, and large administrative reorganisations which disrupted established routines. Not until Brezhnev's rule did this turbulence decline significantly. Consequently Rizzi's conception of the bureaucracy, as well as that of the 'new class' theories that stem from Rizzi's work,[81] holds most clearly under the more stabilised conditions which prevailed after Stalin's death. Stalin himself preferred to atomise the bureaucracy, in order to prevent the very class formation that Trotsky warned of, and Rizzi proclaimed.[82]

Hilferding's argument was subsequently generalised by Ticktin, who also provided it with a materialist basis.[83] Accepting the conception of the Soviet Union as neither capitalist nor socialist, Ticktin argues that its very organisation exhibits a structural divide between the centre and periphery of the bureaucracy. The law of motion of the Soviet mode hinges on the centre's pressure for higher output, which is resisted by bureaucrats below for reasons inherent in their own positions. By no criterion, then, subjective or objective, Ticktin argues, can the bureaucracy as a whole be regarded as a class at any stage in Soviet development, Stalinist or post-Stalinist. This is an extreme position. Marxists have always recognised that there might be internal divisions within any dominant group, and have not believed that total unity is a necessary condition for the existence of a ruling class. Ticktin does not explain why the conflict within the Soviet bureaucracy has been important enough to preclude the bureacracy from being a class. On the other hand, Marxian theorists have nowhere provided general criteria by which this issue could be resolved. More importantly, however, Ticktin's argument cuts into Rizzi's thesis at a deeper level, because he shows how the conflict within the bureaucracy generates massive waste in Soviet-type systems.[84] This aspect totally escaped the notice of Rizzi and Burnham (but not Trotsky or Bukharin). Nor is it a tangential matter, for it was precisely the alleged efficiency of bureaucratic collectivism which they appealed to in their attempt to explain it as a world force which would eventually replace capitalism. This reinforces the case for regarding Stalinism as a product of backwardness, not modernity.

Rizzi is also unclear on the dynamics of reproduction. He presupposes not only that a bureaucratic collectivist formation could sustain itself, but that it would rapidly grow. At one point Rizzi states that this is a property of every mode of production, which is clearly wrong.[85] Elsewhere he follows Trotsky by suggesting that it is the interest of the bureaucracy in extending its privileges that lies behind the development of the productive forces.[86] This is more reasonable, but it fails to account for the concentration on accumulation in heavy industry, which has been a marked feature of Soviet economic development. Hilferding's belief that the key lay in power politics is suggestive, although insufficiently definite, since he fails to specify for what purposes power is to be used, and what motivates its holders to seek it.

Nor is the character of a mode of production fully understood by focusing on its apex. Of at least equal importance from a Marxian perspective is the nature of the subordinate class. Rizzi, however, concentrates almost exclusively on the new ruling class, rather than on the oppressed classes from whom surplus is extracted. He is followed here by Burnham and Hilferding, as well as by the 'new class' theorists. Indeed, there has been a pronounced tendency for the analysis of all political shades to study the Soviet Union 'from above'. What Rizzi did say about the principal subordinate class in Stalinist Russia is not very enlightening. He rejects the notion that Soviet workers constituted a proletariat, believing instead that slavery was a more accurate description of their conditions of life.[87] This was not only in tension with his belief in a socialist future, but took the idea of central planning and totalitarianism at face value. Even at the height of the Stalinist era, however, industrial workers retained some economic freedom because of the large excess demand for labour power and competition between enterprises for all types of inputs.[88] This indicates that the members of the main producing class in the Soviet mode are closer to being wage-labourers than slaves, and that the mode itself may not be *sui generis*, but instead a particular type of capitalism.

IV State Capitalism

Marx and Engels more than once recognised that capitalism could come in various forms. At the same time they argued that the exceptional dynamism of this mode of production brought rapid structural change.[89] Reflecting on this, Engels even went so far as to claim that Marx's perspective precluded rigid conceptional definitions, and eschewed structure for process.[90] In doing so he suggested the inappropriateness of judging new work in Marxism by an appeal to established texts. More importantly, Engels's remarks indicate the immense difficulties inherent in the economic analysis of modes of production which change.

For all their apparent dogmatism the Marxists of the Second International frequently acted in accordance with these views, as volume I of this book testifies. This was certainly true of the Bolsheviks, who justified their revolution of 1917 on the grounds that capitalism had entered a new imperialist epoch which provided institutions of state capitalism facilitating a transition to socialism (see Chapter 13 of volume I of this book). Lenin even believed that the transition itself would involve a modified form of state capitalism that would only gradually yield to socialist forms of organisation (see Chapter 15 of volume I of this book). This provided ammunition to his critics on the Left, who argued for a more radical break with the past and frequently used the term 'state capitalism' as a symbol of their disappointment with the revolution's achievements. Similarly, many Mensheviks claimed that Russian backwardness precluded anything other than some form of capitalist development.[91] Again this shows that Stalin's identification of his opponents on the Left and the Right as a single group was not wholly contrived (see Chapter 2 above).

Trotsky, however, was never impressed with theories of state capitalism in any form, and was especially critical of writers who claimed Russia to be state capitalist. Some of his objections were sensible enough; the term was frequently employed as a slogan of opposition, rather than a category of analysis.[92] But behind Trotsky's opposition was something more fundamental. He could conceive of state capitalism only as a product of capitalist development, not as the outcome of a proletarian revolution. A similar viewpoint was revealed in Hilferding's ridiculing of the concept as applied to the Soviet Union.[93]

Nevertheless, the idea that the Soviet Union was state capitalist did ultimately disrupt the Trotskyist movement in the post-war years. In the 1940s Raya Dunayevskaya and C.L.R. James both left the Fourth International, jettisoned Trotsky's analysis of the Soviet Union as a degenerated workers' state, and instead proposed a state capitalist perspective. In doing so they were greatly influenced by the 'Young Marx' of the *Economic and Philosophic Manuscripts*. Their analysis of the actual relations of production in the Soviet Union in terms of alienated labour was the principal ground on which they justified their position.[94] Other Marxists – many of whom were also initially Trotskyists – have taken a very similar position, reviving the earlier themes of anarchist hostility to state socialism and arguing that it was precisely Bolshevism which brought about state capitalism in the Soviet Union. While the Russian revolution was not a bourgeois revolution, it can be regarded as a capitalist revolution in which the vanguard party acted as the surrogate of the bourgeoisie. Not surprisingly, given their commitment to Bolshevism, the Trotskyists have sometimes been regarded as 'the loyal opposition to Stalinism', or even as 'the Stalinist bureaucracy in exile'.[95] Moreover, from this viewpoint the Soviet Union would remain state capitalist even if democratised in a parliamentary manner, or if workers' control were implemented in the minimalist way specified by Lenin's *State and Revolution*. On this argument it is the institution of wage labour which is the defining characteristic of capitalism. Any tinkering with methods of self-management is, like changes in legal forms of ownership, irrelevant to the question of classifying the mode of production. Socialism represents such a radical break with pre-socialist forms that it can only be created in the process of revolution; there can be no protracted transition. Not surprisingly, such theorists tend to regard capitalism in the West and state capitalism in the East as differing only in degree. The Soviet Union is not planned in any meaningful sense; commodity relations are pervasive; and the state is a dominant economic force even in what appears to be 'private' capitalism.[96]

A simlar conclusion was reached by most members of the Frankfurt School in the 1930s and 1940s, although they did regard the planned economy as a reality, both in Russia and in Western capitalism. For Pollock, the Soviet Union, Nazi Germany and Roosevelt's New Deal in the West were each examples of the same genus.[97] In substance his views differed little from those of Hilferding, Rizzi and Burnham, although the nomenclature of state capitalism did. However, the Frankfurt School thinkers were increasingly moving toward the idea that the dominance of instrumental reason was the real force which made all modern societies repressive, irrespective of their form.[98] The most famous version of this argument was provided by Herbert Marcuse in the 1960s,[99] but the idea took shape 30 years earlier. So far as Soviet Marxism itself was concerned, Marcuse demonstrated in 1956 how instead of acting to humanise the world it had operated to facilitate the development of industrial society, and in the process had become transformed.[100] Nevertheless, he did not provide any extensive analysis of the specific nature of the Soviet mode of production, or of the corresponding class structure. This fitted with the general perspective of the Frankfurt School, in which such issues were considered to be of secondary importance.

In fact none of these theorists provided much by way of a concrete political economy of state capitalism, detailing its specific economic dynamics, contradictions and transformative properties. During the Stalinist period only the state capitalist theory associated with Tony Cliff, and later with the Socialist Workers' Party,[101] attempted to deal with these issues at all comprehensively, and it has major deficiencies. The theory is suggestive in terms of its overall perspective, but it has never been fleshed out to incorporate the complexities of Stalinism and post-Stalinist developments.

Prior to the late 1940s Cliff, too, was an orthodox Trotskyist, but he then realised, as did many other Marxists, that the geographical extension of the Soviet mode of production fitted not at all with Trotsky's general viewpoint. In revising his ideas he was probably influenced by Rizzi, although Cliff broke with the Fourth International over his conception of Russia as state capitalist. During the 1950s Cliff applied the theory to all so-called communist societies, including China,[102] and also adopted an analysis of armaments production which seeks to account for the long boom in Western capitalism (see Chapter 8 below). Of all state capitalist theorists he has, therefore, sought to emulate the comprehensiveness of Trotsky's vision by developing an economic understanding of the epoch as a whole. However, Cliff's economics is much closer to that of the early Bukharin than to Trotsky, and his basic ideas can be traced to *Imperialism and World Economy*.[103]

Cliff defines capitalism in terms of only two characteristics: competition and the separation of the producing classes from the means of production.[104] Although he assumes wage labour to exist in the Soviet mode of production, Cliff places no particular significance upon it.[105] Instead, everything hinges on the military threat from the West, which ultimately forced the isolated and backward Soviet Union to accumulate in a capitalist fashion.[106] Stalin's 'revolution from above' was a new version of primitive accumulation whereby the producers were completely deprived of control over the means of production, and the bureaucracy's rule was secured.[107] Since then the bureaucracy has undertaken the functions of the classical bourgeoisie by accumulating at a rapid rate the surplus extracted from the Russian proletariat.[108]

For Cliff the Soviet Union is one giant unit of capital in a world capitalist economy,[109] and he maintains that it is impossible properly to comprehend the economics of the Soviet mode of production in isolation from this reality. It is clear, for example, that the Soviet Union had no purely internal structure from which the law of value arose: commodity production was minimal, prices and profit were accounting devices, and resource allocation was by administrative fiat. Only the perspective of the world economy showed these institutions to be surrogates for internal capitalist competition, and indirectly to implement the 'law of value'. By this Cliff appears to mean the following: if the Soviet mode of production failed to conform to the law of value it would be unable to withstand the competitive pressure from private capitalism and to build an arsenal sufficiently powerful to defend itself from imperialism.[110]

Emerging victorious from the Second World War, the Soviet mode of production then put Western capitalism itself under threat, and both forms of capitalism were forced to maintain extensive armaments production. According to Cliff it was this that ultimately saved Western capitalism as a system, preventing a return to the slump conditions of the 1930s and underpinning the 'long boom' after 1945. Lenin had therefore been incorrect to believe that imperialism was the highest stage of capitalism; it was only the penultimate stage.[111] It will be the contradictions of the 'permanent war economy' which finally inaugurate socialist revolution on a world scale (see Part II, and especially Chapter 8, below). Until then, Cliff argues, the contradictions of backward capitalisms can bring only state capitalist structures into being. These may be progressive in relation to what preceded them, but they do not represent the dictatorship of the proletariat. The reason has little to do with Leninist principles, and everything to do with the absence of sufficiently strong proletarian classes, and the pressures of Western capitalism (or other state capitalisms) upon backward societies.[112]

Cliff's central idea concerning the importance for Russian economic development of the military threat from the West has been a continuing theme in Marxism since at least the 1880s (see Part II of volume I of this book). It was also explicity referred to by Pollock in 1941, and the argument was known to Hilferding in the 1930s. Moreover, the militarisation of the Soviet Union has subsequently been emphasised by Marxists who accept neither Cliff's particular conception of state capitalism nor the bold conclusions which he draws from his analysis.[113] Furthermore, most of the criticisms raised against Rizzi's theory of bureaucratic collectivism also apply to Cliff's theory of state capitalism, and there are other deficiencies which are peculiar to Cliff. The most telling objections result from the high degree of abstraction of his argument, and the inadequate attention given to historical specifics. Thus, for example, Ernest Mandel has cogently argued that capitalist competition is a form of rivalry which can occur only in commodity producing systems, and that its results cannot be expected outside capitalism. In some form or other competition has existed since the dawn of history, but it has become predominantly capitalist only in the modern period.[114]

There is a further, and related, problem of locating exactly when the counter-revolution occured in the Soviet Union. Cliff's own massive work on Lenin suggests that, as a structure, bureaucratisation was assured by the end of the Civil War, if not earlier, under the leadership of Lenin and Trotsky.[115] On his own Bolshevik perspective, which is not dissimilar from Trotsky's own, however, Cliff claims that the bureaucracy – or its state capitalist faction – did not achieve dominance until the late 1920s, when it finally became a 'class for itself'.[116] A second problem is why the purges devoured so many of the new class and not only their opponents, and why even after 1938 leading members of the bureaucracy felt so insecure.[117] In this regard even Trotsky's analysis is superior, for all its limitations, because Trotsky at least glimpsed the complexities of the Stalinist terror whereas Cliff ignores them.[118]

The fact that many leading bureaucrats were themselves victims of Stalin's terror was one of the principal political forces behind de-Stalinisation in the 1950s. There were also important economic considerations, and Cliff has examined these in some detail.[119] What is so surprising, however, is that they modify his perspective on Stalin's Russia and the state capitalist thesis hardly at all. Even the most radical measures of the late 1980s are considered akin to those of the 1950s; they are simply ways of restructuring bureaucratic rule and the Soviet mode of production in order better to meet the competition from other capitalisms, and would have a greater significance only if, in appealing for popular support, the reformist wing of the bureaucracy inadvertently sets off revolution from below.[120] Otherwise, the changes do not really matter; the dynamic of the Soviet mode of production is apparently invariant with respect to its internal structure.[121]

This dramatic conclusion has received no general theoretical elucidation by Cliff and his associates, and it appears to be distinctly un-Marxist. However, during the 1970s, the world systems theory developed by Immanuel Wallerstein has provided an overall conceptual framework which seeks to justify it, and to claim also that it is a conclusion conforming to a Marxist perspective. These ideas are considered in Chapter 9 as part of the new theories of imperialism and the global economy which emerged after the Second World War. Chapter 18 takes up the issue again in the context of whether or not socialism remains a feasible project for the Soviet Union. First, however, we turn to the Marxian analysis of Western capitalism since 1945.

Notes*

* References to L.D. Trotsky's writings use the following abbreviations: *CLO* for *Challenge of the Left Opposition* (New York: Pathfinder Press, 1975–81); *WLT* for *Writings of Leon Trotsky* (New York: Pathfinder Press, 1973–79); *TI* for *Third International After Lenin* (New York: Pathfinder Press, 1970); *LTC* for *Leon Trotsky on China* (New York: Pathfinder Press, 1976); *PR* for *The Permanent Revolution* (New York: Merit, 1969); *ML* for *My Life* (New York: Pathfinder Press, 1970); *HRR* for *History of the Russian Revolution* (London: Pluto, 1977); *SAFG* for *The Struggle Against Fascism in Germany* (New York: Pathfinder Press, 1971); *RB* for *The Revolution Betrayed* (New York: Pathfinder Press, 1972); *SSF* for *The Stalin School of Falsification* (London: New Park, 1974); *TP* for *The Transitional Program for Socialist Revolution* (New York: Pathfinder Press, 1977); *OF* for *On France* (New York: Pathfinder Press, 1979); *SR* for *The Spanish Revolution* (New York: Pathfinder Press, 1973); *IDM* for *In Defence of Marxism* (London: New Park, 1971).

1. K. Marx and F. Engels, *Collected Works*, vol. 6 (London: Lawrence & Wishart, 1976), pp. 331–3; F. Engels, *The Peasant War in Germany* (Moscow: Progress Publishers, 1965), pp. 114–19.
2. L. Trotsky, *Our Political Tasks* (London: New Park Publications, n.d.; first published in 1904).
3. L.H. Haimson (ed.), *The Mensheviks: From the Revolution of 1917 to the Second World War* (Chicago: University of Chicago Press, 1974). Martov, however, remained highly critical of Bolshevik political practice, arguing against it in much the same terms as Rosa Luxemburg: see I. Howe (ed.), *Essential Works of Socialism* (New Haven, Conn.: Yale University Press, 1986), pp. 148–56.
4. S. Dolgoff (ed.), *Bakunin on Anarchism* (Montreal: Black Rose, 1980).
5. P. Avrich, 'What is Makhaevism?', *Soviet Studies*, 17, 1965, pp. 66–75; E. Haberkern, 'Machajsky: A Rightfully Forgotten Prophet', *Telos* 71, 1987, pp. 111–28; M. Sawer (ed.), *Socialism and the New Class* (Sydney: Australian Political Science Association Monograph 19, 1978), pp. 6–8; G. Konrad and I. Szelényi, *The Intellectuals on the Road to Class Power* (New York: Harcourt Brace Jovanovich, 1979).
6. Karl Kautsky, *The Dictatorship of the Proletariat* (Manchester: National Labour Press, 1920); Kautsky, *Terrorism and Communism* (London: National Labour Press, 1920); see also O. Bauer, *Die Österreichische Revolution* (Vienna: Wiener Volksbuchandlung, 1923).
7. H.H. Gerth and C. Wright Mills (eds), *From Max Weber* (London: Routledge & Kegan Paul, 1948); W. G. Runciman, (ed.), *Max Weber: Selections in Translation* (Cambridge: Cambridge University Press, 1978).
8. R. Michels, *Political Parties. A Sociological Study of The Oligarchic Tendencies of Modern Democracy* (New York: Free Press, 1962).
9. K. Kautsky, *Foundations of Christianity* (London: Orbach & Chambers, 1925; first published in German in 1908); N.I. Bukharin, *Historical Materialism* (New York: Russell & Russell, 1965).
10. C. Rakovsky, *Selected Writings on Opposition in the USSR, 1923–30* (London: Allison & Busby, 1980).
11. R.V. Daniels, *The Conscience of the Revolution* (New York: Simon & Schuster, 1969).
12. M. Lewin, *Lenin's Last Struggle* (London: Pluto, 1975).
13. See Chs 13 and 15 of volume I of this book, and Ch. 1 above.
14. See p. 286 of volume I of this book, and *WLT* (1929), p. 124.

15. *TI*, p. 82; *WLT* (1935-36), p. 31; (1938–39), p. 41.
16. *CLO* (1928-29), pp. 347–51; *WLT* (1935–36), p. 106; (1938–39), p. 116.
17. *RB*, p. 253.
18. H. Draper, *Karl Marx's Theory of Revolution, Vol. I, State and Bureaucracy* (New York: Monthly Review Press, 1977).
19. See, for example, *TS*. Trotsky's views on Stalin's personal insignificance are also expressed throughout *CLO* and *WLT*.
20. See especially *CLO* (1926–27), pp. 67–8, 71, 103f; (1928–29), p. 260; *TI*, pp. 246, 256–7; *WLT* (1930), p. 259; (1934–35), p. 183.
21. *CLO* (1923–25), pp. 76–8.
22. *CLO* (1923–25, pp. 60, 123, 193.
23. *CLO* (1923–25), pp. 158, 327; (1926–27), pp. 74, 81, 171–2, 342, 349, 355, 445ff; *TI*, pp. 158ff, 243, 294–9, 303.
24. *LTC*; *TI*, pp. x, 69–73, 127; *CLO* (1928–29), pp. 24–2; *PR*.
25. *CLO* (1926–27), pp. 17, 69–70, 118, 307, 442; *TI*, p. xix. See also C. Bettelheim, *Class Struggles in the USSR* (New York: Monthly Review Press, 1976 and 1978), vol I and II.
26. *CLO* (1926–7), pp. 466, 490; *TI*, p. 284; *WLT* (1930), pp. 238–9.
27. *TI*, pp. 273–4; *CLO* (1928-9), pp. 78, 97ff, 106, 368; *WLT* (1929), pp. 44, 48, 250–1; (1930), p. 208; (1930–31), pp. 200, 215, 314; (1932), p. 34; (Supplement 1929–33), p. 27.
28. *CLO* (1926–27), p. 506; (1928–29), pp. 272, 292–3, 311ff, 315–16, 333, 371; *ML*, pp. 512–13, 533; *WLT* (1929), pp. 26, 80-1, 362; (1930), p. 207; (1930–31), pp. 215–17, 314; (1932), p. 105; *SSF*, p. xvii.
29. *CLO* (1928–9), pp. 324–6; *WLT* (1930), pp. 131, 259–61; (1932), p. 227; (1932–33), p. 277.
30. *CLO* (1928-29), pp. 128, 138–9, 292–3; *WLT* (1929), pp. 26, 109–10, 201, 216; (1932), p. 272; (1932–33), pp. 17, 23, 75–7, 80; (Supplement 1929-33), p. 36.
31. *CLO* (1928-29), pp. 128, 204; *TI*, pp. xxxvi, 257, 265–6; *ML*, pp. 512–13, 533; *WLT* (1930), pp. 50, 80, 145.
32. *WLT* (1929), pp. 401–4; (1930), pp. 96, 112–16, 200–1, 216, 339; (1930–31), pp. 51, 58, 76–7, 82, 85, 89, 207; (1932–33), pp. 22, 73, 96-8; (Supplement 1929–33), pp. 138–9.
33. *CLO* (1928–29), pp. 138–9, 159, 289; *WLT* (1929), p. 79; (1930), pp. 232, 259–61; (1930–1), p. 252; (1932), p. 53; (1932–3), pp. 96, 131–2, 143, 225.
34. *CLO* (1926–27), pp. 461–4; (1928–29), pp. 19, 70ff.
35. *WLT* (1929), p. 360; (1932–33), p. 110.
36. *LTC*; *TI*; *PR*; *SAFG*; *CLO* (1928–29), p. 135; *WLT* (1932), p. 32.
37. *TI*, pp. xi, xxv, xxxiiiff; *WLT* (1934–35), pp. 10–12, 124, 219, 299; (1935–36), pp. 19, 306; (1936–37), p. 478; (1937–38), pp. 430–1; (1938–39), pp. 363, 365; *RB*, p. 191; also see *TP*.
38. See M.C. Howard, 'Trotsky on the French Revolution', University of Waterloo, mimeo, 1989.
39. *WLT* (1933–34), pp. 40, 84–5, 102, 104, 116, 274,; (1934–35), p. 130; (1935–36), p. 306; (1937–38), p. 65; *RB*, p. 252.
40. *CLO* (1923–25); (1925–27); (1928–29); *WLT* (1929), p. 280; (1930–31), pp. 44, 225.
41. *WLT* (1935–36), pp. 22, 223–5; *RB*, pp. 100, 111–12, 288.
42. *WLT* (1933–34), pp. 103–5, 107–8, 223; (1934–35), pp. 162–3, 180–1, 206–8; (1937–38), p. 276; *RB*, pp. 99, 183, 277–8; see also Ch. 1 above.
43. *CLO* (1923–25), p. 365; (1926–27), pp. 59–60; *WLT* (1930–31), p. 97; (1932), p. 188. However, Trotsky sometimes took a more favourable view of workers' control: see *WLT* (Supplement, 1929–33), p. 291; (1934–35), p. 226. For a

general evaluation see M. Brinton, *The Bolsheviks and Workers' Control, 1917–21* (London: Solidarity, 1970).

44. *WLT* (1933–34), p. 111ff; (1934–35), pp. 117–19, 172; (1935–36), pp. 223–5; *RB*, pp. 111–12, 248ff.
45. *WLT* (1933–34), p. 20; (1934–35), pp. 160, 166; (1935–36), pp. 202, 281, 287, 331, 357–9; (1936–37), pp. 405, 429; (1937–38), pp. 38, 67–8, 126–32; (1938–39), pp. 20, 66ff, 157; (Supplement, 1934–40), pp. 647–8, 673; *RB*, pp. 121–3, 128–30, 132–5, 235ff, 249, 253.
46. *WLT* (Supplement 1929–33), p. 252; (1934–35), pp. 86, 119–20, 124, 142, 164; *RB*, pp. 225–7.
47. *OF*; *SR*; *WLT* (1936–37), p. 93.
48. *RB*, p. 5ff.
49. *WLT* (1933–34), p. 113ff; (1934–35), pp. 120–1, 130–1, 157, 171; (1935–36), p. 118; (1936–37), p. 329; (1937–38), pp. 57–8, 131–2, 444; (Supplement 1934–40), p. 647; *RB*, pp. 44, 273ff.
50. *WLT* (1934–35), pp. 121, 171, 182; (1935–36), pp. 119–70; (1936–37), pp. 335–6, 393; (1937–38), pp. 205, 252, 275–6, 303; (1938–39), pp. 319–20, 346ff, 351; (Supplement 1934–40), pp. 766–7, 846.
51. *WLT* (1935–36), pp. 236–41, 406, 413; (1936–37), pp. 102, 121, 189, 330, 336ff, 363; (1937–38), pp. 28, 112, 160, 198, 229–30, 259; (1938–39), pp. 332, 346ff; *RB*, pp. 165–6, 169–70.
52. *CLO* (1928–29), pp. 256–7, 308ff; *WLT* (1930), pp. 206, 335; (1933–34), p. 226; (1935–36), pp. 304–10.
53. *CLO* (1923–25), pp. 199–258; *HRR*; see also p. 237 of volume I of this book.
54. *ML*.
55. *WLT* (1935–6), p. 186; (1936–37), p. 426.
56. *RB*, p. 289; *WLT* (1936–37), p. 426.
57. B. Rizzi, *La Bureaucratisation du Monde* (Paris: private publication by the author, 1939). Part 1 of this book has been translated by A. Westoby as *The Bureaucratisation of the World* (New York: Free Press, 1985), from which references are taken unless otherwise specified.
58. *IDM*, pp. 5, 18, 37–9.
59. *WLT* (1938–39); (1939–40); *IDM*; *TS*.
60. *IDM*, pp. 22, 70, 111, 155–6; *WLT* (1939–40), pp. 145–7, 197, 351.
61. *WLT* (1939–40), pp. 158–9.
62. *IDM*.
63. *IDM*, pp. 19–22, 24–6, 29ff, 35ff, 50ff, 222ff.
64. Westoby, 'Introduction' to *The Bureaucratisation*, pp. 1–33.
65. *WLT* (1938–39), p. 342; (1939–40), pp. 151–3; *IDM*, pp. 4–5, 10–11, 15–18.
66. J. Burnham, *The Managerial Revolution* (Harmondsworth: Penguin, 1945); M. Shachtman, *The Bureaucratic Revolution* (New York: Donald Press, 1962). Rizzi later accused Burnham of plagiarism (on which see Westoby, 'Introduction' to *The Bureaucratisation*).
67. Rizzi, *La Bureaucratisation*, Ch. 2.
68. Rizzi, *La Bureaucratisation*, pp. 62–3, 69–71. See G.A. Cohen, *Karl Marx's Theory of History: A Defence* (Princeton, NJ: Princeton University Press, 1978) for a rigorous examination of this idea.
69. Rizzi, *La Bureaucratisation*, pp. 52–4.
70. Ibid, Chs 1 and 2.
71. Ibid, pp. 66–7, 73.
72. Ibid, pp. 50–2, 63. For three attempts to develop this idea see M. Morishima and G. Catephores, *Value, Exploitation and Growth* (Maidenhead: McGraw-Hill, 1978), G. Hodgson, *Capitalism, Value and Exploitation* (London: Martin

Robertson, 1982) and J.E. Roemer, *A General Theory of Exploitation and Class* (Cambridge, Mass.: Harvard University Press, 1982); see also Chs 14, 15 and 17 below.
73. Ibid, pp. 59, 63, 68, 83–7, 91–2; and Rizzi, *La Bureaucratisation*, parts II and III.
74. Ibid, pp. 51, 54, 63, 66, 83–92.
75. Westoby, 'Introduction' to *The Bureaucratisation*, pp. 16, 27.
76. Rizzi, *La Bureaucratisation*, pp. 41ff, 47, 87.
77. A. Carlo, 'The Socio-Economic Nature of the USSR', *Telos*, 21, 1974, pp. 22–86; A Carlo and U. Melotti, 'In Memory of Bruno Rizzi', *Telos*, 33, 1977, pp. 142–4. See also T. Cliff, *Permanent Revolution* (London: Bookmarks, 1983).
78. R. Hilferding, 'State Capitalism or Totalitarian State Economy', in Howe, *Essential Works*, pp. 321–7. See also Ch. 14 of volume I of this book, and Ch. 1 above.
79. Rizzi, *La Bureaucratisation*, pp. 48–9, 54.
80. Burnham, *Managerial Revolution*, did so even more explicitly because he gave greater attention to the question of class consciousness.
81. The most famous of these new class theories is M. Djilas, *The New Class* (New York: Praeger, 1957). For surveys and commentary on this literature see A. Nove, *Political Economy and Soviet Socialism* (London: Allen & Unwin, 1978), pp. 3–25, 195–218; Nove, *Socialism, Economics and Development* (London: Allen & Unwin, 1986), pp. 220–38; A. Giddens, *The Class Structure of Advanced Societies* (London: Hutchinson, 1973), Chs 12 and 13; A. Giddens and D. Held, *Classes, Power and Conflict* (Berkeley: University of California Press, 1982), part VIII; and Sawer, *Socialism* We do not consider these theories because they concentrate on the analysis of social structure and do not seriously investigate the nature of the Soviet mode of production.
82. I. Deutscher, *The Prophet Outcast* (Oxford: Oxford University Press, 1963), p. 307.
83. H.H. Ticktin, 'Toward a Political Economy of the USSR', *Critique*, 1, 1973, pp. 20–41.
84. This is well documented in the literature on the Soviet economy; see Ch. 18 below.
85. Rizzi, *La Bureaucratisation*, p. 76.
86. Ibid, pp. 48–9, 60, 63, 96–7.
87. Ibid, pp. 80–1.
88. D. Filtzer, *Soviet Workers and Stalinist Industrialisation* (London: Pluto, 1986).
89. See, for example, K. Marx, *Capital*, volume III (London: Lawrence & Wishart, 1972), Ch. XXVII; K. Marx and F. Engels, *Selected Works*, volume 3 (Moscow: Progress Publishers, 1970), p. 145.
90. Marx, *Capital* III, pp. 13–14. See also section II of Ch. 11 below.
91. Daniels, *Conscience*; Haimson, *The Mensheviks*; Sawer, *Socialism*, Ch. 4; A. Buick and J. Crump, *State Capitalism* (London: Macmillan, 1986), pp. 117–25.
92. *WLT* (1930), p. 384; (1933–34), pp. 42, 66, 108–9, 111–3; (1935–6), p. 223; (Supplement, 1934–40), pp. 673, 688–9; *RB*, p. 245ff.
93. Hilferding, 'State Capitalism' Also see Ch. 1 above for other Marxist views on the concept of state capitalism.
94. R. Dunayevskaya, *For the Record, the Johnson–Forest Tendency or the Theory of State Capitalism, 1941–51: Its Vicissitudes and Ramifications* (Detroit: News and Letters Committee, 1972); Dunayevskaya, *The Original Historical Analysis: Russia as State Capitalist Society (1942)* (Detroit Mich.: News and Letters Committee, 1973); C.L.R. James, *State Capitalism and World Revolution* (Detroit: Facing Reality Publishing Committee, 1950, 2nd edn, 1956; 3rd edn,

1969); P. Beilharz, *Trotsky, Trotskyism and the Transition to Socialism* (Beckenham: Croom Helm, 1987), Ch. 5.

95. Ibid.
96. P. Mattick, *Anti–Bolshevik Communism* (London: Merlin, 1978); P. Cardan, *Socialism and Barbarism* (London: Solidarity, 1969); C. Castoriadis, *Political and Social Writings* (Minneapolis: University of Minneapolis Press, 1988), volumes I and II; Sawer, *Socialism*, Ch. 4; A. Hirsh, *The French New Left* (Boston, Mass.: South End Press, 1981), Ch. 5; Buick and Crump, *State Capitalism*, Ch. 4; Brinton, *The Bolsheviks*. See also K. Anderson, 'Raya Dunayevskaya, 1910 to 1987, Marxist Economist and Philosopher', *Review of Radical Political Economics*, 20, 1988, pp. 62–74.
97. F. Pollock, 'State Capitalism: Its Possibilities and Limitations', *Studies in Philosophy and Social Science* IX, 1941, pp. 200–25.
98. M. Jay, *The Dialectical Imagination* (Boston, Mass.: Little, Brown & Co., 1973); D. Held, *Introduction to Critical Theory* (London: Hutchinson, 1980).
99. H. Marcuse, *One–Dimensional Man* (London: Routledge & Kegan Paul, 1964).
100. Marcuse, *Soviet Marxism: A Critical Analysis* (London: Routledge & Kegan Paul, 1958).
101. T. Cliff, *Russia: A Marxist Analysis* (London: Socialist Review, 1964); T. Cliff, *State Capitalism in Russia* (London: Bookmarks, 1988); P. Binns, T. Cliff and C. Harman, *Russia: From Workers' State to State Capitalism* (London: Bookmarks, 1987).
102. Y. Gluckstein, *Stalin's Satellites in Europe* (London: George Allen & Unwin, 1952); Gluckstein, *Mao's China* (London: Allen & Unwin, 1957). Ygael Gluckstein is Cliff's natal name.
103. N.I. Bukharin, *Imperialism and World Economy* (London: Merlin, 1972; written in 1915). See Ch. 13 of volume I of this book, and Ch. 1 above. Also see C. Gannage, 'E.S. Varga and the Theory of State Monopoly Capitalism', *Review of Radical Political Economics*, 12, 1980, pp. 36–49, for a partial history of ideas of state capitalism.
104. Cliff, *Russia*, pp. 91, 106; Binns, Cliff and Harman, *Russia*, pp. 52, 57.
105. Ibid, pp. 90–1.
106. Cliff, *Russia*, Introduction and p. 109; *State Capitalism*, pp. 19, 343; Binns, Cliff and Harman, *Russia*, p. 11.
107. Cliff, *Russia*, pp. 43–7; Cliff *State Capitalism*, p. 17.
108. Cliff, *Russia*, p. 63.
109. Binns, Cliff and Harman, *Russia*, p. 88ff.
110. Ibid, pp. 55, 76–7, 80–2, 92–5; Cliff, *Russia*, pp. 109–10, 112, 120, 146ff; M. Kidron, 'Maginot Marxism: Mandel's Economics', *International Socialism*, 36, 1969, pp. 33–6; C. Harman, 'The Inconsistencies of Ernest Mandel', *International Socialism*, 41, 1969, pp. 36–41.
111. M. Kidron, *Capitalism and Theory* (London: Pluto, 1974), pp. 124–42.
112. Cliff, *Permanent Revolution*.
113. Pollock, 'State Capitalism'; Hilferding, 'State Capitalism'; Cardan, *Socialism*; C. Castoriadis, ' "Facing the War" and "The Socio–Economic Roots of Re–Armament": A Rejoinder', *Telos*, 53, 1982, pp. 192–8.
114. E. Mandel, *The Inconsistencies of "State Capitalism"* (London: International Marxist Group, 1969). See also D. Laibman, 'The "State Capitalist" and "Bureaucratic–Exploitative" Interpretations of the Soviet Social Formation: A Critique', *Review of Radical Political Economics*, 10, 1978, pp. 24–34.
115. T. Cliff, *Lenin* (London: Pluto, 1975–9), volumes III and IV.
116. Cliff, *Russia*, pp. 27, 64ff, 106, 125; Binns, Cliff and Harman, *Russia*, pp. 22–6, 42.

117. N.S. Khrushchev, *Khrushchev Remembers* (New York: Bantam Books, 1971).
118. Cliff, *Russia*, pp. 128, 318; Binns, Cliff and Harman, *Russia*, pp. 35, 41–5, 57.
119. Cliff, *Russia*, part II.
120. Cliff, *State Capitalism*, p. 300ff.
121. Binns, Cliff and Harman, *Russia*, p. 85ff. See also Ticktin, 'Toward a Political Economy'.

Part II
The Long Boom

4
'Has Capitalism Changed?'

I Orthodox Marxism Takes Stock

At the end of the Second World War many Marxian (and some non-Marxian) economists anticipated that a severe economic downturn, possibly in the same league as the Great Depression, would follow hard on the heels of the peace. When, a dozen years later, the expected crisis had still not materialised and the accumulation of capital was still proceeding rapidly and smoothly in the advanced capitalist countries, the Marxists were under pressure to reappraise their entire political economy. The most important analytical issues concerned the relationship between Marxism and Keynesian theory, and will be considered in the following Chapter. Here we deal with a broader set of questions relating to the possibly changed nature of capitalism. Marx himself had expected the structure of capitalist economies to alter over time, but he had provided little guidance on the limits (if such there were) to the evolution of the system.[1]

By the mid-1950s there was a new 'revisionist controversy' (see Chapters 4 and 14 of volume I of this book). 'Neo-Fabian writers have claimed', Maurice Dobb wrote in 1957, 'that capitalism has either entered on a new and reformed stage that differs radically from the capitalism of the nineteenth century, or even has ceased to be capitalism and is already turning into something else.'[2] Among these 'neo-Fabians' were prominent politicians such as C.A.R. Crosland and John Strachey. Crosland in particular was the intellectual leader of the 'revisionist' stream in the British Labour Party, which hoped to purge the party's constitution and programme of any elements of Marxist influence. Similar movements were growing in Germany (where the anti-Marxist Bad Godesberg Programme adopted in 1957 reflected their success, and the ideas of Eduard Bernstein were rediscovered), and in almost every other advanced capitalist nation with a significant Labour or Social Democratic party.[3]

As Dobb conceded, there was certainly a case for Marxian economics to answer. The sustained prosperity of the previous decade could not be attributed entirely to recovery from the war:

> As for the so-called pent-up demand arising out of war-time conditions and war-time devastation, this must have played a rapidly diminishing role in sustaining industrial activity in the course of the nineteen-fifties. What needs explaining, particularly over the last three or four years (i.e. since the recovery from the American recession of 1953–4), is the persistent boom of *private* investment . . . alike in this country, in West Germany and in North America, in the face of a 'tapering-off' of previously mounting armament expenditures and in face of rising interest rates and credit stringency. This fact is the more remarkable and cries out the more insistently for explanation, since all that we learned both from theory and from experience in the inter-war period leads us to expect from monopoly capitalism, the more it develops, a mounting degree of excess capacity of plant and equipment and a tendency to stagnation in investment and rate of growth'.[4]

The neo-Fabians explained these phenomena, Dobb continued, in terms of three factors. First, there was the 'managerial revolution', which was supposed to have removed control over industry from the capitalist class and placed it in the hands of a new managerial elite whose activities rendered investment decisions less volatile and encouraged the growth of private planning. Second, the so-called 'income revolution' of recent decades had greatly reduced economic inequality in all the advanced industrial countries, increasing the average propensity to consume and stimulating aggregate demand. Finally, the substantial increase in the economic influence of the state had contributed greatly to economic stability. The first two factors could be easily dismissed, Dobb argued; since the owners of capital retained control over its disposition, the supposed managerial revolution was spurious, and the growth in equality of incomes had been very modest.[5] By contrast, the 'big extension of state monopoly capitalism' since 1939 was genuine, and the expansion of state expenditure (especially on arms) had 'played an important part in maintaining the high level of industrial activity and employment that has been characteristic of the past twelve years'.[6]

Dobb suggested two further developments which had contributed to the post-war recovery. One was 'internal accumulation', financed by retained profits rather than external funds supplied by the banks; this tended to encourage investment expenditure by large companies, whose decisions no longer required ratification by outside financiers.[7] The other was the accelerated pace of innovation, bound up with the 'automation' of industrial processes, which promoted revolutionary changes in techniques, increased the rate of investment and reduced its volatility in the face of changes in demand. The resulting boost to department I, Dobb concluded, had offset the underconsumptionist tendencies which might otherwise have adversely affected department II. But this did not imply that 'the upward phase can go on indefinitely, as some neo-Fabians would like to have it, converting a novel "phase" (which I think we have to recognise it as being) into a quite new "stage"'. The new phase was, as he noted two years later, one of 'more frequent, but also more short-lived and shallow crises'. There was no evidence that the contradictions of capitalism had been surmounted. They had merely taken on a new, inflationary form, and another depression could certainly not be ruled out.[8]

In the Soviet Union, Eugen Varga had argued in a book written in 1945–6 and published in September 1946 that the process of economic recovery would occupy the major capitalist powers for at least ten years, given the impoverishment of Europe, China and Japan caused by the war. The augmented economic powers of the state would prove permanent, Varga predicted, and would be invoked if a serious crisis appeared imminent. Conscious planning was replacing the anarchy of the market, giving the state a degree of autonomy; it could no longer simply be described as the creature of the financial oligarchy. But Varga was denounced as a heretic for suggesting that the bourgeois state could overcome the inherent laws of commodity production, and for elevating state capitalist tendencies into a new, crisis-free stage of capitalist development.[9] He recanted in 1949, and the official Soviet position remained, throughout the Stalin era and into the Khrushchev years, what it had been before 1939. There was an essential continuity in 'monopoly capitalism' since the First World War. In the 'general crisis of the capitalist system' the world was divided into 'imperialist' and 'socialist' camps. No long-term stabilisation of capitalism was possible. On the contrary, its contradictions were becoming ever sharper, militarism was rampant, civil liberties were constantly under threat, and the revolutionary potential of the proletariat was growing. There were ambiguities in the Soviet line, notably with respect to the possibility of temporary stabilisations, the inexorable growth of state capitalist tendencies, and the continuation of internal rivalries within the imperialist camp. On balance, however, the official line stated that capitalism was, in essence, unchanged.[10]

Decolonisation also offered a challenge to the traditional Communist world view. The relinquishment of formal imperial control over vast areas of Asia, Africa and the Caribbean in the two decades after 1945 was, at first sight, difficult to reconcile with the Hilferding–Lenin theory of imperialism, according to which the division and re-division of the globe was an essential feature of the highest stage of capitalism. Was not the liberation of the colonies clear proof that the supposed economic contradictions which had provoked imperialist expansion before 1914 had been substantially overcome, if indeed they had ever operated with the severity required by Leninist orthodoxy? (See Chapter 13 of volume I of this book.) Varga took Indian independence very seriously indeed, while one of the most influential works of the new revisionism, John Strachey's *End of Empire*, argued that the 'Hobson–Lenin' theory of imperialism was based on underconsumption, and had been rendered irrelevant by the substantial growth in real wages in metropolitan capitalist countries during the twentieth century. The old imperial powers no longer profited from the colonies, Strachey maintained. Thus West Germany, with no overseas possessions, had recovered from the war more rapidly than France, which had paid a heavy price for its continuing imperialist pretensions.[11]

Marxist theoreticians responded to these developments with a variety of arguments, which were not always mutually consistent. Most denied that the European powers had given up their colonies voluntarily. For the British Communist R. Palme Dutt, writing in 1953, the 'bankruptcy of Western imperialism' reflected the fact that the former colonisers could no longer maintain their domination by the previously successful combination of violence and divide-and-rule. British capital's half-hearted attempt to preserve at least some of its empire was crippling the nation's recovery from the war because of the 'economic and military overstrain' which it caused. Most colonial powers soon abandoned the effort. 'Weakened by the two world wars', as Paul Baran put it four years later, 'and no longer able to withstand the pressure from national liberation movements in the colonies, the imperialist powers were forced to bow to the inevitable and to grant political independence to those countries in which the anti-imperialist forces were strongest, in which they could not possibly expect to maintain further their colonial rule' (see Chapter 9 below).[12]

By the early 1960s the Trotskyist Ernest Mandel was viewing the question from a rather different perspective. Mandel accepted that decolonisation was 'an inevitable concession by the metropolitan bourgeoisie to the colonial bourgeoisie'. But it corresponded to an important change in the economic relations between metropolis and periphery, in which the export of means of production was playing a much more important role (and exports of consumer goods a less significant part) than before. The (ex-)colonial bourgeoisie was now seen as a customer, Mandel suggested, rather than as a competitor, and could thus be permitted greater independence of action. State intervention to promote the establishment of heavy industry in the former colonies could only benefit the engineering industries in the West, which were also subsidised by economic 'aid' to the poor countries.[13]

Mandel, Dutt and Baran all agreed that formal independence masked continuing informal control over the economic and political life of the ex-colonies. Lenin himself had cited Turkey, Egypt and China as examples of real dependence hiding behind a purely nominal national sovereignty. Eire and Iraq had been added in the inter-war years to a list which had lengthened considerably since 1945. Thus, Dutt argued, British finance capital continued to own very important sectors of the Indian economy, drawing tribute from it, and US capital was also moving in fast. Imperialism had not ceased to exist, Dutt concluded; it had simply assumed a different disguise.[14] A new phase of 'neo-colonialism' or – in Mandel's words – 'neo-imperialism' had emerged (see Chapters 9 and 10 below).[15]

Such was the view from the West. As the official ideology of a state which was courting the newly-independent nations, however, Soviet Marxism had to be rather more circumspect. Thus Y.A. Kronrod, contributing to an international symposium in 1961, saw decolonisation as both a genuine liberation and a major threat to economic stability in the capitalist heartland:

> By the world-wide collapse of the colonial system, the former colony-holders have lost or are losing the sources of the unfair, self-favouring redistribution of the material resources of their colonies. A radical change in their national industrial structure is an imperative necessity now that they are, stripped of their colonial privileges, compelled under desperate competition in the markets of the world to hold their ground 'with equal chances'. Moreover, their old colonies are fast turning into new industrial competitive forces in the arena of the world economy.[16]

On this interpretation decolonisation had intensified the contradictions of advanced capitalism, and was thus consistent with the general theme of Lenin's *Imperialism*.

II 'Has Capitalism Changed?'

Kronrod was the Soviet representative in an international debate organised in 1958–9, the results being published in book form in 1961 by Shigeto Tsuru, a Japanese economist who had worked with Paul Sweezy before the war on the development of underconsumptionist theory, and who was known for his attempts to synthesise Keynesian and Marxian macroeconomies.[17] Tsuru set the agenda for discussion by asking whether capitalism had 'undergone sufficient evolution to become immune to the type of major depression like the one of 1929–33'.[18] The United States had experienced 20 years of economic growth without a serious crisis. This could not be attributed entirely to war and preparations for war, as prosperity had already survived significant reductions in arms spending in 1945–7 and 1953–4. The avoidance of depressions could not be explained in terms of a new wave of technical progress associated with an upswing in the 50 year Kondratiev cycle (see section I of Chapter 1 above), as some Marxists were suggesting. The new 'scientific-industrial revolution' dated from 1954 at the earliest, while there had been 10 year cycles of the traditional kind in all previous Kondratiev booms. Changes in economic policy did provide a partial answer, Tsuru admitted, since the scope of effective demand failures had been limited by the 1946 US Employment Act, coupled with banking reforms, farm price support and the growth of built-in fiscal stabilisers. Institutional changes had also occurred, most notably the increase in equality in the distribution of income achieved by US trade unions, which had raised the average propensity to consume and was only partially offset by increased profit margins in the fix-price oligopoly sector.[19]

Tsuru himself stressed the importance of military spending in maintaining demand, given that there seemed to be a ceiling of about 16 per cent on the ratio of private investment to national income in the United States. Other, more transitory, factors were at work, especially the (now declining) US export surplus and the unsustainably rapid expansion of consumer credit. There remained powerful tendencies towards stagnation, Tsuru believed. Political opposition to the growth in civilian government expenditure would prevent it from increasing sufficiently to offset a sharp decline in the military sector. Sustained prosperity required high investment, and hence high profits. Capitalists would, however, resist anything which threatened to encroach upon private investment, whether it was higher wages, increased welfare benefits or low-cost public housing projects. If economic growth was indeed to continue, Tsuru argued, it could only be at the expense of massive waste, in which accelerated obsolescence, vast advertising costs and permanent militarisation would all contribute to the maintenance of effective demand.[20]

What of the notion, widely aired among reformist socialists, that the distinction between socialism and capitalism was becoming blurred? Tsuru rejected the idea that capitalism and communism were slowly but inexorably converging.[21] A mode of production is defined by the location of control over the surplus product. The essential characteristics of capitalism, Tsuru suggested, were fourfold: profit is the motivating force of economic activity; it is controlled by private capital; it is very largely devoted to accumulation; and there exists continuous pressure upon economic agents to realise profit through the sale of commodities. None of these characteristics had significantly changed. The giant corporations remained committed to the maximisation of secure, long-term profits, despite the separation of ownership and control; the state had secured only a small proportion of the surplus product through corporate profit tax; rising retention ratios enforced a decreasing propensity to consume out of profits; and the pressure to sell was stronger than ever.[22] 'At least in the case of the United States', Tsuru concluded, 'the characteristic features of capitalism as a mode of production are definitely there'.[23]

Tsuru's assessment was supported, and amplified, by Paul Sweezy and Paul Baran. Sweezy emphasised the weakening, under monopoly capitalism, of the connection between technical progress and investment. The introduction of new technology could now be financed, he suggested, from the corporations' depreciation reserves without any net stimulus to effective demand whatever, and a rapid rate of innovation was therefore fully consistent with economic stagnation. As for the reduction in income inequality, this entirely pre-dated 1945; there was no inherent or long-run tendency towards increased equality. Finally, Sweezy attacked the simplistic view that, just because increased state expenditure would be beneficial to US capitalism, it would inevitably occur. This overlooked both the 'ideological blinkers' which led capitalists to mistake their true long-run interests, and the existence of conflicts between the long-run interests of the bourgeoisie as a whole and the short-run interests of particular segments of it. For Sweezy the capitalist state was neither a neutral intermediary nor the passive tool of a united ruling class. Economic policy-making was the subject of continuous struggle, and at least in the US case the opponents of increased public expenditure generally came out on top.[24]

Paul Baran provided a longer, more thorough and more detailed reformulation of underconsumption theory. Underconsumption had to be viewed as a tendency, Baran suggested, which could be offset by opposing forces. Since 1870 the productivity of workers in US industry had grown much faster than their real wages. The result was a massive increase in the economic surplus as a share of total output, and its growing concentration in the hands of a steadily decreasing number of giant enterprises. Hence the tendency to underconsumption, since neither capitalist consumption nor investment was able to provide sufficient effective demand to absorb the ever-increasing surplus. Against the stagnationist pressures to which this gave rise must be set the increase in unproductive and wasteful expenditures, especially in the form of product differentiation and advertising costs in the private sector and of military spending by the state. In consequence profits now represented only part of the economic surplus; wasteful surplus-absorbing expenditures accounted for the rest. This meant that underconsumption theory was not refuted either by the failure of profits to rise, or of consumption to fall, as a share of aggregate output. Capitalism remained prone to stagnation on the grounds of underconsumption (see Chapter 6 below).[25]

Marxism of a slightly more conventional strain was represented by Y.A. Kronrod, Maurice Dobb and the French Communist, Charles Bettelheim. Kronrod's analysis echoed that of the inter-war Eugen Varga (see Chapter 1 above). Despite the greatly increased role of the capitalist state, Kronrod argued, a world-wide crisis of overproduction could not long be avoided. All the structural changes which had occurred in Western capitalism were contradictory. The growth of monopoly caused production to grow more rapidly than the market could expand, and the increase in state expenditure was inflationary, which tended to reduce real wages and restrict working-class purchasing power. The growth of 'non-productive' (service) activities offered only a temporary respite from underconsumptionist pressure.[26] Bettelheim's argument was essentially similar, denying the ability of the bourgeois state to suppress the fundamental economic laws of capitalist society and attributing the crisis-free years after 1945 to the growth of wasteful selling costs and military expenditures.[27]

As we saw in the previous section, Dobb was more cautious than this. There were two extreme arguments, he suggested in his contribution to Tsuru's symposium; both were erroneous. It was wrong to assert that nothing had changed, and equally wrong to see capitalism evolving into an entirely new system. The growth of the state, the acceleration of technical progress and the demise of finance capital were important developments, but they did not 'in any way justify talk of a "new stage" or alter in any fundamental respects our estimate of capitalism as a system and of its future'.[28]

None of the Marxian contributors to *Has Capitalism Changed?* made any reference to the economic coordination on a world scale which had been facilitated by initiatives such as the Marshall Plan and, in a more permanent form, through institutions like the International Monetary Fund, the World Bank and the General Agreement on Tariffs and Trade. Not until the 1980s, when the international economic order looked increasingly fragile, was its significance appreciated by Marxian writers (see Chapter 16 below). Nor was any attempt made to assess the relevance of Marx's immiseration doctrine to a period of steadily rising real wages. This was left to Ronald Meek, whose highly critical analysis of the Marxian theory of wages in 1962 was never effectively countered by more orthodox writers.[29]

In the symposium itself the two dissenting voices were those of J.K. Galbraith and John Strachey. Galbraith's rather complacent neo-Keynesian optimism served to minimise the influence which his stress on the exercise of concentrated economic power might otherwise have exerted on contemporary Marxian thought. His contribution added little to his book *American Capitalism*, in which he had described how the burgeoning monopoly power of the big corporations had been matched by the new 'countervailing power' of the state, the trade unions, farmers' organisations, consumer cooperatives and the 'mass distributors' (chain stores and supermarkets). Strachey's was an altogether more substantial contribution. He retained enough of his pre-war Marxism (see Chapter 1 above) to assert the continued existence of the underconsumptionist dilemma: high profits are both a necessary condition for full employment and (because they depress consumer demand) its destroyer. The growth of oligopoly made this contradiction more (not less) acute, since price rigidity widened profit margins, worsened inequality and reduced the self-adjusting powers of the market. There was no final escape from this dilemma under capitalism, Strachey argued, but its horns could be blunted if the working class used the state apparatus to increase effective demand by redistributing income from rich to poor and by increasing public expenditure on socially useful civilian projects. To a very considerable extent this was what had happened in Western Europe since the war. Even the New Deal had been a partial success, Strachey urged, and US capitalists would eventually come to recognise their true long-run interests. Stagnation and increasing waste were not the only alternatives.[30]

Qualified support for this conclusion came from Ernest Mandel, who had not participated in Tsuru's symposium but was publishing prolifically on Marxian political economy in the early 1960s. In his encyclopaedic *Marxist Economic Theory*, first published in French in 1962, Mandel described 'the epoch of capitalist decline' which dated from 1900 as one in which the state was increasingly invoked to protect monopoly profits by taking respons-ibility for unprofitable basic industries, making direct and indirect subsidies to private capital, and providing profit guarantees. Military expenditure helped to stabilise department I by supplying 'replacement markets' for the products of heavy industry, while state welfare benefits and the stability of wage incomes achieved by the unions served to maintain the level of demand in department II. While there remained important stagnationist forces in the modern capitalist economy, state intervention had been able to prevent a repetition of the 1929 disaster.[31]

In his *Introduction to Marxist Economic Theory*, which appeared two years later, Mandel claimed that the growth of state involvement had given rise to what he termed 'neo-capitalism'.[32] This was a system characterised by economic planning and a policy of accommodation with, and significant concessions to, the organised working class. Neo-capitalism was in part a temporary phenomenon, associated with the upswing of the Kondratiev long wave and likely to end with it. To the extent, however, that it reflected capitalists' desperate need to avoid another Great Depression and their recognition that unregulated market mechanisms were no longer viable, neo-capitalism might be here to stay. But it was still capitalism:

> We can draw the following conclusion from all this: state intervention in economic life, managed economy, economic programming, indicative planning, are not the least bit neutral from the social point of view. They are instruments of intervention into the economy which lie in the hands of the bourgeois class or of the ruling groups in the bourgeois class, and are in no sense arbitrators between the bourgeoisie and the proletariat.[33]

Nowhere was this clearer than in the state's attempts to plan wages. Incomes policies were capitalist measures aimed at protecting profits by reducing the share of wages in the social product and integrating the unions into the system.[34]

III The Frankfurt School and the Primacy of the Non-Economic

This theme of working class incorporation featured prominently in the post-war writings of the 'Critical Theorists': the Frankfurt School and those influenced by it. Of all the Marxist theoreticians active in the two decades after 1945, it was the Critical Theorists who drew the most radical conclusions from the changed nature of contemporary capitalism. Profoundly affected by fascism and by the emergence of Stalinism as a repressive ideology of state power, the Frankfurt School rejected the deterministic, positivistic strand in those variants of Marxism which took natural science as their paradigm. Critical Theorists opposed, to the authoritarian and bureaucratic Leninist vanguard party, a libertarian vision of human self-emancipation. They renounced mechanical theories of economic breakdown in favour of a more complex and subtle analysis of the interplay between social institutions, ideology and politics. As Bottomore notes, the Frankfurt School transformed the very notion of 'the political' by extending it to such phenomena as the division of labour, bureaucracy, culture and the family in addition to property ownership and the state apparatus. The determining role of the economic was correspondingly reduced. Critical Theory emphasised instead the increasing integration of 'economic' and 'political' questions; the growth of planning and bureaucratic control at the expense of the market; the continual rationalisation of social life; and the intensification of the division of labour, which fragmented tasks and atomised the working class, no longer able to comprehend and organise against its own alienation.[35]

Some of the implications for Marxian political economy were drawn out by Herbert Marcuse in his study of Soviet Marxism. Hilferding and Kautsky had shown how it was possible for inter-capitalist conflicts to be superseded by a stable, hierarchically-organised world economy (see volume I of this book, Chapter 14). After 1945 these potentialities had been realised, Marcuse argued, in the face of the compelling need to compete with the USSR. The old rivalries between imperialist powers had disappeared in the face of the East–West confrontation, and had been replaced by an 'intercontinental political economy' which was based on planning rather than the anarchy of the market:

> The need for the total mobilisation of all material and mental forces necessitated the abolition of laissez-faire in economic and cultural life, the methodical control of the political process, and national regrouping under the actual hierarchy of economic power – at the expense of cherished national sovereignties. The overriding interest of Western society as a whole modified national and class interest.

The outcome was something very close to Hilferding's 'general cartel', subject to the ultra-imperialist hegemony of the United States. As for labour, Marcuse adopted Arnold Toynbee's distinction between the 'internal' and 'external' proletariats. For the latter, located in ex-colonial territories and in isolated ghettos in the West, little had changed. The former was integrated into the capitalist system and rewarded for its loyalty with improved living standards and a modicum of political influence. Like the Leninist theory of uncontrollable imperialist rivalries leading to war, Marcuse argued, Marx's expectation of proletarian revolution in the advanced capitalist countries had become Utopian.[36]

Friedrich Pollock reinforced this conclusion in his study of the consequences of automation. Pollock expected the new technology to widen the already substantial gulf

> between a small group of highly qualified 'managers', engineers and specialists on the one hand and the vast mass of wage-earners on the other. The reason for this lies not only in the personal qualities of the two groups but also in their technical and administrative training. The activity of the 'hands' is now generally confined to carrying out quite elementary operations or in following simple instructions, the very purpose of which they have no need to understand.

The long-run effects of automation, Pollock hinted darkly, might include the evolution of 'a new form of society', based upon authoritarian or military principles, in which the rule of the 'economic general staff' of highly qualified specialists would be accepted without challenge, and capitalists would lose their economic function.[37]

For both Marcuse and Pollock, then, the transformation of post-war capitalism had reduced the working class to fragmentation and passivity. This fundamentally pessimistic perspective was opposed in 1961–2 by a Greek economist based in Paris who, while not formally associated with the Frankfurt School, was considerably influenced by it. Paul Cardan (the *nom-de-plume* of Cornelius Castoriadis) wrote of a 'bureaucratic capitalism' in which the economic contradictions identified by traditional Marxism had been successfully overcome. Marx's analysis of the falling rate of profit was fatally flawed, Cardan claimed, while underconsumption had been avoided by the continuous increase in workers' living standards. State intervention now restricted cyclical fluctuations to very narrow limits, so that 'for all practical purposes full employment has been permanently achieved. Provided they conform, wage earners, whether manual or intellectual, can face the prospect of endless employment. Except for minor fluctuations, production expands by a considerable percentage from year to year.' Real wages rise at roughly the same rate. Allowing for the steady increase in investment and in government expenditure, this meant that 'the market problem has been essentially solved'. Thus, Cardan concluded, 'A crisis of 1929–33 proportions is today quite inconceivable, outside of a sudden epidemic of collective lunacy, simultaneously affecting large numbers of capitalists and their economic advisors'.[38]

For Cardan, however, this did not imply either that capitalism was free of all contradictions or that the working class was doomed to passive acceptance of the status quo. These two points were closely related. The basic flaw in Marx's political economy, Cardan argued, was its assumption that in capitalism social agents are completely 'reified' (that is, reduced to objects by the operation of uncontrollable economic laws). Both Marx's theory of exploitation and his analysis of economic crises assumed that neither workers nor capitalists could influence the functioning of the economy. But this is belied both by the capitalists' ability to organise state-managed and crisis-free accumulation, and by the constant struggle of the working class over every aspect of the capitalist economy, from the level of wages and the pace of investment to the structure of production and the nature of technical change. The existence of class conflict at the point of production testifies that there are limits to reification. It points to what in Cardan's opinion is the real and fundamental contradiction of modern capitalism: its need to solicit the participation of workers (without which profitable production would be impossible) and at the same time to limit this participation (lest they organise to do away with capitalism itself). The true dynamic of capitalist society, Cardan concluded, is the dynamic of the class struggle, which is reflected in the growing number of unofficial strikes over the control and speed of production.[39]

Similar terrain was traversed (in a rather different fashion) by Jürgen Habermas, the foremost member of the second-generation Critical Theorists. Although his most important book, *Legitimation Crisis*, was published as late as 1973, its relevance to the theme of the present chapter is unmistakable. Habermas denied that 'organised or state-regulated capitalism' had been able to do away with economic crises altogether. The underlying law of the tendency for the rate of profit to decline – and here Habermas parted company with all the other writers involved in this controversy except Mandel – was still operative. But crises had changed the form in which they appeared, with the traditional decline in production and employment being replaced by inflation, constant pressure on government finances, and a growing disparity between private affluence and public squalor.[40] Class relations had become political, so that 'economic processes can no longer be conceived immanently as movements of a self-regulating economic system'. The provision of collective goods by the state, although essential to cheapen constant capital and increase the rate of exploitation, cast doubt upon the generality of the labour theory of value, which could not be applied to education, technology or science. Wage determination, too, had been severed from the law of value and become quasi-political, reflecting a class compromise attained through collective bargaining.[41]

There are analogies between Habermas's ideas and the concept of 'state monopoly capitalism' (or *stamocap*) which was official ideology in East Germany, treating the state as a collective capitalist which replaced the spontaneous operation of market forces with central planning. Habermas objected that this view of the state as a mere agent of the monopolists was oversimple, and also exaggerated its power to plan rationally. But he did accept the most important element of *stamocap* theory, which was the increasingly open political nature of economic activity. Economic crises could be averted, but only at the cost of displacing the pressures which lay behind them into other spheres of social life. Class conflict and exploitation remained of fundamental importance, but now found their expression in political and social – rather than narrowly economic – instability.[42]

This conclusion elevated the question of ideology to a central position in political economy. One result of the growth of state intervention, Habermas maintained, was the collapse of 'the basic bourgeois ideology of fair exchange' and its replacement by the notions of formal political democracy and actual rule by a technocratic elite of planners. This raised the possibility of two types of political crisis: a 'rationality crisis' resulting from the system's inability to provide the successful economic management which it had promised its citizenry; and a 'legitimation crisis' when it could in consequence no longer retain mass loyalty. In the socio-cultural sphere this would engender a 'motivation crisis' due to the system's failure to 'generate the requisite quantity of action-motivating meaning'.[43]

Whereas Cardan saw the germ of a revolutionary grass-roots mass movement in the withdrawal of consent by workers on the shop floor (and was partially vindicated in the May 1968 revolt in France), Habermas's conclusions were much less incisive. He claimed to be replying to 'the not-yet-satisfactorily answered question "Has capitalism changed?" ',[44] but it is far from clear precisely what his answer was. Having overcome its traditional economic contradictions, capitalism faced the prospect of a withdrawal of legitimation by its workers. This constitutes a 'permanent crisis' which, Habermas seems to argue, threatens its continued existence. Just how this threat might become effective remains somewhat obscure.[45]

IV Unending Boom, Unfinished Business

We can certainly agree with Habermas that Tsuru's question had not been satisfactorily answered. Capitalism *had* changed, but to what degree and with what implications for Marxian political economy remained deeply controversial. The periodisation of capitalist development, the criteria for identifying a new stage, the way in which this might differ from a new 'phase': these issues would recur, without being resolved, in later decades. The central analytical problem of the relationship between Marx and Keynes underlay many of the disagreements on more practical questions. It was very widely discussed by economists of all persuasions, and forms the subject of the following chapter.

Many of the remaining unresolved issues were debated most vigorously in the years after 1965, when the fragility of post-war prosperity began to become apparent. One controversy raged around the underconsumptionist views of Baran and Sweezy, which were especially influential in the United States; we deal with their analysis of 'monopoly capital' in Chapter 6. The volume III account of the tendency for the rate of profit to decline was generally offered as an alternative to underconsumption, though occasionally it was combined with it in a synthetic model of crises. This forms the subject of Chapter 7. For the Marxian theories of advanced capitalism, a very important question concerned the economic effects of military expenditure in either stimulating capital accumulation or (as Dutt had suggested) constituting a heavy burden upon it. The implications of the 'permanent arms economy' are discussed in Chapter 8. Finally, the apparent failure of the post-war prosperity to encompass the ex-colonial territories of the Third World became a prominent issue in the 1960s. The 1960s and 1970s saw an explosion of Marxian and neo-Marxian literature on economic development, which went far beyond the rather unimpressive earlier treatment of decolonisation. The whole of Part III (Chapters 9–11) is devoted to the new theories of imperialism which emerged.

In all these debates the primacy of the economic contradictions of capitalism was taken for granted by almost all participants. This is not to accuse them of vulgar economic determinism; Baran and Sweezy in particular paid considerable attention to political, ideological and cultural issues. But the insights of Critical Theory were not seriously applied to economic questions until, from the mid-1970s onwards, the deficiencies of more traditional approaches to the explanation of crises became apparent. In many recent crisis theories the role of working-class self-activity, of legitimation and motivation, have taken pride of place, as we shall see in Chapter 16.

Notes

1. F. Sternberg, *The Coming Crisis* (London: Gollancz, 1947); A. Cairncross, *Years of Recovery: British Economic Policy 1945–51* (London: Methuen, 1985), p. 411.
2. M. Dobb, 'Changes in Capitalism Since the Second World War', *Marxism Today*, December 1957, p. 79.
3. C.A.R. Crosland, *The Future of Socialism* (London: Cape, 1956); J. Strachey, *Contemporary Capitalism* (London: Gollancz, 1956); C. Gneuss, 'The Precursor: Eduard Bernstein', in L. Labedz (ed.), *Revisionism* (London: Allen & Unwin 1962), pp. 31–41.
4. Dobb, 'Changes', pp. 82–3.
5. Ibid, pp. 79–80; cf. P.M. Sweezy, 'The Illusion of the "Managerial Revolution"', *Science and Society* 6, 1942, pp. 1–23; C. Wright Mills and H. Gerth, 'A Marx for the Managers', in C. Wright Mills, *Power Politics and People* (Oxford: Oxford University Press, 1963) pp. 53–76 (first published in 1942).
6. Dobb, 'Changes', p. 81.
7. In fact internal financing was already very important in inter-war Britain: see L. Hannah, *The Corporate Economy* (London: Methuen, 1983), 2nd edn, pp. 62–4.

27. C. Bettelheim, 'Commentaires Sur: "Reflections on Capitalism" de Shigeto Tsuru', in Tsuru, *Has Capitalism Changed?*, pp. 93–109.
28. M. Dobb, 'Has Capitalism Changed?', in Tsuru, *Has Capitalism Changed?*, p. 146.
29. R.L. Meek, 'Marx's "Doctrine of Increasing Misery"', *Science and Society*, 76, 1962, pp. 422–41, reprinted with amendments in Meek, *Economics and Ideology and Other Essays* (London: Chapman & Hall 1967), pp. 112–28.
30. J. K. Galbraith, 'Economic Power and the Survival of Capitalism', in Tsuru, *Has Capitalism Changed?*, pp. 167–81; cf. Galbraith, *American Capitalism: The Concept of Countervailing Power* (London: Hamish Hamilton, 1957). Galbraith was later to abandon this position in his *The New Industrial State* (London: Deutsch, 1972); J. Strachey, 'Has Capitalism Changed?', in Tsuru, *Has Capitalism Changed?*, pp. 67–82.
31. E. Mandel, *Marxist Economic Theory*, volume I (London: Merlin Press, 1968; first published in French 1962), pp. 501–7, 529–34; cf. Mandel, *An Introduction to Marxist Economic Theory* (New York: Pathfinder Press, 1970; first published in French in 1964), pp. 62–7.
32. Mandel, *Introduction*, pp. 54–78.
33. Ibid, p. 76.
34. Ibid, pp. 73–5.
35. T. Bottomore, 'Frankfurt School', in Bottomore (ed.), *A Dictionary of Marxism* (Oxford: Blackwell, 1983), pp. 182–8; cf. D. Held, *Introduction to Critical Theory* (London: Heinemann, 1980) and F.R. Hansen, *The Breakdown of Capitalism* (London: Routledge & Kegan Paul, 1986), Ch. 6.
36. Marcuse, *Soviet Marxism*, pp. 33–7; cf. N. Moszkowska, 'Erwartung und Wirklichkeit', *Periodikum für Wissenschaftlichen Sozialismus*, 16, 1960, p. 10. See also Ch. 9 below.
37. F. Pollock, *The Economic and Social Consequences of Automation* (Oxford: Blackwell, 1957), pp. 82–3.
38. P. Cardan, *Modern Capitalism and Revolution* (Bromley: Solidarity, 1965), pp. 28, 63.
39. Ibid, pp. 33–9, 72–7.
40. J. Habermas, *Legitimation Crisis* (London: Heinemann, 1976; first published 1973), pp. 33–6, 45–6.
41. Ibid, pp. 52, 55. See also A. Przeworski, *Capitalism and Social Democracy* (Cambridge: Cambridge University Press, 1985).
42. Ibid, pp. 40, 59–60; cf. M. Wirth, *Kapitalismustheorie in der DDR* (Frankfurt am Main: Suhrkamp Verlag, 1972). For related theoretical developments in Japan, see Morris-Suzuki, *A History*, pp. 122–4, 127–8.
43. Habermas, *Legitimation Crisis* , pp. 36, 49.
44. Ibid, p. 31, where Habermas refers explicitly to Tsuru's book.
45. Ibid, p. 93; cf. Held, *Introduction*, pp. 284–95.

5
Marx and Keynes

I Keynes and Marx

The most important intellectual product of the Great Depression was Keynes's *General Theory*, which was published in 1936. It was not totally original, nor did it present an entirely consistent and self-contained theoretical system. Many of its ideas had been anticipated by earlier writers (including Keynes himself) and there were, as we shall see, important analytical lacunae. Even the policy prescriptions which the *General Theory* contained were less novel, and less controversial, than is often supposed. Moreover Keynes never broke decisively with orthodox theories, and incorporated a number of important neoclassical ideas into his own work.[1] All the same, the book was the first systematic and comprehensive expression of the view that mass unemployment was the normal outcome of an unregulated capitalist economy to emerge from the pen of a respected and hitherto mainstream economist, and as such its appearance was a major event which Marxian theorists could not ignore.[2] Moreover, Keynes's ideas offered the prospect of a reformed, crisis-free capitalism in which Marxian economics would become an irrelevance, so that there were direct political implications to be faced. The bulk of this chapter is concerned with the ways in which Marxian political economy responded to the Keynesian challenge. We begin, however, by asking the converse question: what did Keynes make of Marx?

There are only three references to Marx in the *General Theory*, one of which simply acknowledges him as the originator of the term 'classical economics'.[3] In the second, Keynes describes how the notion of deficient aggregate demand had been banished by the victory of Ricardian economics after 1820; 'it could only live on furtively, below the surface, in the underworld of Karl Marx, Silvio Gesell, and Major Douglas'. Since Gesell and Douglas were monetary heretics of rather minor analytical stature, this was not flattering to Marx. But there was worse to come. Unlike Marx, Gesell had explicitly repudiated 'the classical hypothesis' (Say's Law), Keynes asserted. In so doing, Gesell had rendered Marx's own critique of classical economics redundant; thus his work contains 'the answer to Marxism'. Keynes concluded, only slightly less emphatically, with the opinion 'that the future will learn more from the spirit of Gesell than from that of Marx'.[4]

Keynes was not quite as ignorant about Marx as this final passage might suggest, nor always as dismissive. In 1920–1 or 1921–2 Maurice Dobb, then an undergraduate, had read a paper on Marx to the Political Economy Club at Cambridge, which met in Keynes's rooms. Keynes approved of the piece, Dobb recalled, since he 'liked unorthodoxy in the young, up to a point'.[5] Keynes's writings from the 1920s contain several abusive references to Marxism, including the famous query as to 'how a doctrine so illogical and so dull can have exercised so powerful and enduring an influence over the minds of men and, through them, the events of history'.[6] But, by 1933, probably under the influence of Piero Sraffa (see Chapters 13 and 15 below), he was taking a more favourable line, alluding to Marx's treatment of the realisation problem in his lectures on classical monetary theory and finding close similarities between Marx and Malthus on the question of effective demand.[7]

In a first draft of the *General Theory*, also written in 1933, Keynes came as near as he ever would to a correct understanding of Marx. The relevant passages are worth citing in full:

> The distinction between a co-operative economy and an entrepreneur economy bears some relation to a pregnant observation made by Karl Marx, – though the subsequent use to which he put this observation was highly illogical. He pointed out that the nature of production in the actual world is not, as economists often seem to suppose, a case of C-M-C′, i.e. of exchanging commodity (or effort) for money in order to obtain another commodity (or effort). That may be the standpoint of the private consumer. But it is not the attitude of *business*, which is a case of M-C-M′, i.e. of parting with money for commodity (or effort) in order to obtain more money.

The significance of this point, Keynes continued, is that the entrepreneur's demand for labour depends upon the expected profitability of production, and not on the direct satisfaction of human needs.

In a long footnote Keynes took the argument further:

> The excess of M′ over M is the source of Marx's *surplus value*. It is a curiosity in the history of economic theory that the heretics of the past hundred years who have, in one shape or another, opposed the formula M-C-M′ to the classical formula C-M-C′, have tended to believe *either* that M′ must always and necessarily exceed M *or* that M must always and

> necessarily exceed M′, according as they were living in a period in which the one or the other predominated in actual experience. Marx and those who believe in the necessarily exploitative character of the capitalist system, assert the inevitable excess of M′; whilst Hobson, or Foster and Catchings, or Major Douglas who believe in its inherent tendency towards deflation and under-employment, assert the inevitable excess of M. Marx, however, was approaching the intermediate truth when he added that the continuous excess of M′ would be inevitably interrupted by a series of crises, gradually increasing in intensity, or entrepreneur bankruptcy and underemployment, during which, presumably, M must be in excess. My own argument, if it is accepted, should at least serve to effect a reconciliation between the followers of Marx and those of Major Douglas, leaving the classical economists [that is, in Keynes's idiosyncratic use of the term, the supporters of Say's Law] still high and dry in the belief that M and M′ are always equal![8]

Disregarding once again the somewhat incongruous juxtaposition of Marx and Douglas,[9] Keynes was not far from the truth here, as we shall see in a later section. But his flirtation with Marx did not last long. In the following year he returned to his earlier views and derided Marx's picture of the capitalist world as hopelessly inappropriate to contemporary reality, including him as a pillar of the very nineteenth-century orthodoxy which had to be overthrown. 'If Ricardian economics were to fall', he told a radio audience in November 1934, 'an essential prop to the intellectual foundations of Marxism would fall with it'.[10] In correspondence with George Bernard Shaw at this time Keynes argued the same position, repeating his claim that Marxian theory rested upon Ricardian foundations (that is, on the operation of Say's Law). He compared *Capital* scornfully to the *Koran*, both being sources of useless dogma, and complained about its 'dreary, out-of-date, academic controversialising'. Keynes concluded that 'its contemporary economic value (apart from occasional but inconstructive and discontinuous flashes of insight) is *nil*'.[11] This made even the dismissal of Marx in the *General Theory* seem generous, and did nothing to soften Marxists' innate hostility to the theorising of 'vulgar' economists.

II Marxists on Keynes: Initial Reactions

Even before the appearance of the *General Theory*, Lewis Corey was vigorously criticising Keynes's *Treatise on Money*. As we saw in Chapter 1, Corey's explanation of the Great Depression involved a synthesis of the falling rate of profit and underconsumption strands in Marxian crisis theory. Not surprisingly, then, his attack on Keynes centred on these two issues. Corey maintained that investment depended on movements in the rate of profit, and not (as Keynes supposed) on the rate of interest; Keynes's monetary account of depression thus confused the effect with the cause. 'The fall in the rate of profit is not, as Keynes seems to imagine, the means of a smooth transition to a "new social order" which "is" and yet is "not" capitalism. It is the expression of economic decline and an omen of violent class struggles, social explosions, and wars.' As to the second factor, Corey argued that Keynes 'slights consumption' and exaggerates the importance of investment. 'Oversaving is a factor in the cyclical process. Not because it creates a deficiency in capital investment (and production) but because it creates a deficiency in consumption by diverting to investment income which should go into consumption.' Finally, Corey made a methodological criticism: Keynes's proposals 'emphasize the secondary factors of exchange, not the primary factors of production'.[12] This would be a recurring theme in Marxist reactions to Keynes.

The *General Theory* itself was widely reviewed by Marxian economists. The former German Social Democrat Emil Lederer, now exiled in New York, pointed to three parallels between Keynes and Marx.[13] The first was Keynes's adoption of a labour theory of value, complete with the 'reduction' of skilled to unskilled labour, in his concept of 'wage-units'. The second was his falling rate of profit, disguised as a decline in the marginal efficiency of capital, and the third his recognition of the need for proportionality between consumption and investment, and hence between the Marxian departments I and II. Lederer's objections to the *General Theory* were methodological and political rather than narrowly economic. Keynes had ignored classes in favour of individualistic psychology, he claimed, and had expressed an unwarranted optimism concerning the rationality of capitalists' political behaviour:

> Keynes makes the tacit assumption that [capitalists'] decisions are guided by theoretical insight. He takes it for granted that a theoretical insight can be grasped even if it means the destruction of a social position. This inheritance from the eighteenth century makes Keynes's views utopian – especially in countries which have not developed the art of compromise.

Ideas, Lederer concluded, can change nothing unless they are backed by interests and emotions: 'A rational analysis as such is not a force . . . The ideas put forward by Keynes would entail a revolution in power and property, but we can hardly believe that mankind will accept a new economic and social set-up by persuasion.'[14]

For the Frankfurt Institute (itself also in exile), Kurt Mandelbaum and Friedrich Pollock were even more critical.[15] Keynes's emphasis on liquidity preference was misplaced, they argued, since monetary dislocation was a symptom of crises rather than their cause. He had exaggerated the effects on investment of changes in the rate of interest, while ignoring the repercussions of technical progress on the rate of profit and thereby on investment. There was nothing in the *General Theory* on the effects of disproportionalities in investment in different sectors of the economy. In fact the book contained little that was new. Its refutation of Say's Law had been anticipated by Marx, while its 'naive, long-refuted underconsumptionism' revealed Keynes's inability to break with bourgeois ideas, and his reliance upon subjective propensities demonstrated the superficiality of his analysis. Even his liberalism was only skin-deep: an authoritarian streak was exposed by his approval of Mercantilism and his endorsement of real wage reductions through price inflation. 'To the extent that Keynes's revision does go beyond the classical teaching', Mandelbaum and Pollock concluded, 'it points not to a better but to a more gloomy future.'[16]

The conservative element in Keynes's ideas was also emphasised by John Darrell, writing in the newly-established American Marxist quarterly *Science and Society*. There were close resemblances between Keynes and Marx on some issues, Darrell conceded, especially with respect to the falling rate of profit, but on the whole Keynes's explanation of crises and of long-term trends in capitalist development was irreconcilable with the Marxist approach. Above all, Keynes's individualistic psychology was at fault. Following Jevons, Walras and Menger, he dealt with asocial individuals and took their preferences, their propensities to consume, their profit expectations, as given. Thus, Darrell concluded, the *General Theory* was consistent with a subjective theory of value. It was a work of economics, not political economy, and had failed to uncover the inherent laws of capitalist production.[17]

Founded in 1938, the *Modern Quarterly* was the British counterpart to *Science and Society*. In its inaugural issue Eric Roll criticised Keynes for concentrating upon exchange rather than production, and for ignoring the political problems associated with attempts to alter the mechanism of exchange. The implication of the *General Theory*, Roll asserted, was that liberalism was bankrupt politically as well as economically. Keynes's ideas had already been implemented in fascist Italy and Nazi Germany. Despite his own sincerely-held progressive views, Keynes's work was in real danger of being taken over by reactionary demagogues.[18]

That there was no unanimity among British Marxists in their reaction to Keynes is demonstrated by *Modern Quarterly*'s publication, three issues later, of John Strachey's much more favourable review of the *General Theory*.[19] Strachey pointed to the 'remarkable similarity' between Keynes's conclusions and those of volume III of *Capital* on the central issue of the rate of profit. It is true, Strachey concedes, that Keynes ignores the relationship between technical progress and the profit rate. For both Keynes and Marx, however, an increase in employment requires investment expenditure, and both see capital accumulation as causing a fall in the rate of profit (to which concept, according to Strachey, Keynes's marginal efficiency of capital is a close approximation). Thus the tendency for a decline in the rate of profit is 'the chariot at Mr. Keynes's back. It is immensely interesting that a leading capitalist economist has restored the tendency of the rate of profit to fall to the centre of his picture of capitalist society.'[20]

Strachey went much too far in his identification of the two theories, as had Corey and Darrell, but in the late 1930s several other writers sympathetic to Marx penetrated the academic journals with articles highlighting this and other similarities with Keynes. In the *Review of Economic Studies* J.D. Wilson argued, like Strachey, that Keynes's marginal efficiency of capital was a close relative of Marx's rate of profit, but that Keynes took as data the long-run factors central to Marx's more successful analysis. The same journal published an important paper by Fan-Hung comparing the theories of effective demand, the profit rate, money and interest in the *General Theory* and in *Capital*, using an algebraic formulation. Keynes had misinterpreted Marx's reproduction schemes, Fan-Hung claimed. They did not assume the validity of Say's Law, but rather specified the conditions for macroeconomic equilibrium in terms compatible with the effective demand analysis of Keynes. In the *Economic Record* the Australian E.E. Ward stressed the underconsumptionist parallels between Marx and Keynes, but also pointed to the relative superficiality (in the methodological sense) and subjectivity of the *General Theory*. Ward contrasted Marx's success in predicting the course of capitalist development (rising unemployment, growth of monopoly, crises, international expansion) with the lack of predictive content in Keynes, which was the inevitable result of his failure to incorporate institutional change into his argument. The Polish Marxist Oskar Lange had argued previously that this was the central limitation of all bourgeois economics.[21]

One academic voice was unexpectedly silent. In 1936 Maurice Dobb was the British Communist Party's leading economist, and by far the most distinguished Marxian economist in the English-speaking world; he was also based in Cambridge. Yet he seems to have taken no part in the debate over the *General Theory*. Dobb himself attributed this surprising omission to his deep engagement in anti-fascist and other political activity, and in 1977 his Cambridge contemporary Austin Robinson confirmed that Dobb was 'rather much of a loner . . . not yet as much at the centre of Cambridge debate as he has been more recently, and not in the thick of the fray around Keynes and Keynes's theory'.[22] But this cannot be the whole story. Dobb had already published a respectful review of Keynes's *Treatise On Money*, and did find the time to publish (in 1937) a major theoretical text and to revise the chapter on crises, following discussions with Michal Kalecki, three years later. The 1940 edition of *Political Economy and Capitalism* contains seven references to Keynes, of which only three are of any substance at all and none provides a critical discussion of the principal arguments of the *General Theory*. It appears both that Dobb was initially somewhat confused by the book and that he was inhibited from making any frontal attack on the man who had been his patron since his undergraduate days at Pembroke College. Dobb's early respect for Keynes owed much to the principled internationalism of *The Economic Consequences of the Peace*, while Keynes had arranged for the publication of Dobb's book on *Wages* and had commented helpfully on the manuscript of his *Russian Economic Development*. There would have been no great pressure on Dobb from his party comrades to denounce the *General Theory*, since in the late 1930s the Communist campaign for the Popular Front against fascism included the effective abandoment of any ideological crusade against reformist economics. Thus Dobb could slowly come to terms with Keynes's ideas through the writings of Robinson and Kalecki without being forced to take a firm stand on their theoretical merits.[23]

To summarise: initial Marxist reactions to Keynes were mixed. Similarities thought to be important were noted, especially with respect to the crisis-prone nature of capitalism, the declining rate of profit, and the theories of money and interest. Nonetheless Keynes was also severely criticised for his subjectivism, for his concentration on the surface phenomena of exchange, for his inability to break with liberal microeconomics, and for the naivety (or worse) of his political outlook. Some of these objections were more firmly based than others. In particular, the reservations expressed by Lederer and Roll about the illiberal political implications of the *General Theory* did highlight important weaknesses in Keynes's argument. But there was little substance to Corey's critique, and neither he nor Mandelbaum and Pollock seem to have understood that Keynes placed much more stress on shifts of his marginal efficiency of capital schedule than in movements along it; Darrell also grossly misrepresented Keynes's views on profit expectations. Any similarity between Keynes's wage units and Marx's labour values is purely formal, while the marginal efficiency of capital schedule is a subjective concept which relates to a very much shorter time dimension than Marx's theory of the falling rate of profit. The lack of clarity in Marxian criticisms of Keynes arose, in large part, from their failure to see that Keynesian economics pertained to the short-run, in which both the capital stock and technology were held constant. Marxian objections to Keynes would be strengthened, and made more systematic, after 1945, and the short-run nature of his analysis would be explicitly recognised. Meanwhile, the early Keynesians were reconsidering their own positions.

III The Keynesians and Marx

Keynes took no further interest in Marx after the publication of the *General Theory*. He did, however, encourage one of his most energetic disciples, Joan Robinson, in her relentless investigation of the relationship between Keynesian and Marxian thinking. As editor of the *Economic Journal*, Keynes published Robinson's first two articles on Marx (one a review of Strachey's *Nature of Capitalist Crisis*), and also 'received kindly' her *Essay on Marxian Economics*.[24] In the first paper, written in 1935, she arrived at 'the apparently paradoxical view that Marx was in reality a classical economist' in Keynes's pejorative use of the term (that is, a supporter of Say's Law). Robinson had reached this conclusion because 'the pivot of the whole [Marxian] argument is that investment cannot increase unless consumption declines'. Rejection of Say's Law would – and here she uses Keynes's phrase – destroy 'the foundations of a large part of Marx's economic analysis'. Robinson further dismisses the labour theory of value as 'a piece of formalism', and Marx's account of the falling rate of profit as derived from it by a 'completely circular' argument (even though the profit rate does indeed fall, as a result of the increasing capital–labour ratio).[25]

All this is obtained from a reading of Strachey rather than Marx. In her *Economic Journal* article Robinson revealed a new familiarity with *Capital*, though not (significantly) with *Theories of Surplus Value*, as yet untranslated and probably – since the Nazi book-burnings – a scarce item in the original German. Keynes, too, seems not to have read the *Theories*, where Marx's attitude to Say's Law is much more explicitly critical than in *Capital*.[26] Robinson is however no more sympathetic to the volume III analysis of the falling rate of profit, which could, she suggests in a twist in the argument reminiscent of Natalie Moszkowska (see Chapter 7 below), be reformulated as a law of the rising rate of exploitation: 'one tautology is as good as another'.[27] On Say's Law, she begins by accusing Marx of assuming away the problem of effective demand by his postulate that capitalists invest everything that they save. Marx's belief that wage cuts in depressions increase the rate of exploitation and hence the rate of profit is quite wrong, she argues, since it ignores the negative effect of reduced real wages on workers' consumption, and thereby on aggregate demand.[28] But Robinson then cites Michał Kalecki as having shown how 'Marx's method provides the basis for the analysis of effective demand, and the academic economists, owing to their neglect of Marx, have wasted a great deal of time in rediscovering it for themselves.' This must have been intended as veiled criticism of Keynes, as well as of her own earlier work.[29]

With Kalecki's assistance, Robinson had now found the underconsumptionist element in Marx, and interprets the Marxian theory of crisis as one of disproportionality between departments I and II, and thus also between consumption and investment. In effect 'the workers cannot consume, and the capitalists will not. The consumer-goods industries therefore present a narrow field for investment, and the capital-goods industries in turn suffer from restricted demand. Here at last Say's Law is overthrown, and Marx appears to foreshadow the modern theory of effective demand.' Hence – and with this she ends the article by embracing a key Marxian idea – 'the barrier of capitalist production is capital itself'.[30]

Biography of
Michał Kalecki

Michał Kalecki was born in Lodz in 1899, the son of a Jewish textile manufacturer. He studied engineering at Warsaw Polytechnic, without graduating, and worked as a financial journalist before spending seven years (1929–36) at the Institute for Business Cycle and Price Research in Warsaw. In 1936 he moved to England, researching first in Cambridge and then, from 1940, at the Institute of Statistics in Oxford. In 1946 he was employed briefly by the International Labour Organisation in Montreal, and then moved to New York to join the staff of the UN Department of Economic Affairs. After coming under political pressure during the McCarthy era, Kalecki returned to Poland in 1955 as an advisor to the government and professor in Warsaw. His relations with the Polish authorities were, however, turbulent. In 1968 Kalecki resigned in protest at a semi-official anti-Semitic campaign; he died two years later.

Biography of
Joan Robinson

Joan Robinson was born in England in 1903, the daughter of a general in the British Army and granddaughter of the Christian Socialist, F.D. Maurice. She was educated at St Paul's Girls School in London and at Girton College, Cambridge, where she graduated in economics in 1925. After two years in India, Robinson returned to Cambridge in 1928 and taught there until her retirement in 1971. She was an important member of the 'Cambridge Circus', assisting Keynes to reformulate his ideas between the publication of the *Treatise* and the *General Theory*. Robinson first studied Marx in the late 1930s, following discussions with Michal Kalecki, and her positivist and Keynesian interpretations of Marxian economics proved extremely influential. A tireless traveller, she took a strong interest in problems of economic development, and became an enthusiastic supporter of Mao's China in the 1970s. Joan Robinson died in 1983, having established an international reputation as an early post-Keynesian theorist but, above all, as a self-proclaimed heretic and scourge of all economic orthodoxies.

These themes are developed, at somewhat greater length, in Robinson's *Essay*. She again discards the falling rate of profit as representing 'a false scent', and her hostility to the labour theory of value is prominent once more (Robinson was never impressed by the apparent parallel with Keynes's 'wage-units').[31] She now interprets Marx as a sophisticated underconsumptionist, for whom the demand for consumer goods is constrained by the poverty of the workers and the capitalists' greed for accumulation. This, in consequence, limits the rate of growth of demand for investment goods and gives rise to deficiencies in effective demand. But Marx had not recognised the fundamental importance of Say's Law, Robinson argues, and had tried to construct a crisis theory which would apply even if the Law were valid. This had confused both Marx himself and later theorists (including, one may surmise, both Keynes and Robinson).[32] But, Robinson maintained, a suitably modified Marxian political economy is perfectly consistent with the basic insights of the *General Theory*. Marx and Keynes even share some of the same defects, including the lack of an adequate theory of income distribution and of the inducement to invest.[33]

Robinson continued to write on these topics for almost 40 years and, although she became increasingly critical of bourgeois economics and more receptive to some of Marx's ideas, she remained faithful to her broad conclusions of 1942. Other radical Keynesians have, almost without exception, followed her lead and are frequently seen as having developed a Keynesian form of Marxism. Henry Smith may indeed have got there first, having argued as early as 1937 that Marx's theory of the trade cycle hinged upon fluctuations in investment spending, the exact consequences of which Keynes had worked out in the *General Theory*.[34] S.S. Alexander discovered similarities between Keynes and Marx in their treatment of income distribution as a determinant of the propensity to consume; their analyses of hoarding and liquidity preference; and (yet again) the long-run tendency for the rate of profit to decline. Unusually for an avowed Keynesian, Alexander echoed some of the Marxian criticisms of Keynes.[35] After the war L.R. Klein extended Fan-Hung's work by expressing the Marxian and Keynesian systems as econometric models differing in their parameter values and subjecting them to empirical testing (from which Marx emerged quite favourably).[36] Once the long-run implications of effective demand analysis had been spelled out in terms of a theory of economic growth, a number of Keynesian writers demonstrated the close similarity of the Harrod–Domar and Marxian growth models. Domar himself freely acknowledged his debt to the Russian economists of the 1920s and, through them, to Marx.[37] Eventually, in the 1980s, the veteran Keynesian Dudley Dillard restated the principal achievement of both Marx and Keynes as the integration of monetary theory into general economic analysis.[38] We return to the relation of Marxian and Keynesian theory in Chapter 15 below.

IV Marxists on Keynes: Second and Third Thoughts

Predictably Dillard's appraisal was challenged not by fellow Keynesians but from the Marxist camp, on the grounds that Keynes's neoclassical theory of value, and his technocratic, statist vision of a reformed capitalism, were fundamentally incompatible with Marxian political economy.[39] Similar objections had been raised repeatedly in earlier decades, often rather aggressively in the opening years of the Cold War when ideological antagonisms were at their most intense and the Soviet Union appeared to many Marxists to be in imminent danger of military attack from the capitalist powers. Thus in his 1946 appraisal Paul Sweezy, while admitting that there was much in the *General Theory's* analysis of effective demand which Marxists could draw upon, described Keynes (not without justice) as in the last resort a prisoner of his neoclassical upbringing. He had never been able to view the capitalist system as a totality, Sweezy argued, integrating its economics, politics, technology and culture. Thus Keynes had regarded the class struggle as nothing more than 'a frightful muddle',[40] and overlooked the class role of the capitalist state, which he treated as a *deus ex machina*. He had neglected the effects of technical progress in creating unemployment, which he regarded as a correctable fault in the economic mechanism rather than as a means of maintaining capitalist control over the market for labour power. And, finally, Keynes had paid even less attention to monopoly power than some of his neoclassical colleagues, and had nothing to say about its macroeconomic implications. (This was a defect which 'post-Keynesian' theorists such as Kalecki, and Marxians like Baran and Sweezy, would later seek to correct: see Chapter 6 below.) There remained no bourgeois counterpart to Hilferding's *Finance Capital* in this respect, Sweezy concluded.[41]

In 1950 Maurice Dobb at last settled theoretical accounts with Keynes. Dobb stressed the *General Theory*'s break with neoclassical orthodoxy and its rejection of the traditional presumption of economic tranquillity. But, he argued, Keynes had always intended to reform capitalism and could not be claimed as a theorist of 'democratic socialism'; his proposed 'socialisation of investment' (never clearly defined, but possibly involving the nationalisation of the financial sector) was meant as an alternative to the socialisation of production. Keynes's economic method was excessively aggregative, Dobb maintained, and led him to neglect the need for balance between different sectors and hence the need for planning. His sympathies were with the productive capitalist as against the rentier, not with the working class, and his characterisation of the bourgeois state as a neutral arbiter had blinded him to the political limitations on government economic policy. It was probable, Dobb concluded, that armaments expenditure represented the only form of state intervention against depression which was acceptable to capitalist opinion, and that full employment under capitalism was a Utopian ideal. (Our discussion of the 'permanent arms economy' is in Chapter 8 below.) In his later work Dobb was less hostile to the *General Theory*, but he was still highly critical of Keynes's treatment of value and distribution theory, which had remained essentially neoclassical. Keynes's analysis of profit, resting heavily on ideas concerning the marginal efficiency of investment, represented the 'most vulnerable point' of the entire *General Theory*.[42]

There was much truth in this, as in Sweezy's complaint that Keynes had neglected the macroeconomic implications of monopoly. But, for all their criticisms, neither Sweezy nor Dobb denied the central analytical tenets of the *General Theory*, that deficient effective demand was the root cause of economic crises and fiscal policy could (at least in principle) set matters right. Their objections to Keynes emphasised political rather than narrowly economic constraints, and seem to owe much to Michal Kalecki's influential article on the 'political trade cycle'.[43] Sweezy was an avowed underconsumptionist (see Chapter 6 below), Dobb less so but with considerable sympathy for the underconsumptionist position.[44] Neither had much time for what was soon to become, in the aftermath of the *General Theory*, the majority Marxist explanation of crises: the volume III analysis of the falling rate of profit. Whatever its merits and demerits (which are considered in Chapter 7 below), the falling rate of profit theory did provide an unequivocal analytical alternative to mainstream Keynesianism, in terms both of the causes of depressions and the prospects for state intervention to prevent or ameliorate them. According to this theory technical progress would raise the organic composition of capital faster than the rate of exploitation, forcing down the profit rate and choking off investment. Individual capitalists – even whole capitalist nations – experience a slump as a decline in demand, but to see deficient demand as the fundamental factor is to mistake a symptom for a cause. Production is the core of the capitalist economy, not exchange. Government expenditure therefore offers no long-term solution for crises, since it represents a drain on the very surplus value which constitutes the source of profit. Capitalism is inherently and inevitably crisis-prone.

This forthright anti-Keynesianism had its origins in the (pre-Keynesian) work of Henryk Grossmann, and was propagated tirelessly over a almost half a century by his disciple, Paul Mattick.[45] Today it is very widely accepted among Marxian economists.[46] It can best be explained by using Marx's formula for the circulation of capital which was cited, inaccurately, by Keynes in his 1933 draft (see section I above), and by ignoring both the transformation of labour values into prices of production (see Chapters 12–14 below) and fixed capital (see Chapter 13 below). In simple or pre-capitalist commodity production, circulation takes the form C-M-C: the individual producer exchanges one commodity (C) for money (M) in order to buy a different commodity of equal value (C, not C′ as Keynes had it). In capitalism the relationship is M-C-C′-M′ (not Keynes's M-C-M′). The capitalist thus begins with a sum of money (M) which is exchanged for means of production and labour power of equal value (C). These commodities are set to work in production, in the course of which surplus labour is performed and surplus value created. At the end of the production process the capitalist is the owner of new commodities greater in value than those with which he began (C′), the difference between C′ and C being the surplus value they embody. All being well, he sells them at their labour values and receives an equivalent sum of money (M′), where the difference between M′ and M represents both the surplus value produced and the profit which the capitalist has obtained. The rate of profit is given by $(C' - C)/C$, which is equal to $(M' - M)/M$.

The claim of the anti-Keynesian Marxists, then, is that crises result from a failure to produce sufficient surplus value, so that $(C' - C)$ rises less rapidly than C and the rate of profit falls. They are not the result of difficulties at the realisation stage (C′-M′). Since the state is not itself a capitalist it produces no surplus value of its own, and its activities constitute the dissipation of that which is produced by productive labour in private, profit-making industry. State intervention reduces the amount of surplus value available to private capital, and simply serves to make things worse; this is the reverse of what Keynesian economics implies.[47] At first glance this is a glaring example of the Ricardian fallacy which Keynes denounced in Marx himself; in assuming that $M' = C'$ (and $C = M$) it appears to rest solidly upon Say's Law and to deny the possibility of deficient effective demand. In fact this is not so. The anti-Keynesian position does not rule out the possibility that $M' < C'$. Indeed, this might well be the result of the cutback in investment produced by the decline in the profit rate, which would reduce effective demand and lead to a fall in product prices; it would then be an important factor generalising and deepening the crisis. But, to repeat, for the anti-Keynesians it is only an effect. The deeper cause of the crisis lies elsewhere, in the production of surplus value and not in the difficulties of realising surplus value.

It is important to be clear as to exactly what the anti-Keynesians have, and have not, established. Quite irrespective of the validity of Marx's falling rate of profit analysis (see Chapter 7 below), they have demonstrated that crises *may* originate with the production of surplus value, without there being realisation difficulties. What they have not shown is that all crises *must* originate in this way. With a constant or even rising ratio between $(C' - C)$ and C, the realised profit rate $(M' - M)/M$ will fall, and a crisis may ensue, if $M' < C'$ due to deficient effective demand. Conversely, a crisis may result from excessive effective demand. In these circumstances the short-run or market prices of means of production, and labour power, rise above their long-run prices of production (which we have assumed to be equal to labour values). Hence capitalists are unable to buy inputs equal in value to M, so that $C < M$.

Marxists influenced by Kalecki[48] have approached the problem of deficient effective demand in a slightly different, but not at all inconsistent, manner. They take for granted the production of surplus value and begin with the proposition that, in equilibrium, aggregate income must equal aggregate planned expenditure. Abstracting from the state and from foreign trade, we can therefore write

$$\text{Wages} + \text{Profits} = \text{Workers' Consumption} + \text{Capitalists' Consumption} + \text{Investment} \qquad (5.1)$$

It is a fairly close approximation to the truth to assume that workers consume the whole of their wage incomes, as any saving done during their working lives (for example via pension funds) is offset by dis-saving after retirement. Hence (5.1) can be simplified to

$$\text{Profits} = \text{Capitalists' Consumption} + \text{Investment} \qquad (5.2)$$

This is equivalent to Keynes's celebrated 'widow's cruse' model of total profits,[49] in which capitalists' incomes are determined by their expenditure, and in particular (since little stress is placed upon their consumption) by their investment expenditure. In terms of the Marxian circulation formula, this means that $(M' - M)$ depends on capitalists' investment decisions, which set a maximum limit, in the aggregate, to their profits, irrespective of the production of surplus value (given by $C' - C$). Note, however, as the Kaleckians generally fail to do, because they abstract from the production process, that the reverse is also true: if sufficient surplus value cannot be produced then capitalist investment plans will be frustrated.

State expenditure can also be taken into account, on Kalecki's argument, so long as some assumption is made concerning the incidence of taxation. On the supposition that workers bear none of the burden, (5.2) can be rewritten as

$$\text{Net Profits} + \text{Taxes} = \text{Capitalists' Consumption} + \text{Investment} + \text{Government Expenditure} \qquad (5.3)$$

or

$$\text{Net Profits} = \text{Capitalists' Consumption} + \text{Investment} + (\text{Government Expenditure } \textit{minus} \text{ Taxes}) \qquad (5.3a)$$

Thus, where effective demand would otherwise be inadequate, a budget deficit will increase net profits and encourage the production of surplus value. This, however, assumes that there is no 'crowding-out' of private expenditure; that is, it assumes that capitalists do not react to the expanding role of the state by reducing investment, as the anti-Keynesian Marxists maintain. Thus everything depends upon the determinants of investment, for which (as we have seen) neither Marx nor Keynes provides a satisfactory explanation. Subject to this very important qualification, a Kaleckian reformulation does provide the basis for an integration of Marxian and Keynesian theory[50] in which the realisation of surplus value depends upon the level of effective demand, quite irrespective of problems in the production of surplus value. The response of Marxian economists to the Great Depression would have been much more credible if such a reformulation had been available to them then (see Chapter 1 above).

V Conclusion

With hindsight it can be seen that the *General Theory* was more of a watershed for Marxian political economy than for bourgeois economics. To a large extent the 'Keynesian Revolution' in orthodox economics was stillborn, any radicalism in Keynes's conclusions being first stifled by a synthesis with neoclassical theory, and then swamped by a neoclassical counter-revolution. Both processes were aided by Keynes's own continued adherence to orthodox microeconomics and by the confinement of his analysis to the short-run.[51]

The real importance of Keynes's ideas for Marxism, however, became clear only once they had been reworked for the long run, and in the context of Sraffa's rehabilitation of classical political economy.[52] These developments, which took place in the 1950s and 1960s, are discussed in Chapters 13 and 15 below. Among the Marxists, however, there was very soon a great divide, with many regarding a Kalecki–Sraffa version of Marxism as nothing more than 'left Keynesianism'. Instead they emphasised the methodological distinctiveness of Marx's economic thought, the pivotal role of production as distinct from exchange, and the overriding importance of the falling rate of profit, and took up an explicitly anti-Keynesian stance. The gulf between these two schools widened, and also included value theory, with the 'left Keynesians' and Kaleckians being much readier than their opponents to abandon the labour theory of value in the face of the many problems which arose with it. These theoretical conflicts will be encountered in several of the following chapters, and especially in Chapters 14 and 15.

Notes

1. M. Bleaney, *The Rise and Fall of Keynesian Economics* (London: Macmillan, 1986), Chs 1–2; J. Robinson, *Economic Philosophy* (Harmondsworth: Penguin, 1964); Robinson, *Economic Heresies* (London: Macmillan, 1971); see also Ch 15 below.

2. Kurt Mandelbaum and Friedrich Pollock, writing under the joint pseudonym of 'Erich Baumann', regarded Keynes's attack on 'classical economics' as the twentieth-century equivalent of J.S. Mill's recantation of the wage-fund theory in 1869: E. Baumann, 'Keynes's Revision der Liberalistischen Nationalökonomie', *Zeitschrift für Sozialforschung*, 5, 1936, p. 384
3. J.M. Keynes, *The General Theory of Employment, Money and Interest* (London: Macmillan, 1936), p. 3n.
4. Ibid, pp. 32, 355. On Douglas, see H.I. Dutton and J.E. King, ' "A Private, Perhaps, but not a Major . . .": the Reception of C.H. Douglas's Social Credit Ideas in Britain, 1919–1939', *History of Political Economy*, 16, 1986, pp. 259–79; on Gesell see H.T.N. Gaitskell, 'Four Monetary Heretics', in G.D.H. Cole (ed.), *What Everyone Wants to Know About Money* (London: Gollancz, 1933), pp. 385–401.
5. M.H. Dobb, 'Random Biographical Notes', *Cambridge Journal of Economics*, 2, 1978, p. 117.
6. J.M. Keynes, 'The End of Laissez-Faire' (1926), in Keynes, *Collected Works*, volume IX (London: Macmillan for the Royal Economic Society, 1972) (hereafter *CW*), p. 285; cf. his review of Trotsky's *Where Is Britain Going?* (1926 in *CW*, X (1972)), pp. 63–7.
7. Editorial note in *CW*, XIII (1973), p. 420; Keynes's essay on Malthus in *CW*, X (1972), p. 91n.; and the editorial note in ibid, p. 71, dating this to 1933.
8. Keynes, 1933 draft of the *General Theory* in *CW*, XXIX (1979), pp. 81 and 81n. On Hobson see J.E. King, *Economic Exiles* (London: Macmillan, 1988), Ch. 6; on Foster and Catchings, see J. Dorfman, *The Economic Mind in American Civilisation*, volume 4 (New York: Viking Press, 1959), pp. 338–51.
9. On which see Dutton and King, 'A Private', pp. 272–4.
10. Keynes, 'Mr. Keynes Replies to Shaw' (1934), in *CW*, XXVIII (1982), pp. 30–5; 'Poverty in Plenty: is the Economic System Self-Adjusting?' (1934), in *CW*, XIII (1973), p. 488.
11. Keynes to G.B. Shaw, 2 December 1934 and 1 January 1935, in *CW*, XXVIII (1982), pp. 38, 42; cf. D.K. Foley, 'Say's Law in Marx and Keynes', *Cahiers d'Économie Politique*, 10–11, 1986, pp. 183–94.
12. L. Corey, *The Decline of American Capitalism* (London: John Lane The Bodley Head, 1935), pp. 188–90, 214–16; cf. Ch. 1, section II, above.
13. E. Lederer, 'Commentary on Keynes', *Social Research*, 3, 1936, pp. 478–87. On Lederer see R.A. Dickler, 'Lederer, Emil (1882–1939)', in J. Eatwell, M. Milgate and P. Newman (eds), *The New Palgrave: A Dictionary of Economics*, volume 3 (London: Macmillan, 1987), pp. 157–8.
14. Ibid, p. 487. Very similar points were raised by the then Social Democrat A.L. Rowse in his *Mr Keynes and the Labour Movement* (London: Macmillan, 1936), pp. 12–13, 17, 56–61.
15. Baumann, 'Keynes's Revision', pp. 384–403.
16. Ibid, p. 403.
17. J. Darrell, 'The Economic Consequences of Mr. Keynes', *Science and Society*, 1, 1937, pp. 194–211.
18. E. Roll, 'The Decline of Liberal Economics', *Modern Quarterly*, 1, 1938, pp. 78–90.
19. J. Strachey, 'Mr. J.M. Keynes and the Falling Rate of Profit', *Modern Quarterly*, 1, 1938, pp. 337–47. See also N. Thompson, 'John Strachey: the Making and Unmaking of an English Marxist, 1925–40', in D.E. Moggridge (ed.), *Perspectives on the History of Economic Thought, Volume 3* (Aldershot: Edward Elgar, 1990), pp. 103–16.

20. Ibid, p. 340.
21. J.D. Wilson, 'A Note on Marx and the Trade Cycle', *Review of Economic Studies*, 5, 1938, pp. 107–13; Fan–Hung, 'Keynes and Marx on the Theory of Capital, Accumulation, Money and Interest', *Review of Economic Studies*, 7, 1939, pp. 28–41, reprinted in D. Horowitz (ed.), *Marx and Modern Economics* (London: McGibbon & Kee, 1968), pp. 117–37; E.E. Ward, 'Marx and Keynes's General Theory', *Economic Record*, 15, 1939, pp. 152–67; O. Lange, 'Marxian Economics and Modern Economic Theory', *Review of Economic Studies*, 2, 1935, pp. 189–201.
22. Dobb, 'Random Notes', p. 119; A. Robinson, 'Keynes and His Cambridge Colleagues', in D. Patinkin and J.C. Leith (eds), *Keynes, Cambridge and the 'General Theory'* (London: Macmillan, 1937), p. 27.
23. Dobb, review of Keynes's *Treatise*, *Cambridge Review*, 28 November 1930, reprinted in E. Homberger, W. Janeway and S. Schama (eds), *The Cambridge Mind: Ninety Years of the 'Cambridge Review'* (London: Cape, 1970), pp. 44–6; *Russian Economic Development Since the Revolution* (London: Routledge, 1928), p. xii; Dobb, 'Employment And Unemployment' (a review of Joan Robinson's *Introduction To The Theory Of Employment*), *Cambridge Review*, 28 January 1938, pp. 213–14; Dobb, 'An Economist From Poland' (review of Kalecki's *Essays In The Theory of Economic Fluctuations*), *Daily Worker*, 22 March 1939; Dobb, *Political Economy and Capitalism* (London: Routledge, 1937; 2nd edn, Routledge & Kegan Paul, 1940). We are grateful to Noel Thompson and especially to Brian Pollitt for information concerning Dobb's attitude to the *General Theory*.
24. J. Robinson, *Essays in the Theory of Employment* (London: Macmillan, 1937), pp. v and 246–55; Robinson, 'Marx on Unemployment', *Economic Journal*, 51, 1941, pp. 234–48; Robinson, *An Essay on Marxian Economics* (London: Macmillan, 2d edn, 1966; first published 1942), p. vi.
25. Robinson, *Essays*, pp. 246–55.
26. M.C. Howard and J.E. King, *The Political Economy of Marx* (Harlow: Longman, 1985), 2d edn, pp. 209–14.
27. Robinson, *Essay*, ch. III and V.
28. Robinson, 'Marx on Unemployment', pp. 236, 246.
29. Ibid, p. 240; cf. M. Kalecki, *Essays in the Theory of Economic Fluctuations* (London: Allen & Unwin, 1939), p. 45.
30. Robinson, 'Marx on Unemployment', p. 248.
31. Robinson, *Essay*, Chs III and V.
32. Ibid, pp. 49–51.
33. Ibid, pp. 34, 62, 80–1.
34. H. Smith, 'Marx and the Trade Cycle', *Review of Economic Studies*, 4, 1937, pp. 192–204.
35. S.S. Alexander, 'Mr. Keynes and Mr. Marx', *Review of Economic Studies*, 7, 1940, pp. 123–35.
36. L.R. Klein, 'Theories of Effective Demand and Employment', *Journal of Political Economy* 55, 1947, pp. 108–32, reprinted in Horowitz, *Marx*, pp. 138–75.
37. S. Tsuru, 'Keynes Versus Marx: The Methodology of Aggregates', in K. Kurihara (ed.), *Post Keynesian Economics* (New Brunswick, NJ: Rutgers University Press, 1954), pp. 320–44, reprinted in Horowitz, *Marx*, pp. 176–202; A.E. Ott, 'Marx and Modern Growth Theory', *German Economic Review*, 10, 1967, pp. 189–95; W. Krelle, 'Marx as a Growth Theorist', *German Economic Review*, 9, 1971, pp. 122–33; T.P. Lianos, 'Domar's Growth Model and Marx's

Reproduction Scheme', *Journal of Macroeconomics*, 1, 1979, pp. 405–12; cf. E.S. Domar, *Essays in the Theory of Economic Growth* (New York: Oxford University Press, 1957), Ch. IX., and Ch. 15 of volume I of this book.
38. D. Dillard, 'Keynes and Marx: a Centenary Appraisal', *Journal of Post-Keynesian Economics*, 6, 1984, pp. 421–32; cf. P. Kenway, 'Marx, Keynes and the Possibility of Crisis', *Cambridge Journal of Economics*, 4, 1980, pp. 23–36; C. Sardoni, *Marx and Keynes on Economic Recessions; The Theory of Unemployment and Effective Demand* (Brighton: Wheatsheaf, 1987).
39. P. Burkett, 'Dillard on Keynes and Marx: Comment', *Journal of Post–Keynesian Economics*, 8, 1986, pp. 623–31; cf. D. Dillard, 'Dillard on Keynes and Marx: Rejoinder', *Journal of Post–Keynesian Economics*, 8, 1986, pp. 632–6.
40. Keynes, *Essays in Persuasion*, in *CW*, IX (1972), p. vii; cf. his comments on Trotsky, cited in n.6 above.
41. P.M. Sweezy, 'John Maynard Keynes', *Science and Society*, 10, 1946, pp. 398–405, reprinted in Sweezy, *The Present as History* (New York: Monthly Review Press, 1953), pp. 253–62. On Hilferding, see Ch. 5 of volume I of this book.
42. M.H. Dobb, 'Full Employment and Capitalism' (1950), in Dobb, *On Economic Theory and Socialism* (London: Routledge & Kegan Paul, 1955), pp. 215–25; Dobb, *Theories of Value and Distribution Since Adam Smith* (Cambridge: Cambridge University Press, 1973), p. 225; cf. J.M. Gillman, 'An Evaluation of John Maynard Keynes', *Science and Society*, 19, 1955, pp. 107–33, and M.A. Lebowitz, 'The Current Crisis of Economic Theory', *Science and Society*, 37, 1973–4, pp. 385–403.
43. M. Kalecki, 'Political Aspects of Full Employment', *Political Quarterly*, 14, 1943, pp. 322–31, reprinted in E.K. Hunt and J.G. Schwartz, (eds), *A Critique of Economic Theory* (Harmondsworth: Penguin, 1972), pp. 420–30.
44. See Dobb, 'Full Employment', p. 224 and Ch. 1, section II, above.
45. P. Mattick, *Marx and Keynes: the Limits of the Mixed Economy* (London: Merlin, 1971), and Ch. 16 of volume I of this book.
46. B. Fine and L. Harris, *Re–Reading Capital* (London: Macmillan, 1979), and G. Pilling, *The Crisis of Keynesian Economics* (Beckenham: Croom Helm 1986).
47. The parallels here with conservative writers such as Bacon and Eltis are conceded by Pilling, *Crisis*, p. 131 (see R. Bacon and W. Eltis, *Britain's Economic Problem: Too Few Producers*, London, Macmillan, 1976).
48. M. Kalecki, 'The Marxian Equations of Reproduction and Modern Economics', *Social Science Information* 7, 1968, pp. 73–9, reprinted in J.B. Foster and H. Szlajfer (eds), *The Faltering Economy* (New York: Monthly Review Press, 1984), pp. 159–66; cf. J. Steindl, *Maturity and Stagnation in American Capitalism* (New York: Monthly Review Press, 1976; first published 1953), pp. 236–9; P. Erdos, 'A Contribution to the Criticism of Keynes and Keynesianism', in J.G. Schwartz (ed.), *The Subtle Anatomy of Capitalism* (Santa Monica, Cal.: Goodyear, 1977), pp. 232–54; and M. Sebastiani (ed), *Kalecki's Relevance Today* (London: Macmillan, 1989), pp. 164–90, 206–19.
49. J.M. Keynes, *A Treatise On Money*, vol. I, in *CW*, V, p. 125; the parable is found in I Kings 17, vv. 12–16.
50. For a discussion of the wider relationship between Kalecki and Marx see M. Sawyer, *The Economics of Michal Kalecki* (London: Macmillan, 1985), Ch. 8.
51. J. Robinson, 'What Has Become of the Keynesian Revolution?', in Robinson, *Collected Economic Papers*, volume V (Oxford: Blackwell, 1979), pp. 168–77; R.E. Lucas, *Studies in Business Cycle Theory* (Cambridge, Mass.: MIT Press, 1981); cf. Dobb, *Theories*, pp. 214–5.
52. Sardoni, *Marx and Keynes*.

6
Monopoly Capital

I Introduction

As we saw in Chapter 1, four broad types of crisis theory were used by Marxian economists to explain the Great Depression: disproportionality, overaccumulation, the falling rate of profit, and underconsumptionism. Of these, disproportionality soon lost all influence and overaccumulation fell out of favour for several decades. The other two theories were, however, invoked after 1945, both to account for the 'long boom' and to demonstrate that it could not last indefinitely. One school of post-war writers claimed that the tendency for the rate of profit to decline had been in abeyance because of the temporary strength of various counter-acting tendencies, but would eventually reassert itself and put an end to sustained prosperity. This had been very much a minority viewpoint before the Second World War, but by the 1960s it was probably accepted by the majority of Marxian economists, at least in Europe. The second line of argument, relying on underconsumptionist ideas, was much more influential in North America, where the analysis of 'monopoly capital' maintained that aggregate demand had been stimulated after the war by wasteful (for example, military) expenditures. For Paul Baran, Paul Sweezy and their followers, capitalism was not merely prone to stagnation and crisis; it was also, and increasingly, devoting its productive power to irrational uses.

This part of the book is organised as follows. The present chapter examines the theory of monopoly capital, assessing both its formal validity and its explanatory power. Then in Chapter 7 we provide a critical history of the falling rate of profit theory from 1883. In both chapters we concentrate on theoretical developments up to the end of the 'long boom' – that is, roughly up to 1973 – leaving detailed treatment of subsequent controversies to Chapter 16 in the final part of the book. We conclude this part, in Chapter 8, with a discussion of the relationship between arms spending and the post-war economic performance of Western capitalism.

II The Origins of *Monopoly Capital*

Before the Great Depression Marxian economics had very little influence in the United States. Class consciousness was very much weaker than in Europe, the labour movement more opportunistic, and the universities possibly even more conservative and intolerant of radical ideas. The reaction to the Bolshevik Revolution was also more draconian in North America, strengthening the already powerful forces of intellectual and political conformity. The institutionalist Thorstein Veblen, a trenchant critic of capitalist mores, did act as something of a conduit for the transmission of socialist ideas. But, apart from Louis Boudin's *The Theoretical System of Karl Marx* (a distinguished but largely exegetical work published in 1907), no specifically Marxian text of any significance appeared in the US before Lewis Corey's writings on crisis theory in the mid-1930s.[1]

Corey was largely self-taught, an activist rather than an academic. His work was marred by eclecticism, and he soon renounced Marxism altogether.[2] Paul Sweezy proved to be a much more important figure. Trained at Harvard and the London School of Economics, the young Sweezy was the author of a thesis on the economic history of the British coal industry and a number of articles in mainstream professional journals. He had begun as an orthodox 'classical' economist (in the Keynesian sense), accepting the validity of Say's Law, supporting wage cuts to reduce unemployment and revealing considerable mathematical talent in justifying this stand.[3] By 1938–9 Sweezy had changed his position and become significantly more radical, arguing now both that employment was determined by product demand and that oligopoly implied a discontinuous labour demand curve with zero wage-elasticity over the relevant range; wage cuts would thus fail to stimulate a recovery in employment. This conclusion was a corollary of his celebrated analysis of the kinked demand curve.[4]

Precisely when Sweezy can be said to have become a Marxist is a little unclear. His contemporary, Lorie Tarshis, recalls him first as 'an ardent and belligerent defender of Hayek' and then, in 1937, as a firm Keynesian. In the following year Sweezy's name appeared as co-author of the highly influential tract, *An Economic Program for American Democracy*, which was 'a presentation of the Keynes of the *General Theory* in New Deal American garb'.[5] Sweezy's own recollections are different: 'I returned to the United States [in 1933] after my year at the London School a convinced but very ignorant Marxist', he wrote in 1981.[6] Nothing Sweezy published in the 1930s, however, marked him out as anything other than a very competent and original Keynesian. His underconsumptionism must also have owed something to the English radical writer J.A. Hobson, whose work he praised in a book review in 1938.[7] In addition, Sweezy's critical attitude towards monopoly power is consistent with the position taken by many of his liberal and socialist contemporaries like Stuart Chase and Gardner Means.[8]

At all events, Harvard was at this time a good place to learn Marxian economics. Graduate students included the Japanese Marxist, Shigeto Tsuru, and (after 1939) another of Sweezy's future collaborators, Paul Baran. Socialist discussion groups proliferated. Among the professors were Joseph Schumpeter and Wassily Leontief, both of whom knew their Marx, and the less expert Edward S. Mason, who took on Sweezy as a teaching assistant for his course on the economics of socialism. Sweezy's lecture notes for this course formed the basis of his first important theoretical book, *The Theory of Capitalist Development.*[9] Published in 1942, this remains even today one of the best introductions to Marx's own economic thought, and also contains the most comprehensive survey in the English language of Marxian crisis theories up to the 1930s. As we saw in Chapter 1, Sweezy combined an overaccumulation analysis of cyclical fluctuations with an underconsumptionist theory of the tendency to secular stagnation. It is the latter with which we are concerned here, since it was very closely connected with his notion of monopoly capital.

Biography of
Paul Sweezy

Sweezy was born in New York City in 1910, the son of a Wall Street banker. He studied at Harvard and the London School of Economics, returning to Harvard in 1933 as an instructor and graduate student. By 1942, when he joined the Office of Strategic Services as a researcher, Sweezy had completed a PhD thesis on the economic history of the British coal trade, published a seminal article on price determination under oligopoly, and written the influential *Theory of Capitalist Development.* At the end of the war Sweezy resigned from Harvard in anticipation of a refusal of tenure, and subsequently fell foul of McCarthyism in New Hampshire. Although he later held visiting positions at Cornell, Stanford, Yale and other institutions, Sweezy's departure from academic life proved to be permanent. In 1949, with Leo Huberman, he founded the journal *Monthly Review,* which he has edited ever since. Sweezy is best known, however, for his long collaboration with Paul Baran, and above all for their best-selling book *Monopoly Capital.*

In his analysis of stagnation Sweezy drew heavily upon Otto Bauer's formal model of underconsumption, which itself had close affinities with the growth model formulated independently by the English Keynesian Roy

Harrod three years later, in 1939. The Bauer–Sweezy model is flawed, but the essence of the argument can be expressed quite simply. Consumption tends to fall as a proportion of total output because capitalists do not spend enough to maintain a constant savings ratio out of their rising profits, while workers (who spend everything they get) receive a declining income share. Hence, if all savings are invested, the capital stock grows more rapidly than the output of consumer goods. The 'appropriate' capital stock – that which maximises profits – is closely related to the level of consumption so that, if accumulation threatens to run ahead of consumer spending, investment is curtailed and profitable growth comes to an end. This, in a nutshell, is the Bauer–Sweezy model of underconsumption (criticisms are deferred until section IV below).[10]

Sweezy concluded that chronic depression was the normal state towards which capitalism tended, subject only to certain offsetting factors. Investment might be increased by the establishment of new industries, like the railways in the mid-nineteenth century, and (less importantly) by faulty investment which boosted demand without adding to profitable productive capacity. Private consumption could be stimulated by population growth and the expansion of unproductive expenditures. Finally, state spending might rise. The hitherto most important counter-acting tendencies, Sweezy argued, had been the development of new industries and the growth of population. Both had weakened considerably in recent decades, he maintained, leaving unproductive consumption and demand creation by the state as the only significant barriers to underconsumption. Here Sweezy revealed the influence of Keynesian ideas and the work of his Harvard colleague Alvin Hansen, a late but enthusiastic convert to Keynes, whose well-known 'stagnation thesis' emphasised decreasing population growth and a reduced rate of technical innovation.[11] Although neither man features at all prominently in *The Theory of Capitalist Development*, Sweezy's obituary tribute to Keynes has already been referred to (see Chapter 5, section IV), and as late as 1954 he was praising Hansen for having stressed the exogenous causes of stagnation.[12]

For Sweezy, then, unproductive consumption and state expenditure were the two principal checks to underconsumption. There is relatively little in *The Theory of Capitalist Development* on the economic, as opposed to the political, theory of the state.[13] Sweezy's views on unproductive consumption, however, emerge very clearly from his discussion of monopoly capital. Like Hilferding and Lenin, whom he cites with approval, Sweezy is convinced that the growth of monopoly represents a new stage of capitalism in which – and here he strikes out on his own – the laws of motion of capitalist development must be rethought. He agrees with Marx that monopolists' excess profits are won primarily at the expense of other capitalists, and that this entails long-run differences in the rate of profit between different sectors of the economy. Marx's analysis of competitive prices of production rested on the assumption of an equal rate of profit in all industries. Under monopoly capitalism this cannot be sustained. It follows that there is no general law of monopoly price: all that can be said is that output will be lower, and price higher, than in free competition. There are also macroeconomic consequences, Sweezy maintains, following the argument (unknown to him) of the Soviet writer Evgeny Preobrazhensky: investment is lower, and the costs of distribution are higher. Since competitive capitalists are too small to influence market price, their investment decisions reflect only the profits they expect to obtain from the newly-accumulated capital, ignoring any effect upon the capital they already employ. Monopolists, however, must also consider the effects of new investment upon the profitability of their existing capital, which will be devalued by an increase in the industry's capacity and the consequent fall in price. All other things being equal, monopolists will invest less than competitive capitalists, thereby reducing effective demand and creating a tendency towards stagnation. Working against this is the increase in commercial and distributive expenditures, which raises demand for individual monopolists and expands consumption (by reducing savings) for the entire economy. But these expenditures are unproductive, and monopoly capital is therefore characterised by increasing levels of waste.[14]

This final conclusion had been anticipated by both Preobrazhensky and Natalie Moszkowska,[15] but in the case of Sweezy it reveals the influence of contemporary bourgeois theory. Product differentiation and selling costs were fundamental to Edward Chamberlin's model of 'monopolistic competition', first formulated in his 1926 doctoral thesis, though Chamberlin himself recoiled from their radical (and especially their macroeconomic) implications. Both he and Joan Robinson, in her very similar analysis of 'imperfect competition' in 1933, had suggested the likelihood of a market equilibrium in which capitalists would operate with excess capacity, which they would not find it profitable to eliminate through price reductions.[16] Sweezy's argument concerning the lower level of investment in monopoly capitalism is really a dynamic extension of this proposition, since Chamberlin-Robinson firms with excess capacity can meet increased demand without new investment. Certainly Sweezy was not the only economist, in the decade of the New Deal, to link monopoly power with macroeconomic stagnation.[17]

III Enter Paul Baran

In *The Theory of Capitalist Development* Sweezy acknowledges the assistance of Paul Baran, who had arrived in the United States in 1939 and was to be Sweezy's foremost collaborator over the next quarter of a century.[18] Baran had acquired a thorough grounding in the Marxism of both the Second and

Third Internationals, first in his native Russia and then in Germany, where he had worked with Friedrich Pollock of the Frankfurt School. Baran's interests complemented those of Paul Sweezy in several ways. First there was his deep concern with problems of economic growth in backward areas. In his book Sweezy had denied that capital exports from the advanced countries would produce harmonious and balanced development in underdeveloped regions, but barely hinted at the theory of dependence and underdevelopment which Baran's work would later inspire (see Chapter 9 below).[19] Baran's second contribution was the knowledge of Critical Theory which he had obtained during his time in Frankfurt. Far more than most of his Marxist contemporaries, Baran was concerned with the rationality of capitalism as a form of social life, not merely with its viability in a narrow economic sense. His influence made the theory of 'monopoly capital' less economistic than it might otherwise have become, and gave Marxian political economy in North America an unusually powerful focus on the cultural and ideological dimensions of work, education and family life.[20]

Biography of
Paul Baran

Baran was born in Nikolaev on the Black Sea in December 1910, into a family of Polish Jews; his father was a doctor. He was educated in Poland, Russia and Germany, where he was briefly a member of the Communist Party. After studying in Moscow under Preobrazhensky, Baran returned to Germany in 1928. Here he joined the Social Democratic Party, worked at the Frankfurt Institute as research assistant to Friedrich Pollock, and wrote a PhD under the supervision of Emil Lederer. After 1933 Baran lived in Paris, Moscow, Vilna and London before emigrating to the United States in 1939. He studied at Harvard, where he began his long association with Paul Sweezy, and during the war worked with John Kenneth Galbraith on the US Strategic Bombing Survey. From 1949 until his death in March 1964 Baran taught at Stanford University, where he occupied a lonely and uncomfortable position as the only avowedly Marxist professor of economics in the United States.

Third, Baran augmented Sweezy's rather sketchy analysis of the capitalist state. In a major essay on economic planning, published in 1952, he identified six forms of government expenditure which might offset underconsumption. Four of them – improved social services, overseas aid, investment in productive enterprises, and direct consumption spending – would arouse business hostility, he claimed, because of the threat they posed to the dominance of capitalist ideology. For Baran only arms spending and unproductive civilian projects ('leaf raking') were immune to these objections. Hence planning could not render full employment consistent with peaceful, liberal-democratic capitalism, as social democratic politicians believed. Apart from socialism, the alternatives were a militaristic fascist regime or the abandonment of full employment, in order to 'keep labor in its place'.[21]

Baran's final, and most important, contribution to the partnership with Sweezy was the concept of the economic surplus, which was at the heart of his book *The Political Economy of Growth*, published in 1957 (see Chapter 9 below). Strictly speaking, there are three distinct concepts: the planned, actual and potential surplus. The *planned surplus* is the difference between the optimum output of a socialist economy and its optimum consumption, 'optimum' being defined in terms of the 'considered judgement of a socialist community guided by reason and science'.[22] It is not relevant to capitalism, and bears no direct relation to the traditional Marxian notion of surplus value. The *actual surplus* is the difference between actual output and actual consumption; in a closed economy and ignoring the state it is equal to current saving, and is less than surplus value by an amount equal to capitalist consumption minus any saving by workers. It could in principle be calculated – in market prices rather than labour values – from conventional national income accounts.[23]

Baran defines the *potential surplus* as 'the difference between the output that *could* be produced in a given natural and technological environment with the help of employable productive resources, and what might be regarded as essential consumption'. It has four components. The first is consumption by the upper class and part of the middle class in excess of socially-defined acceptable minimum standards. Then there is the output forgone because of the employment of unproductive workers: the makers of armaments, luxury articles and objects of ostentation, government and military officials, clergymen, lawyers, advertising agents, brokers, merchants and speculators. (The first and second categories overlap, raising the danger of double-counting.) Third comes the output lost by 'the irrational and wasteful organisation of the existing productive apparatus', including normal (that is, non-depression) excess capacity, forgone economies of scale, senseless product differentiation, and the suppression of technical advances to protect existing royalties and profits. Finally there is the output which is never produced because aggregate demand is inadequate. Baran's potential economic surplus is thus a hybrid concept, relating both to existing capitalist reality and to his vision of a rational socialist future. Its harnessing to useful purposes 'presupposes a more or less drastic reorganisation of the production and distribution of social output, and implies far-reaching changes in the structure of society'.[24]

In *The Political Economy of Growth* Baran makes no attempt to measure the potential surplus, refuses to speculate about its long-run tendency as a proportion of total output, and disposes of its relationship to conventional surplus value in a single footnote. (Unlike surplus value, potential surplus includes output lost through underemployment or misuse of productive resources, but excludes essential consumption by capitalists and essential outlays on public administration.)[25] The concept is, however, of crucial importance for his entire theoretical system in two ways. First, it offers a powerful tool for the critical analysis of existing non-socialist economic systems, both backward and advanced. If the potential surplus were to be realised, and channelled into socially productive activities, the rate of growth could be increased and unemployment reduced. Both the standard of living and the quality of life would be greatly improved. In fact 'waste' constitutes Baran's chief argument against monopoly capitalism in advanced countries, and it is defined by his concept of potential surplus. Second, the concept of potential surplus allows a new and more defensible formulation of underconsumption theory. Critics of underconsumptionism had objected that neither profits nor savings had increased as a proportion of national income, in the way that the theory seemed to require; instead both the savings ratio and the profit share had remained roughly constant for long periods.[26] This, Baran argued, was to confuse reality with potentiality. Realised profits, and actual savings, might not have increased in relation to income, but their potential magnitudes had indeed risen. The gap between them had been filled – that is, surplus had been absorbed – by excess capacity and unproductive consumption. Growing waste was therefore the clearest possible evidence in support of underconsumptionism. Without it, stagnation and crisis would be evident.[27]

The Theory of Capitalist Development had ended on a relatively optimistic note, with Sweezy looking forward to the early victory of socialism in Western Europe and the possibility of a (longer) peaceful transition from capitalism in the United States.[28] Fifteen years on, *The Political Economy of Growth* offered an altogether gloomier prospect. Monopoly capital was hostile to full employment, on essentially disciplinary grounds, and would resist the expansion of civilian government spending. This made private waste and state expenditure on imperialist domination (especially armaments) the only significant outlets for the potential surplus. Baran concluded that the stability of the system was highly precarious in economic, political and military terms. If stagnation was to be avoided, it could only be at the cost of McCarthyite hysteria and the constant threat of war.[29]

IV *Monopoly Capital*

Most of the pieces for a theory of monopoly capital had now been assembled: underconsumption and the analysis of the monopoly enterprise by Sweezy, potential surplus and constraints on state intervention by Baran. All that remained for the *Monopoly Capital* jigsaw to be complete was the discovery of one missing component, later labelled 'the law of the rising surplus'. If it could be demonstrated that the potential surplus did have a clear tendency to increase over time, the case for a revised theory of underconsumption would be greatly strengthened. The history of advanced capitalism (at least in North America) could be rewritten, and it would be possible not only to explain the long boom after 1945 but also to predict its impending demise.

The first hint of a law of rising surplus came in a paper published by Baran in 1959, soon followed by two articles jointly written with Sweezy, their first co-authored publications in over 20 years of collaboration.[30] They were a first draft of the core chapters of *Monopoly Capital*, which finally appeared in 1966, two years after Baran's death and having taken almost exactly ten years from the first tentative outline to the date of publication.[31] The book's starting-point is 'the giant corporation', which has replaced the individual capitalist as the prime mover in a system in which small business plays a purely passive role.[32] For Baran and Sweezy the corporation's incentive to maximise profits is every bit as strong as that of the traditional entrepreneur; the interests of both shareholders and management coincide in the quest for higher profits, which increase the size and strength of the firm and offer the greatest security and the best promotion prospects for its managers. The corporation does compete with its rivals but this competition does not take the form of price-cutting, since oligopolists recognise that this would be self-defeating. Price wars are replaced by tacit collusion, in which price and output levels are agreed on and approximate to those which a single monopolist would find most profitable. This 'joint profit maximisation' model of price formation was derived, quite unashamedly, from contemporary microeconomic theory.[33]

Vigorous competition does continue, Baran and Sweezy suggest, but using such non-price weapons as product differentiation, product innovation and selling costs. Monopoly capital does not so much retard innovation as prevent it from lowering prices. Since production costs continue to fall, while prices are fixed, profit margins widen. This is a microeconomic law; at the macroeconomic level it is reflected in the tendency for the surplus to rise, relatively as well as absolutely.[34]

In *Monopoly Capital* Baran and Sweezy define the surplus as 'the difference between what a society produces and the cost of producing it', referring the reader to *The Political Economy of Growth* for further details.[35] In an Appendix they present Joseph Phillips's statistical estimates. Phillips measures the surplus as the sum of property incomes, wasteful expenditures, government spending and costs resulting from 'the penetration of the production process by the sales effort' (for example, the costs of unnecessary model and design changes). This is neither the actual nor the potential surplus defined in Baran's book (it differs from the latter in making no attempt to allow for output forgone due to unemployment and excess capacity). Phillips's work has been heavily criticised, as we shall see in the following section. At present it is sufficient to record his conclusion: between 1929 and 1963 surplus rose from 46.9 per cent to 56.1 per cent of US GNP. By the latter year property incomes accounted for less than one-third of the total surplus.[36]

How this rising surplus might be absorbed is a central question of *Monopoly Capital.* Neither capitalist consumption nor investment was up to the task, Baran and Sweezy concluded. Since a declining proportion of corporate profits was paid out in dividends, consumption by shareholders is of decreasing significance and the investment-seeking part of the surplus rises. Underconsumptionist considerations make it extremely unlikely that the ratio of investment to output can continually increase even if the incentive to invest were not weaker in monopoly than in competitive capitalism. Baran and Sweezy also reject Lenin's suggestion that capital exports to underdeveloped regions are ultimately surplus-absorbing. The United States was receiving more income from its assets in poor countries than it invested there: surplus was being transferred, but in the wrong direction.[37]

This leaves selling expenses and expenditure by the state. *Monopoly Capital* is probably best known, among its non-Marxian readers, for its description of the 'Sales Effort' as an outlet for surplus:

> The function of advertising, perhaps its dominant function today, thus becomes that of waging, on behalf of the producers and sellers of consumer goods, a relentless war against saving and in favour of consumption. And the principal means of carrying out this task are to induce changes in fashion, create new wants, set new standards of status, enforce new norms of propriety. The unquestioned success of advertising in achieving these aims has greatly strengthened its role as a force counteracting monopoly capitalism's tendency to stagnation and at the same time marked it as the chief architect of the famous 'American Way of Life'.[38]

As for the state, ideological prejudice and opposition from private vested interests ensure that it is not civilian but military expenditure which dominates the government's absorption of surplus.[39] The discussion of civilian spending in *Monopoly Capital* adds little to that in Baran's book; its treatment of military expenditure will be discussed in the following chapter of this book. Baran and Sweezy conclude that the orthodox communist term 'state monopoly capitalism' is inappropriate, since the state is not an independent force and there has been no qualitative change in its economic role.[40]

They argue that monopoly capital dates from about 1870, with the emergence of the giant corporation as the dominant dynamic influence in the US economy, and the law of rising surplus can be detected from then onwards. Stagnation has been the normal state of monopoly capital, Baran and Sweezy maintain, except when it has been offset by world wars or by 'epoch-making' innovations such as the railways (1870–1900) or the internal combustion engine (in the 1920s).[41] The first really clear signs of stagnation can thus be found in the long depression of 1907–15, while the Great Depression of the 1930s should be seen 'not as the Great Exception but as the normal outcome of the workings of the American economic system'. After 1945 the expansion of the sales effort and the unrelenting growth of military spending masked stagnationist tendencies which, by 1963, were coming increasingly to the fore. The end of the long boom was in sight.[42]

Significantly the book does not end there. A chapter on racism provides a link between revolution in the underdeveloped Third World and marginalised groups in the heartlands of capitalism (see Chapter 9 below). Following this, Baran and Sweezy go on to dissect the quality of life under monopoly capital. It has not satisfied human needs nor made people happy, they argue in a chapter which recalls Marcuse and Galbraith no less than Marx. There is a crisis of values revealed in growing disorientation, apathy and despair, together with the continued survival of poverty and poor housing and the problems engendered by suburban sprawl and the collapse of public transport and education.[43] Drawing heavily upon Critical Theory, the final chapter of *Monopoly Capital* assesses the rationality of the system. The giant corporation ensures that US society is rational in its parts, Baran and Sweezy suggest, but cannot prevent the increasing irrationality of the whole. Bourgeois ideology is itself disintegrating, despite the infiltration of calculation and pretence into every sphere of daily life. People are more and more alienated at work, due to the dehumanising effects of the intensive division of labour to which they are subjected, and also in consumption, where even 'leisure' has become a grind. The destructive hand of monopoly capital reaches deep into the personal realm to affect family life and sexual gratification.[44]

The most important conclusion of all is that, for Baran and Sweezy, the proletariat of the advanced capitalist countries can no longer be relied upon as the agent of social transformation:

> Industrial workers are a diminishing minority of the American working class, and their organised cores in the basic industries have to a large extent been integrated into the system as consumers and ideologically conditioned members of the society. They are not, as the industrial workers were in Marx's day, the system's special victims, though they suffer from its elementality and irrationality along with other classes and strata – more than some, less than others.

Monopoly capital will be overthrown, if at all, by revolutionary war in the Third World (see Chapter 9 below).[45]

V *Monopoly Capital* and its Critics

There is a sizeable critical literature on Baran and Sweezy, dating from the publication of *The Political Economy of Growth* and continuing to the present day. One part of it claims that their methodology is un-Marxian, while the remainder points to substantive defects of theory and evidence. As to the former, orthodox Marxists maintain that *Monopoly Capital* ignores the labour process and the determination of wages; stresses the realisation of surplus value rather than its production, and is therefore 'left Keynesian' rather than Marxian; replaces Marx's scientific concept of surplus value with the vague, ahistorical and moralistic notion of 'surplus'; says almost nothing about the working class in the United States (and what it does say is distinctly unflattering); looks to the peasant masses of the Third World rather than to the Western proletariat for revolutionary zeal; repudiates the theory of the falling rate of profit; and abandons key elements of the Leninist analysis of imperialism. Above all, the labour theory of value plays no part in Baran's and Sweezy's theory.[46]

Much of this is correct, though to show that a proposition is inconsistent with Marx is of course irrelevant to its truth or falsity. Sweezy was to react to the last criticism by claiming that he and Baran had not rejected Marx's theory of value, but rather taken it for granted. In competitive capitalism labour values are transformed into prices of production, while monopoly capital requires a second transformation, from competitive to monopoly prices. It was this process, understandably neglected by Marx, which *Monopoly Capital* had investigated.[47] This rather lame defence brings to mind Samuelson's tongue-in-cheek description of transformation as a process of erasure and replacement.[48] Sweezy might have been better advised to admit the irrelevance to monopoly capital of the labour theory of value, interpreted as a quantitative theory of price determination, and to have defended instead the continuing significance of Marx's qualitative analysis of value as a theory of alienation and fetishism.[49] He had always emphasised this aspect of the theory, and it was equally consistent with Baran's sympathy for the Frankfurt School.

To some extent Baran's and Sweezy's neglect of work and workers was later put right by Harry Braverman's *Labor and Monopoly Capital*, which will be considered shortly. Our critical discussion of their treatment of surplus and surplus value also comes a little later in this section. Otherwise Sweezy was on firm ground, both methodologically and theoretically, in denying the charges of heresy. Marx's own materialist analysis of ideas requires that theory be amended as social reality changes, so that there is absolutely nothing improper in recasting political economy for a new stage of capitalist development. Moreover, those elements of traditional Marxian economics discarded in *Monopoly Capital*, especially the falling rate of profit theory and Lenin's treatment of capital exports, were among the weakest aspects of accepted theory, while underconsumptionism had a long and quite honourable pedigree in both the Second and Third Internationals (see volume I of this book and Chapter 1 above). And who, in the period when Baran and Sweezy were writing, could seriously have expected a proletarian revolution to occur in the United States?

Quite apart from these 'fundamentalist' considerations, there are five substantive objections to the theory of monopoly capital which deserve to be taken seriously. They concern the validity of underconsumption theory in general; the conceptual and empirical status of the particular form which it assumed in the 'law of the rising surplus'; the lack of a theory of wages, and the related issue of overaccumulation; the analysis of state expenditure; and (crucially) whether modern capitalism actually is monopolistic rather than competitive in nature. All have a bearing on the really central question: can *Monopoly Capital* indeed account for the post-war boom and its eventual collapse?

The central problem with any theory of underconsumption was exposed by Tugan-Baranovsky at the turn of the century: capitalism is driven by profit and not by the consumption requirements of working people. Taken collectively, capitalists are to a very large extent their own customers, so that the demand for a particular type of producer-good often depends on the output of other types of producer-good: 'mills to produce mills to produce mills', in the familiar paraphrase of Tugan's argument (see volume I, Chapter 9, of this book). In a capitalist economy there is no obvious reason why the ratio of capital to consumption may not rise indefinitely, no matter how absurd it may be from the viewpoint of a hypothetical, rationally planned, socialist order. One way of salvaging the conclusions of underconsumption theory, however, was suggested by Sweezy's Harvard colleague, E.S. Domar. It involves replacing the supposedly constant relation between capital and consumption with an (empirically more defensible) constancy in the capital–*output* ratio. This, Domar pointed out, actually strengthens Sweezy's conclusions, since deficient effective demand may now result – under some circumstances – even if there is no decline in the average propensity to consume while, if there is a tendency for the savings ratio to rise, demand-deficiency can be avoided only by an accelerating growth rate.[50] Whether Domar's model is one of 'underconsumption' or not is a moot point, but the strong possibility of stagnation or crisis which it reveals is surely what really matters.

The second set of criticisms concerns the economic surplus and its alleged tendency to rise. As we saw in the previous section, the concept of potential surplus found in *The Political Economy of Growth* is a tool of social criticism and is only loosely related to Marx's notion of surplus value. In *Monopoly Capital* a less ambitious definition is offered, and it can be argued that 'the difference between what a society produces and the cost of producing it' is actually very close to Marxian surplus value, allowing for the fact that the employment of unproductive labour represents the absorption of surplus value and does not contribute to its creation.[51] The precise demarcation between productive and unproductive labour, however, remains extremely controversial. Baran and Sweezy were criticised in particular for treating all state spending as unproductive or surplus-absorbing, and ignoring the productive necessity of many state functions.[52] Further objections have been raised against Phillips's techniques of measurement because of his use of price rather than value magnitudes, his confusion of output and income definitions of the surplus, and the double-counting which is involved.[53] None of these flaws is fatal. Most were corrected in a very careful study by E.N. Wolff in 1977, which found the 'adjusted rate of surplus value' (a close proxy for Baran's and Sweezy's surplus as a share of GNP) to have risen appreciably in the 20 years after 1947, largely as a result of the growth in unproductive activity.[54]

The problem, as liberal critics have never failed to note, is that there was little or no evidence of stagnation in this period. Neither unemployment nor the degree of excess capacity was on a clearly rising trend, and the rate of economic growth, although slower than in Western Europe and Japan, remained quite respectable.[55] The obvious conclusion is that surplus absorption proved less difficult than Baran and Sweezy supposed.

This is reinforced by a consideration of the third objection to the theory of monopoly capital. In *The Theory of Capitalist Development* Sweezy had explained crises in terms of a falling rate of exploitation near the top of the boom, due to the rise in real wages as unemployment fell (see Chapter 1 above). Nothing of this sort is to be found in *Monopoly Capital*, where there is no theory of wages at all. This gives rise to the question whether 'overaccumulation', discussed by Sweezy in his earlier book, might not become a semi-permanent feature of an economy in which the forces working against stagnation had become so strong.[56] Even Harry Braverman's *Labor and Monopoly Capital*, with its impressive but rather one-sided emphasis on the subjection of the American worker under Taylorist 'scientific management', contributed very little to the theory of wages, and left open the possibility that rising real wages might be a major form of surplus absorption.[57]

Weaknesses in *Monopoly Capital's* treatment of the state added to these doubts about the validity of the underlying theoretical analysis. At least one Marxist reviewer found the supposed limits to the growth of military spending quite implausible.[58] Other critics complained that Baran and Sweezy had greatly exaggerated the obstacles to expanding civilian government expenditure, much of which was in fact essential, under late-twentieth century conditions, for the profitable accumulation of private capital.[59] Several objected, too, to what Joan Robinson described as Baran's 'slapdash' treatment of public finance, with its quite unconvincing denial that budget deficits resulting from tax cuts could significantly stimulate effective demand in the long run.[60]

In some ways, however, the most damaging charge against Baran and Sweezy was that they had totally mis-specified the nature of contemporary capitalism, which remained (and remains) fiercely competitive. According to some critics, *Monopoly Capital* had grossly overstated the degree to which the giant corporation was insulated from competitive pressure upon its prices and profit margins. Mere size does not give monopoly power, in view of the multi-product character of most huge enterprises. There is great scope for both potential and actual 'cross-entry' into one industry by corporations from another which possess relevant expertise and adaptable excess productive capacity.[61] A second consideration must be taken into account here. The 'degree of monopoly' in many industries should be measured on a global rather than a purely national scale, given the post-war liberalisation of trade and capital flows, and the continuous and growing pressure of international competition.[62] On these arguments 'monopoly capital' is an illusion.

VI An Assessment

There is much to be said for the third, fourth and fifth criticisms of the theory of monopoly capital, concerning wages, the state and the degree of international competition. With hindsight it is evident that the ideas of Baran and Sweezy were very much a product of their time and place. Writing in the United States of the 1950s and early 1960s, they viewed American capitalism as the mirror in which all other capitalist countries could see their future, just as Marx had used Britain (and Hilferding, Germany) as a paradigm.[63] A few contemporaries were uneasy about this vision, which so clearly reflected US economic dominance in the immediate aftermath of the Second World War. David Horowitz regretted 'a tendency in [*Monopoly Capital*] to rely too heavily on the US as the archetypal monopoly capitalist society, and to ignore the interdependencies of the international system', while Maurice Dobb doubted the relevance of the book to Western Europe and James O'Connor went so far as to ask, 'does the US show Gaullist France the future, or is it the other way round?'[64]

By the early 1970s this question was beginning to appear less impertinent, as the United States was reduced from its former economic supremacy to being merely the first among equals in a world of open, competitive, statified and inflationary capitalist economies with intermittently troublesome labour movements. It is thus hardly surprising that *Monopoly Capital* had so little influence in Western Europe, where an alternative tradition of monopoly capital theory had developed under the influence of Michal Kalecki and Josef Steindl.[65] This European school, represented in the 1980s by writers such as Keith Cowling and Malcolm Sawyer, offers an analysis which is much more rigorous than that of Baran and Sweezy, but also less obviously informed by a conception of historical materialism. For this reason it is best characterised as post-Keynesian rather than Marxian in nature.[66]

Once the long boom faltered, most North American Marxists turned away from *Monopoly Capital*, and from underconsumption theory more generally, to alternative sources of crisis theory. Only in two respects did the ideas of Baran and Sweezy have a more permanent impact upon Marxian economics throughout the world. This was in their treatment of armaments expenditure, which is discussed in Chapter 8 below, and in their theory of underdevelopment in the Third World, which is considered in Part III.

Notes

1. P.M. Sweezy, 'The Influence of Marxian Economics on American Thought and Practice', in D.D. Egbert and S. Persons (eds), *Socialism in American Life*, volume I (Princeton, NJ: Princeton University Press, 1952), pp. 455–86.
2. See Ch. 1, section II, above, and E. Corey, 'Lewis Corey (Louis C. Fraina), 1892–1953: A Bibliography with Autobiographical Notes', *Labor History*, 4, 1963, pp. 103–31.
3. P.M. Sweezy, 'Professor Pigou's "Theory of Unemployment"', *Journal of Political Economy*, 42, 1934, pp. 800–11.
4. P.M. Sweezy, Contribution to Discussion on 'Wage Policies', *American Economic Review*, 28, 1938, pp. 156–7; 'Demand under Conditions of Oligopoly', *Journal of Political Economy*, 47, 1939, pp. 568–73.
5. G.C. Harcourt, 'Occasional Portraits of the Founding Post-Keynesians: Lorie Tarshis (or Tarshis on Tarshis by Harcourt)', in G.C. Harcourt, *The Social Science Imperialists* (London: Routledge & Kegan Paul, 1982), pp. 367, 370–1, 375n.; D.L. May, *From New Deal to New Economics: The Liberal Response to the Recession of 1937* (New York: Garland, 1981), p. 148.
6. P.M. Sweezy, *Four Lectures on Marxism* (New York: Monthly Review Press, 1981), p. 13; cf. M. Hillard, 'Harry Magdoff and Paul Sweezy: Biographical Notes', in S. Resnick and R. Wolff (eds), *Rethinking Marxism: Struggles in Marxist Theory. Essays for Harry Magdoff and Paul Sweezy* (Boston, Mass.: Autonomedia, 1985), pp. 397–404.
7. P.M. Sweezy, 'J.A. Hobson's Economic Heresies', *The Nation*, 147, 1938, pp. 209–10.
8. S. Chase, *The Tragedy of Waste* (New York: Macmillan, 1925); G.C. Means, 'Big Business, Administered Prices, and the Problem of Full Employment', *Journal of Marketing*, 4, 1939–40, pp. 370–81.
9. Hillard, 'Harry Magdoff'; S. Tsuru, 'A Peripatetic Economist', *Banco Nazionale del Lavoro Quarterly Review*, 142, 1982, pp. 227–44.
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11. Sweezy, *Theory*, Ch. XII; A.H. Hansen, *Full Recovery or Stagnation?* (New York: Norton, 1938). Joseph Schumpeter also influenced Sweezy; see J. Schumpeter, *Capitalism, Socialism and Democracy* (London: Routledge & Kegan Paul, 1942), and Sweezy, *Theory*, 'Preface to 1956 printing'.
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7
The Falling Rate of Profit

I The Falling Rate of Profit: 1883–1918

There is a simple justification for beginning a chapter on modern problems with an account of earlier developments. Almost all the central issues in the theory of the falling rate of profit had been raised, and not a few also resolved, before 1945. Apparently unknown to most of the participants, many post-war controversies thus involved little more than a reworking of debates which had taken place in previous decades.[1] Two central questions can be detected in the early literature, both with a bearing on recent contentions. First, is the theory logically valid, yielding a determinate prediction concerning the long-run tendency of the rate of profit? Second, does it provide a basis (or even *the* basis) for a coherent Marxian theory of crisis? Two further questions – has the profit rate actually declined, and if so, why? – were somewhat neglected.

Marx wrote at length on the general rate of profit in Part III of the third volume of *Capital*. His argument can be expressed in simple algebra. The economy-wide organic composition of capital can be written as $k = c/v$, the ratio between aggregate constant and aggregate variable capital; the rate of exploitation is $e = s/v$, the ratio of total surplus value to total variable capital. The profit rate is $r = s/(c + v)$. Dividing both sides of this fraction by v, and making the appropriate substitutions, we have $r = e/(k + 1)$. The rate of profit thus increases as e rises, and falls with increases in k. In a nutshell, Marx argues that in the 'modern industry' or 'machinofacture' stage of capitalist development k tends to increase more rapidly than any rise in e. Despite the operation of several 'counter-acting tendencies', the rate of profit must eventually decline. This is associated – precisely how, Marx is unclear – with a tendency for cyclical crises to become more severe.[2]

There were good reasons why Marx published his theory of the falling rate of profit along with his analysis of the transformation of labour values into prices of production, since the general profit rate is determined simultaneously with prices of production (see Chapters 12–14 below). But even before the appearance of volume III in 1894, the theory was proving controversial. One of the entrants in the 'Prize Essay Competition', George C. Stiebeling, incurred the wrath of Engels by suggesting that higher organic compositions were associated with higher rates of exploitation, so that the rate of profit might remain constant as the organic composition rose. Stiebeling cited cross-sectional data from the US industrial census in support of his argument, but the faults in his analysis were very serious.[3]

Less easily brushed aside were the arguments, published independently in 1899, of Benedetto Croce and Mikhail Tugan-Baranovsky. Croce, writing in Italian, pointed out that technical progress entailed an increase in the productivity of labour and hence a *ceteris paribus* reduction in the value of constant capital. This, he asserted, would produce an increasing, not a decreasing, rate of profit. Tugan-Baranovsky's argument was similar, stressing the effects of technical change both in cheapening the elements of constant capital and in raising the rate of exploitation. But whereas Croce had left open the implications of a rising profit rate, Tugan concluded both that one limb of Marx's crisis theory was invalid and that the Marxian theory of exploitation itself had been destroyed.[4] If the profit rate did in fact fall, it would be for reasons other than those relied upon by Marx, such as the growth of real wages, cuts in the length of the working day, an increase in rent, or a rise in the burden of taxation on profits.[5] Tugan's critique, however, leaves a lot to be desired. His numerical examples are extremely difficult to follow, since he repeatedly confuses physical quantities and value magnitudes, and there is no general, algebraic treatment of the problem. His assumption of an equal organic composition of capital in the different departments also means that his analysis is logically confined to a one-sector economy. And, as Ladislaus von Bortkiewicz soon noted, Tugan had not disproved any connection between the organic composition and the profit rate; he had merely shown that Marx's argument concerning this connection was invalid.[6]

However, Bortkiewicz himself agreed with Tugan's conclusions, which he tried to establish rigorously. Innovations involving the mechanisation of processes previously carried out by hand will only be used by capitalists, Bortkiewicz argued, if they raise the general rate of profit. Marx's error was to make his capitalists calculate in values rather than prices. Improvements in existing processes of production will again be introduced only if the profit rate rises. A falling rate of profit requires a decline in productivity in at least one sector, or an increase in real wages (which is not what Marx argued). According to Bortkiewicz, Marx had concluded otherwise because he neglected the impact of productivity growth on the rate of exploitation.[7]

It was to be many years before any Marxist came to grips with Bortkiewicz's intricate mathematical model. Tugan's argument, however, was much more accessible although, somewhat suprisingly, the German revisionists made nothing of it, and it was the more orthodox who alone responded. In an early review of Tugan's first book, Karl Kautsky defended Marx on the grounds that he had already allowed for the effects of productivity growth on the organic composition of capital. Tugan's numerical example was valid, Kautsky claimed, only in the special case where the value of constant capital did not exceed that of variable capital. In any case, Tugan was guilty of a fallacy of composition: innovations might be profitable for an individual capitalist and yet reduce the rate of profit for capitalists as a whole. Though he was quick to defend Marx's analysis, however, Kautsky's theory of crisis was underconsumptionist and quite independent of any tendency for the rate of profit to decline.[8] In this Kautsky was typical of his Marxian contemporaries. Even Louis Boudin, who stressed the retarding effect of a declining profit rate on the pace of capital accumulation, took a similar line.[9] The falling rate of profit formed only a subsidiary element in Rudolf Hilferding's explanation of crises,[10] while Rosa Luxemburg's rather cryptic comments in her *Accumulation of Capital* were accompanied by a numerical example of expanded reproduction in which the rate of profit was deliberately held constant. In her *Antikritik* Luxemburg was scornful of a reviewer's suggestion that the falling rate of profit would lead to the breakdown of capitalism:

> One is not too sure exactly how the dear man envisages this – whether the capitalist class will at a certain point commit suicide in despair at the low rate of profit, or whether it will somehow declare that business is so bad that it is simply not worth the trouble, whereupon it will hand the key over to the proletariat? However that may be this comfort is unfortunately dispelled by a single sentence by Marx, namely the statement that 'large capitals will compensate for the fall in the rate of profit by mass production'. Thus there is still some time to pass before capitalism collapses because of the falling rate of profit, roughly until the sun burns out.[11]

In fact the Russian mathematician Georg von Charasoff had already answered Luxemburg's rhetorical question in his *System of Marxism*, published in 1910. He pointed out that the profit rate sets a maximum limit to the rate of capital accumulation. If workers spend their entire incomes, all saving is done by capitalists and it is easy to show that the rate of accumulation is the product of (i) the capitalist's savings propensity and (ii) the rate of profit. In modern notation $g = s_c.r$, where g is the ratio between savings (assumed equal to investment) and capital; s_c is the ratio of savings to profits; and r, the rate of profit, is the ratio of profits to capital (see Chapter 15 below). Charasoff argued that s_c tended towards unity, so that any decline in the profit rate entailed a declining rate of accumulation. And he linked the falling rate of profit directly to the explanation of cyclical crises via Marx's analysis of the overproduction of capital.[12] Charasoff seems also to have been the first since Marx to recognise that any increase in the organic composition of capital would reduce the *maximum* rate of profit: if wages are zero, $r = s/c$ which is the inverse of the ratio of dead to living labour.[13]

Despite all this Charasoff was a forceful critic of Marx's law, amplifying Tugan-Baranovsky's objections and adding several of his own. He argued that the equilibrium profit rate was not equal to $s/(c + v)$; that capitalists would not adopt innovations which reduced the profit rate; and that even technical changes which increased the organic composition in department I could cheapen the elements of constant capital by enough to reduce the organic composition in department II and increase the production of surplus value in both departments. The profit rate would fall only if Ricardian diminishing returns set in, or if real wages rose. Charasoff concluded that Marx's theory of the falling rate of profit is 'no law . . . but a plain error . . . according to the law of a capitalist economy, the profit rate can *never* fall'.[14] These weaknesses in the theory were sufficient to destroy the scientific pretensions of Marxian political economy as a whole.[15] Apart from a brief and dismissive review by Otto Bauer,[16] however, little attention was paid to Charasoff's book. The absence of any analysis of the falling rate of profit in the writings of the orthodox Russian Marxists (Plekhanov, Lenin, Bukharin and Trotsky) suggests that they took much the same view of the matter as Rosa Luxemburg.

Thus by 1918 it was a standard criticism of the falling rate of profit theory that Marx had underestimated the effects of technical progress on the productivity of labour; that these effects tended to reduce the value of constant capital and to increase the rate of exploitation; and that the rate of profit would not fall, but was likely to rise, as a result of technical change. Orthodox Marxists hedged, as indeed had Marx himself. Most, however, denied that the counter-acting tendencies would be sufficient, in the long run, to prevent the profit rate from falling, and few had any truck with the notion that technical change would actually increase the rate of profit. None saw the falling rate of profit theory as a very important part of Marxian crisis theory, nor (apart from Stiebeling) made any reference whatsoever to empirical evidence.

II 1918–45

This second period saw the arguments of the critics considerably strengthened, with the work first of Natalie Moszkowska and then of the remarkable Japanese economist Kei Shibata. Paradoxically, it was also a time in which some Marxists began to use the falling rate of profit theory to explain economic crises. Both developments, however, took place very largely on the fringes of international Marxism. Orthodox Social Democrats such as

Kautsky and Hilferding paid no further attention to these debates, and this neglect was paralleled in communist economics. After 1945 the falling rate of profit would increasingly be seen as the analytical basis for Lenin's concept of capitalist 'overripeness', which he invoked to account for the export of capital, growing imperialist rivalry and war. But Lenin's *Imperialism* is profoundly ambiguous on this question, and the overwhelming majority of Leninist (and later Stalinist) writers between the wars interpreted him as an underconsumptionist. Thus in 1935 the Comintern's leading theorist, Eugen Varga, treated the tendency for the profit rate to fall as an incidental consequence of the rising organic composition of capital, the principal effect of which was to reduce working-class purchasing power by lowering the employment of variable capital. That the organic composition would rise, and the rate of profit fall, was, however, taken for granted.[17]

The connection with crises was first emphasised by the German academic Erich Preiser, for whom the falling rate of profit was the basis of Marxian crisis theory, explaining both the overproduction of commodities and the intensity of the competitive struggle. Preiser rejected previous interpretations of Marx as an underconsumptionist or a disproportionality theorist. This, he claimed, involved a methodological error, since 'nowhere are the parallels with the Hegelian philosophy of history clearer than in the law of the falling rate of profit'.[18] This point was taken up five years later by Henryk Grossmann who argued that, in order to be consistent with Marx's materialist conception of history, the economic contradictions of capitalism must be traced back to the production of surplus value rather than to its realisation. Grossmann derived from Marx's law both a theory of cyclical fluctuations and, more dramatically, a prediction of economic breakdown: surplus value declines in relation to the capital employed, and this eventually makes it impossible for capitalists both to maintain the pace of accumulation and to sustain their own consumption expenditures.[19] Grossmann, an independent Marxist associated with the Frankfurt School, was severely criticised from all quarters for neglecting the impact of technological change on labour productivity and for assuming that capitalists would continue to accumulate irrespective of the effect on their profits.[20] Even if his analysis had been correct, the Social Democrat Hans Neisser concluded, Grossmann would still have failed to establish a link between the falling rate of profit and the onset of economic crisis. Accumulation might continue, even with a decreasing profit rate, so long as it remained positive; and successful capitalists, who were increasing their profitability at the expense of their rivals, would certainly continue to expand their own productive capacity.[21]

The first really plausible account of the connection between the trade cycle and the falling rate of profit came, in 1936, from the Austrian Social Democrat Otto Bauer, by then an exile in Czechoslovakia. Bauer's starting-point was an economy in the trough of the cycle, which receives an (unexplained) exogenous stimulus. The degree of capacity utilisation will increase, since more can be produced with the same (underutilised) plant and equipment. More workers are therefore employed, which reduces the organic composition of capital and increases the rate of profit, encouraging renewed accumulation. This gives rise to a boom. Eventually the pace of new investment is fast enough to increase the organic composition. Everything now depends on the rate of exploitation. If in the upswing this has risen sufficiently to maintain the profit rate, Bauer argues, the decline in wages relative to profits may spark off a crisis of underconsumption. If the rate of exploitation lags behind the organic composition, the rate of profit falls. Companies react to this by cutting back their dividends; there is a stock market crash, a consequent decline in investment, and hence a slump.[22] Bauer's analysis lacked both a formal model of the cycle and an endogenous mechanism to bring about the upswing, but it was the most convincing of a number of contemporary attempts to use the falling rate of profit in a theory of cyclical fluctuations, incorporating problems of effective demand. To some extent, too, it foreshadows the more ambitious post-war syntheses of writers such as Ernest Mandel.[23]

While Grossmann and Bauer were constructing a crisis theory, Natalie Moszkowska had returned to Tugan-Baranovsky's formulation of the problem: could technical change really lower the rate of profit without an increase in the real wage? Moszkowska began with Marx's criterion for a viable technological advance. To be profitable for the capitalist, Marx had argued, a new machine must save at least as much paid labour as it costs to construct. In a series of numerical examples Moszkowska showed that this criterion entails another. An innovation which is labour-saving in Marx's sense also – *ceteris paribus*, holding real wages constant – increases the rate of profit. In the limiting case, where capitalists are indifferent between old and new techniques because the net saving in labour value is zero, the profit rate will be unchanged. Thus Tugan was right. New technology which reduces the rate of profit will fail to meet Marx's criterion of labour-cost reduction.[24]

Moszkowska's argument can be illustrated with a slightly modified version of her example of the limiting case.[25] It is a one-sector model in which, we assume, identical workers use homogeneous units of a means of production (corn) to produce larger quantities of the same commodity. The old technology can be written, in physical units, as

$$170 \text{ corn} + 340 \text{ labour} \rightarrow 510 \text{ corn} \tag{7.1}$$

This shows that in each production period 340 workers transform 170 tons of corn into a gross output of 510 tons. The net output is 340 tons; labour productivity, defined as net output per worker, is 340/340 = 1; and the value of a ton of corn is the inverse of this (that is, also, 340/340 = 1). If we assume that one-half of each working day is paid for, and one-half unpaid, the value of labour power is one-half and the rate of exploitation equals 100 per cent. This means that one-half of the net output goes to the workers, so that each worker consumes 170/340 = ½ ton of corn; the remaining 170 tons represent the surplus product and accrue to the capitalists. Remembering that the value of one ton of corn = 1, the system can be written in value terms as

$$170c + 170v + 170s = 510, \tag{7.2}$$

so that the rate of profit is 170/(170 + 170) = 50 per cent.

The new technique which Moszkowska considers can be written as:

$$340 \text{ corn} + 340 \text{ labour} \rightarrow 765 \text{ corn} \tag{7.3}$$

It can be seen that it does – just – satisfy Marx's criterion. If there are constant returns to scale, a gross output of 765 tons could have been produced under the old technology if the use of both corn and labour had been increased by 50 per cent, giving

$$255 \text{ corn} + 510 \text{ labour} \rightarrow 765 \text{ corn} \tag{7.1a}$$

Comparing (7.1a) with (7.3), it is evident that the new process uses 85 more tons of corn, with a value of 85, and 170 fewer workers; with the value of labour power equal to one-half, this represents a saving of 85 units of labour value in the payment of direct labour. Thus the extra labour embodied in the new means of production is exactly equal to the saving in paid labour which the new technique allows, when the labour values of the original technique are used to make the comparison.

Using the new technology, net output has increased to (765 − 340 = 425); means of production per worker have doubled (from 170/340 = ½ to 340/340 = 1); and productivity has increased by 25 per cent (net output per worker, previously 340/340 = 1, is now 425/340 = 1.25). Hence the unit value of corn has fallen, from 340/340 (= 1) to 340/425 (= 0.8). If real wages are unchanged, at one-half of a ton of corn per worker per period, workers receive 170 and the remaining 425 − 170 = 255 tons constitutes the surplus product paid to the capitalists. Value magnitudes can then be calculated as before. Constant capital is 272 (340 × 0.8), variable capital is 136 (170 × 0.8) and surplus value is 204 (255 × 0.8), giving:

$$272c + 136v + 204s = 612 \tag{7.4}$$

with the rate of exploitation = 150 per cent (204/136) and the rate of profit unchanged at 204/(272 + 136) = 50 per cent. If the rate of exploitation had remained constant, at 100 per cent, the rate of profit would indeed have fallen:

$$272c + 170v + 170s = 612, \qquad (7.4a)$$

with $r = 170/(272 + 170) = 38.5$ per cent. But this would involve an increase in real wages (which Marx's argument precludes), since the 170 units of variable capital represent $170/(0.8) = 212.5$ tons of corn, and each worker would be able to consume $212.5/340 = 0.625$ tons per period instead of the original 0.5. The rate of profit could also be induced to fall by making the increase in productivity less than 25 per cent, but this, as we have seen, would have rendered the innovation unacceptable to capitalists on Marx's labour-saving criterion and would not, therefore, represent a criticism of his theory. If labour productivity had increased by more than 25 per cent, however, the rate of profit would have risen if wages had remained constant.

Moszkowska concluded from this that the theory:

> is a dynamic, not a historical law. It does not express a historical fact, i.e. that the rate of profit falls, but simply the mutual dependence of two variables, i.e.
> 1. When the rate of exploitation remains the same, the profit rate falls.
> 2. When the rate of profit remains the same, the rate of surplus value rises.
>
> Thus the law only expresses a functional relationship, and could as well be called 'the law of the tendency for the rate of surplus value to rise' as 'the law of the tendency for the rate of profit to fall'.[26]

The problem with Moszkowska's argument is similar to that of Tugan's; it is cast in terms of labour values and not in prices of production, and it deals with Marx's argument in the context of a one-commodity economy in which there is a single produced good. Capitalists, however, make their decisions in terms of price magnitudes, not labour values, and have to do so in an economy which produces a multitude of commodities. Moszkowska's argument therefore falls short of a comprehensive critique on two grounds. First, Marx's criterion for an innovation to be profitable to capitalists must be specified in price terms, to require that the increased cost of extra constant capital be more than offset by reduced wage costs, and his argument must be evaluated on this basis. Second, the evaluation should be conducted in the context of a multi-commodity economy.

In an article which appeared in 1934, five years after the publication of Moszkowska's book, Kei Shibata demonstrated that the Tugan–Bortkiewicz–Moszkowska rising profit rate theorem could indeed be established for models specified in prices as well as labour values. Shibata used a three-department model with only circulating capital, in which, for simplicity, the quantity of means of production per worker was initially the same in all sectors. With a little licence (Shibata does not name the three commodities, and sets out his argument rather differently), his system may be written as:

$$\begin{aligned} 8/3 \text{ steel} &+ 4/30 \text{ labour} \rightarrow 4 \text{ steel} \\ 2/3 \text{ steel} &+ 1/30 \text{ labour} \rightarrow 1 \text{ corn} \\ 2/3 \text{ steel} &+ 1/30 \text{ labour} \rightarrow 1 \text{ gold} \end{aligned} \tag{7.5}$$

If the real wage equals 5 tons of wheat per unit of labour per period, this system is in simple reproduction. The output of steel is exactly equal to the quantity used up in the three departments (4 tons), and the entire output of corn goes to feed the workers, since (6/30)(5) = 1; the output of gold accrues in its entirety to the capitalists. The labour values of the three commodities (λ_s, λ_c and λ_g) are found by solving

$$\begin{aligned} 8/3\lambda_s + 4/30 &= 4\lambda_s \\ 2/3\lambda_s + 1/30 &= \lambda_c \\ 2/3\lambda_s + 1/30 &= \lambda_g \end{aligned} \tag{7.6}$$

from which $\lambda_s = \lambda_c = \lambda_g = 1/10$, and the value relations are

$$\begin{aligned} 8/30c_1 + 2/30v_1 + 2/30s_1 &= 4/10 \\ 2/30c_2 + 1/60v_2 + 1/60s_2 &= 1/10 \\ 2/30c_3 + 1/60v_3 + 1/60s_3 &= 1/10 \end{aligned} \tag{7.7}$$

with the organic composition of capital = 4 in each department, the rate of exploitation = 100 per cent and the rate of profit = 20 per cent.

Denoting the prices of the first two commodities in terms of gold by p_s and p_c, the wage rate by w and the rate of profit by r, the corresponding price magnitudes can be obtained by solving

$$\begin{aligned} (8/30p_s + 2/3w)\,(1 + r) &= 4/10p_s \\ (2/30p_s + 1/60w)(1 + r) &= 1/10p_c \\ (2/30p_s + 1/60w)(1 + r) &= 1/10p_g \end{aligned} \tag{7.8}$$

where we know already that $w = 5p_c$ and $p_g = 1$. These equations show that the equilibrium prices of each commodity must be such as to allow capitalists to recover their costs and to obtain the prevailing average rate of profit r (see Chapter 3 of volume I of this book, and chapters 12–14 below). Solving equations (7.8) yields $p_s = p_c = 1$, and $r = 0.2$.

Shibata now introduces several types of technical change, each involving a very small increase in the use of means of production and a very small reduction in the employment of living labour. In the first case, he increases the inputs of steel per unit of output from 2/3 to 401/600 in departments I and II, reducing the corresponding labour inputs from 1/30 to 199/600. The conditions of production in the gold industry are unchanged. Solving the relevant variants of equations (7.6) and (7.8), he shows that the organic composition in the two departments has increased as expected (from 4 to 4.03), while prices and the rate of profit have changed: $p_s = p_c = 1.001$, and $r = 0.1988$. But this offers no support to Marx's law of the falling rate of profit. The prices of both commodities have risen. Hence the innovation is not cost-reducing; no rational capitalist would introduce it, and it is therefore irrelevant to the question at hand.

The second case involves an increase in organic compositions with no change in prices. (Shibata chooses new input coefficients in the first two departments which do not result in different prices from those calculated in equations (7.8) for the original case depicted in equations (7.5).) This is achieved by raising the quantity of steel required, per unit of steel and corn output, to 4100/6006, and reducing direct labour requirements to 199/6006 in each department. Using a suitably amended version of equations (7.6), Shibata finds that the organic compositions and rates of exploitation have risen at the same rate, leaving the value rate of profit unaltered. This is confirmed from the new equations (7.8), which yield $p_s = p_c = 1$, and $r = 0.2$. This example is analogous to Moszkowska's 'limiting case': there is no reduction in cost, and no change in the rate of profit. Capitalists would be indifferent between the new and old techniques.

A third change is now considered, which alters the unit input requirements to 401/601 and 199/6010 in the first two departments. The new value relations show a higher organic composition and an increase in both the rate of exploitation and the rate of profit. This is confirmed by the price equations, which give $p_s = p_c = 0.999$, and $r = 0.20080$. This innovation has reduced costs, and is thus acceptable to capitalists. Only if it is associated with an increase in the real wage, however, can it lead to anything other than an increase in the rate of profit.[27]

Shibata's analysis of 1934 went beyond that of Moszkowska by explicitly treating Marx's argument in terms of prices of production. But he does not come to grips with the complexity of a genuinely multi-commodity economy. Throughout his article, he keeps the organic composition of capital in the production of steel equal to that in corn. Consequently these two goods are always produced under the same technological conditions, and from an analytical perspective could be treated as a single commodity.[28] It is true that Shibata allowed a different organic composition in gold production, but Bortkiewicz had shown in 1907 that such 'luxury' sectors could have no influence upon the rate of profit, or upon the prices of non-luxury commodities.[29] Thus Shibata's argument could be conducted in terms of the first two departments alone, and these could be reduced to a single sector. Despite appearances, then, Shibata had not dealt with the second limitation of Moszkowska's work.

In 1939, however Shibata published a more general analysis which did deal with this question. In fact he provided a very early example of a Leontief input–output model, from which (given the real wage) prices of production and the profit rate could be derived. The paper represents something of a milestone in the debate on the transformation problem, and will be considered in detail in Chapter 12 below. All that need be noted here is that Shibata went a long way towards establishing three propositions, all of which were formally confirmed after 1945. First, the rate of profit in such a system can be calculated, given the real wage, from data on input coefficients and turnover periods of capital in departments I and II, without reference either to labour values or to conditions of production in department III. Second, cost-reducing innovations in either department I or department II lead to a rising rate of profit, so long as the real wage is held constant. This has come to be known as the 'Okishio Theorem', after the subsequent rigorous proof by Nobuo Okishio (see section IV below). Third, these results are unaffected by the introduction of fixed capital, if it can be assumed to depreciate linearly over time.[30]

Thus Shibata had contributed significantly to demonstrating the falsity of Marx's theory of the falling rate of profit. Although his work appeared only in Japan it was written in English, and soon came to the attention of Paul Sweezy, presumably via Sweezy's Harvard colleague Shigeto Tsuru, who had unsuccessfully challenged the results of Shibata's first paper.[31] In his *Theory of Capitalist Development*, published in 1942, Sweezy cites Shibata without apparently understanding the significance of the rising rate of profit theorem, which he denies. Sweezy did, however, repudiate the traditional falling rate of profit theory as a general law, since he could see no reason why the organic composition must necessarily increase more rapidly than the rate of exploitation. If the rate of profit did fall, Sweezy concluded, it would more likely be as the result of increasing real wages, or state intervention to benefit labour.[32]

British writers at this time seem to have been familiar with neither Moszkowska nor Shibata, but similar reservations about the general validity of Marx's analysis were very evident. The actual course of the profit rate depended, Maurice Dobb argued in the early 1940s, on the relationship between technical change, productivity growth and the rate of exploitation. The rate of profit was likely eventually to decline, but this was contingent and might be long delayed.[33] Joan Robinson went further, coming to conclusions very similar to those of Moszkowska. One might as well talk of a rising rate of surplus value as of a falling profit rate, Robinson suggested; 'one tautology is as good as another'. She also echoed Bauer in his attempt to incorporate effective demand into the analysis, but concluded that Marx's discussion of the falling rate of profit was 'a false scent . . . [which] explains nothing at all'.[34]

III 1945–c.1973

Post-war controversies took place on three levels. First, in the late 1950s and early 1960s, academic economists in Britain, the United States and Japan continued to investigate the logical coherence of the falling rate of profit theory; all found it defective to a greater or lesser degree. Then, coinciding with the end of the long boom in the early 1970s, the rediscovery of Henryk Grossmann stimulated a vigorous defence of the theory as an alternative to Keynesian and underconsumptionist influences in Marxian political economy (see Chapter 5 above). Meanwhile, the first serious efforts were being made to provide empirical support for Marx's volume III analysis, and to relate it to actual developments in contemporary capitalist economies.

The initial contribution came in 1956 from H.D. Dickinson, who employed analytical tools taken from neoclassical economics to explore the relationship between the organic composition of capital and the rate of exploitation.[35] Holding the real wage constant, Dickinson used a Cobb-Douglas production function to relate the growth of capital to that of output. Only if very special conditions held would the rate of profit fall continuously, he maintained; otherwise it would initially rise as the organic composition increased, decreasing only when capital accumulation had passed a crucial threshold.[36] Thus any decline in the profit rate, Dickinson concluded, although eventually inescapable, might well be postponed until 'some distant future'.[37]

This was an ingenious and widely imitated[38] but ultimately unsuccessful synthesis of Marxian and neoclassical economics. There can be no objection in principle to connecting capital accumulation, labour productivity and the growth of the surplus product, which was what Tugan, Moszkowska and Shibata had all done. While constant capital does not create value it *is* productive in the sense of increasing the output of commodities, as Marx himself knew very well. The problem with Dickinson's argument is that he used neoclassical ideas which have since been shown to be seriously defective. Only very special types of technology can be represented in terms of an aggregate production function.[39]

In 1960 Ronald Meek avoided this pitfall in a less ambitious, but more influential, paper.[40] Eschewing algebraic generalisations, Meek relied entirely on a series of plausible numerical examples in which technical progress increased both the organic composition and the rate of exploitation. His findings were similar to Dickinson's. 'If we start from a fairly low level of organic composition, then', Meek concluded, 'I think it can possibly be said that on Marx's premises the "tendency" of the rate of profit is first to rise, and then some time afterwards to fall.'[41] The initial increase would be greater, and the point of downturn later, the lower the initial rate of exploitation; the greater the increase in productivity associated with a given rise in the organic composition; and the faster the growth of productivity in department II relative to department I. This last result is somewhat surprising, since productivity growth in department I cheapens the elements of constant capital and thus works against the assumed increase in the organic composition.[42] This points to a defect in Meek's procedure. Like Moszkowska, Shibata and Dickinson, he had regarded the organic composition of capital as a parameter with an inherent tendency to increase over time. It should, however, be treated as an endogenous variable, its value derived from a hypothesis concerning the nature of technological change. In fact, technical progress may be associated with a *decline* in the organic composition if the unit value of constant capital falls fast enough.

The first model in which the endogeneity of the organic composition was explicitly addressed seems to have been that of the Dutch economist Arnold Heertje, which dates only from 1972.[43] Heertje drew heavily on the earlier work of Samuelson, which was itself greatly influenced by the path-breaking analysis of Leontief and von Neumann. Not the first to apply modern activity analysis to Marx, as one biographer claims,[44] the Nobel laureate Paul Samuelson has certainly been the most distinguished, and also the most persistent. In Chapter 14 we shall describe Samuelson's long confrontation with the labour theory of value in the 1970s. It is his 1957 paper, 'Wages and Interest: A Modern Dissection of Marxian Economic Models', which is relevant here. In it Samuelson demonstrated, on the assumption that there is no joint production or scarce natural resources, and a constant real wage, that the rate of profit must rise if there is a technical change which capitalists actually adopt. If the rate of profit does not rise, they will be better off using the old technology. Given the assumption that capitalists behave rationally, it is not possible for there to be simultaneously (i) technical progress, (ii) constant real wages, *and* (iii) a falling rate of profit. Thus technical progress which does not increase the real wage must increase the rate of profit.[45] This is Shibata's conclusion, generalised and more elegantly expressed. Samuelson states it, rather boldly, in a mathematical footnote to his article. A rigorous proof was, however, subsequently provided by the Japanese economist Nobuo Okishio, after whom the *Okishio Theorem* has been named.[46]

By the early 1960s, then, academic economists had voiced serious reservations about the tendency for the rate of profit to decline. For Dickinson and Meek everything depended on the relationship between the organic composition, labour productivity and the rate of exploitation, and they believed that the profit rate might rise for a very considerable period before eventually starting to fall. According to Samuelson and Okishio the rate of profit would fall as a consequence of technical change only in conjunction with an increase in real wages. But, for Marx, mechanisation also displaces workers, and the resulting unemployment tends 'to preclude wage rises'.[47] Thus Marx seemed, in Samuelson's phrase, to have 'backed one horse too many'. In consequence Cornelius Castoriadis was not the only socialist to repudiate the falling rate of profit altogether, and with it to renounce any theory of capitalist crisis which did not depend on realisation difficulties.[48]

These doubts were reinforced by the first serious empirical study of the law since Stiebeling, which was made in 1957 by Joseph Gillman. Using data from official US sources for the later nineteenth and early twentieth centuries, Gillman found a clear break in trend around 1919, before which the organic composition of capital had been rising sharply, more than offsetting the increased rate of exploitation to give the expected decline in the rate of profit. After 1919 all three ratios had remained roughly constant.[49] Either Marx's law applied only to the early stages of capitalist development, Gillman concluded, or it must be reformulated. He pointed to the 'capital-saving' nature of technical change under monopoly capitalism, and more especially to the rapid growth of unproductive expenditures, such as sales and administrative costs, which became so central to Baran's and Sweezy's *Monopoly Capital* (see Chapter 6 above). These represented deductions from surplus value, he argued, following Marx.[50] Ignoring variable capital, and denoting unproductive expenditures as u, the true rate of profit is $(s - u)/c$ rather than s/c. The profit rate depends not only on the rate of exploitation and the organic composition, but also on u/v, that is, the ratio between unproductive expenditures and the wages of productive workers. Re-estimated on this basis, Gillman argued, the rate of profit had indeed declined after 1919, but because of an increase in u/v rather than c/v.[51]

Gillman's series were in market prices rather than labour value terms, so that they do not measure Marx's $r = s/(c + v)$, all three components of which are defined in labour values. The fundamental problem with his analysis, however, is that it assumes full capacity utilisation. Paul Baran emphasised this point in his review of Gillman's book:

> This is, indeed, a paradoxical way of looking at the matter, and I doubt that Gillman himself fully realizes its implications. For what follows from it is that U.S. capitalism today would be better off in the absence of the unproductive outlays to which Gillman refers. Both the volume and the rate of profit would be higher. Clearly, for prosperity to prevail, these larger profits would have to find sufficient outlets in investment (at home and abroad) and/or in capitalists' consumption lest they be 'offset' (and eliminated) by massive depressions and unemployment. Since it cannot be Gillman's view that depression and unemployment would constitute a blessing to the capitalist system, he must believe that investment would respond to higher rates of return and rise automatically to the level required for the maintenance of reasonably high employment.
>
> That this confidence in the elasticity of investment with regard to the rate of profit is hardly compatible with the far-reaching (and growing)

> monopolization of the U.S. economy, correctly observed and stressed by Gillman, apparently leaves him undisturbed. Nor does he seem to be impressed by the undisguised dismay with which business circles react to any reduction of the government's unproductive expenditures, or by the anguish caused in Wall Street by every outbreak of a 'peace scare.'

Under conditions of deficient aggregate demand, Baran concluded, unproductive expenditures may *increase* profits by allowing the realisation of more of the surplus value which has been produced.[52]

This tension between the falling rate of profit and underconsumptionist models of crisis is equally apparent in the work of Ernest Mandel, the only other Marxian economist in this period to invoke empirical evidence about trends in profitability. In his early writings Mandel showed scant regard for the theory. His 1962 *Marxist Economic Theory* devoted much less space to the falling rate of profit than to disproportionality and demand-deficiency theories of crisis.[53] In *An Introduction to Marxist Economic Theory*, which appeared five years later, the emphasis is similarly upon effective demand rather than the rate of profit.[54] Not until *Late Capitalism*, published in German in 1972 and in English in 1975, did Mandel emphasise the falling rate of profit as the key to understanding the long boom and its demise, borrowing from Parvus and Kondratiev the notion of 50 year cycles or 'long waves' of capitalist development (see Chapter 1 above and also Chapter 16 below). For Mandel accumulation is a function of the rate of profit. Upswings in the long cycle are initiated by 'triggering factors' which lower the organic composition or increase the rate of exploitation. The post-war boom was one such upswing, Mandel maintained, with characteristically prolonged and powerful surges of capital accumulation and short, weak depressions. The specific triggers which had operated after 1945 included major technical changes cheapening the elements of constant capital, and improvements in transport and communications which had reduced circulation time; both had offset the tendency for the organic composition to rise. Equally important was the substantial increase in the rate of exploitation resulting from the defeat of the European working class by fascism. As the 'third technological revolution' exhausted itself, and the working class recovered its strength and self-confidence, the long boom would give way to a new Kondratiev downturn, and capitalism would face renewed crises of the classic kind.[55]

Mandel told an attractive story in lucid prose, illustrated with a wealth of empirical detail drawn from his encyclopaedic knowledge of orthodox economic literature and official statistical sources. His facility of exposition, however, tended to conceal very real defects in his analysis. The data cited in *Late Capitalism* obscured an 'obstinate refusal to face facts', in particular to acknowledge that the capital–output ratio – a rough proxy for Marx's organic composition – had been constant or falling for almost a century, so that fluctuations in the rate of profit had depended very largely upon changes in the rate of exploitation. Class struggle rather than technical change was the critical factor.[56] At the theoretical level Mandel had confronted neither the Okishio Theorem nor the Dickinson–Meek argument that a rising rate of profit might be a secular instead of merely a long-cyclical phenomenon. Moreover, his failure to repudiate his earlier Keynesianism produced a fatal ambiguity. As one reviewer concluded,

> it is never clear . . . whether Mandel considers capitalism has an inherent tendency towards over-production which periodically *expresses* itself in a falling rate of profit, or whether over-production itself is *caused* by a falling rate of profit. As a result, his repeated references to demand and realisation exist in something of a vacuum, and one is left wondering what, if any, is their connection with his basic theory of development.[57]

Resolute anti-Keynesianism was the defining characteristic of one increasingly influential stream of thought, based on the ideas of Henryk Grossmann as propagated by his disciples Paul Mattick (in the United States) and Roman Rosdolsky (in Germany).[58] The most literate specimen of the large and often turgid literature of what has become known as the 'capital logic' school was a widely-read 1973 article by David Yaffe,[59] which was entirely faithful to the spirit of Grossmann's theory (if not to his numerical models of breakdown). Yaffe began by warning against humanist interpretations of Marx, like that of the Frankfurt School, which located the contradictions of capitalism outside the economy, in the ideological, technical and political spheres, and against the Keynesianism of many self-proclaimed Marxian economists (see Chapters 4 and 5 above): 'If the capitalist mode of production can ensure, with or without government intervention, continual expansion and full employment, then the most important objective argument in support of revolutionary socialist theory breaks down.'[60] Marx had commenced his own analysis of capitalism, in volume I of *Capital*, by focusing upon 'capital in general', or 'the inner nature of capital', abstracting from the effects of competition on the behaviour of 'many capitals'. From this perspective he had demonstrated that the increasing organic composition 'was not a mere assertion but follows logically from the concept of capital itself', since mechanisation and the consequent replacement of living labour by dead labour are required to secure capital's domination over the process of production.[61]

Because there were counter-acting tendencies, Yaffe continued, the fall in the rate of profit was 'not linear but in some periods is only latent coming to the fore more or less strongly in other periods and appearing in the form of a crisis cycle'. Once 'absolute overaccumulation' occurs, so that further accumulation adds nothing to the mass of surplus value which is produced, growth comes to a halt. For Yaffe, this is all that there is to Marx's theory of crisis. It is logically independent of competition and effective demand, since

> we have shown the tendency that capitalism has towards over-production and crisis without considering competition. In the discussion so far it has also been assumed that all goods are *actually sold* at their value and there are no realisation difficulties; that is the tendency towards crisis and overproduction of capital can be deduced independent of such considerations.

Competition does become relevant in explaining how the crisis is overcome: the 'restructuring' of capital – a term redolent of the 1970s – ensures that only the more efficient, and most profitable, capitals survive: 'In this sense the capitalist crisis can be regarded as the strongest counteracting tendency to the long-run tendency of the rate of profit to fall . . . The tendency towards "breakdown" and stagnation therefore takes the form of cycles due to the effects of the countertendencies of which the actual crisis is an extreme case.'[62]

Yaffe concludes by again denouncing what he considers to be a number of incorrect versions of the Marxian theory of crisis, which 'separate the circulation process from the capitalist production process as a whole'. The most serious of these fallacies is underconsumptionism, which mistakes effects for causes: 'The over-accumulation of *capital* is the cause of the over-production of commodities and the latter is *not* the limitation to the capitalist production process.' It follows that state activity cannot stave off the tendency for the rate of profit to decline, since it is innately unproductive. The profits of capitalists who sell commodities (for example, armaments) to the state are acquired at the expense of other capitalists, since they represent only 'a redistribution of the already-produced surplus value'. Hence 'the mixed-economy has not fundamentally changed the contradictions of the traditional capitalist system', which remains crisis-prone.[63]

This is a restatement of the falling rate of profit theory, not a reasoned defence. No more than Mandel does Yaffe offer a critique of the Okishio Theorem. He does consider what he correctly terms the 'immanent tendency, within the accumulation process' for the rate of exploitation to rise, but dismisses it on the grounds (first asserted by Marx himself) that it becomes progressively more difficult to reduce necessary labour time as technical progress proceeds. This was conceded by Meek, whose numerical examples nevertheless show the profit rate to rise initially, conceivably for a very long time. Yaffe ignores this possibility entirely.[64] He also makes no effort to account for the 'long boom', or to explain the absence, for almost 30 years, of those crises of overaccumulation which are supposedly an inherent part of the essence of capital. To this extent his analysis is considerably less convincing than Mandel's.

IV Conclusion

By the mid-1970s a two-part agenda for defenders of the falling rate of profit theory had emerged. Theoretically, they would have to come to grips with the Okishio Theorem, answer the Dickinson–Meek criticisms, and formulate their argument in such a way that it did not amount to a tautology of the form: 'Either the profit rate falls or, if the counter-acting tendencies are strong enough, it does not.' Empirically, they would need to be much more careful in their representation of the evidence, measuring the organic composition and the rate of exploitation in terms of labour values and using these data to explain movements in the rate of profit, which is a ratio involving prices. Finally, they would have to be scrupulously clear as to the demarcation line between productive activities which create surplus value and unproductive activities which absorb it. In Chapter 16 we shall see how successful they were.

Notes

1. S. Groll and Z.B. Orzech, 'From Marx to the Okishio Theorem: A Genealogy', *History of Political Economy*, 21, 1989, pp. 253–72.
2. K. Marx, *Capital*, volume III (Moscow: Foreign Languages Publishing House, 1962), chs XIII–XIV; see also M.C. Howard and J.E. King, *The Political Economy of Marx* (Harlow: Longman, 1985), 2nd edn, pp. 200–2.
3. G.C. Stiebeling, *Das Problem der Durchschnittsprofitrate: Kritik einer Kritik mit Meinem Nachtrag* (New York: Labor News Co., 1893), p. 12; cf. Stiebeling, *Untersuchungen Über die Raten des Mehrwerths und Profits mit Bezug auf die Lösung des Problems der Durchschnittsprofitrate* (New York: New York Labor News Co., 1894); and F. Engels, 'Preface' to Marx, *Capital*, III, pp. 19–21. For a full discussion of the 'Prize Essay Competition' see Chapter 2 of volume I of this book.
4. B. Croce, 'A Criticism of the Marxian Law of the Fall in the Rate of Profit' (1899), pp. 142–58 of Croce, *Historical Materialism and the Economics of Karl Marx* (London: Cass, 1966; first published 1914); M. Tugan-Baranovsky, *Studien Zur Theorie und Geschichte der Handelskrisen in England* (Jena: G. Fischer, 1901), Ch. 7.
5. M. Tugan-Baranovsky, *Theoretische Grundlagen des Marxismus* (Leipzig: Duncker & Humblot, 1905), pp. 170–86.
6. L. von Bortkiewicz, 'Wertrechnung und Preisrechnung im Marxschen System. Erster Artikel', *Archiv für Sozialwissenschaft und Sozialpolitik*, 23, 1906, p. 49.
7. L. von Bortkiewicz, 'Value and Price in the Marxian System' (1907), *International Economic Papers*, 2, 1952, pp. 36–51.
8. K. Kautsky, 'Krisentheorien', *Die Neue Zeit*, 20, 1901–2, pp. 37–47, 76–81, 110–18, 133–43.
9. L. Boudin, *The Theoretical System of Karl Marx* (New York: Kelley, 1967; first published 1907), pp. 142–6, 169.
10. R. Hilferding, *Finance Capital* (London: Routledge & Kegan Paul, 1981; first published 1910), Ch. 17.

11. R. Luxemburg, *The Accumulation of Capital* (London: Routledge & Kegan Paul, 1951; first published 1913), pp. 330–38, 367; Luxemburg, 'The Accumulation of Capital: An Anti-Critique', in K. Tarbuck (ed.), R. Luxemburg and N. Bukharin, *Imperialism and the Accumulation of Capital* (London: Allen Lane, 1972), pp. 76–7n.
12. G. von Charasoff, *Das System des Marxismus: Darstellung und Kritik* (Berlin: Hans Bondy Verlag, 1910), pp. 63, 176, 313–14; cf. Charasoff, *Karl Marx Über die Menschliche und Kapitalistische Wirtschaft: Eine Neue Darstellung Seiner Lehre* (Berlin: Hans Bondy, 1909), pp. 76, 83–4. For Charasoff's contribution to the theories of value, see Ch. 12 below.
13. Ibid, pp. 45–50.
14. Ibid, pp. 160–1, 184–6, 192, 194, 245, 247 (original stress).
15. Ibid, pp. 196–8.
16. O. Bauer, review of Charasoff, *Das System*, in *Der Kampf*, February 1911.
17. E. Varga, *The Great Crisis and its Political Consequences: Economics and Politics 1928–1934* (New York: Howard Fertig, 1974; first published 1935), p. 23; on Lenin and his followers, see Chs 13 and 15 of volume I of this book, and Ch. 2 above.
18. E. Preiser, 'Das Wesen der Marxschen Krisentheorie' (1924), in Preiser, *Politische Ökonomie im 20. Jahrhundert: Probleme und Gestalten* (Munich: C.H. Beck, 1970), pp. 49, 52, 58–9, 72, 75.
19. H. Grossmann, *Das Akkumulations- und Zusammenbruchsgesetz des Kapitalistischen Systems (Zugleich Eine Krisentheorie)* (Leipzig: C.L. Hirschfeld, 1929); see also sections I–III of Ch. 16 of volume I of this book.
20. For an assessment of the critical reaction to Grossmann, see section IV of Ch. 16 of volume I of this book.
21. H. Neisser, 'Das Gesetz der Fallenden Profitrate als Krisen- und Zusammenbruchsgesetz', *Die Gesellschaft*, 8, 1931, pp. 84–5.
22. O. Bauer, *Zwischen Zwei Weltkriegen?* (Bratislava: Eugen Prager Verlag, 1936), pp. 55–7.
23. See the discussion of Lewis Corey and John Strachey in Ch. 1 above; for Mandel, see the following section.
24. N. Moszkowska, *Das Marxsche System: Ein Beitrag zu dessen Aufbau* (Berlin: Verlag Hans Robert Engelmann, 1929), pp. 37–8.
25. Ibid, p. 86. Like Tugan, Moszkowska confuses physical quantities and value magnitudes, so that our exposition necessarily involves some modification of her example. A more general algebraic interpretation is given by K. Schoer, 'Natalie Moszkowska and the Falling Rate of Profit', *New Left Review*, 95, 1976, pp. 92–6.
26. Moszkowska, *Das Marxsche System*, p. 118.
27. K. Shibata, 'On the Law of Decline in the Rate of Profit', *Kyoto University Economic Review*, July 1934, pp. 61–75.
28. P. Garegnani, 'Heterogeneous Capital, the Production Function and the Theory of Distribution', *Review of Economic Studies*, 37, 1970, pp. 407–36.
29. See Ch. 3 of volume I of this book.
30. K. Shibata, 'On the General Profit Rate', *Kyoto University Economic Review*, January 1939, pp. 40–66. See also K. Shibata, *Dynamic and Dialectic Theories of World Capitalism* (Kyoto: Minerva Shoho, 1959), which in addition to technical material includes an analysis of the Soviet Union as a 'state capitalist mode of production'.
31. Ibid, pp. 58–60.
32. P.M. Sweezy, *The Theory of Capitalist Development* (New York: Monthly Review Press, 1970; first published 1942), pp. 100–5.

33. M.H. Dobb, *Political Economy and Capitalism* (London: Routledge & Kegan Paul, 1940), 2nd edn, pp. 94–9, 108–14; Dobb, review of Sweezy, *The Theory of Capitalist Development*, *Science and Society*, 7, 1943, pp. 270–5.
34. J. Robinson, 'Marx on Unemployment', *Economic Journal*, 51, 1941, pp. 243–5; Robinson, *An Essay on Marxian Economics* (London: Macmillan, 1942), p. 42.
35. H.D. Dickinson, 'The Falling Rate of Profit in Marxian Economics', *Review of Economic Studies*, 24, 1956–7, pp. 120–30.
36. Where Y is output, L is labour, K is capital, and A and β are constants, the Cobb–Douglas production function is $Y = AL^{1-\beta}K^{\beta}$. Neoclassical theorists set the rate of profit (r) equal to the marginal product of capital ($\partial Y/\partial K$), to obtain $r = AK^{\beta}$. Dickinson shows that, if the initial capital stock is K_o, r increases with capital accumulation until $K = K_o/(1 - \beta)^{1/\beta}$, and then declines (ibid, pp. 125–6).
37. Ibid, p. 129.
38. For example M. Blaug, 'Marxian Economics and Technical Change', *Kyklos*, 13, 1960, pp. 495–509.
39. Garegnani, 'Heterogeneous Capital'; G.C. Harcourt, *Some Cambridge Controversies in the Theory of Capital* (Cambridge: Cambridge University Press, 1972), Ch. 4. See also Ch. 13 below.
40. R.L. Meek, 'The Falling Rate of Profit', pp. 129–42 of Meek, *Economics and Ideology and Other Essays* (London: Chapman & Hall, 1967; first published in 1960).
41. Ibid, p. 141.
42. Ibid, pp. 137–42; cf. Dickinson, 'Falling Rate of Profit', p. 128.
43. A. Heertje, 'An Essay on Marxian Economics', *Schweizerische Zeitschrift für Volkswirtschaft und Statistik*, 108, 1972, pp. 33–45, reprinted in M.C. Howard and J.E. King (eds), *The Economics of Marx* (Harmondsworth: Penguin, 1976), pp. 219–32; cf. Howard and King, *Political Economy*, 1985), pp. 128–32.
44. C.C. von Weizsäcker, 'On Ricardo and Marx', in E.C. Brown and R.M. Solow (eds), *Paul Samuelson and Modern Economic Theory* (New York: McGraw-Hill, 1983), pp. 203–10.
45. P.A. Samuelson, 'Wages and Interest: A Modern Dissection of Marxian Economic Models', *American Economic Review*, 47, 1957, pp. 884–912.
46. Ibid, p. 894, n. 9; N. Okishio, 'Technical Changes and the Rate of Profit', *Kobe University Economic Review*, 7, 1961, pp. 85–99, and 'A Mathematical Note on Marxian Theorems', *Weltwirtschaftliches Archiv*, 91, 1963, pp. 287–98. (Okishio realised his debt to Shibata and Samuelson, both of whom he cites.) See also E. Dietzenbacher, 'The Implications of Technical Change in a Marxian Framework', *Journal of Economics/Zeitschrift für Nationalökonomie*, 50, 1989, pp. 35–46.
47. K. Marx, *Capital*, volume I (Moscow: Foreign Languages Publishing House, 1961), Ch. XXV.
48. P. Cardan [pseudonym for C. Castoriadis], *Modern Capitalism and Revolution* (Bromley: Solidarity, 1965); cf. Ch. 4, section III, above.
49. J.M. Gillman, *The Falling Rate of Profit* (London: Dobson, 1957), p. 51, chart 3 and p. 57, chart 4.
50. Howard and King, *Political Economy*, pp. 128–32.
51. Gillman, *Falling Rate*, p. 97, table H and p. 98, chart 5.
52. P.A. Baran, 'Review of Gillman', *American Economic Review*, 49, 1959, pp. 1082–3; J. Robinson, 'The Falling Rate of Profit: A Comment', *Science and Society*, 23, 1959, pp. 104–6; H. Szlajfer, 'Economic Surplus and Surplus Value Under Monopoly Capitalism', in J.B. Foster and H. Szlajfer (eds), *The Faltering Economy* (New York: Monthly Review Press, 1984), p. 276. Gillman's

8
The Permanent Arms Economy

I Introduction

Perhaps the most obvious (and certainly the most sinister) difference between the post-war and pre-war worlds was the level of military expenditure carried on by the victorious powers. Disarmament had not been complete even after the First World War, but there was no precedent in the peacetime history of capitalism for the scale of arms spending which was now being undertaken. In 1950 military expenditure accounted for 6.6 per cent of the United Kingdom's GNP, for 5.5 per cent in France and 5.1 per cent in the United States; a decade later the figures were 6.5 per cent, 6.5 per cent and 9.0 per cent respectively.[1] One explanation for this persistent militarism was what the liberal economist James Tobin was later to describe as the 'naive theory' of arms spending, which saw it simply as 'a response to world events'.[2] However, this is less naive than it sounds. Undoubtedly there were serious political barriers to disarmament after 1945. France and (less desperately) Britain were embroiled in colonial wars, the United States was defending its newly-won 'informal empire', and all three were engaged in the long Cold War confrontation with the Soviet Union and China.

Inevitably, though, Marxists found the 'naive theory' lacking, since it ignored several important dimensions of the problem and, in particular, made no mention of the positive benefits which high levels of arms spending might offer the world capitalist system and its component nation-states. The first of these is *ideological*: militarism promotes national unity against the supposed external threat and reduces the intensity of internal class antagonisms. We shall return to this question at the end of this chapter. Second, there are two categories of *indirect economic* advantages. Most important are those accruing from the exercise of imperial power, in the form of super-profits from investment in, and trade with, colonies and neo-colonies. In this context military expenditure is a prop for imperialism rather than a significant phenomenon in its own right. (Our separation of the economics of militarism from the political economy of imperialism is to a certain extent an artificial one, and readers unfamiliar with the latter question should refer to Chapters 9, 10 and 11 below.) Also important are the civilian 'spin-offs' from military research and development, 'ranging from biros through computers to nuclear power'.[3] We shall have more to say about such spin-offs shortly.

For the most part, however, our concern here is with the *direct economic* benefits which may result from militarism. Arms contracts are likely to be profitable for the companies which obtain them (the evidence is that they are very profitable indeed).[4] But how could arms spending raise the rate of profit for the system as a whole? Like most liberals, many Marxists deny that this is possible, some suggesting that military expenditure lowers the profit rate and thus represents a net burden for capital. Other Marxist writers, however, argue that armaments expenditure is directly beneficial, for one of two reasons. The first is the stimulation that it provides to aggregate demand, and the corresponding weakening of the underconsumptionist tendencies which would otherwise prevent the realisation of surplus value. This line of argument is central to the analysis of (but by no means confined to) Baran and Sweezy and their followers (see Chapter 6 above). The second argument concerns the production of surplus value, not its realisation. Arms spending, it is maintained, represents the most important of the counteracting forces working against the long-run tendency for the rate of profit to decline. This view was most cogently expressed in the 1950s and early 1960s by the English neo-Trotskyist Michael Kidron, and remains the official position of the Socialist Workers' Party in Britain.

The remainder of this chapter is organised as follows. In the next section we summarise the somewhat sketchy and inconclusive discussion of military expenditure in classical Marxism. We then examine the underconsumptionist argument, paying special attention to the possibility of testing it empirically. In section IV we analyse the relationship between arms spending and the rate of profit. The following section deals with the economic costs of militarism, the role of the 'military–industrial complex', and the suggestion that militarism is a form of economic parasitism. We conclude by considering the methodological implications of the 'permanent arms economy' thesis.

II Marxism and Military Expenditure before 1939

Marx wrote nothing on the economics of military expenditure. Engels did little more, despite his strong personal interest in the technical aspects of warfare and the substantial growth of European militarism in the final decade of his life. His pamphlet *Can Europe Disarm?*, written in 1893, called for the settlement of international disputes by negotiation and the replacement of standing armies by popular militias. For Engels arms spending offered neither direct nor indirect benefits to capitalist states, but only the prospect of financial ruin.[5] Both German and Russian Marxists tended to neglect the entire issue. Like Engels, Karl Kautsky did point to the costs of colonial expansion and the military spending associated with it, warning that Germany's attempt to build a strong navy in addition to its expensive army would result in economic disaster. As the world war loomed Kautsky argued that, although militarism did give a boost to consumer demand, it was (like other unproductive expenditures) contradictory. Capitalists benefited from arms spending but, to the extent that it was financed by taxation upon profits, they would necessarily resist it. In consequence there were definite limits to the growth of military expenditure, which could not enable the system to overcome its chronic tendency to underconsumption.[6] Kautsky claimed that his left-wing critics in the SPD were mistaken when they viewed militarism as a necessary condition for the survival of capitalism. Although it did have economic causes, arms spending was not indispensable, and disarmament was a real – albeit precarious – possibility.[7]

Of all the classical Marxists, it was Rosa Luxemburg who showed most interest in the economic implications of military expenditure, but her analysis, contained in one short chapter of her *Accumulation of Capital*,[8] is remarkably difficult to follow. The fundamental theme of Luxemburg's book is the need for external (that is, non-capitalist) markets if surplus value is to be realised (see Chapter 6 of volume I of this book). She seems to have regarded military expenditure as supplementing the more important external markets provided by overseas colonies and neo-colonies, but her numerical examples of extended reproduction with an armaments sector only serve to obscure her argument. In fact everything depends upon how an expansion in military spending is financed. There are three possibilities. Increased taxes on workers merely alter the composition of output (more guns, less butter), without affecting aggregate profits or the level of effective demand. Higher taxes on profits may or may not increase the overall profitability of capital, depending on what would otherwise have been done with them. Deficit financing will have a stimulating effect so long as demand is insufficient to permit the realisation of all the surplus value which would be produced at full capacity utilisation. And military expenditure has the distinct advantage, from an underconsumptionist viewpoint, that it 'creates no further problem by increasing productive capacity (not to mention the huge new investment opportunities created by reconstruction after the capitalist nations have turned their weapons against each other)'.[9]

But this is to suggest only that sense can be made of Luxemburg in Keynesian terms, not that she herself was a premature Keynesian. That would be to give Luxemburg both too much and too little credit. Too much, because *The Accumulation of Capital* simply does not display the necessary clarity of analysis on the issue of effective demand. Too little, because it ignores her wider contribution. Luxemburg highlighted the social and ideological benefits which capitalism derives from militarism, both at home (reduced class tension, increased power of coercion where needed) and abroad (forced conversion of natural economy into commodity economy, rapid introduction of capital and wage labour in backward regions).

Luxemburg's claims about the economic advantages of arms spending were less supportable when viewed from the perspective of Bolshevik economic theory. Although neither Lenin nor Trotsky dealt specifically with the effects of military expenditure *per se*, as distinct from their analysis of imperialism, Bukharin did do so. Arguing in terms of Marx's reproduction models, Bukharin recognised in the *Economics of the Transformation Period* that the production of armaments cut into surplus value and hindered expanded reproduction. Indeed, if the value of military production exceeded total surplus value, the system would enter into 'negative extended reproduction'. Bukharin believed that the process might be hidden through inflation of money prices, but such growth was illusory. By implication, then, rather than explicit rebuttal, Bukharin argued that Luxemburg's treatment of the arms economy was the exact opposite of the truth; rather than aiding in the realisation of surplus value, the principal effect was to destroy the production of values. As we argue in later sections, Bukharin's position is the more defensible, but until recently it was that of Luxemburg which proved most influential in Marxian political economy.[10]

It would have been difficult to maintain that military expenditure was responsible for the relative economic stabilisation of the 1920s, given the very substantial degree of disarmament by all the major capitalist powers. Only after 1933, with the alarming revival of German militarism (and of the German economy) under Hitler, was any serious attention paid to Luxemburg's conclusions. Writing in 1937, Eugen Varga denied that arms spending could guarantee prosperity. The tenor of Varga's argument was, however, distinctly Keynesian, with strong undertones of Luxemburg. If military expenditure were financed by taxing the working class, he suggested, aggregate demand would be unaltered; only its composition would change. Loan-financed expenditures, on the other hand, would expand demand so long as they involved 'the use of capital previously *lying fallow*'; that is, up to the point at which excess capacity had been eliminated. In a postscript two years later, Varga took a much more positive attitude. The increase in arms spending had 'led to a liquidation of unemployment in Germany', he wrote. 'Armaments offer a tremendous and almost unlimited market for capitalism', which would not be at the expense of civilian activity unless military expenditure continued to increase after full employment had been attained.[11] Since Varga wrote with the full authority of the Comintern behind him, it is clear that by 1939 the underconsumptionist, 'surplus-absorbing' approach to military expenditure could be regarded as Stalinist orthodoxy, and to that extent Stalin can be exempted from Natalie Moszkowska's charge that neither he nor Lenin ever came to grips with the new phenomenon of 'war capitalism'.[12]

The resurgence of militarism could, however, be seen from a quite different perspective. As we saw in Chapter 1, Friedrich Pollock maintained (in 1941) that the new state capitalism in the West could not tolerate mass unemployment, for fear of popular revolt. Rising living standards for the masses were no less dangerous, since they implied increased leisure, more time for reflection, and a greater risk of conscious and revolutionary opposition. In terms very similar to those of George Orwell's post-war novel *1984*, Pollock concluded that capitalism could not survive a 'peace economy': 'As long as one national state capitalism has not conquered the entire earth, however, there will always be ample opportunities to spend most of its productive excess capacity (excess over the requirements for a minimum standard of living) for ever-increasing and technically more perfect armaments.'[13]

III Arms Spending and Effective Demand

In *The Theory of Capitalist Development* Paul Sweezy had described militarism as 'an increasingly important offsetting force to the tendency to underconsumption', which 'provides the capitalist class as a whole with increased opportunities for profitable investment of capital'.[14] But Sweezy devoted no more than a page to its economic effects, and it was only after the war that he and Paul Baran placed military expenditure at the centre of their theory of monopoly capital (see Chapter 6 above). The one disadvantage of the arms economy was high taxation, Sweezy argued in 1953.

> Everything else is in its favour. It is precisely the biggest monopolies which benefit most directly from arms spending; there is no competition, direct or indirect, with private enterprise; the atmosphere of hatred and intolerance that goes with war preparations – the witch hunts, the jingoism, the glorification of force – creates the conditions in which the propertied classes find it easiest to control the ideas and activities of workers and farmers and lower middle classes.

None of the alternatives proposed by liberal peace campaigners could succeed. Capitalists would resist the expansion of civilian government spending, and there would be powerful opposition to any attempt to increase consumption by raising wages at the expense of profits. Nor would a simultaneous and balanced reduction in military expenditure and taxation prove effective: 'Profits are so large as to confine the growth of consumption within narrow limits, and if they were largely invested in expanding civilian capacity the result would very soon be a crisis of excess capacity and overproduction.'[15]

Paul Baran's *Political Economy of Growth*, published four years later, placed less emphasis on the stabilising effects of arms spending, possibly as a result of the relative decline in US military expenditure at the end of the Korean War. However, militarism played a much greater role in *Monopoly Capital*, where it was treated as one of the two major absorbers of surplus, along with the 'sales effort'.[16] By 1970 it had become an article of faith among American Marxists that 'the military-industrial complex has eliminated the spectre of secular stagnation'.[17] Baran and Sweezy were themselves more circumspect, arguing that the demand-creating role of military spending was subject to both military and economic limits. Weapons production was becoming so capital-intensive that its effect upon employment was severely constrained, and the lethal irrationality of the nuclear arms race was more and more acknowledged within the military establishment. These limits, Baran and Sweezy suggested, 'signal the end of the illusion that perpetual prosperity can be assured through the unlimited expansion of the arms budget', and foreshadowed the return of stagnation and depression.[18] As a matter of brute fact, neither economic nor military logic restrained US military spending in the way that Baran and Sweezy had expected. The arms budget rose (at current prices) from $47 billion in 1961 to $265 billion in 1984, and $299 billion in 1989; even correcting for inflation, the massive increases in the Vietnam and Reagan eras are readily apparent.[19]

At the theoretical level, the underconsumptionist argument raises two important issues. The first is whether military expenditure has been consciously pursued as an instrument of economic policy. The second is whether it has actually had the stimulating effects which Baran and Sweezy and their followers have claimed for it. As far as the first question is concerned, it would be very difficult to sustain a case that military spending was deliberately employed as a counter-cyclical or anti-stagnation measure. To do so it would be necessary to establish, first that the US ruling class was conscious of the need for such a device and united in its determination to use it; and second, that changes in arms spending were governed, in their timing and magnitude, by macroeconomic considerations. Both propositions seem more than a little far-fetched (see below for some rather inconclusive evidence). Neither was endorsed by Baran and Sweezy, who interpreted the post-war growth in military expenditure in more conventional terms: it was the inescapable precondition of the United States's political and economic dominance over an increasingly hostile world.[20] This is not Tobin's 'naive theory' of militarism, since it hinges on the indirect economic advantages which accrue from imperialist hegemony. Any direct economic benefits from arms spending, however, were a mere by-product of the United States's super-imperialist position.

Were the benefits real, or only apparent? Attempts to investigate this issue are bedevilled by conceptual and technical problems. First, it is by no means clear that it is legitimate to force dialectical Marxist theory into the mould of equilibrium models suitable for formal statistical testing. This leads inevitably to a narrowing of its range, since broad and ambitious historical stories are notoriously more difficult to test econometrically than precise and limited economic hypotheses. Second, published data are invariably in market prices rather than prices of production, let alone labour values, casting some doubt on the pertinence of any such tests from the perspective of orthodox Marxist theory. Third is the question of the level at which analysis is to be conducted: individual states, or the capitalist world as a whole? Fourth comes a clutch of econometric problems, especially that of simultaneity. Merely establishing a statistical relationship between military expenditure and capacity utilisation implies nothing about the direction of causation, which may run from the former to the latter ('rearmament boosts demand') or from the latter to the former ('economic growth allows more to be spent on the military'); and there may, of course, be no causal relationship at all.[21]

There have been only two serious econometric studies of military spending from a Marxist perspective. In the first, Al Szymanski explored the relation between armaments expenditure, unemployment and economic growth in the 18 wealthiest capitalist countries between 1950 and 1968. His initial observation was that arms spending was so small – less than 4 per cent of national income in all except Britain, Israel and the United States – as to cast serious doubt upon its economic significance. (Much however depends on the strength of international multiplier effects, which are discussed below.) Except for the United States, Szymanski found no correlation between the stage of development, measured by per capita income level, and the share of arms spending. If richer countries did produce relatively more surplus, and suffer more severely from underconsumption, it was not reflected in their military expenditure. Third, Szymanski found a negative correlation between arms spending and the rate of economic growth, contrary to Baran's and Sweezy's expectations. On only one test did the theory succeed: Szymanski did find nations with higher military spending to have lower unemployment rates. On balance, though, the surplus absorption approach was not consistent with observed capitalist reality.[22]

In the other study Ron Smith cast further doubt on the underconsumptionist argument. Smith noted that military expenditure is unsuitable as a counter-cyclical policy both because of its long lead-time and due to the highly capital-intensive nature of most armaments production. He found no evidence that the timing of increases in US arms spending had been affected by trends in unemployment. Smith also discovered that differences in military expenditure by advanced capitalist countries before 1970 were unrelated to their relative unemployment rates. Like Szymanski, he reported a negative cross-sectional relationship between arms spending and economic growth. Smith too concluded that the underconsumptionist interpretation of militarism possessed little explanatory power.[23]

It might be objected to this that cross-sectional tests miss the point. If US arms spending can be shown to have stimulated demand in Japan and Western Europe, the lower levels of military expenditure there would be irrelevant to the underconsumptionist argument.[24] There are, however, good reasons for believing that this was not so. First, it remains conjectural: no hard evidence has been produced to show that unemployment rates or indices of capacity utilisation in other capitalist countries moved in line with changes in US arms spending. Second, the marginal propensity to import of the United States was too low for such international spillovers of demand to have served as a major engine of expansion, at least in the 1950s and 1960s.[25] Third, and decisively, US military spending in these two decades was funded in large part by increased taxation rather than by deficit finance. The expansionary effect was therefore relatively small. Assuming the expenditure to have had no import content, national income in the United States would have been raised by the amount of the arms expenditure itself (according to the balanced budget multiplier theorem of Keynesian economics), but there would have been no effect on the international economy.[26] If part of the expenditure had involved the purchase of foreign goods, this would have generated international multiplier effects. However, in this case they would have been offset by a reduced expansion of demand within the US economy itself.

This argument must be qualified. There may well also have been accelerator effects on US private investment, which could conceivably have spilled over into the other Western countries (US engineering companies ordering machine tools from Japan, for example). And this in turn may well have stimulated business confidence (and hence investment) all over the world, although it would be difficult to test this empirically. Finally, it is important to note that neither Szymanski nor Smith deal with the period after 1970, when the US economy became much more open to import penetration, and during which (especially from 1981 onwards) military expansion was accompanied by colossal budget deficits. Their findings might thus be valid only for the earlier period. However, none of these reservations weaken the two, essentially negative, conclusions. The demand-creating effects of arms spending probably did not cause the 'long boom' after 1945 in the manner suggested by Baran and Sweezy; and the decreasing growth rates and rising unemployment levels of the 1970s and 1980s were not the unintended consequence of beating swords into ploughshares.

IV Arms and the Falling Rate of Profit

Even more than Baran and Sweezy, Michael Kidron viewed arms spending as the key to capitalism's success after 1945 (see also section IV of Chapter 3 above). It was, according to Kidron, a period in which high employment, rapid growth and economic stability operated as a 'causal loop', reinforcing each other in much the same way as stagnation and instability had done in the 1930s. Kidron rejected several popular explanations of the change. State planning presupposed high levels of economic activity, and would have been unnecessary in their absence. As for the post-war liberalisation of trade and the rapid pace of technical innovation, Kidron argued that both operated inside the causal loop already mentioned. To account for the long boom an autonomous, external factor was required.[27]

For Kidron this factor was the arms economy. Insofar as it is financed by taxation on profits, military expenditure deprives capitalism of resources which would otherwise be used for productive investment. Their diversion to weapons production slows down the growth of the organic composition of capital in civilian activities, thereby significantly retarding the fall in the profit rate which would otherwise occur. Kidron's analysis relies upon one crucial proposition: increases in the organic composition in military production have no effect upon the rate of profit in the wider economy. Armaments are not consumed by workers; nor are they used as means of production in wage-goods industries, either directly or indirectly. In this they resemble the luxury commodities consumed by capitalists. They belong neither to department I nor to department II, but rather to that third sector which Marx denoted by IIb and Bortkiewicz (followed in this by most later writers) identified as department III. As early as David Ricardo it had been argued that changes in the conditions of production in such industries would affect only the relative prices of the commodities concerned, without influencing the general profit rate. This was demonstrated to be true by Bortkiewicz at the turn of the century, for a simple three-department model of simple reproduction, and was confirmed in a more general context by Piero Sraffa in 1960. Kidron concluded from this that the permanent arms economy was the latest, and easily the most powerful, counter-acting tendency to the falling rate of profit. It constituted the basis of a new stage of capitalist development, superseding Lenin's imperialism, which had proved to be only 'the highest stage but one'.[28]

Marx himself had hesitated over the validity of Ricardo's analysis of luxury production, on occasion denying it forcefully.[29] This has led those Marxists unwilling to criticise the master, like Ernest Mandel, to dismiss Kidron's argument as erroneous. Mandel, indeed, points to the relatively high organic composition in military production as evidence that the arms economy has accelerated the decline in the rate of profit and served as a destabilising influence.[30] This, however, is completely wrong. Bortkiewicz's simple model proves the independence of the general profit rate from conditions of production in department III, and the underlying logic of this result is easily understood. Production in departments I and II is 'self-sufficient' in the sense that it does not require inputs from department III. These two departments constitute a self-contained subsystem, and their internal conditions of production alone determine their own rate of profit. If the rate of profit is equalised throughout the entire economy, that in department III must thus adjust to the rate which prevails in the subsystem formed by departments I and II. An excessive concentration of constant capital in department III might keep the profit rate there so low as to prevent the equalisation process from occurring, but it cannot affect the rate of profit in departments I and II.[31] More recently the same point has been established for the more general, *n*-industry case. Piero Sraffa has shown that only 'basic' industries, which produce wage-goods and means of production, have any influence on the rate of profit. And armament production is clearly a 'non-basic' activity in this rather technical sense.[32]

The real problems with Kidron's treatment are quite different. At the theoretical level, his analysis stands or falls with Marx's theory of the falling rate of profit, which we saw in Chapter 7 to be seriously defective. There is thus no theoretical substance to Kidron's claim that without the permanent arms economy a declining profit rate would have rendered post-war capitalism prone to crisis. Nor, as one would expect, is there any empirical support for his argument; for example, the sharp reduction in arms spending as a proportion of British output from 12 per cent in 1952 to 5½ per cent by 1970 was not reflected in a similar decline in the rate of profit. As we shall see in a later chapter, the fall which did occur can be accounted for by other factors altogether.[33] This is not to deny that military expenditure may affect the rate of profit. Technical spin-offs might cheapen the elements of constant capital in civilian industry, for example, while the ideological impact of militarism might be such as to induce workers to accept lower wages and a higher rate of exploitation. Equally, as will be seen in the following section, there are several ways in which arms spending may reduce profitability. But none of them lends any support to Kidron's thesis, because the way in which arms expenditure affects the economy is very different.

V The Costs of Military Spending

Szymanski had concluded that 'in a very basic sense, military spending, instead of leading to economic growth, actually appears to be a cause of at least relative stagnation'.[34] In fact there are at least three ways in which arms spending could retard growth. Militarism may 'crowd out' investment in productive industry; it may divert scientists, technologists and ancillary resources from non-military research and development projects; and it can foster complacency and inefficiency both in the armaments sector itself and in the wider economy. Although specific vested interests gain from military expenditure, it is – if these factors operate – at the expense of capital as a whole.

ism, from Cobden and Hobson to Melman, have attacked the vested interests making up the 'military–industrial complex', about which the retiring President Eisenhower (himself a former general) warned the American people in 1960. Writing just after the First World War had run its bloody course, A.C. Pigou denounced the arms producers for promoting 'the explosive material, out of which the flame of war may burst'; and he meant these words in a figurative as well as a literal sense.[39] Many Marxists, too, see militarism as a form of economic parasitism in which a narrow fraction of capital profits while the rest of society (including the majority of capitalists) foot the bill. In James O'Connor's words, the 'defence' contractors 'have established what seems to be a permanent tap on the federal budget and thus have a long-run stake in the arms race itself . . . Thus, the big military contractors participate readily with defense programs regardless of the rationality of these programs in terms of overall national capital interests.'[40] Militarism bears violent witness to the failure of economic management in the modern capitalist state.[41]

VI Capitalism and Peace

To return to the categories used in the first section of this chapter, it appears probable that the *direct economic* effects of military expenditure are negative (or were negative, up to the end of the 1970s: the 'military reindustrialisation' of the United States during the Reagan presidency has yet to be fully assessed).[42] Acceptance of this conclusion implies that the important limits to growth of output in post-war capitalism have been set by supply constraints rather than deficient demand,[43] or at least that any shortfall in effective demand resulting from disarmament could have been quickly corrected by increased civilian (including government) expenditure. This repudiation of Keynesian ideas leads to what has sometimes been termed, not entirely facetiously, 'supply-side Marxism' (see Chapter 16 below). For the United States the initial *indirect economic* effects of arms spending may have been sufficiently positive to outweigh its direct costs, since its military might did help the United States to dominate the international economy for a quarter of a century after 1945. It was, however, a contradictory position, since the ensuing balance of payments deficits and crowding-out of productive investment contributed greatly to the destruction of the very economic hegemony that the arms spending began by defending.[44] For the other Western powers with substantial military expenditure, like Britain and France, the balance sheet is overwhelmingly negative. The permanent arms economy, then, was not responsible for the long boom, nor were cuts in arms spending implicated in its demise.

There remains the *ideological* impact of militarism, in terms of increased social cohesion and enhanced legitimation of capitalist class relations. These effects cannot be measured and may at some points have been negative (especially during the Vietnam War). Assuming them generally to have been positive, however, a significant methodological issue arises. Is it legitimate to argue, from the fact that military expenditure makes capitalism run more smoothly, that this is the *reason* why arms spending has been so high since 1945? Are functional explanations of this kind acceptable in Marxist analysis, or must causal statements be framed in terms of rational decisions taken by individuals? These questions have wide ramifications (for example in the theory of the state and of the labour process) which will be considered in Chapter 17 below.

Another, closely related, issue has a bearing on a more traditional controversy in Marxist theory. This concerns the extent to which high military expenditure was caused by economic factors, as against 'relatively autonomous' political, strategic and other superstructural determinants. Mary Kaldor has suggested the existence of a sort of weapons fetishism,

> in which the weapons system as a piece of separate independent hardware, a thing, appears to dictate its own patterns of consumption and production to weld together the military and industrial components of the mode of warfare. It could be that our own awe of the Bomb makes us victim of this fetishism, unable to identify a meaning in the social system that produces it and therefore apparently helpless in the headlong momentum of modern militarism.[45]

It is not necessary to go as far as E.P. Thompson, for whom a self-propelled 'exterminism' has replaced capitalism and socialism at the centre of world history,[46] to realise that military competition does possess a deadly momentum of its own.

This leads us to the final, and by far the most important, point. Modern militarism is after all a product of capitalism, however convoluted and contradictory the production process may have been. Can it, then, be overcome within the confines of capitalism? This is the question which exercised Karl Kautsky on the eve of the First World War. He cautioned against confusing the claim that militarism is the creation of capitalism (which he accepted) with the proposition that militarism is a necessary condition for the existence of capitalism (which he denied). There is nothing in the logic of capital, Kautsky concluded, to prevent disarmament and the onset of peace.[47] Given the remarkable resilience of the capitalist mode of production, we can only hope that he was right.

Notes

1. D. Smith and R. Smith, *The Economics of Militarism* (London: Pluto Press, 1983), p. 23.
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Part III
New Theories of Imperialism

9
Capitalism and Underdevelopment

I Introduction

The analysis considered in Part II focused upon the functioning and transformation of advanced capitalism. Each theory sought to provide an explanation of the 'long boom', understand the contradictions which would ultimately undermine it, and thereby account for the passivity of the working classes in the West, as well as locating the basis for any future radicalisation. In all cases the economic structures of backward areas and their relationship to those of developed countries figured hardly at all. Only Baran and Sweezy thought them to be significant, and even in *Monopoly Capital* they were of secondary importance. The forces of stability and change in the heartlands of capitalism were seen to operate primarily through the reproduction and growth of the major capitalist economies.

Backwardness elsewhere, however, became increasingly evident after the Second World War. By then per capita incomes in the advanced countries were over four times higher, on average, than those of less developed areas, whereas in the mid-eighteenth century they had been approximately equal, and 200 years earlier many non-European countries had been richer.[1] Moreover, as a political force Marxism progressed mainly in undeveloped areas, and Marxists naturally felt the need to link this to backwardness. In itself this was not new. As volume I of this book documents, Russian Marxists considered this issue at length. What was novel in the post-war theories which emerged was the argument that backwardness was a result of a process of *underdevelopment*, in which advanced capitalist economies had distorted the economic structures of backward areas so as to preclude their development. Marxists, of course, had always taken the view that imperialist exploitation contributed to the economic growth of leading capitalist nations. But before the 1920s they had also considered that the impact of the West encouraged economic development on a world scale. Marx and

Engels, Kautsky, Luxemburg and Hilferding, along with Lenin, Bukharin and Trotsky, all believed that imperialism fostered capitalist economic development generally.[2]

To be sure, it was never a pronounced theme in the work of these Marxists, which was highly Eurocentric. Even their use of the term 'imperialism' reflected this. Lenin, for example, used it as a synonym for the monopoly stage of capitalism, while Hilferding and Luxemburg considered imperialism to be equivalent to a 'struggle for economic territory'. The domination and exploitation of undeveloped countries by advanced economies, which has become its principal meaning in the post-war years, was certainly not the prevailing reference before 1917, or even in the inter-war years. Only Kautsky and Luxemburg came close to it, and they would have sharply resisted the political associations of the new usage, in which it was frequently held that 'class struggle' now meant a conflict between exploited and exploiting *nations* (see section III below).

The responsibility for initiating the revision of established theories of imperialism falls on Paul Baran, who, in the early 1950s, formulated most of the main economic propositions in the analysis of underdevelopment.[3] Anticipations of his ideas can be found, including no less an authority than the Comintern programme of 1928 (see Chapter 11 below). Occasional statements of Stalin, Trotsky and other Russian Marxists in the inter-war years also pointed towards Baran's work.[4] There was clearly a basis for the new theory in Lenin's claim that capitalism had ceased to be a progressive force and, since he relied heavily upon Hilferding and was close to the views of Bukharin, in their writings too (see Chapter 13 of volume I of this book). After 1920 the Third International elevated the importance of anti-imperialist struggles in the colonies, and this no doubt also provided an impulse conducive to the reformulation of the theory.[5] Nevertheless, only with Baran's work did there occur a clear break with traditional Marxian views about capitalist economic development in backward countries. For the first time a comprehensive economic theory of underdevelopment was formulated, explaining why development outside the strongholds of advanced capitalism was impossible without the intervention of socialist revolution. Furthermore, although Baran's ideas were subsequently extended by André Gunder Frank, Immanuel Wallerstein and the 'dependency theorists', they seldom improved upon Baran (see sections III and IV below). Consequently, Baran may claim a place in modern Marxian theories of imperialism analogous to that of Hilferding earlier in the century. He provided the principal concepts and the main ideas, while leaving enough space for additional considerations to be introduced by other theorists.

The main influence on Baran may well have been Paul Sweezy. An enduring friendship between the two began in 1939, and Sweezy's *Theory of Capitalist Development*, published in 1942, briefly pointed towards Baran's ideas of a decade later.[6] However, Sweezy increasingly moved towards an 'exchange perspective' which was not clearly manifest in Baran's own work (see section I of Chapter 11 below). Raul Prebisch and other radical development economists may also have provided some of the ideas which Baran used, together with the terminology of the 'centre' and 'periphery' which would become the hallmark of the new theories of imperialism. But Baran emphasised neither the structural rigidities which (they claimed) inhibited the growth of backward economies, nor the deteriorating terms of trade which supposedly followed from these inflexibilities.[7] Instead he stressed underdevelopment as a result of the very nature of capitalism itself. The contrast provided by the economic transformation of the Soviet Union clearly impressed Baran, as did the extension of the command economy to Eastern Europe and China. It led him to repudiate reformism: no matter how radical, a reformed capitalism would be inferior to the potential offered by central planning, the very nature of which required a socialist revolution.[8] Together with decolonisation, the dramatic rise of national liberation movements, and the Soviet Union's need for allies and trading partners, this Stalinist aspect of Baran's theory was responsible for the warm reception which his ideas received from Maurice Dobb and from Soviet spokesmen.[9]

II Paul Baran and *The Political Economy of Growth*

Baran first outlined his theory of underdevelopment in an article 'On the Political Economy of Backwardness', which was published in 1952, having been presented as a paper to the American Economic Association two years earlier. This was followed by a more extended account in *The Political Economy of Growth* in 1957, the main ideas of which had been the subject of a lecture series delivered in 1953. During the 1950s and 1960s Baran also wrote articles on various aspects of underdevelopment, some of which were collected together in *The Longer View*, published (posthumously) in 1970. At the same time he was cooperating with Paul Sweezy in writing *Monopoly Capital* (see Chapter 6 above). This text was almost wholly concerned with the economic structure of advanced capitalism, but, given the nature of Baran's thesis on backwardness, it formed an integral part of his theory of underdevelopment.[10]

The central idea in Baran's treatment of imperialism is more classical than Marxian. Economic growth is the result of the size and utilisation of the surplus product. Economies grow by allocating the surplus to productive investments, and the more surplus is accumulated the faster is growth. Economic stagnation occurs either because the surplus is insufficient to expand the productive forces or, if adequate, is wasted in unproductive consumption. Thus the divergent economic histories of the centre and periphery – in which the development of the means of production is concentrated in the centre, and development is inhibited in the periphery –

hinges on the division of the world's surplus between different regions and the way in which it is used within them.[11]

According to Baran the divergence originated in the sixteenth century, when Western European countries began a process of colonial expansion and primitive accumulation. While the domestic surplus was also increasingly being invested at home, it was supplemented by using the surplus of other economies outside Europe. This transfer of surplus undermined the economic development of Latin America, Africa and most of South East Asia. Baran claimed that the seeds of autonomous capitalist development could be discerned everywhere (or, at least, everywhere in Asia) in the sixteenth century, when it had been feasible for accumulation to have occurred over the whole globe. In the event it was concentrated in Western Europe only because European domination of other areas thwarted incipient bourgeois revolutions there, and restructured their economies in the interests of the imperial centres.[12] A small initial advantage possessed by Western Europe at the dawn of modern history was thereby turned into an enduring benefit and gave rise to cumulative divergence.

To support this thesis Baran pointed to the industrial development of India prior to its conquest, and showed how the Indian economy was then distorted by colonial administrations for the benefit of British manufacturers. Established industry was undermined and the surplus produced by the Indian economy was siphoned off by the imperial power. Baran also contrasted Indian experience with the fate of Japan, which had successfully escaped colonisation and consequently preserved its industry intact, carried out its own bourgeois revolution, and used the surplus for its own productive investments.[13] More generally, according to Baran, what determined whether a country developed or became underdeveloped was its incorporation into an imperial economy or the retention of independence.

There is no doubt that Baran exaggerated his case. To assert that all of Asia was on the verge of bourgeois revolution was absurd.[14] Baran concentrated his attention upon the forces of production and failed to perceive the strength of pre-capitalist relations of production which characterised many areas outside Europe. However, his claim that colonisation did undermine the existing productive forces and plunder the surpluses of the colonised is well established.[15] At least in part, the speed of accumulation in Europe was a function of the exploitation of the periphery. Whether this brought about underdevelopment, though, is a more contentious issue. If the peripheral areas were backward at the outset – as Marx himself believed – restructuring their economies for the benefit of the imperial power does not itself constitute evidence of underdevelopment. Rather, it may be a necessary condition for sustained later growth.

Aside from issues of historical development, the really controversial issue is whether or not the process continued to operate after decolonisation. Baran claimed that it did, and here he supplemented his analysis with more obviously Marxian elements, including theories of monopoly capital and underconsumption. He dated the emergence of monopoly capital to the late nineteenth century and thus opened the possibility of interpreting his own theory as an extension of Lenin's.[16] Baran's analysis of the functioning of monopoly capital, however, is very different from that of Lenin. For Baran inter-imperialist rivalry plays no role, and it is underconsumption which brings about a tendency towards stagnation. Investment outlets are insufficient to absorb an ever-larger surplus, and modern capitalism thus ceases to be a progressive force, even on its home ground. Instead of sustaining a rapid expansion of the productive forces, as did competitive capitalism, it dissipates surplus in wasteful activities (see Chapter 6 above).

For Baran there is no discontinuity in the economies of the periphery, since neo-imperialism effortlessly replaced colonial control and engendered sustained underdevelopment. Surplus continues to be drained off, principally through the repatriation of profits from foreign investments. This intensifies the surplus absorption problem in advanced economies, but cannot be alleviated by extensive investment in the periphery itself because this would threaten the entrenched monopoly positions of foreign corporations. Baran maintains that this is reinforced by the class structures of peripheral societies, themselves the product of imperialist or neo-imperialist domination. Whatever surplus is retained by the ruling classes of backward economies cannot be productively employed there, because the extreme inequality which prevails precludes profitable investment in industries catering for mass consumption, which Baran held to be essential for capitalist industrialisation. The periphery also suffers from a heritage of colonisation, which establishes a social structure dominated by a *comprador* (client) bourgeoisie and remnants of feudalism. Any attempt by Third World governments to encourage autonomous development engenders intense opposition and brings the threat of external intervention by the states of advanced capitalism, and especially by the United States. Monopoly capital has no more interest than colonial administrations in genuine economic development in the periphery.[17]

Baran's argument for the continuance of underdevelopment in the post-war years, and that of many of his followers, may thus be summarised as follows. First, the causes of Third World backwardness are exogenous rather than endogenous: that is, their poverty is due to relations with the West, not because of purely internal barriers to economic growth. Second, these contacts result in underdevelopment rather than development since the rich capitalist countries have both a strong incentive to block growth and (by creating relations of dependence) the power to do so. They have an incentive to perpetuate backwardness because this makes it more profitable to export capital to, or to engage in commodity trade with, the periphery.

Harry Magdoff, and other disciples of Baran, have added some orthodox Marxian considerations to his thesis. Underdevelopment entails a lower organic composition of capital, a larger rate of exploitation and thus a greater rate of profit than is available in the developed countries. It also means higher prices for manufactured exports from the metropolis, lower prices for imported raw materials from the periphery, and a correspondingly greater share of the gains from trade.[18] This is why relations of dependence are profitable. They are sustained through the exercise of both political and economic power. Formal colonial rule gave way to 'neo-colonialism' or 'neo-imperialism' (see section 1 of Chapter 4 above) and is buttressed by several types of economic influence. Direct ownership of assets is only one; no less important are monopoly control over modern technology and the growing indebtedness of Third World states, which renders them unable to resist the dictates of imperialist institutions like the International Monetary Fund and the World Bank.

Against Baran and his followers it has been objected, with considerable justice, that wealthy areas yield higher profits than poor ones, and that the supposed incentive for blocked development is therefore illusory. Before 1914 capital was exported not to the most backward parts of the globe but to the 'regions of recent settlement' in America and Australasia, where living standards were exceptionally high.[19] Again, in the post-war years US capital exports were directed more towards Western Europe than to the Third World. After 1945 trade, too, grew more rapidly between the advanced capitalist economies, with metropolis-periphery exchange lagging well behind. Thus rich regions appear to offer more lucrative markets, and more profitable investment opportunities, than poor countries and Western capital had no obvious incentive to block economic development in the backward areas. Its power to do so was also less than Baran had claimed. There have been many examples of political and military intervention by advanced capitalist states in the internal affairs of Third World countries.[20] But, at the same time, decolonisation was not purely cosmetic; at least the larger of the newly-independent states won a significant measure of genuine independence. No more than Brazil and Mexico are India and Nigeria mere puppets of of imperialism.

The evidence for economic dependence is stronger, but its implications are not straightforward. The extent of indebtedness is notorious, and very much greater than it was in Baran's day. But, by itself, the geographical location of asset ownership is entirely irrelevant to questions of development and backwardness. The central issue is not who owns the surplus but where it is invested. If this were not the case how else is it possible to explain the post-war backwardness of Spain and Portugal who were the first, and very substantial, plunderers of the New World and Africa? Analogously, a periphery remains backward not because it is exploited by a centre, but because the surplus is invested elsewhere.[21] And, while peripheral economies continue to rely technologically on the West, it is not clear why this should preclude development. In fact technological dependence has provoked two completely incompatible complaints: that the Third World is denied access to the most modern techniques, and that the use of these inappropriate methods of production has profoundly damaged their development.[22]

It is possible to take issue with other aspects of Baran's analysis: his characterisation of Western economies in terms of 'monopoly capital', his underconsumptionism, his rejection of the possibility of export-oriented industrialisation in the Third World, and his identification of US foreign policy with the immediate economic interests of capital. The theory of monopoly capital has been criticised in Chapter 6 above, and problems in the associated theory of underconsumption were exposed by Tugan-Baranovsky nearly a century ago (see Chapters 9 and 10 of volume I of this book). If there was a justification for emphasising the importance of the internal market in the early 1950s, it has certainly been weakened by the liberalisation of the world economy since then. After Baran's death in 1964, it has become clear that industrialisation can be based upon exports (see Chapter 11 below). A stable world hierarchy of income levels and rates of economic growth, which Baran's theory predicts, has been undermined. Even in the years immediately preceding *The Political Economy of Growth* events did not conform to Baran's thesis. The Marshall Plan provided large-scale aid from the United States explicitly in order to facilitate the recovery of Western European economies.[23] There was no attempt to 'block' development here, but Baran did not mention this important counter-example, and instead characterised 'aid' as invariably a transfer of resources from the centre to the periphery in order to sustain underdevelopment.[24] Of course, the transfer of resources to Europe under the Marshall Plan might be explained by the strategic objective of countering Soviet power, which operated to qualify the deeper interest in limiting development, but the possibility that the trade-off could run the other way did not enter Baran's analysis. Nor did he consider the likelihood that US intervention in the Third World which inhibits development might stem from political objectives, and lack any economic interest in sustaining backwardness.

Baran was aware that growth had occurred in at least some peripheral economies. However, he characterised this as dependent development, which was the creation of advanced capitalism in the centre, lacking any autonomous impulse, and was in consequence 'distorted'.[25] This argument proved popular with some Japanese Marxists, who alleged that under US domination Japan's economic development had been subordinated to the needs of American capital. The phenomenal success of Japan over the last 40 years has made this thesis less and less convincing, although it lingered on into the 1960s as part of the Japanese Communist Party's doctrine.[26] Elsewhere, too, the concept of 'distorted development' continued to be popular, especially among the dependency theorists of Latin America.[27] But no more than Baran have they provided criteria by which an autonomous development might be distinguished from a dependent one. When other economists have done so, in order to test the hypothesis that dependent development characterises Third World countries while that of the centre is autonomous, they have found no evidence in its favour. The most obvious counter-example is Canada, which by many indices is economically, politically and culturally dependent upon the United States, yet enjoys a per capita income only slightly below that of the United States itself.[28]

The belief that economic backwardness could be eradicated only by following Soviet practice was exceptionally widespread in the 1950s, and extended well beyond the ranks of orthodox communists. Baran's treatment of the issue is nonetheless notable for being wholly uncritical. Stalinist repression received no more than a passing reference in his work, and the possibility that it might be intimately related to the Soviet mode of production went unrecognised.[29] The fact that Soviet practice frequently flew in the face of the most secure propositions of classical economics, which Marx himself had accepted, was regarded as a strength rather than a weakness (see Chapters 11 and 18 below). Baran ignored everything but the mobilisation of the surplus for rapid accumulation in capital-intensive processes based on heavy industry.[30] His treatment was therefore very similar to that of Maurice Dobb, and Dobb himself was very favourably disposed to Baran's analysis.[31]

In the final years of his life Baran displayed doubts about the Soviet route to socialism.[32] His friends in Russia during the 1920s – who included Preobrazhensky – and his association with the Frankfurt School in the 1930s, meant that he could have had few illusions about the extent of the repression under Stalin. But, like Paul Sweezy and Isaac Deutscher, and before them Otto Bauer and Theodor Dan (the leader of the emigré Left Mensheviks in the 1930s), Baran believed that Soviet authoritarianism would ultimately yield to the liberating potentialities opened up by economic development.[33] According to this view, Stalin was preserving socialism in the only way that was practically possible. In doing so he had used barbaric means, but they were employed primarily to eliminate barbarism itself; economic modernity would prove to be incompatible with totalitarianism, and must inevitably bring substantial democratisation. Coupled with the collectivist property forms protected by Stalin, the socialist project would return to classical conceptions. As the evidence accumulated against this rather vulgar form of historical materialism, Baran became increasingly uncomfortable with the pro-Soviet stance which he had taken in *The Political Economy of Growth*. Nevertheless, by the time of his death in 1964 he was still unwilling, or unable, to offer an alternative model of development, and there is no evidence that he repudiated his theory of underdevelopment.

For his part, Paul Sweezy did sever his commitments to the Soviet Union in the late 1960s, proclaiming instead the appropriateness of a Maoist strategy toward socialist development.[34] Mao himself actually designated the Soviet Union under Khrushchev as a form of capitalism, and accused it of acting in an imperialist manner.[35] Some East European communist parties may have sympathised with this view after their own experiences of Soviet imperialism, and they like China frequently resisted incorporation into a 'socialist division of labour' based upon comparative advantage.[36] In the West the Maoist critique was extended by Charles Bettelheim, who sought to document the degenerative tendencies in Soviet history from the earliest days of the revolution. In doing so he echoed many of the arguments articulated by theorists of bureaucratic collectivism and state capitalism (see Chapter 3 above). But Bettelheim ultimately explained the degeneration in terms of the absence of a supreme leader who could maintain ideological purity, and counter 'economistic' concerns for the development of the productive forces as opposed to the creation of new socialist relations of production through continued class struggle.[37]

Like Sweezy and Bettelheim, many disillusioned communists and fellow-travellers shifted allegiance to other socialist states during the 1960s and 1970s, and they were joined by a younger generation in the New Left.[38] Baran's enthusiasm for the Cuban revolution suggests that, had he lived, he might have done so as well. Russia was a rather unsuitable role model for his theory of underdevelopment, which corresponded more closely to the Third World revolutions led by national liberation movements, and which dominated the writings of Mao, Guevara and Debray.[39] After all, if Baran was correct there was no possibility of *proletarian* revolution in the periphery, and some other agency was required. However, his traditional Marxist contempt for the peasantry,[40] and his Stalinist allegiance to heavy industry might have inhibited any such reorientation.

III Frank's Revisions

Baran found it exceedingly difficult to publish in the 1950s, and his position at Stanford University was threatened after his outspoken support for the Cuban revolution.[41] But *The Political Economy of Growth* had an immense impact upon radicals. It coloured the thinking of innovative development economists like Raul Prebisch, Dudley Seers and Keith Griffin, and was greatly admired by Marxist activists such as Salvadore Allende, Che Guevara and Regis Debray. Even Mao's challenge to Soviet hegemony had elements which were also recognisable in Baran's thinking. At the same time it provided the foundation for a school of Marxian economists concerned with the theoretical comprehension of underdevelopment. The works of dependency theorists like André Gunder Frank and Theotonio Dos Santos represent extensions of Baran's analysis, while the journal *Monthly Review* (edited by Paul Sweezy and Harry Magdoff) became identified with the overall perspective. But orthodox Communists such as

Maurice Dobb were sometimes equally enthusiastic, as were Trotskyists such as Ernest Mandel. Nor was Baran's influence confined to political economists and revolutionaries, since the historiography of Fernand Braudel and Immanuel Wallerstein drew heavily upon his general theoretical viewpoint (see section IV below).[42]

During the 1960s Frank proved to be the most important Marxist writer to extend Baran's ideas, especially in his *Capitalism and Underdevelopment in Latin America*.[43] In large part this book was no more than a restatement of Baran's original thesis, applied to Latin America. Indeed, it was in Latin America that Baran found his most receptive constituency, and Frank's works were the chief medium. Nevertheless, Frank did revise Baran's analysis in various ways, and these modifications have had an enduring influence. He dispensed with some of Baran's weaker arguments, introduced additional material designed to strengthen others and, most important, outlined a new perspective which sought to generalise Baran's treatment of colonialism and monopoly capital.

Frank did not repeat Baran's claim that incipient bourgeois revolution and autonomous capitalist development were world-wide phenomena in the sixteenth century. He accepted instead that most of the globe was genuinely undeveloped, and that the 'development of underdevelopment' was a process of reconstruction to meet imperial needs rather than a reversal of prior development. Nor did Frank employ Baran's irritating and wholly inappropriate references to the rule of Reason as a justification for Stalinism, although he too saw the emulation of Soviet practice as the solution for underdevelopment.[44] While retaining the importance attributed to monopoly, Frank concentrated upon its effect in the periphery, and did not emphasise tendencies towards stagnation in the centre. He also provided many more historical illustrations of the process of underdevelopment, and explicitly confronted the neoclassical theory of international trade, prominent theorists of 'modernisation' like Rostow, and more radical structuralists who emphasised the importance of rigidities and economic dualism in peripheral societies.[45]

None of this moved very far beyond *The Political Economy of Growth*, and the really important deficiencies in Baran's thesis remain evident in Frank's work. But Frank also introduced a significant shift in perspective. He defined capitalism in terms of exchange relationships: production for the market, rather than for direct use, made economic activity capitalist. Whether or not property relations involved wage labour or bondage, if outputs were produced for exchange this sufficed to define them as being capitalist. In Frank's view, moreover, all markets were only segments of a single world market, so that every capitalist activity was part of a global division of labour. The different 'modes of labour control'[46] are simply optimal methods of production in specific circumstances, and all are the result of profit maximisation. It follows that Latin America had been capitalist since the sixteenth century, when it was first incorporated into the world economy.[47]

Frank maintained that monopoly had characterised the capitalist world economy from its inception. The system has always involved 'chains' in which surplus is extracted from 'satellites' by 'metropoles', which may themselves be satellites of higher-order metropoles. These chains operated within countries as well as between them, so there was an extended continuum of exploitative relationships. Frank recognised that important changes had occurred in the five centuries since the capitalist world economy originated, but he claimed that this had been a 'continuity in change', with no alteration in underlying structure.[48] This structure was, in turn, frequently presented as a matrix of zero-sum relations, in which the wealth of the metropoles is a direct function of surplus extraction from the satellites. Thus, for Frank, economic development and underdevelopment are exact complements, whose classical expression can be found in early Mercantilist thought.[49]

Although it is possible to find allusions to these themes in Baran,[50] on the whole his own viewpoint was markedly different. Baran remained much closer to the original Marxian conception of capitalism as a mode of production defined by specific social relations, and contrasted the centres of advanced capitalism and the periphery more clearly than in Frank's metropolis–satellite chain. For Baran monopoly capital was a particular stage in capitalist development; while he undoubtedly thought of it as parasitic, he viewed the earlier forms of capitalism as unambiguously progressive, on standard Marxian grounds. Surplus extraction was related primarily to the development of the productive forces, and it was from rapid accumulation through command planning that Baran saw salvation for the Third World.

Frank's thought is extremely loose, and ambiguities are everywhere. But the real difficulty hinges on his conception of capitalism, into which the continuum of metropole–satellite relations and the zero-sum vision of exploitation fit so neatly. It was precisely this which brought an onslaught of criticism from more orthodox Marxists in the 1970s (see Chapter 11 below). In the 1960s, however, Frank's revisionism was widely embraced because it dovetailed with the revolutionary theories that were then popular. Peripheries could be located within advanced capitalism, facilitating the identification of the oppressed and marginalised in the First World with those in the Third. At the same time, the incorporation of the Western proletariat could be explained by its relative affluence, which derived from the surplus extracted from these groups. They, in turn, could be regarded as genuine agents of world revolution because it was their suffering which underpinned the whole structure of global capitalism.[51]

Towards the end of the 1960s, Frank himself moved beyond Latin American underdevelopment towards the broader subject of the world economy.[52] This also became the central topic for Samir Amin and Immanuel Wallerstein, and it is the 'world systems' theory constructed by Wallerstein which has since proved to be the most influential interpretation within this genus. The theory has very close affinities with the vision which Frank adopted in the 1960s, but at the same time introduces modifications which strengthen it. Thus, with the rise of world system theory in the early 1970s, Baran's original theory of underdevelopment underwent a second revision.

VI Wallerstein's Revision of Frank

The world systems theory of Immanuel Wallerstein is constructed firmly upon Frank's conception of capitalism as a system of exchange. For Wallerstein the capitalist mode of production is defined by production oriented to the market, in which different modes of labour control are the results of profit maximisation under varying circumstances and where each constitutes an element in the division of labour of a world economy.[53] He often suggests that the system is one of zero-sum surplus transfers,[54] although this viewpoint is not consistently proclaimed;[55] as in the work of Frank, there is considerable ambiguity and apparent contradiction on this and many other matters. Wallerstein also sometimes refers to the existence of a chain of metropolis–satellite relations,[56] but usually emphasises the tri-modal hierarchy of the world capitalist economy. At the apex is a core of rich powerful states, while the base is comprised of most countries in the Third World. In between is the 'semi-periphery', whose characteristics are convex combinations of core and peripheral elements. Wallerstein classifies most of Latin America as semi-peripheral, which is not surprising given that per capita incomes here are considerably above those in most backward countries.[57]

This perspective is fleshed out in Wallerstein's history of the world economy since the sixteenth century, when (he believes) capitalism originated. To date, only three volumes of *The Modern World System* have appeared, but Wallerstein has already sketched the arguments of the projected fourth and final volume in a large number of articles covering diverse topics in the period since the mid-nineteenth century.[58] The focus is very much on the *longue durée*, (that is, the very long run), which reflects the influence of Fernand Braudel. And, although Wallerstein recognises various stages of capitalist development, there is again an emphasis on 'continuity in change', as with Frank. Wallerstein also claims, however, that his overall vision is very close to the spirit (if not the letter) of Marx, and traditional Marxian themes are indeed more evident in his work than that of Frank. But Wallerstein regards all work on underdevelopment as essentially Marxist, and believes world systems theory to be its culmination, since it expresses in analytically complete form what Baran and Frank could only approximate.[59]

In fact 'underdevelopment' and 'dependency' are displaced from centre stage in Wallerstein's work, and are overshadowed by his recognition of a general interdependence between all the elements in the world economy. Moreover, while there always exists a hierarchy of core, semi-periphery and periphery, there is also socio-economic mobility. For Wallerstein the location of particular countries has varied over time; in particular, there have been movements in and out of the semi-periphery from both directions. Wallerstein analyses the changes in *The Modern World System* and recognises the complex forces at work. As a general rule, however, he regards the active role played by state organisations to be pivotal.[60] Unlike Baran and Frank, therefore, Wallerstein recognises the importance of political independence as a prerequisite for overcoming underdevelopment. Since he also views each state as the agent of a national bourgeoisie (broadly understood in accordance with his definition of capitalism, in which the specific social relations of traditional Marxian definitions do not figure) his system has sufficient flexibility to incorporate Lenin's notion of uneven development and inter-imperialist rivalry, as well the 'super-imperialism' of the United States.[61]

At the same time Wallerstein devalues the significance which Baran and Frank had both assigned to the Soviet route to socialism. Indeed, he maintains that there is no way in which an individual country can break free from the world capitalist system. Wallerstein regards as pointless most of the debate over the nature of the Soviet Union in terms of the concepts of degenerated workers' state, bureaucratic collectivism and state capitalism, because it presumes that internal social relations are crucial, and any analysis in terms of the 'betrayal' of the revolution is thought to be naive. However, he considers the Soviet Union to be state capitalist for the same reasons as Cliff (see Chapter 3 above): the law of value rules the Soviet economy through the pressures of military and economic competition from other states. Quite independently of the intentions of the revolutionaries, the Bolshevik revolution proved to be an example of a more general phenomenon whereby state power is rejuvenated and the economy restructured in order to lift a country from the semi-periphery into the core.[62]

Wallerstein has complete sympathy with the aims of the original Bolsheviks, and believes that the movement which they led represented a genuine 'anti-systemic' force. So too did the Chinese Communist Party, and Wallerstein is particularly impressed with Mao's efforts in the Cultural Revolution to resist the pressures of the capitalist world economy by continuing the class struggle against bureaucratisation and 'capitalist roaders'. Nevertheless, in his view there is no way that either revolution could have been successful; the capitalist world system is simply too powerful, and ultimately dominates all units in the global economy. Wallerstein explains the Sino–Soviet conflict since the 1950s in terms of the different positions which the two countries occupy. Russia had succeeded in attaining core status while China remained in the periphery, and the logic of surplus appropriation had to assert itself.[63]

Neither the Russian or Chinese revolutions, nor those of other national liberation movements in the periphery since the Second World War, however, are regarded as twentieth-century replicas of the 'Prussian road' to capitalist modernisation (on which see Chapter 11 of volume I of this book). They represent the beginnings of the world anti-systemic movement which, Wallerstein believes, will triumph during the next two centuries. He adheres to a version of the revolutionary scenario described at the end of section III above, and maintains that his economic analysis alone can explain the apparently diverse movements which have embraced Marxism.[64] Only by recognising capitalism as a world system, and interpreting the concepts of Marxian political economy in these terms, can it be appreciated how Marx's 'proletariat' has come to designate the oppressed and exploited generally. Here Wallerstein's argument has close affinities with the heterodox views of Frantz Fanon and Herbert Marcuse. More traditional versions of Marxian thought, which take the social relations of national units as the basis from which to define modes of production, are completely impotent when it comes to accounting for the multitude of revolutionary movements which seek to overthrow capitalism under the banner of Marxism.[65]

Despite reincorporation into the capitalist world economy, Marxist revolutions have been progressive. They have eradicated the social relations of bondage and, although they have failed to achieve socialism, socialist ideals live on in the official ideologies.[66] Anti-systemic revolutionary movements will continue to arise elsewhere in the world system and, while they too will be unable to break free of capitalism, they will operate in the same progressive manner. Ultimately the contradictions of capitalism will bring about the unification of anti-systemic forces on a world scale, and socialism will then emerge triumphant.[67]

Wallerstein is exceedingly vague about the economics of this process, but it seems to involve an underconsumptionism reminiscent of Rosa Luxemburg joined to the cyclical theory of Kondratiev and Schumpeter.[68] He summarises his views as follows:

> It has been the case over the history of the capitalist world-economy that the system's growth or 'development' has not been constant, but has occurred in wavelike spurts of expansion and contraction . . . As production is expanded in the individual search for accumulation, there regularly come points where the amount produced throughout the world-economy exceed[s] the effective demand resulting from the existing distribution of world income . . . The consequent periods of stagnation

> both reduce overall production and lead to class struggles which force a redistribution of world income to lower strata within the world-economy. This redistribution expands the market, at least in the core zones, and this can be most effectively compensated for, in terms of the interest of the upper strata, by the incorporation of new zones within the world-economy, adding a new component of ultra-low-income-receiving direct producers.[69]

According to Wallerstein the contractionary phases do not threaten the existence of capitalism because there is a mechanism which regularly brings about a reversal. However, he does believe that the capitalist world economy has entered a 'long crisis', which began early in the twentieth century. Expansion of the outer boundaries of the system, and the proletarianisation of direct producers, which are the methods by which effective demand recovers, are nearing their limits. Politically, this is reflected in the rise of anti-systemic movements.[70] One effect of proletarianisation (in the normal Marxian sense of this term, which Wallerstein adopts in this context) is to reduce the differentiation within and between these movements, allowing their unification on a world scale. They will then be able to attack capitalism as a whole, rather than being limited to the national struggles of the past, which were bound to fail in breaking free of capitalism. In other words, the closer does capitalism (as Wallerstein understands it) approach capitalism (as Marx understood it), the nearer is genuine socialist liberation. Stalin, Baran and Frank all believed that socialist societies could co-exist with capitalism, in rivalry with it and progressively expanding at its expense. This, however, is an illusion. According to Wallerstein capitalism is a world system, and it must be overthrown at that level; socialism can only be realised on a world scale.[71]

Wallerstein therefore returns to a theme of Marx himself, but his route is very different. Despite the manifold ambiguities in the writings of Marx and Engels, they are nothing as compared with those of Wallerstein. Indeed, one of the most frequent charges levelled against world systems theory, as well as against the ideas of Frank and the dependency theorists, is the lack of conceptual precision and analytical rigour. This is particularly acute at the very heart of their economics: the notions of surplus, and surplus transfer. Unlike Baran, who sometimes explained his ideas on these matters at length, Wallerstein is particularly opaque. He refers constantly to monopoly, but not only does he use the term in very different ways, he also seems to regard it as a synonym for unequal exchange. At several points, however, he refers for support to the theory of Arghiri Emmanuel,[72] and it is this analysis which will be critically examined in the next chapter, before we consider in Chapter 11 the critics of underdevelopment theory.

Notes

1. J. Faaland, *Population and the World Economy in the 21st Century* (Oxford: Basil Blackwell, 1982), p. 162.
2. M.C. Howard and J.E. King, *The Political Economy of Marx* (Harlow: Longman, 1985), 2nd edn, Ch. 14; A. Brewer, *Marxist Theories of Imperialism* (London: Routledge & Kegan Paul, 1980); see also volume I of this book.
3. P.A. Baran, 'Discussion', *American Economic Review* 41, 1951, pp. 355–8; Baran, 'National Economic Planning', in B.F. Haley (ed.), *A Survey of Contemporary Economics* (Homewood, Ill.: Irwin, 1952), pp. 355–403; Baran, 'On the Political Economy of Backwardness', *Manchester School*, 20, 1952, pp. 66–84; Baran, *The Political Economy of Growth* (Harmondsworth: Penguin, 1973; first published in 1957); Baran, *The Longer View* (New York: Monthly Review Press, 1970).
4. F. Claudin, *The Communist Movement: From Comintern to Cominform* (Harmondsworth: Penguin, 1975); B. Warren, *Imperialism: Pioneer of Capitalism* (London: New Left Books, 1980); M.N. Roy, *Selected Works: Volume I, 1917–23* (New Delhi: Oxford University Press, 1987); Roy, *M.N. Roy's Memoirs* (Bombay: Allied Publishers, 1964); O. Kuusinen, *Fundamentals of Marxism–Leninism* (Moscow: Foreign Languages Publishing House, 1928); A. Foster-Carter, 'Neo-Marxist Approaches to Development and Underdevelopment', *Journal of Contemporary Asia*, 3, 1973, pp. 7–33; A. Pronin, *India* (Moscow: Foreign Languages Publishing House, 1940); M. Blomström & B. Hettne, *Development Theory in Transition* (London: Zed, 1984); L.D. Trotsky, *Writings of Leon Trotsky* (New York: Pathfinder Press, 1975–1981): (1930), pp. 242–6, 324; (1933–4), p. 306; (1937–8), pp. 324, 358–61, 430; (1938–9), pp. 26, 33–5, 326–9; see also section II of Ch. 2 above.
5. Claudin, *Communist Movement*.
6. J.E. King, *Economic Exiles* (London: Macmillan, 1988), Ch. 8.
7. L.E. Di Marco (ed.), *International Economics and Development: Essays in Honor of Raul Prebisch* (New York: Academic Press, 1972); I.M.D. Little, *Economic Development* (New York: Basic Books, 1982).
8. Baran, 'National Economic Planning'.
9. M.H. Dobb, *Economic Growth and Underdeveloped Countries* (London: Laurence & Wishart, 1963); E.K. Valkenier, 'East–West Economic Competition in the Third World', in M.D. Shulman (ed.), *East–West Tensions in the Third World* (New York: Norton, 1986), Ch. 6.
10. See n.3 above, and Ch. 6 above.
11. Baran, *Political Economy of Growth*, Chs 1 and 2; see also Ch. 6 above.
12. Baran, *Political Economy of Growth*, p. 268.
13. Ibid, pp. 68, 277, 285.
14. J. Robinson, review of *The Political Economy of Growth*, *Nation*, 184, 1957, pp. 485–6; N. Kaldor, review of *The Political Economy of Growth*, *American Economic Review*, 48, 1958, pp. 164–70.
15. K. Griffin and J. Gurley, 'Radical Analysis of Imperialism, the Third World, and the Transition to Socialism', *Journal of Economic Literature*, XXIII, 1985, pp. 1089–143.
16. Baran, *Political Economy of Growth*, pp. 112ff.
17. Ibid, pp. 120, 237, 300ff, 337ff, 358ff, 364ff, 404, 410ff.
18. Baran himself made little of this final point, but it is stressed by some of his disciples: see, for example, H. Magdoff, *The Age of Imperialism: The Economics of U.S. Foreign Policy* (New York: Monthly Review Press, 1969), pp. 43–54.
19. R. Nurkse, *Patterns of Trade and Development* (Oxford: Blackwell, 1961).

20. N. Chomsky, *On Power and Ideology* (Montreal: Black Rose, 1987); E. Kolko, *Confronting the Third World* (New York: Pantheon, 1988); S.E. Ambrose, *Rise to Globalism* (Harmondsworth: Penguin, 1989), 5th edn; F. Halliday, *Cold War, Third World: An Essay on Soviet–American Relations* (London: Hutchinson, 1989).
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22. Compare A. Emmanuel, *Appropriate or Underdeveloped Technology?* (Chichester: Wiley, 1982), and E.F. Schumacher, *Small is Beautiful* (London: Blond & Briggs, 1973).
23. P. Armstrong, A. Glyn and J. Harrison, *Capitalism Since World War II* (London: Fontana, 1984), pp. 106–12, 125–6, 154–5, 161–2; M.J. Hogan, *The Marshall Plan* (Cambridge: Cambridge University Press, 1987).
24. Baran, *Political Economy of Growth*, pp. 77–86, 241.
25. Baran, *Political Economy of Growth*, pp. 127, 274–8, 325ff, 360, 431.
26. T. Morris-Suzuki, *A History of Japanese Economic Thought* (London: Routledge, 1989), pp. 108–11.
27. T. Dos Santos, 'The Structure of Dependence', *American Economic Review*, 60, 1970, pp. 231–36; T.H. Weaver and M. Berger, 'The Marxist Critique of Dependency Theory: An Introduction', in C. Wilber (ed.), *The Political Economy of Development and Underdevelopment* (New York: Random House, 1984), 3rd edn, pp. 45–64; Blomström & Hettne, *Development Theory*.
28. S. Lall, 'Is "Dependence" a Useful Concept in Analysing Underdevelopment?' *World Development* 3, 1975, pp. 799–810; Little, *Economic Development*, Part IV; *The Economist*, 4 November 1989, p. 123.
29. Baran, *Political Economy of Growth*, pp. 14, 28, 55, 57, 409.
30. Ibid, Ch. 8.
31. Dobb, *Economic Growth*; see also Ch. 2 above.
32. P. Clecak, *Radical Paradoxes: Dilemmas of the American Left, 1945–70* (New York: Harper & Row, 1973), Chs 1, 2 and 4.
33. I. Deutscher, *The Prophet Armed* (Oxford: Oxford University Press, 1954), pp. 291, 513; Deutscher, *The Prophet Unarmed* (Oxford: Oxford University Press, 1959), pp. viif, 199–200, 262, 464ff; Deutscher, *The Prophet Outcast* (Oxford: Oxford University Press, 1963), pp. 92ff, 102ff, 308ff, 510ff, 521; Deutscher, *Stalin* (Harmondsworth: Penguin, 1966), pp. 14, 244, 553, 557ff, 609–13; Deutscher, *The Great Contest* (New York: Oxford University Press, 1960), pp. 20–1; Deutscher, *Ironies of History* (New York: Simon & Schuster; 1966), pp. 17, 23, 25, 30–1; Deutscher, *The Unfinished Revolution* (New York: Oxford University Press, 1967), pp. 38, 53–8, 104–7; Deutscher, *Russia After Stalin* (London: Hamish Hamilton, 1969), pp. 55, 64, 96, 101, 165–75; M. Croan, 'Prospects for the Soviet Dictatorship: Otto Bauer', in L. Labedz (ed.), *Revisionism* (London: Allen & Unwin, 1962), pp. 281–96; L.H. Haimson (ed.), *The Mensheviks: From the Revolution of 1917 to the Second World War* (Chicago: University of Chicago Press, 1974).
34. Clecak, *Radical Paradoxes*, Ch. 5.
35. Mao Tse-Tung, *A Critique of Soviet Economics* (New York: Monthly Review Press, 1977); Editorial Department of *Renmin Ribao*, 'Chairman Mao's Theory of the Differentiation of the Three Worlds is a Major Contribution to Marxism–Leninism', *Peking Review* 45, 1977, pp. 10–41.
36. M. Ellman, *Socialist Planning* (Cambridge: Cambridge University Press, 1989), pp. 272–6, 278, 288, 294.
37. See the articles by Bettelheim in P. Sweezy and C. Bettelheim, *On The Transition to Socialism* (New York: Monthly Review Press, 1971), and also C. Bettelheim,

Class Struggles in the USSR (New York: Monthly Review Press, 1976 and 1978), volumes I and II.
38. Clecak, *Radical Paradoxes*; D. Caute, *The Fellow Travellers: Intellectual Friends of Communism* (New Haven, Coun.: Yale University Press, 1988), Part III.
39. S. Schram, *The Thought of Mao Tse-Tung* (Cambridge: Cambridge University Press, 1989); R. Debray, *Che's Guerilla War* (Harmondsworth: Penguin, 1975); H. Ramm, *The Marxism of R. Debray* (Lawrence: Regent's Press of Kansas, 1978).
40. Baran, *Political Economy of Growth*, pp. 39, 122, 416, 435, 437.
41. King, *Economic Exiles*, p. 176.
42. Ibid, p. 177; Griffin and Gurley, 'Radical Analysis'; Blomström and Hettne, *Development Theory*; Clecak, *Radical Paradoxes.*
43. A.G. Frank, *Capitalism and Underdevelopment in Latin America* (Harmondsworth: Penguin, 1971; first published in 1967).
44. Baran, *Political Economy of Growth*, pp. 119, 139, 145, 155, 424, 428; Frank, *Capitalism and Underdevelopment*, pp. 22, 144–5, 235, 304–5, 346.
45. A.G. Frank, *Latin America: Underdevelopment or Revolution?* (New York: Monthly Review Press, 1969).
46. The phrase is Wallerstein's, but the concept is Frank's; see section IV below.
47. Frank, *Capitalism and Underdevelopment*, pp. 11–12, 22, 31, 48, 53, 149, 159, 175, 180, 272–3, 293–4.
48. Ibid, pp. 14–15, 21, 31, 34–6, 38–9, 44, 46, 140, 174, 176, 178, 228–9, 273–4; Blomström & Hettne, *Development Theory*, pp. 58ff, 67ff, 175ff.
49. Frank, *Capitalism and Underdevelopment*, pp. 32, 91–2, 99, 122–7, 134, 142, 218, 225, 238, 327. However, as with all of Frank's exposition, virtually nothing is stated unambiguously. See A. Nove, 'On Reading André Gunder Frank', *Journal of Development Studies*, 10, 1973, pp. 445–55.
50 Baran, *Political Economy of Growth*, pp. 302ff, 388.
51. Frank, *Capitalism and Underdevelopment*, pp. 145, 228; A.G. Frank, *Lumpenbourgeoisie: Lumpendevelopment* (New York: Monthly Review Press, 1972); Blomström and Hettne, *Development Theory*, 58ff, 67ff, 175ff; Clecak, *Radical Paradoxes.*
52. A.G. Frank, *World Accumulation 1492–1789* (New York: Monthly Review Press, 1978); Frank, *Dependent Accumulation and Underdevelopment* (London: Macmillan, 1979); Frank, *Crisis: In the World Economy* (New York: Holmes & Meier, 1980); Frank, *Crisis: In the Third World* (New York: Holmes & Meier, 1981).
53. I. Wallerstein, *The Modern World-System I* (New York: Academic Press, 1974), pp. 87ff, 126ff; Wallerstein, *The Capitalist World-Economy* (Cambridge: Cambridge Universtiy Press, 1979), pp. 4–5, 15, 17, 19, 66, 68, 120, 122–4, 147, 155–9, 196–7, 206ff, 276–8, 285; Wallerstein, *The Politics of the World Economy* (Cambridge: Cambridge University Press, 1984), p. 16; Wallerstein, *Historical Capitalism* (London: Verso, 1983).
54. Wallerstein, *Modern I*, pp. 127–8, 179, 356; Wallerstein, *The Modern World System II* (New York: Academic Press, 1980), pp. 28, 31, 249; Wallerstein, *Capitalist*, pp. 61, 71, 73, 87, 129, 134, 142; Wallerstein, *Politics*, pp. 9, 80, 97–8, 111, 155, 165; Wallerstein, *Historical Capitalism*, pp. 40, 47, 72, 97ff, 100–4.
55. Wallerstein, *Modern I*, pp. 38, 349–50, 337; Wallerstein, *Modern II*, pp. 7–9, 38, 48, 55; Wallerstein, *The Modern World System III* (New York: Academic Press, 1989); Wallerstein, *Capitalist*, pp. 87, 97, 120–1, 129, 134, 285, 292–3; Wallerstein, *Politics*, pp. 16ff, 38–9, 59, 125ff, 155ff.
56. Wallerstein, *Capitalist*, pp. 223, 292; Wallerstein, *Historical Capitalism*, pp. 28ff.

57. Wallerstein, *Modern I*, pp. 349–50; Wallerstein, *Capitalist*, pp. 57, 120, 247; Wallerstein, *Politics*, p. 132.
58. Many of these articles are reprinted in Wallerstein, *Capitalist* and Wallerstein, *Politics*. See also G. Arrighi, T.K. Hopkins and I. Wallerstein, *Antisystemic Movements* (London: Verso, 1989).
59. I. Wallerstein, 'Marx and Underdevelopment', in S. Resnick and R. Wolff (eds), *Rethinking Marxism* (New York: Autonomedia, 1985), pp. 379–95; Wallerstein, *Capitalist*, pp. 9, 22–3, 53, 57, 68, 147, 154–5, 181, 191; Wallerstein, *Politics* p. 35; Wallerstein, *Historical Capitalism*, pp. 8–9.
60. Wallerstein, *Modern II*, p. 179; Wallerstein, *Capitalist*, pp. 61, 72, 74, 87, 90ff, 120ff, 196, 240ff, 286ff; Wallerstein, *Historical Capitalism*, pp. 48ff.
61. 'Super-imperialism' denotes the dominance of one imperialist power over all the others. It should be distinguished both from (classical) notions of imperialist rivalry and from Kautsky's concept of 'ultra-imperialism', which refers to stable collusion between imperialist powers. See R. Rowthorn, *Capitalism, Conflict and Inflation* (London: Lawrence & Wishart, 1980), pp. 48–78.
62. Wallerstein, *Capitalist*, pp. 30ff, 58, 61, 66, 68, 82, 239–40, 272, 280; Wallerstein, *Politics*, 52ff, 83–4, 88ff, 92ff, 106–9, 112ff, 125ff, 172; Wallerstein, *Historical Capitalism*, pp. 69, 86ff, 91–2, 108–11; C. Chase-Dunn (ed.), *Socialist States in the World System* (Beverley Hills, Cal.: Sage, 1982); see also P. Mattick, *Anti-Bolshevik Communism* (London: Merlin, 1978).
63. Wallerstein, *Capitalist*, pp. 58, 227; Wallerstein, *Politics*, pp. 91–2, 107, 131.
64. Wallerstein, *Capitalist*, pp. 200, 236–7, 251ff, 266, 278–9, 288, 291; Wallerstein, *Politics*, pp. 69ff, 72–3.
65. Wallerstein, *Capitalist*, pp. 196, 200, 224. 230, 284, 288; Wallerstein, *Historical Capitalism*, pp. 89ff; Arrighi, Hopkins and Wallerstein, *Antisystemic Movements*; cf. F. Fanon, *The Wretched of the Earth* (New York: Grove Press, 1968) and H. Marcuse, *One-Dimensional Man* (London: Routledge & Kegan Paul, 1964).
66. Wallerstein, *Capitalist*, pp. 234, 280ff; Wallerstein, *Politics*, pp. 57, 92ff; Wallerstein, *Historical Capitalism*, pp. 51ff, 92–3.
67. Wallerstein, *Politics*, pp. 104–5; Arrighi, Hopkins and Wallerstein, *Antisystemic Movements*.
68. For an outline of the ideas of Kondratiev and Schumpeter see Ch. 1 above, Ch. 18 below, and Ch. 15 of volume I of this book.
69. Wallerstein, *Politics*, p. 6.
70. Wallerstein, *Modern II*, pp. 3ff, 130; Wallerstein, *Capitalist*, pp. 35, 61, 97–8, 120–1, 125, 129, 148–50, 162–4, 278, 290; Wallerstein, *Politics*, pp. 16, 23–4; 38ff, 52–9, 63, 98, 100ff, 111, 153; Wallerstein, *Historical Capitalism*, pp. 34–40, 90ff.
71. Wallerstein, *Capitalist*, pp. 109–18, 246, 271ff, 281; Wallerstein, *Politics*, pp. 8ff, 21, 24–6, 32–3, 35, 55ff, 67, 78–9, 101, 109, 111, 126–30; Wallerstein, *Historical Capitalism*, pp. 22ff, 60ff.
72. Wallerstein, *Modern II*, pp. 193, 205, 249; Wallerstein, *Capitalist*, pp. 18, 42, 71, 122, 127, 162, 273ff, 285, 292; Wallerstein, *Politics*, pp. 3ff, 37ff, 43, 45, 58, 82, 100ff; Wallerstein, *Historical Capitalism*, pp. 30, 32, 50, 61.

10
Unequal Exchange

I Unequal Exchange Before Emmanuel

With the solitary exception of Rosa Luxemburg, classical Marxian analyses of imperialism identified the export of capital as the fundamental mechanism by which metropolitan capitalism exploits the periphery (see Chapters 5–6, and 13 of volume I of this book). One of the consequences of the decline of the Leninist theory of imperialism after 1945, which was described in the previous chapter, has been an increasing interest in trade rather than capital flows as the principal instrument of international exploitation. What appeared to be a growing gap between developed and undeveloped countries, especially after the collapse of the Korean War boom and the sharp fall in commodity prices in the early 1950s, had important intellectual repercussions. Development economics had only recently emerged as a clearly defined academic subdiscipline. From its beginnings it had been on the margins of economic orthodoxy, with its practitioners much more inclined than their mainstream colleagues to tolerate state interference with the operation of market forces and to countenance radical political changes, such as land reform, as a necessary pre-condition for economic development. These heterodox tendencies were strengthened by the post-1952 experience, which reinforced the arguments of development economists like Hans Singer and Raul Prebisch who postulated a secular deterioration in the terms of trade of poor primary producers dating back to the nineteenth century and constituting the chief cause of the widening gap between rich and poor countries. One did not have to be a Marxist, in this period, to see free trade as a tool of imperialist domination.[1]

Although considerable doubt was subsequently cast on the claim about the terms of trade,[2] the concept of unequal exchange proved to be more resilient. In fact it is not logically dependent upon any trend in the terms of trade, since inequality in exchange can be defined in terms of a quite different standard. In the labour theory of value, Marxian political economy has an alternative benchmark by which the degree of unequal exchange can be assessed.

When, however, the development theorists turned to the Marxian literature, they obtained little guidance. In *Capital*, Marx himself concentrated precisely upon showing how the existence of exploitation did *not* depend upon unequal exchange. For Marx surplus value is produced even when commodities sell at their values, due to the unique nature of labour power. While this did not preclude the possibility that unequal exchange might constitute an additional means of surplus extraction, Marx did not pursue it systematically, and was extremely critical of those who did, like the Mercantilists and Utopian socialists.[3] Marx himself had failed to write the projected volume of *Capital* dealing with the world market, and his few references to the labour theory of value in international trade were fragmentary and unsystematic. The three most important are found in volume III of *Capital*. Two of them involve numerical examples illustrating the possible relationships between the rate of exploitation and the rate of profit in advanced and backward countries. In the first, Marx shows how a higher profit rate can obtain in Asia than in Europe, even though the rate of exploitation is much higher in Europe:

Europe	$84c + 16v + 16s = 116$
Asia	$16c + 84v + 21s = 121$

Europe has an organic composition of 4, a rate of exploitation of 100 per cent, and a profit rate of 16 per cent; for Asia the corresponding figures are $^1/_4$, 25 per cent and 21 per cent. With this example Marx claims to have discredited Bastiat and Carey, who would have predicted a higher rate of profit in Europe, but he offers no further explanation. His second example contrasts an undeveloped country with a nation at a higher stage of development:

Undeveloped	$50c + 100v + 100s = 250$
Higher stage	$400c + 100v + 100s = 600$

The two countries now have the same rate of exploitation, so that the more advanced country, with its higher organic composition, has a very much lower profit rate: 20 per cent as against $66^2/_3$ per cent. Marx continues by assuming productivity to be lower in the backward country, increasing necessary labour and reducing both surplus labour and the rate of exploitation:

Undeveloped	$50c + 113^1/_3v + 66^2/_3s = 230$

The profit rate has fallen to $36^2/_3$ per cent, but remains higher than that in the advanced country.

There is no direct reference to unequal exchange in either of these passages. Later in volume III, when Marx discusses the forces counter-acting the tendency for the rate of profit to fall, he does refer to unequal exchange. His argument here is not concerned with international differences in the organic composition of capital, but with the fact that the higher labour productivity of the more developed countries allows them to sell their commodities for more than the labour embodied in them, 'even though cheaper than the competing countries' with lower productivity levels. Marx draws an analogy with the capitalist within a particular country 'who employs a new invention before it becomes generally used, undersells his competitors and yet sells his commodity above its individual value', thereby obtaining a surplus profit. In an international context, 'the more favoured country receives more labour in exchange for less labour, although this difference, this excess, is pocketed, as in any exchange between labour and capital, by a certain class'.[4]

The next Marxian economist seriously to consider these questions was Otto Bauer in his important book on the national question, published in 1907. Although he did not cite Marx directly, Bauer was clearly influenced by the volume III argument concerning international differences in the organic composition of capital. Marx's theory of price, Bauer maintained, supplies the key to understanding the economic basis for antagonism between two regions at different levels of development which trade with each other. If organic compositions diverge, trade will take place on unequal terms, and 'the capitalists of the more highly-developed country not only exploit their own workers but also constantly appropriate part of the surplus value produced in the less-developed country'. This unequal exchange applies not only between predominantly agrarian and mainly industrial countries, but also within states.

> Without a doubt this is also the economic relationship between German Bohemia and Czech Bohemia . . . What German writers so happily describe as the *higher culture* of German Bohemia, the 'lesser merit' of the Czech regions, is nothing other than the effect of the fact which dominates all capitalist competition, that the capitalistically more highly-developed parts of the country appropriate part of the value produced in the capitalistically less-developed areas.[5]

Bauer had in fact added little or nothing to Marx's own discussion. In view of both Lenin's theory of imperialism and subsequent developments in the theory of unequal exchange it is significant that he strongly denied that imperialism could benefit the working class in the metropolis, and explicitly stated the rate of exploitation in low-wage Czech Bohemia to be *lower* than in the higher-wage German regions.[6] Bauer's analysis was, however, quite influential in the 1920s, winning the support of both Henryk Grossmann and Evgeny Preobrazhensky, whose model of Soviet industrialisation hinged upon surplus extraction from the peasantry by means of unequal internal exchange. Grossmann used the first of Marx's numerical examples, on p. 187 above, pointing out that if the rate of profit were to be equalised internationally this would entail a transfer of value from Asia to Europe. Both commodities would then sell at 118½, giving a common rate of profit of 18½ per cent and involving an unequal exchange in Europe's favour of 2½ units of value, since commodities embodying 116 units of value would sell for 118½. This process of value extraction, Grossmann argued, was a significant offset to the falling rate of profit and helped to explain the strength of imperialist pressures in twentieth-century capitalism.[7] In the 1930s the protectionism of the Romanian neo-fascist Mihail Manoilescu owed something to Bauer, while in Japan Toichi Nawa and Kaname Akamatsu were anticipating much later developments in European Marxism in their debate on unequal exchange.[8] Thereafter the issue became much less prominent, at least in Western Marxism. In his 1942 *Theory of Capitalist Development*, for example, Paul Sweezy rejected the very possibility that international trade could transfer value from one country to another, on the grounds that trade alone (without capital movements) cannot equalise profit rates. His collaborator, Paul Baran, was similarly dismissive.[9] There was a substantial Soviet literature, dating from 1954, but this seems to have been of low quality and to have gone almost unnoticed in the West before the publication of J.-O. Andersson's survey in 1976.[10]

By then it was of purely historical interest. In December 1962 a Greek economist working in Paris, Arghiri Emmanuel, delivered a lecture in which he attributed unequal exchange not to international differences in organic compositions but to the huge and growing gap in real wages between rich and poor countries. This, Emmanuel argued, gave rise to a large divergence between relative prices and labour values, leading to the exchange of vastly unequal quantities of labour in the normal course of international trade. Unknown to Emmanuel another Parisian, Henri Denis, was about to publish an article with a very similar theme.[11] The ensuing controversy was at first confined to France but, with the publication in 1972 of an English translation of Emmanuel's book, it soon took on global proportions.

II Emmanuel's Theory of Unequal Exchange

Emmanuel's starting-point is the existence of a powerful tendency for the rate of profit to be equalised on a world scale, while there remain huge differences in both wages and rates of exploitation between advanced and backward countries. He suggests that the international mobility of capital has eliminated any substantial gap in profit rates, after allowing for relatively small and quite stable risk premia.[12] Thus, unlike Baran, Frank and the dependency theorists, Emmanuel considers the world economy to be essentially competitive. However, he recognises one fundamental exception to this, and it constitutes the foundation for his analysis of unequal exchange. Such labour mobility as is permitted by immigration controls in the West is utterly inadequate to equalise wages between rich and poor countries. In fact, according to Emmanuel, wages 'can vary enormously in space but very little in time'. Even the physiological minimum is elastic, since socially-created needs can become biological needs if their satisfaction has been guaranteed for a long period of time: 'a stage is reached at which certain needs created by civilization become so habitual and urgent that a worker will rather cut down on his food and clothing than do without the corresponding article or service'. In addition, 'there are considerable moral constraints upon the labour market. In spite of everything capitalism retains certain vestiges of personal relationships inherited from the feudal regime. One does not change one's employer as one changes the shop where one buys things', and one's employer is seldom proud of wage reductions. Finally, 'the trade-union struggle of the working class and the reactions of the employers' organisations prevent the free play of the market in this field'.[13]

For these reasons there exist very large international differences in the value of labour power, which Emmanuel takes to be exogenous in the sense that they are the cause of differences in commodity prices and in the level of economic development rather than the result. For him, wage differentials between rich and poor countries explain why it is that commodities produced in the Third World are so cheap, and those from the West so expensive; and this is responsible for the wide and growing gap in economic development between them. Emmanuel's rather confusing discussion of the relationship between wages and prices uses numerical examples which invoke first Marxian and then Sraffian models of price determination, in neither case very satisfactorily.[14] To illustrate his argument we employ a highly-simplified example of our own, framed in terms of labour values and ignoring all the problems with Marx's transformation algorithm (a more complicated and more acceptable Sraffian model is presented in section IV, although even this may have problems, as Chapter 15 below indicates). Rich country A produces 30 cars, using 720 days of direct and indirect labour, while poor country B produces 30 tons of tea with 480 days of direct and indirect labour. Wages are lower, and the rate of exploitation correspondingly higher, in B than in A, but the organic composition of capital is the same in the two countries. Assuming for simplicity that there is no fixed capital, the value relations can be written as:

	c	*v*	*s*	*Total value*	*Value per unit of output*
A	480	120	120	720	720/30 = 24
B	240	60	180	480	480/30 = 16

Here the (common) organic composition is 4, while the rate of exploitation is 100 per cent in *A* and 300 per cent in *B*.

Without international capital mobility, the rate of profit would be 20 per cent (= 120/600) in *A* and 60 per cent (= 180/300) in *B*. However, a uniform rate of profit is established, along the lines proposed by Marx in volume III of *Capital*,[15] by dividing total surplus value by total capital employed, so that r = 300/900 = 33 $^1/_3$ per cent. Prices of production are obtained in the usual manner:

	Cost-price $(c + v)$	*Profits* $r(c + v)$	*Price of production* $(1 + r)(c + v)$	*Price per unit* of output
A	600	200	800	800/30 = 80/3
B	300	100	400	400/30 = 40/3

The ratio of the labour values of the two commodities (24/16 = 1.5) is less than the ratio of their prices (80/3 ÷ 40/3 = 2). Assume that *A* imports 6 tons of tea at a total cost of (6) (40/3) = 80. *B*'s receipts will allow it to import three cars without incurring a balance of payments deficit, since (3) (80/3) = 80. But the labour value of *B*'s imports is (3)(24) = 72, while the labour value of its exports is (6)(16) = 96. Thus rich country *A* gains 24 days of labour from this unequal exchange. Of the 60 days of surplus labour performed in the poor country only 36 remain there, the other 24 being transferred to the rich country in the course of trade. This value transfer, it must be emphasised, is quite separate from the unequal exchange discussed by Bauer and Grossmann, which results from differences in the organic composition of capital with wages equal (see Appendix A for an example).

Like his disciple, the Egyptian Samir Amin, Emmanuel argues that unequal exchange serves to sustain and increase international differences in wages. Growing prosperity in the rich countries increases the speed of their economic development, allowing still further wage rises. In the poor countries, on the other hand, the narrowness of the internal market means that accumulation is retarded, so that unemployment increases and wages decline still further. With a widening wage gap, the consequences of unequal exchange become more and more serious: the entire process is a cumulative one. It can be reversed only by deliberate policies to raise wages in the poor countries, which will necessitate export taxes and import substitution under tariff protection. Even complete autarky would, on Emmanuel's argument, be preferable to unequal exchange.[16]

The ramifications of Emmanuel's analysis are profound and far-ranging. He repudiates the entire Leninist conception of imperialism as a stage of capitalism dominated by the export of capital. On the contrary, 'all imperialisms are, in the last resort, mercantile in character',[17] yielding their huge profits from commodity trade rather than from foreign investment.

This explains why capital has always flowed more freely to advanced than to backward areas, and why decolonisation was implemented so rapidly after 1945 once the foundations for free trade had been secured.[18] A further implication is that neither dependency, broadly defined, nor specialisation upon agricultural production need preclude economic development, so long as wages are high. Emmanuel compares Canada and the Congo (both considered to be highly dependent) to establish the first point, and cites the examples of Australia, New Zealand and Denmark in support of the second.[19]

Finally, and by far the most important, he attacks the notion of international working class solidarity and replaces the class struggle with conflict between rich and poor countries as the central divide in world capitalism. As the chief beneficiaries of unequal exchange, workers in the advanced countries no longer have a common interest with those in backward areas, upon whose continued exploitation their own high living standards depend.

> From the moment when the sharing-out of the product of international exploitation assumes an important, if not preponderant, place in what is at stake in the class struggle within the nation, this struggle ceases to be a genuine class struggle in the Marxist sense of the term, and becomes a settlement of accounts between partners around a jointly-owned cake.

Thus loyalty to the nation transcends class interests, and 'national integration has been made possible in the big industrial countries at the expense of the international disintegration of the proletariat'.[20] In the coming global revolution, the Western working class is likely to be on the wrong side.[21]

III Emmanuel and his Critics

Early in the debate which Emmanuel's ideas provoked, Charles Bettelheim raised an objection which was to be repeated frequently in the following two decades. The poverty of the Third World was due to the low level of development of the productive forces, Bettelheim argued. Wage differentials with the West were the result, not the cause, of underdevelopment.[22] In similar vein, other critics maintained that Emmanuel had failed to recognise the importance of the level and rate of change of labour productivity as a determinant of real wages. It was their relatively high productivity which had allowed British workers to enjoy high wages during the Industrial Revolution, and the steady increase in productivity which had permitted wage levels to rise thereafter. The same was true, *a fortiori*, of the white settlers in North America and Australasia.[23] Writing in the mid-1970s, J.-O. Andersson pointed to the grim example of Uruguay to arrive at the same conclusion from the opposite direction. Once known as the 'Switzerland of Latin America', renowned for its mass affluence and comprehensive welfare state, Uruguay had been led by declining productivity in its export markets into apparently terminal economic decline, with working-class living standards savagely reduced and political rights destroyed.[24] In all these cases wages seem to be the dependent, not the independent, variable. In his review of *Unequal Exchange* Henri Denis drew the same conclusion from a more neoclassical perspective. Consider the effects of a fall in the overseas demand for a poor country's exports. Balance of payments equilibrium would be restored by a depreciation of its currency, entailing a decline in real wages. Hence wages are affected by changes in world market conditions. They are endogenous, not exogenous, to the system.[25]

Emmanuel's critics expressed further doubts concerning the quantitative significance of unequal exchange. Even if his analysis were assumed to be fundamentally correct, exactly how much of the poor countries' surplus value was being transferred to the rich countries? Was it enough to account for the blocking of economic development in the Third World? Could it also explain the dramatic century-long increase in real wages in the advanced capitalist countries? Bettelheim suggested that the answer to both questions must be a negative one, since the poor countries' exports to the West amounted (in the mid-1960s) to no more than $25 billion (see also section III of Chapter 11 below). Emmanuel replied that the impact should be measured in terms of the potential revenue from these exports if unequal exchange were abolished, which might be as high as $200–300 billion.[26] Samir Amin's estimate – again for the mid-1960s – was that unequal exchange cost the poor countries some $22 billion each year. This represented only 1.5 per cent of the GNP of the metropolitan capitalist countries, but 15 per cent of that of the poor countries, and was alone responsible for their failure to develop.[27] All these estimates are somewhat speculative, and Emmanuel's seems to assume a pre-determined pattern of international trade and a zero price-elasticitity of demand for the poor countries' exports.

We shall return to the quantitative importance of unequal exchange in the next section. Related to it are the political conclusions drawn by Emmanuel, which themselves became the subject of intense critical scrutiny. Both Marxists and neoclassical economists like Paul Samuelson were quick to note that unequal exchange is not, as Emmanuel maintained, inconsistent with mutual gains from trade. Even if the poor countries trade on unfavourable terms with their richer partners, their losses are relative rather than absolute. It follows that autarky would be inferior to trade on almost any terms, however unequal.[28] Indeed, it is necessary to distinguish, as Andersson does, between unequal and 'disjunctive' trade. The latter is defined as trade which widens the economic gap between the parties. It is logically independent of the former, since a country which is the subject of unequal exchange may gain from a faster rate of economic development than its partner, and vice versa. The destruction of overseas competition by dumping illustrates this possibility; the converse case occurred with the de-industrialisation of countries apparently benefiting from oil or gas rents, like Venezuela, the Netherlands and Britain.[29]

A further pertinent objection to Emmanuel's political conclusion was raised by Brewer, who notes that there are three classes, not two, in *Unequal Exchange*: a single unified bourgeoisie and two proletariats, one poor and the other rich. A *ceteris paribus* increase in wages in either country will reduce the rate of profit, giving an objective basis for class conflict between workers and capitalists there. It may or may not lower wages for the other working class. At all events, there are no 'national' interests, as Emmanuel would have us believe.[30] While this is true enough, it does not re-establish material prerequisites for the international proletarian solidarity which Bettelheim and other Marxist writers continue to assert. To shed light on this question a precise theory of income distribution is required, and neither Emmanuel nor his critics provides such a theory.[31] We shall return to this question, too, in section IV.

Emmanuel assumes that the huge wage differentials between the Third World and the West are reflected in correspondingly large differences in rates of exploitation. Many of his critics have argued that the reverse is true: if the productivity differentials between rich and poor countries are larger than the real wage gap, then the rate of exploitation will be higher in the rich countries, not lower as Emmanuel supposes.[32] This can be demonstrated in a simple one-commodity model. Assume that both Indian and British workers consume corn, but that the latter are very much better fed. Real wages in Britain (w_B) are thus much higher than in India (w_I). But agricultural productivity is significantly lower in India, so that the labour value of corn there (λ_I) is much higher than that of British corn (λ_B). Then necessary labour in India ($w_I\lambda_I$) may be greater than that in Britain ($w_B\lambda_B$); if the working day is the same in the two countries, surplus labour will be lower in India, and the rate of exploitation also lower. Once we allow for the fact that Indian and British workers consume different commodities, produced under a variety of conditions, the analysis becomes very much more complicated. But the underlying principle is the same: if labour power costs much more, in terms of labour, in India than in Britain, the rate of exploitation there will be lower. British workers will be richer, but more exploited.

This is an important weakness in Emmanuel's analysis. It can be expressed, rather differently, as his failure to adapt the labour theory of value to the problems posed by international trade.[33] When workers of different skills operate at different intensities upon quite different quantities of machinery and raw materials, it can no longer be taken for granted that their labours are equivalent. This difficulty applies within any particular country or region, so long as technical and cultural conditions differ. It requires that serious thought be given to the 'reduction' of complex to simple labour, and to the definition of 'socially necessary' simple labour, when conditions of production vary.[34] When the comparison is between advanced and backward countries, the problems are more acute. Emmanuel is able to assume them away because of his critical assumption that rich and poor countries are completely specialised. Rich country *A* produces cars, but no tea, in our example in section II; poor country *B* produces tea, but no cars. Comparisons of labour productivity are meaningless, since it is not possible to measure 'cars per hour' in relation to 'tons of tea per hour'. For Emmanuel, then, the notion of 'international value' is redundant. The value of a car is defined as the amount of labour socially necessary to produce it in *A*, and the value of a ton of tea is the labour-time socially necessary for its production in *B*. There is no ambiguity. If we were to relax Emmanuel's simplifying assumption and introduce a third commodity which is produced in both countries, this would change. The productivity of labour in this third activity is likely to be higher in *A* than in *B*, and the 'national value' correspondingly lower. But which of the two national values is the one which 'counts': that is, which defines the international value of the commodity in question? If it is the (low) *A*-value, it follows that an hour of labour-time expended in *B* counts for less than an hour in *A*, and estimates of unequal exchange must be reduced accordingly. If it is the (high) *B*-value, this is still true because one hour of labour-time in *A* produces more value than in *B*.

We may conclude from this that the theory of unequal exchange needs substantial modification once there are productivity differences, in comparable industries, between rich and poor producers. Indeed, if there were no such differentials it would be difficult to explain why any accumulation whatever is undertaken in the high-wage West. Why should internationally mobile, profit-seeking capital not concentrate all accumulation in the poor countries, taking advantage of the lower wages which it can pay there to produce the goods which Emmanuel assumes to be manufactured in the rich countries? Will this not eventually do away with the whole distinction between rich and poor countries, between the West and the Third World?[35] Indeed, some Marxian economists have argued that de-industrialisation in advanced capitalism and the industrialisation of certain Third World countries indicates that this is precisely what is happening now (see section V of Chapter 11 below). But it cannot be understood, and its limitations established, within the confines of Emmanuel's 'cars-and-tea' model of a completely specialised world in which the pattern of trade is predetermined. In one sense this is the most damning criticism of his entire analysis of unequal exchange.

IV Andersson's Reformulation

In this section we set out a slightly simplified version of Andersson's model, which meets several of the objections to Emmanuel's analysis which were considered earlier.[36] There are two countries, distinguished by different wage levels, where the wage in country 1 is higher than that in country 2 ($w_1 > w_2$). But there are now three commodities, two produced in only one country and the third produced (under different conditions) in both. Commodity A (machinery) is produced only in the rich country, and commodity C (coffee) only in the poor country; commodity B (cloth) is manufactured in both, with B_1 denoting the output of the rich country and B_2 that of the poor country. Thus trade involves the exchange of machinery for coffee.

Hence there are four industries, each of which uses labour and machines. The quantities of machinery and labour required, per unit of output, are (A_a, L_a), (A_{b1}, L_{b1}), (A_{b2}, L_{b2}) and (A_c, L_c) respectively, and prices are represented by p_a, p_{b1}, p_{b2} and p_c. It is assumed that there is no fixed capital, that machines wear out at the end of each year, and that wages are paid at the end of the year. With r as the common rate of profit, equal in all four industries, we can write the following system of equations:

$$\begin{aligned} p_aA_a(1 + r) + w_1L_a &= p_aA \\ p_aA_{b1}(1 + r) + w_1L_{b1} &= p_{b1}B_1 \\ p_aA_{b2}(1 + r) + w_2L_{b2} &= p_{b2}B_2 \\ p_aA_c(1 + r) + w_2L_c &= p_cC \end{aligned} \tag{10.1}$$

The first equation in this system expresses the equilibrium condition that in the machinery industry sales proceeds (p_aA) must equal its wages bill (w_1L_a), plus its machinery costs (p_aA_a), plus profits on those costs (rp_aA_a). The remaining three equations state analogous conditions for the production of cloth in both countries, and for coffee production. In these four equations there are seven unknowns: the four prices, w_1, w_2 and r. They can be reduced to five by taking one of the four prices as numeraire: for example, setting $p_a = 1$, and by defining a relationship between p_{b1} and p_{b2} (which are the prices of the same commodity in the two economies). The system then has one degree of freedom, since there is one less equation than there are unknowns. The economic meaning of this is that only one of the two wage rates can be exogenous, not both, as Emmanuel assumes. Thus, if w_1 is taken to be exogenous, changes in wages in the rich country affect the wage rate in the poor country, and vice versa if w_2 were the exogenous wage rate.

We can now assess the merits of Emmanuel's three fundamental claims: First we return to his argument that there is no basis for international working-class solidarity. This is related to the proposition that increased wages in the rich country are gained at the expense of lower wages in the poor country; in formal terms, this means that $dw_2/dw_1 < 0$. To examine this claim we make the simplifying assumption that there are no tariffs or transport costs, so that there is a single world market price for cloth:

$$p_{b1} = p_{b2} = p_b \tag{10.2}$$

Now assume the wage rate in the rich country to be exogenous, and equal to $\bar{w}_1$. From the second and third equations in system (10.1) we find that

$$w_2 = \left(\frac{A_{b1}}{B_1} - \frac{A_{b2}}{B_2}\right) \left(\frac{A - \bar{w}_1 L_a}{A_a}\right) \frac{B_2}{L_{b2}} + \frac{L_{b1}}{B_1} \cdot \frac{B_2}{L_{b2}} \cdot \bar{w}_1 \tag{10.3}$$

so that

$$dw_2/d\bar{w}_1 = \frac{L_{b1}}{B_1} \cdot \frac{B_2}{L_{b2}} - \frac{L_a}{A_a} \cdot \frac{B_2}{L_{b2}} \left(\frac{A_{b1}}{B_1} - \frac{A_{b2}}{B_2}\right) \tag{10.4}$$

In order that $dw_2/d\bar{w}_1 < 0$, this requires that

$$\frac{L_{b1}}{B_1} \leqslant \frac{L_a}{A_a} \left(\frac{A_{b1}}{B_1} - \frac{A_{b2}}{B_2}\right) \tag{10.5}$$

But nothing can be said *a priori* about the sign of this expression, which depends on the machine–output and labour–output ratios in machinery and cloth production. Consequently Emmanuel's first claim is insecure.

A second claim implied by Emmanuel's argument in *Unequal Exchange* is that the rich country's terms of trade are improved by an increase in wages there, and vice versa. This proposition can be assessed by taking machines as the numeraire and setting $p_a = 1$. Since the poor country exchanges coffee for machines, its terms of trade are now expressed by p_c, which is the price of coffee in terms of machines. Using equations (10.1), (10.2) and (10.3) we obtain

$$P_c = \frac{A_c}{C} \frac{(A - w_1 L_a)}{A_a} + \frac{L_c}{C} \cdot \frac{B_2}{L_{b2}} \left[\left(\frac{A_{b1}}{B_1} - \frac{A_{b2}}{B_2}\right)\left(\frac{A - w_1 L_a}{A_a}\right) + \frac{L_{b1}}{B_1} \cdot w_1\right] \tag{10.6}$$

so that

$$dp_c/dw_1 = \frac{L_c}{C} \cdot \frac{B_2}{L_{b2}} \left[\frac{L_{b1}}{B_1} - \frac{L_a}{A_a}\left(\frac{A_{b1}}{B_1} - \frac{A_{b2}}{B_2}\right)\right] - \frac{A_c}{C} \cdot \frac{L_a}{A_a} \tag{10.7}$$

Once again, the relevant relationship, that between p_c and w_1, depends on the machine–output and labour–output ratios in the various industries, so that no firm conclusion can be drawn *a priori*.

The third and final proposition concerns the relationship between international wage differences and unequal exchange. Emmanuel claims that the country with low wages experiences unequal exchange and will suffer from it, to the benefit of the rich country. To appraise this claim we need to recognise differences in labour productivity and reformulate the four industry equations of system (10.1) in labour value terms. Where λ_a and λ_c are the quantities of direct plus indirect labour needed to produce machinery and coffee; λ_b is the quantity of direct plus indirect labour needed to produce cloth in the rich country; and α (<1) is a factor expressing the relationship between an hour of labour in the poor country and an hour of labour in the rich country, we have

$$\begin{aligned}
\lambda_a A_a &+ L_a &= \lambda_a A \\
\lambda_a A_{b1} &+ L_{b1} &= \lambda_b B_1 \\
\lambda_a A_{b2} &+ \alpha L_{b2} &= \lambda_a B_2 \\
\lambda_a A_c &+ \alpha L_c &= \lambda_c C
\end{aligned} \tag{10.8}$$

The first two equations in system (10.8) relate to the rich country. The second equation, for example, defines the value of cloth in country 1 ($\lambda_b B_1$) as the sum of the indirect labour ($\lambda_a A_{b1}$) and the direct labour (L_{b1}) required to produce it. The second two equations apply to the poor country, where labour is less productive and therefore 'counts' for less. The quantities of direct labour used to produce cloth and coffee in the poor country must therefore be scaled down from L_{b2} and L_c to αL_{b2} and αL_c; and it is the more advanced conditions of production in the rich country which define the international labour value of cloth (that is, λ_b, which is obtained by solving the second equation in the system). In the third equation, then, the value of cloth output in the poor country is shown as $\lambda_b B_2$; and this equals the sum of the indirect labour ($\lambda_a A_{b2}$) and the direct labour (αL_{b2}) required. The fourth equation sets the labour value of the output of coffee ($\lambda_c C$) equal to the sum of the indirect and direct labour required in its production ($\lambda_c A_c + \alpha L_c$).

Solving system (10.8), which has four equations and four unknowns (λ_a, λ_b, λ_c and α), we obtain

$$\lambda_a = \frac{L_a}{A - A_a}$$

$$\lambda_b = \frac{L_{b1}}{B_1} + \frac{A_{b1}}{B_1} \cdot \frac{L_a}{A - A_a}$$

$$\lambda_c = \frac{L_a}{A - A_a}\left[\frac{A_c}{C} + \frac{L_c}{C} \cdot \frac{B_2}{L_{b2}}\left(\frac{A_{b1}}{B_1} - \frac{A_{b2}}{B_2}\right)\right] + \frac{L_c}{C} \cdot \frac{L_{b1}}{B_1} \cdot \frac{B_2}{L_{b2}}$$

$$\alpha = \frac{\lambda_b B_2 - \lambda_a A_{b2}}{L_{b2}} = \frac{B_2}{L_{b2}} \cdot \frac{L_{b1}}{B_1} + \frac{B_2}{L_{b2}} \cdot \frac{L_a}{A - A_a} \left(\frac{A_{b1}}{B_1} - \frac{A_{b2}}{B_2}\right). \tag{10.9}$$

The equation for λ_a is straightforward: the labour value of a machine is equal to the labour employed in the industry, divided by the net output of machines. The equation for the value of a unit of cloth (λ_b) shows it to be the sum of (i) the direct labour input per unit of output, L_{b1}/B_1, and (ii) the indirect labour which is required, given by the product of the machine-output ratio (A_{b1}/B_1) and the value of a machine $\lambda_a = \dfrac{L_a}{A - A_a}$.

The even more complicated expression for λ_c can be interpreted similarly. As for α, the fourth equation in system (10.9) shows it to depend (among other things) upon (i) the relative productivities of living labour in the cloth industry in the two countries (B_1/L_{b1} and B_2/L_{b2}); and (ii) the relative machine-output ratios (A_{b1}/B_1 and A_{b2}/B_2).

We can now return to the question of unequal exchange. If we set the value-price ratio of machinery equal to unity, so that $\lambda_a = p_a = 1$, unequal exchange can be defined in terms of the trade in coffee alone. Exchange will be unequal if $p_c \neq \lambda_c$, that is, if the price of coffee (in terms of machines) differs from its labour value. With $\lambda_a = 1$ in equation (10.9),

$$\lambda_c = \frac{A_c}{C} + \frac{L_c}{C} \cdot \frac{B_2}{L_{b2}} \left(\frac{A_{b1}}{B_1} - \frac{A_{b2}}{B_2} + \frac{L_{b1}}{B_1}\right) \tag{10.10}$$

and to establish the existence of unequal exchange we must compare equations (10.6) and (10.10). Again no simple conclusion suggests itself. Exchange is likely to be unequal, but there is no clear reason to suppose that it will necessarily benefit the rich country at the expense of the poor country rather than the other way round. Thus a more rigorous reformulation fails to provide any general substantiation of Emmanuel's three basic claims.[37] This can be illustrated by inserting hypothetical numerical examples into Andersson's model, as in Appendix B.[38]

V Some Unanswered Questions

In spite of these serious analytical defects, it is difficult to deny that Emmanuel highlighted an important question. Why is it that Sri Lankan tea-pickers earn only a tiny fraction of the real wages paid to a working-class tea-drinker in the United States? Why do stonemasons or truck drivers in the two countries, performing very similar work, enjoy vastly different living standards? Why is it, after centuries of international trade, that these wage differentials not only have not been eliminated, but have widened considerably? Is there not a 'labour aristocracy' on a global scale, and might this not shed light on the absence of international proletarian solidarity?

If Emmanuel achieved nothing else, he did ensure that Marxian economists were forced to pay long-overdue attention to questions such as these. And there are others. One is the Marxian attitude to the theory of comparative costs. The great majority of Emmanuel's critics rejected autarky as a feasible path to development. Were they not thereby endorsing the orthodox analysis of trade as a process in which both parties gain, and workers in poor countries may gain most of all?[39] Another set of issues concerns the analysis of exploitation when wages differ. Are two groups of workers differentially exploited whenever they are paid unequal wages, or only when wage differentials exceed any differences in productivity? What if they are concentrated in different branches of production, so that their productivities cannot easily be compared? These questions have ramifications beyond the theory of imperialism: for example, in the analysis of discrimination against black or women workers within the advanced countries. They have yet to receive an adequate answer.[40]

A third set of problems is posed by Emmanuel's assumption that competition rather than monopoly prevails in international economic relations. This is one of his most obvious disagreements with Leninism. Is it fully justified by the emergence of a global free market under US economic hegemony after 1945? Are the multinational corporations effectively free competitors on a world scale?[41] If so, how is one to interpret the protective barriers imposed by the rich countries against the poor countries' exports? How do these trade barriers compare with the repatriation of profits, and with deficiencies in domestic demand due to low wages, as an obstruction to the economic development of the Third World?[42] Was Emmanuel in fact correct to minimise the significance of capital exports (his second major break with Leninism)? Or is the focus of accumulation now shifting from the metropolis to the periphery, so that the whole basis of the distinction between rich and poor countries is beginning to break down?[43] How long will it take, and what are the implications for wage differentials? We turn to some of these questions in the following chapter.

Appendix A: Unequal Exchange Due to Different Organic Compositions

If we modify the numerical example used in section II by allowing equal wages and rates of exploitation, but unequal organic compositions, we can write the following value relations:

	c	v	s	*total value*	*value per unit of output*
A	480	120	120	720	24
B	240	120	120	480	16

Here the average profit rate is (240/960) = 25 per cent, and the price relations are:

	cost-price	*profits*	*price of production*	*price per unit of output*
A	600	150	750	750/30 = 25
B	360	90	450	450/30 = 15

Again the relative price of cars in terms of tea (25/15 = 1.6) exceeds their relative labour value (24/16 = 1.5). If A imports 5 tons of tea at a total cost of 75, B can import three cars costing (3)(25) = 75. The labour value of A's imports is (5)(16) = 80, exceeding the labour value of its exports, which is (3)(24) = 72. The rich country has gained eight days of labour through this unequal exchange.

Appendix B: Numerical Example of Andersson's Model

For simplicity the output of each industry is assumed to be the same ($A = B_1 = B_2 = C = 100$), and the input requirements are set at ($A_a = 80$, $L_a = 20$), ($A_{b1} = 50$, $L_{b1} = 50$), ($A_{b2} = 40$, $L_{b2} = 200$), and ($A_c = 20$, $L_c = 100$). Here machinery production is the most machine-intensive, followed by cloth manufacture in the rich country; cloth and coffee production in the poor country are equally labour-intensive. Setting $p_a = \lambda_a = 1$, and $p_{b1} = p_{b2} = p_b$, it is found from equations (10.1) – (10.10) that $\lambda_b = 1$, $\lambda_c = 0.5$ and $\alpha = 0.3$. Assuming that $w_1 = 0.2$, we also obtain $p_b = 0.7$, $p_c = 0.35$, $w_2 = 0.11$, and $r = 0.2$. Since $\lambda_c = 0.5 > p_c = 0.35$, the poor country is the victim of unequal exchange. Raising w_1 to 0.6, however, has the following effects. The rate of profit falls ($r = 0.11$), the price of coffee increases ($p_c = 0.425$) and the wage rate in the poor country rises ($w_2 = 0.205$). Contrary to Emmanuel's expectations, an increase in real wages in the rich country has increased real wages in the poor country, improved its terms of trade, and reduced the degree of unequal exchange (since p_c/λ_c is now 0.425/0.6 = 0.71, as against 0.35/0.6 = 0.58). Even though in this case unequal exchange does indeed benefit the rich country, its magnitude is unlikely to be very great.

Now reverse the production conditions in the rich country's two industries, so that machine production becomes less machine-intensive than cloth manufacture (the data for the poor country's two industries do not change). With $A_a = 50$, $L_a = 50$, $A_{b1} = 80$ and $L_{b1} = 20$, the labour value solutions prove to be the same as before. If we set $w_1 = 0.5$, the price equations can be solved to obtain $p_c = 0.65$, $w_2 = 0.35$, and $r = 0.5$. Unequal exchange now operates in favour of the poor country, since $p_c = 0.65 > \lambda_c = 0.5$. Increasing $w_1 = 0.8$ gives a new solution with $p_c = 0.56$, $w_2 = 0.32$, and $r = 0.2$. Wages in the poor country have fallen, its terms of trade have deteriorated, and its advantage from unequal exchange has declined (since $p_c/\lambda_c = 0.56/0.5 = 1.12$ rather than $0.65/0.5 = 1.30$). Although in this case there is indeed no basis for international proletarian solidarity, as measured by the criterion on p. 196, it offers very little comfort for Arghiri Emmanuel. As a general theory, *Unequal Exchange* is evidently deeply flawed.

Notes

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3. M.C. Howard and J.E. King, *The Political Economy of Marx* (Harlow: Longman, 1985), 2nd edn, pp. 68–70; K. Marx, *The Poverty of Philosophy* (New York: International Publishers, 1963).
4. K. Marx, *Capital*, volume III (Moscow: Foreign Languages Publishing House, 1962), pp. 148–9 (Ch. VIII), 210–11 (Ch. XIII), and 232–3 (Ch. XIV, section V); cf. A. Emmanuel, *Unequal Exchange* (New York: Monthly Review Press, 1972; first published in French 1969), pp. 90–5, and J.-O. Andersson, *Studies in the Theory of Unequal Exchange Between Nations* (Åbo: Åbo Akademi, 1976), pp. 40–2.
5. O. Bauer, *Die Nationalitätenfrage und die Sozialdemokratie* (Vienna: Wiener Volksbuchhandlung, 1907), pp. 246–8; original stress.
6. Ibid, pp. 247, 476–91.
7. H. Grossmann, *Das Akkumulations- und Zusammenbruchsgesetz des Kapitalistischen Systems (Zugleich eine Krisentheorie)* (Leipzig: Grünberg, 1929), pp. 429–38; E. Preobrazhensky, *The New Economics* (Oxford: Clarendon Press, 1965; first published in Russian 1926), pp. 5–6, 92, 261–2; cf. volume I of this book, Ch. 15, section VI, and Ch. 16.
8. M. Manoilescu, *The Theory of Protection and International Trade* (London: P.S. King, 1931); see also H.L. Roberts, *Rumania: Political Problems of an Agrarian*

State (New Haven, Conn.: Yale University Press, 1951), pp. 192–8, and T. Morris–Suzuki, *A History of Japanese Economic Thought* (London: Routledge, 1989), pp. 112–14.
9. P.M. Sweezy, *The Theory of Capitalist Development* (New York: Monthly Review Press, 1970; first published 1942), p. 290; P.A. Baran, *The Political Economy of Growth* (New York: Monthly Review Press, 1957), p. 232; cf. Emmanuel, *Unequal Exchange*, pp. 92–4.
10. Andersson, *Studies*, pp. 167–79.
11. Emmanuel, *Unequal Exchange*, pp. 95, 104, n.81.
12. Ibid, pp. 44–5, 71–3.
13. Ibid, pp. 24–5; cf. ibid, pp. 120–2.
14. Compare ibid, Ch. 1 and Appendix 5; on Sraffa see Chs 13–15 below.
15. Marx, *Capital*, III, Ch. IX; see also Ch. 3 of volume I of this book.
16. Emmanuel, *Unequal Exchange*, pp. 130–6, 145–51, 233–6; cf. S. Amin, *Unequal Development* (New York: Monthly Review Press, 1976) and Amin, *Imperialism and Unequal Development* (Hassocks: Harvester Press, 1977), pp. 117–36 and 181–252. For a summary of Amin's argument, see S. Amin, 'Accumulation and Development: A Theoretical Model', *Review of African Political Economy*, 1, 1974, pp. 9–26.
17. Emmanuel, *Unequal Exchange*, p. 187. Fernand Braudel takes the same view; see M. C. Howard, 'Fernand Braudel on Capitalism: A Theoretical Analysis', *Historical Reflections*, 12, 1985, pp. 469–83, and section 1 of Ch. 11 below.
18. A. Emmanuel, 'White–Settler Colonialism and the Myth of Investment Imperialism', *New Left Review*, 73, May–June 1972, pp. 35–57.
19. Emmanuel, *Unequal Exchange*, pp. 363, 376–8; cf. Emmanuel, 'Myths of Development versus Myths of Underdevelopment', *New Left Review*, 85, May–June 1974, pp. 61–82.
20. A. Emmanuel, 'The Delusions of Internationalism', *Monthly Review* 22, June 1970, pp. 13–19; cf. Emmanuel, *Unequal Exchange*, pp. 181, 189.
21. Ibid, pp. 339–40, citing Lenin on this point; cf. section III of Ch. 9 above.
22. C. Bettelheim, 'Theoretical Comments', in Emmanuel, *Unequal Exchange*, pp. 287–9; cf. A. Clunies–Ross, 'Emmanuel on Unequal Exchange: A Marxist Contribution on Trade Relations Between Rich and Poor', *Journal of Economic Studies*, 3, 1976, pp. 42–60; A. Shaikh, 'Foreign Trade and the Law of Value, part II', *Science and Society*, 44, 1980, pp. 27–57; see also Ch. 11 below.
23. A. Brewer, *Marxist Theories of Imperialism* (London: Routledge & Kegan Paul, 1980), pp. 225–6.
24. Andersson, *Studies*, pp. 79–81.
25. H. Denis, 'Note sur l'Échange Inégal', *Revue Économique*, January 1970, pp. 93–5.
26. Emmanuel, *Unequal Exchange*, Appendix IV, pp. 367–8.
27. Amin, *Unequal Development*, pp. 143–4; cf. E. Mandel, *Late Capitalism* (London: Verso, 1980; first published in German 1972), p. 346.
28. Andersson, *Studies*, pp. 81–4; J.E. Roemer, 'Unequal Exchange, Labor Migration, and International Capital Flows: A Theoretical Synthesis', in P. Desai (ed.), *Marxism, the Soviet Economy and Central Planning: Essays in Honour of Alexander Erlich* (Cambridge, Mass.: MIT Press, 1983), pp. 34–60; P.A. Samuelson, 'Illogic of Marxian Doctrine of Unequal Exchange', in D.A. Belsey, E.J. Kane, P.A. Samuelson and R.M. Solow, (eds.) *Inflation, Trade and Taxes: Essays in Honour of Alice Bourneuf* (Columbus: Ohio State University Press, 1976), pp. 96–107.
29. Andersson, *Studies*, Ch. 2 (Andersson uses the term 'non–equivalent exchange' to describe trade which takes place – for whatever reason – at ratios other than those equal to relative labour values).

30. Brewer, *Marxist Theories*, pp. 218–19.
31. A. de Janvry and F. Kramer, 'The Limits of Unequal Exchange', *Review of Radical Political Economics*, 11, 1979, p. 8; cf. C. Bettelheim, 'Economic Inequalities Between Nations and International Solidarity', *Monthly Review*, 22, June 1970, pp. 19–24.
32. C. Bettelheim, 'Theoretical Comments', p. 302; cf. M. Kidron, 'Black Reformism: The Theory of Unequal Exchange', in Kidron, *Capitalism and Theory* (London: Pluto Press, 1974), pp. 95–123.
33. A. Shaikh, 'Foreign Trade and the Law of Value, Part I', *Science and Society* 43, 1979, pp. 281–302; cf. de Janvry and Kramer, 'The Limits', p. 5. See also M. Itoh, 'Skilled Labour in Value Theory', *Capital and Class*, 31, 1987, pp. 55–6.
34. Howard and King, *Political Economy*, Chs 7 and 9.
35. Brewer, *Marxist Theories*, pp. 223, 226–30; de Janvry and Kramer, 'The Limits', pp. 11–12; Andersson, *Studies*, p. 73.
36. Andersson, *Studies*, pp. 96–105.
37. For a similar conclusion see L. Mainwaring, 'International Trade and the Transfer of Labour Value', *Journal of Development Studies*, 17, 1980, pp. 22–31.
38. Andersson, *Studies*, pp. 156–65.
39. Samuelson, 'Illogic'.
40. Roemer, 'Unequal Exchange'; de Janvry and Kramer, 'The Limits'; cf. J.E. Roemer, 'Differentially Exploited Labour: A Marxian Theory of Discrimination', *Review of Radical Political Economics*, 10, 1978, pp. 43–53.
41. As argued by N. Harris, *The End of the Third World* (Harmondsworth: Penguin, 1987).
42. E. Malizia, 'Imperialism Reconsidered', *Review of Radical Political Economics* 5, 1973, pp. 87–92.
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11
Critics of Underdevelopment

I Introduction

All theories of underdevelopment treat capitalism as functioning on a global scale in the manner of Marx's account of merchant capital, where monopoly power and unequal exchange redistribute surplus between geographical areas. Frank and Wallerstein add a zero-sum description to this circulationist perspective. Not only do they maintain that advanced capitalism underdeveloped the periphery, but they also insist that the centre has developed *only* because of the exploitation of the periphery. Furthermore, for Frank and Wallerstein it is production for profit realised on the market which defines capitalism. Specific relations of production are not regarded as important. Capitalism includes various forms of labour control, each of which is the outcome of optimising behaviour by property owners, including serfdom, slavery and wage-labour. Thus class structures are endogenous variables and have no causal significance; any effect which may be attributable to them can be reduced to the more fundamental determinant of profit maximisation.[1]

This position is sometimes associated with Paul Sweezy, who, in his debate with Maurice Dobb during the 1950s over the transition from feudalism to capitalism in Western Europe, saw the rise of trade as the 'prime mover'.[2] Dobb, by contrast, argued that contradictions of the feudal mode of production were the principal factors bringing about the transition. Sweezy's view was expressed by Marx in the 1840s, and because he was then heavily influenced by Adam Smith any emphasis on the importance of exchange relations is sometimes called 'Smithian'.[3] The importance of the market in promoting capitalism in Russia was also stressed by Plekhanov and Lenin in their debate with the populists, and the idea reappeared in controversies over economic development in Russia during the 1920s (see Chapters 8, 9, 10 and 15 of volume I of this book). Nevertheless, modern theorists of underdevelopment go very much further than earlier Marxists, who always identified capitalism with wage labour. Thus, while Sweezy (for example) believed that the expansion of markets caused the development of capitalism, he defined capitalism by specific relations of production in the same way as Marx.

Insofar as there is a theoretical link between Sweezy and the theorists of underdevelopment in their treatment of capitalism it lies at a deeper level. Critics of the thesis that the expansion of trade created capitalism allege that it rests upon the assumption of *homo economicus*[4]. If this is true, there is indeed a resemblance between Sweezy, Frank and Wallerstein. A difference occurs only because Sweezy believed that profit maximisation would result in wage labour, while theorists of underdevelopment recognise that other modes of labour control may prove more profitable. There is here also a similarity with neoclassical theory, although again it is imperfect. Neoclassical economists invariably assume that rational economic agents act in an environment where voluntary contracts prevail,[5] whereas Frank and Wallerstein recognise the possibility of trade at the point of a gun. This indicates that an appeal to acquisitive behaviour explains very little. It becomes an explanatory hypothesis only when the feasible set from which choices are made is specified. This judgement is reinforced by the fact that Robert Brenner, who is a powerful critic of all Smithian views, assumes rationality to predominate in economic behaviour, and that property owners seek to maximise their incomes. His own account of the origin of capitalism and of undevelopment, therefore, rests upon the same assumption about motivation as those which he attacks (see section III below).

Since the 1960s, Marxian critics of theories of underdevelopment have regarded the treatment of relations of production as the central weakness of these theories. They are convinced that class structures are far less pliable than Frank and Wallerstein maintain. From the critics' perspective, the periphery has suffered less from capitalist exploitation than from its absence, and continuing backwardness is the result of factors endogenous to peripheral societies rather than being exogenously imposed by their contacts with the advanced capitalist world (see section II of Chapter 9 above). Since relations of production have remained predominantly pre-capitalist, the rapid economic development which capitalist class structures invariably generate has been delayed or blocked. While the critics recognise that underdevelopment may occur, they claim that it depends upon the reinforcement of non-capitalist relations of production. More generally, they argue that class structures are not properly conceived as endogenous variables; they are instead the exogenous cause of development and underdevelopment. And while they also accept that capitalist development at the centre may have benefited from exploitation of the periphery, they do not regard this exploitation as a necessary condition for the development to have occurred. Consequently, the Marxian critics argue that a zero-sum conception of the relationship between the centre and the periphery is thoroughly misconceived.

The most important criticisms of the theory of underdevelopment from this 'mode of production' perspective arise from two interpretations of historical materialism formulated by Louis Althusser in the 1960s, and Robert Brenner in the 1970s. Only Brenner appears to have been motivated by the issue of backwardness, but Althusser's theory has been applied to the problem by numerous Marxists. Section II below outlines the Althusserian approach, and section III considers Brenner's critique of Frank and Wallerstein. As we will see, both forms of historical materialism can be criticised for devaluing the causal significance of the forces of production. Each theory, therefore, points to the importance of the version of historical materialism defended by G.A. Cohen in the 1970s, in which relations of production are held to be endogenous while the forces of production are exogenous. Cohen's theory has never been used explicitly in the analysis of underdevelopment, but his ideas are of central relevance to it. They are considered in section IV. Finally, we deal in section V with the work of those Marxists who have argued that many peripheral economies are, in fact, rapidly developing the forces of production.

II Articulation Theory

Althusserian Marxism is inherently complex, but it is made artificially difficult to understand by the use of a vocabulary which inhibits clarity.[6] However, the essential ideas relevant to the problem of backwardness are reasonably straightforward. Actual economic systems are seen as involving more than one mode of production, and this 'articulation' of modes is particularly pronounced in the case of peripheral 'social formations'.[7] Capitalism is treated in the usual Marxian manner as involving wage labour, and it is generally presumed that capitalist relations of production facilitate the rapid development of the forces of production. The persistence of backwardness in the periphery is due to restraints on the expansion of capitalism by pre-capitalist modes of production. This may be due to the integrity of the pre-capitalist mode itself, or to the weakness of capitalist penetration, or it may be the result of the adaptation of the pre-capitalist modes to meet the requirements of capitalist reproduction, which thereby suffocates its own dynamism. (Note, however, that such adaptation is not interpreted as the result of a conscious policy by advanced capitalist states to obstruct the development of the periphery.) The extent to which capitalist development is hindered is variable, and depends principally on the nature of the pre-capitalist mode. Development and undevelopment, then, can each be regarded as a function of the ease with which capitalism is able to progress in the face of resistance by pre-capitalist modes. What Frank and

Wallerstein see as a single capitalist economy is instead a set of distinct modal articulations, which result in very different developmental tendencies.

Not all 'mode of production' Marxists are articulation theorists. Some show the influence of dependency theory and regard capitalism in the periphery as externally determined, with its dynamic deriving from capitalist modes of production at the centre. Since Frank and the dependency theorists themselves have increasingly given attention to, and emphasised the importance of, internal factors within peripheral economies, the difference between these schools becomes unclear. Other mode of production theorists have argued that 'peripheral' or 'colonial' modes of production are *sui generis*.[8] The modes of production outside the centre are thus considered to be distinct from those at the centre, and to bring about different kinds of development, because they were imposed under colonialism, or are otherwise the result of the centre's domination of the world economy. This approach again comes very close to that of Frank, Wallerstein and the dependency theorists. In this section, therefore, we do not consider mode of production theorists in general but direct attention to articulation theorists, who do have a position distinct from the theorists of underdevelopment.

The notion of articulation is evident in the earlier history of Marxian political economy, including Marx's own analysis. But Althusserians have tended to repudiate Marx's ideas on peripheral economies, instead using his general theoretical apparatus to construct their own. Lenin's treatment of the Prussian and American routes to capitalist development is clearly relevant, and most Althusserians have a high regard for all aspects of Leninism.[9] Rosa Luxemburg's account of the violent impact of capitalism on natural economies is usually respectfully acknowledged, although she is criticised for failing to recognise the extent to which capitalist development in the periphery may be blocked.[10] However, Trotsky's ideas on uneven and combined development, which are the most relevant of all, tend to get little credit in Althusserian Marxism.[11] This has probably more to do with the politics of French communism than considered judgements as to their worth, which may also explain the importance attached to some of the platitudes of Mao Tse-Tung.

Modern articulation theory comes in two forms: studies of specific social formations,[12] and general theoretical work designed to elucidate the key concepts.[13] However, this division is somewhat artificial in that the work of Althusserians is invariably theoretical, and specific studies have sometimes formulated general hypotheses. Moreover, by the very nature of this approach to undevelopment, high theory is put at a premium. Since concrete social formations are to be explained by the modes of production which constitute them, in the face of the manifold meanings which Marx's concepts have acquired there is a need to refine the tools of analysis. Indeed, this was at the outset the primary purpose of Althusser's Marxism, which was based on the belief that Marx's work had been extensively infused with alien notions of economism, humanism, historicism and empiricism, and required a thorough overhaul to make rigorous the specifically Marxian problematic.

However, little progress has been made on the specialised issues of articulation theory. There is no doubt that the basic idea is a fertile one and that fixing attention on modes of production is clearly more Marxian than is the theory of underdevelopment.[14] But the considerable attention devoted to conceptual elucidation has brought great disagreement over the exact definition of a mode of production, how modes interrelate, and the relation of modes to the political and ideological dimensions of social formations.[15] These basic theoretical issues have proved difficult to resolve.

Since the outcome of any articulation depends on the dynamics of the combined modes of production, it is essential that these elements of the theory be treated properly. But Althusserians have been altogether ignorant of the deficiencies in Marx's own treatment of the laws of motion of capitalism. Thus Laclau, in what is otherwise an admirable critique of Frank's work on Latin America, appeals to Marx's law of the falling rate of profit to explain the geographical expansion of capitalism.[16] This cannot possibly form the basis of any coherent explanation (see Chapter 7 above). More generally there has been a pronounced tendency, beginning with Althusser himself, to treat all of Marx's more technical economic analysis as unproblematic, including the quantitative theory of value (see part IV below).[17] Despite their own shortcomings, theorists of underdevelopment correctly realise that some revision is required, but this is anathema to Althusserians.

Any account of the dynamics of the capitalist mode of production must in turn be based on a model of *pure* capitalism, where there are no elements from other modes present. However, what is invariably taken as a necessary feature of capitalism – commodity production – cannot extend to all aspects of economic life; it is excluded from the production of labour power, and from institutions which regulate and enforce contracts.[18] Moreover, all instances of capitalism have up to now been organised as specific political units (city- or nation-states), reflecting the importance of previous historical development.[19]

An even more intractable problem is to determine what modes of production can in principle exist. Unless all modes are specified, it is impossible to separate articulations from single modes. Explanation in Althusserian terms would necessarily be suspect, as it could always retreat into *ad hoc* specification of new modes in order to counter evidence which threatened established theory. Modes of production theorists may well have trodden this path already. The existing literature includes references to 'colonial modes of production', the 'lineage mode', 'plantation modes' and 'peasant modes', which certainly cannot be found in Marx, while his own concept of the Asiatic mode has rightly been subject to criticism (see Chapter

7 of volume I of this book). Moreover, to preclude the endless creation of new modes requires some principle of limitation, and this implies an appeal to elements which are not modal; forces of production are the obvious example within the Marxian tradition. But then modes of production become endogenous variables, and can have no part in the most fundamental of explanations of development and undevelopment.[20]

Nothing in the overall vision of Althusser's Marxism aids the solution of these problems. The alleged priority of economic relations is specified in a way which cannot be falsified. Those cases where politics appears to be of paramount importance, for example, are rationalised by asserting that this is so only because the economic structure allows it and therefore remains the 'structure in dominance'. Elements of the superstructure, however, are said to have relative autonomy, although the limits which define it have not been specified clearly. They do not involve human agency, for individuals are conceived as mere 'bearers of relations' and only structures are of significance. This facilitates functionalist explanation, but no justification is provided for this form of argument. Indeed, there is no sensible specification of what constitutes science. Theory construction itself is supposed to be an autonomous practice, unconstrained by empirical evidence. Exactly what validates knowledge remains unclear.[21]

III Class Relations and Development

Robert Brenner offers a much more rigorous account of backwardness in terms of relations of production than do the Althusserians, and he is now widely recognised as the strongest critic of Baran, Frank and Wallerstein from this perspective. However, Brenner's primary concern is with backwardness prior to the twentieth century, and he suggests that some of his propositions might have to be modified in the changed conditions of the modern world.[22] On the other hand, since Brenner appeals to theoretical considerations which are general, any changes would presumably be slight. Thus the relevance of his critique to the post-war theory of underdevelopment is ambiguous.

Brenner's basic proposition is that capitalist relations of production lead to a systematic development of the productive forces, and pre-capitalist relations do not. Two relations define capitalism: the dependence of economic agents upon the market, and wage labour. Since individuals in capitalism cannot produce the full range of use values which they need, but instead must procure them through exchange, they have an incentive to be efficient. More important, they are forced to be efficient by competition from similarly situated economic agents. Furthermore, the existence of wage labour allows continual adjustments in organisation and scale to achieve efficiency.[23] Pre-capitalist relations of production which involve either the coercive extraction of surplus from direct producers, or non-dependence upon markets, or both, generate neither the incentive nor the compulsion for continual improvements in efficiency, and if the direct producers are tied to their means of production (as under feudalism) the organisation of labour is less flexible. While Brenner accepts that improvements in techniques are not wholly precluded by pre-capitalist relations of production, he argues that these relations do not generate a *systematic* tendency in this direction.[24] Instead, property owners are led to concentrate upon increasing their incomes by lengthening the working day, or reducing the incomes of direct producers, rather than raising labour productivity as under capitalism.[25] According to Brenner, then, Baran, Frank and Wallerstein have all misunderstood the reasons for development and continued backwardness, which are largely separate and unconnected phenomena. Different class structures are the pivotal factors, not the relationship of centre and periphery in the world market, or surplus transfers between geographical areas. Thus Brenner is a severe critic of the theories of underdevelopment which were discussed in Chapter 9 above.

Brenner supports his thesis with a whole battery of arguments and evidence. He examines the transition from feudalism to capitalism in England and cogently argues that it was not the rise of trade, but rather a series of class struggles between peasants and lords, which constituted the 'prime mover'. This is buttressed by comparisons of similarly situated European countries, in which Brenner seeks to show that only the different outcomes of the same class struggles can account for the different economic histories of the various countries. The method itself is a powerful one, for it seeks to isolate class struggles as the only factor which differs in the initial situation, so that any variation in forms of development must be due to this cause.[26] Dobb's earlier position in his debate with Sweezy is thus broadly confirmed by Brenner, and the causal importance of the world market is denied.[27] Brenner also maintains that it is the class structures of peripheral regions that account for their place in the world economy;[28] he points to examples where peripheries have sometimes derived surplus from trading with the centre,[29] and denies that the exploitation of backward areas was necessary for the development of advanced capitalism because capitalism has its own internal dynamic of growth.[30]

Brenner's rehabilitation of the importance of class relationships is a major achievement, with devastating consequences for the theories of underdevelopment examined in Chapters 9 and 10 above. But Brenner's claims are not thoroughly secure, and the remainder of this section concentrates upon their weaknesses. The arguments are sometimes indeterminate, but there are reasons for believing that the autonomy of class structures – at least in the modern world – has been significantly weakened by the development of the world market. This does not re-establish the validity of theories of underdevelopment, but it does suggest that some of their subsidiary propositions may contain elements of truth.

Capitalist competition, acting as a compulsive force which generates economic development, is at the heart of Brenner's thesis. Marx himself agreed that this was important, but maintained that competition only externalises 'the inherent laws of capitalist production' which arise from the fact that 'the appropriation of ever more and more wealth in the abstract' is the 'subjective aim' of capitalists.[31] This distinction is important because, without the prior existence of the acquisitive drive, competition will not arise in the first place. The reason why capitalist class relations have been associated with economic development may not then lie wholly within these relations, as Brenner presumes. Cultural factors become important as well, at least in the formative period.[32]

This argument is reinforced by the experience of European 'late starters'. German and Russian capitalism in the second half of the nineteenth century was extremely dynamic, but was also characterised by extensive protection and monopolistic practices which Tugan-Baranovsky, Hilferding, Bukharin and Lenin all documented (see volume I of this book and section V below). Furthermore, in both cases industrialisation was induced by pressure from other states, so that competition was of a different type from that stressed by Brenner. This indicates also that Wallerstein's conception of the world economy cannot be completely subordinated to matters of class, since in these instances class structures were altered 'from above' in order to meet the challenges posed by the international system. And, in treating this issue, Wallerstein makes a more fundamental point against all theorists who argue that relations of production act as exogenous causes of development and undevelopment. He points out that economic theory studies systems, and must therefore pay attention to the boundaries of systemic relations. Wallerstein defines an economic system, not unreasonably, as a connected division of labour and argues that the modes of production of particular areas do not include all the factors relevant to explaining economic performance, except in primitive and isolated mini-systems.[33] The problem with this argument is that, in the work of Frank and Wallerstein, it takes an absolutist form. They treat any particular country's connection with the world economy as entailing that its economy is wholly determined by the world economy. Indeed, Frank argues that even the remaining mini-systems which are not overtly connected with the world economy are nevertheless determined by it. The fact that they have not been incorporated reflects the lack of potential for profitable reorganisation, and this itself is determined by the situation in the world economy.[34]

The increasing causal importance of the world market is also suggested by some of Brenner's arguments for the dominance of class relations in European pre-capitalist economies. He does not appeal to traditionalism, but instead claims that relations of production channelled the rational actions of all economic agents towards reproducing existing relations of production, even though overall productivity could have been increased by changing them.[35] For example, peasant producers did not innovate and specialise because markets were thin and uncertain, so that risk-averse behaviour favoured conservatism.[36] However, it would seem to follow that, as the world economy expands, the better organisation of markets would then encourage specialisation and the development of capitalism, as Plekhanov and Lenin argued (see Chapters 8 and 9 of volume I of this book).

This example also suggests that Brenner's thesis may after all share the central deficiency of articulation theory. In Brenner's argument, it is not only thin markets which hold back development; were living standards higher, the cost of engaging in risky specialisation would be reduced. Thus the maintenance of pre-capitalist class structures seems to be dependent upon the level of development reached by the productive forces. Relations of production are endogenous, then, and there are deeper causes of the continuance of backwardness. It is the limited development of the forces of production which proves to be self-sustaining, generating a 'low-level equilibrium trap'.[37]

IV The Productive Forces and the Relations of Production

Is it, then, the growth of the productive forces which represents the motor of history, and the level of their productivity which determines the stage of economic development? According to G.A. Cohen's version of historical materialism, they are indeed both the prime mover and the principal determinant. In *Karl Marx's Theory of History*, published in 1978, he argues for an interpretation of the materialist conception of history which in the post-war years was considered to be indefensible by even the most fundamentalist of Marxists. It is the technological determinism of Marx's famous summary of his science of history in the preface to the *Critique of Political Economy* which, Cohen maintains, is canonical.[38] 'History is, fundamentally, the growth of human productive power, and forms of society rise and fall accordingly as they enable or impede that growth'.[39] Cohen's substantive position is thus very close to that of Kautsky and Plekhanov, and runs against most currents of twentieth-century Marxism, which elevate the importance of the relations of production. But Cohen's method is distinctive: he uses the tools of modern analytic philosophy and employs new arguments to make his case.

Cohen organises his defence of technological determinism by arguing for what he calls the 'development thesis' and the 'primacy thesis'.[40] The development thesis rests upon three propositions: '(c) Men are . . . somewhat rational. (d) The historical situation of men is one of scarcity. (e) Men posses intelligence of a kind and degree which enables them to improve their situation.' Because of (d) there is a struggle for survival; (e) ensures that scarcity-reducing innovations will occur; and (c) implies that there will be a tendency to adopt them. Cohen's case for the primacy thesis hinges on the argument that different relations of production do have differential capabilities for generating growth in the productive forces at different stages of development.[41]

These ideas have played no role in the debate on underdevelopment. This is surprising because their relevance to it would seem obvious, and the quality of Cohen's analysis far surpasses that of the main protagonists in the debate. It appears to reinforce the critical position already taken towards the work of Baran, Frank and Wallerstein, as well as questioning both articulation theory and Brenner's thesis. At the same time, however, Cohen's position apparently runs against the brute facts of backwardness. Why, given the vast development of the productive forces in advanced capitalism, are the living standards in the poor countries on average one-seventh of those in the developed countries?[42]

The relevance of the 'development thesis' for understanding Third World backwardness today is very limited. The productive forces have already developed elsewhere, and desires for material improvement in the periphery are manifestly evident. On the other hand, the acceptance of the primacy thesis may not be incompatible with the main thrust of the theory of underdevelopment. Surprisingly, Cohen nowhere explicitly specifies the types of economy to which his propositions apply: that is, whether they relate to the local economies; to regional, national or continental economies; or to the global economy as a whole. In the intellectual history of Marxian political economy strikingly different positions have been taken on this question. One way of representing the differences in 1917 between Bukharin, Trotsky and Luxemburg on the one hand, and Kautsky, Hilferding and Plekhanov on the other, is that the former group took the world economy as the relevant unit in terms of which the concepts of historical materialism were to be understood, whereas the latter believed that national or regional territorial entities were the proper referents. Both interpretations could find support in Marx, but in neither case is it conclusive. And Cohen does not even discuss the issue, let alone resolve it, although what hints there are to his own views suggest that he would side with Kautsky, Hilferding and Plekhanov.[43] Thus in principle Frank and Wallerstein could accept the primacy thesis by arguing that it applies to the world economy, and that the economic relations of this economy are functional for global accumulation, which is centred in the core countries at the expense of the periphery.

The theorists of underdevelopment might also accept the primacy thesis yet reject the proposition that capitalist relations of production (in the traditional Marxian sense) facilitate the development of the modern productive forces. There is evidence supporting the idea that wage labour may be less effective, compared to slavery, petty commodity production and serfdom, than Cohen is willing to concede.[44] Moreover, even if increasing technical sophistication of the productive forces favours wage labour, there is still ambiguity in the relevance of the primacy thesis for capitalist development in the periphery, for Cohen nowhere discusses the time frame of his propositions. Consequently it is not clear whether the tendency to proletarianisation would operate over a matter of decades or centuries.

Nor does Cohen's historical materialism have clear implications, either for articulation theory or for Brenner's thesis. Like Brenner, Cohen recognises exceptions to the association between capitalist relations of production and rapid economic development if these relations are insufficiently extensive in the social formation, as articulation theorists emphasise. In addition, Cohen's treatment of pre-capitalist relations of production seems to hinge on their appropriateness being concentrated on preserving established productive power. He suggests that the limited availability of surplus puts a premium upon productive relations which maintain, rather than change, the forces of production. This is hardly a position dramatically at odds with Brenner's own.[45]

Recent work by sophisticated neoclassical economists and by some Marxists has substantiated this proposition in the context of undeveloped countries. By recognising uncertainty, information asymmetries, non-convexities and transactions costs, as well as the incompleteness of markets and the imperfections in existing markets which result from these factors, they have demonstrated that what appear to be 'feudal remnants', like sharecropping, may be sustained in the absence of coercion or traditional culture.[46] This points to the importance of state policy in establishing institutions which encourage the endogenous emergence of capitalist relation of production. Such institutions might even involve the creation of social security systems to reduce the risks to entrepreneurship on the part of petty producers.

A related issue is the importance of secure property rights.[47] Neither the articulation theorists, nor the theorists of underdevelopment, nor Brenner and Cohen, treat this issue. All implicitly assume that property rights are immune to any threat apart from class conflict. But the fact that many Third World areas are wracked by civil war, under military threat, and ruled by corrupt and arbitrary governments, is not conducive to capitalist economic development, even when other conditions might be highly favourable to it. It is not clear, however, whether these factors support those who claim that continued backwardness stems from internal factors, or the theorists of underdevelopment who maintain that it is the relation of the peripheral economies to the advanced West which is the key issue.

V Capitalist Development in the Periphery

The ideas of Althusser, Brenner and Cohen represent successive attempts to 'return to Marx' in the face of the revisionism which has become increasingly important since the 1920s. The theory of underdevelopment was therefore a natural target, and each version of historical materialism has indicated limitations in the theory. However, at the time none proved able to mount a frontal assault on the doctrine as it applies to economic backwardness in the modern world. Such an attack emerged only in the 1970s, and even then did not become pronounced until the 1980s. But here, too, a 'return to Marx' has been evident, and at a much more concrete level.

From the outset, Marxism sought to become the chief intellectual opponent of liberalism. Its success in achieving this objective resulted in an inclination on the part of some Marxists to suppress or dismiss Marx's own economic liberalism. Notwithstanding the significance of his critique of classical political economy, Marx remained in many ways a classical economist, and this is obviously true at the level of policy. Apart from supporting working-class attempts to limit exploitation, Marx by and large favoured free trade and a minimal state, and certainly regarded colonialism as extending 'civilisation'. He did not repudiate the doctrine of comparative advantage, was opposed to autarkic economic development, and favoured virtually all measures promoting capitalist social relations, including imperial domination of 'non-historical' ethnic groups. And, on the whole, he remained optimistic that capitalism would engulf the whole globe and provide the material basis for socialism on a world scale.[48]

Long dismissed as ideological representatives of the dominant powers, liberal economists have never experienced the pessimism of many modern Marxists regarding economic development of the periphery. It has come as something of a shock to Marxian writers that the empirical evidence on economic growth in the periphery since the Second World War has borne out much of the liberal case. Those countries which adopted strategies of export-oriented growth have achieved the most spectacular performance, while countries favouring self-sufficiency have done relatively poorly. Countries which have resisted distorting market prices have out-performed the heavily interventionist backward economies, which have in varying degrees emulated the Soviet model and replaced economic mechanisms with direct controls and administrative allocation.[49] Not surprisingly there has been a resurgence of liberal development economics since the 1960s, and the theory of underdevelopment has been brought into disrepute.

It is to the abiding credit of Bill Warren that, 20 years ago, he began the process of reasserting the coherence of the original Marxian position, and coupled it to a comprehensive critical evaluation of the theory of underdevelopment. In a series of works, the most important of which is his book, *Imperialism: Pioneer of Capitalism*, published (posthumously) in 1980, he exposed many of the conceptual ambiguities, theoretical errors and empirical inaccuracies of Baran, Frank and the dependency theorists.[50] Warren forcefully restated the case for regarding capitalism (defined in the traditional Marxian sense) as progressive, not only economically but also politically, morally and culturally. Empirical evidence that capitalist economic development in the Third World brought with it a tendency toward equality, increasing freedom and cultural growth was used to clinch his case.[51]

Warren argued that the theory of underdevelopment represented a nationalist ideology suited to the interests of the professional intelligentsia, and not very different from that of the Russian Narodniks a century earlier.[52] Indeed, he regarded the state of Marxian development theory in the 1970s as very similar to the 'great debate' between Social Democrats and populists in the 1890s (see Chapters 7, 8, 9 and 10 of volume I of this book).[53] In arguing that backward capitalisms had their own *internal* dynamic, and in documenting their growth, Warren saw himself as occupying a position analogous to that of Lenin. But in fact he was in some ways closer to the position of Peter Struve. Like Struve, Warren saw population growth as the proximate cause of outright misery in the Third World,[54] underestimated the diversity of conditions which prevailed there, and painted the most optimistic picture which the data could sustain. Even those Marxists who were sympathetic to his general viewpoint felt impelled to criticise his own presentation sharply.[55]

Warren also gave capitalism a one-dimensional representation. In order to justify its progressivity, he neglected the dialectical complexities evident in Marx's own writing on primitive accumulation and nineteenth-century imperialism.[56] Marx distinguished between imperialist nations with respect to the modernity of their own social formations, and related this to the type of colonialism which they practised. Even the impact of British rule in India had varied over time, depending on which particular groups within the propertied classes dominated policy formation. So far as Ireland was concerned, Marx believed it essential for British rule to be ended completely; without independence, the strength of domestic capitalist development would be sacrificed to those interests which controlled the occupying power.[57] Thus in Marx's view not all aspects of imperialism were wholly favourable to the most rapid development of capitalism, and none of them minimised the 'birth pangs' of that development.[58]

Furthermore, Warren contradicted himself when he stressed the economic importance of political independence for Third World countries.[59] He was correct to argue that decolonisation was much more than an aspect of 'continuity in change' which the theorists of underdevelopment claimed, but in doing so he undercut his own different representation of continuity, in which both colonialism and independence aided capitalist development in the periphery. Warren was also rather cavalier in tracing the intellectual origins of the theory of underdevelopment, despite the extended treatment which he gave to the issue. He located the watershed in Lenin's *Imperialism*, and saw a continuous line of advance to Frank and the dependency theorists. It is true that Lenin facilitated the formation of underdevelopment theories by representing capitalism as moribund, treating working-class affluence as confined to a labour aristocracy living off super-profits, and finding a place for anti-imperialist movements in the overthrow of capitalism. But it was only with Baran's work in the 1950s that a 'Third-Worldist' revision of Marxism attained even minimal coherence. And an essential element in this revision stemmed from the achievements of the Soviet command economy, which post-dated Lenin's death. Warren mistakenly equated the political slogans of the Comintern and the statements of Soviet diplomats with theoretical analysis, and he attributed to Lenin's *Imperialism* a more coherent and precise content than it actually contained (see Chapter 15 of volume I of this book).[60]

Despite these weaknesses in Warren's presentation of his argument, it was basically sound, and it has been well supported both by subsequent analysis and by empirical evidence. The most important Marxian work has been that of Nigel Harris, who provides extensive data on the rapid capitalist development of peripheral economies and differentiates between types of growth.[61] With one important qualification Harris recognises, as did Warren, that neoclassical theorists have been more acute in understanding Third World development than neo-Marxists like Baran, Frank and Wallerstein.[62] The qualification concerns the importance of state capitalism: apart from Hong Kong, all 'Newly Industrialising Countries' (NICs) have depended upon extensive state involvement. However, this offers little support to the theory of underdevelopment because the NICs followed the example of Japan and Wilhelmine Germany rather than the Soviet model, and export-oriented growth strategies have been far more successful than those of import-substitution. Moreover, according to Harris, modern technologies ensure that development cannot continue very far without entry into the world market, even for the largest economies. He maintains that a free-trade policy, if not complete *laissez-faire*, has become a necessity for continued success.[63]

According to Harris the success of the NICs reflects the emergence of what Marxists have increasingly seen as a new international division of labour.[64] A centre concentrating on manufacturing and a periphery specialising in primary products is rapidly being replaced by integrated circuits of production, widely distributed in space and not amenable to simple classification. Advanced capitalist states do not constitute a unified centre, and transnational corporations are intensely competitive. Protection from the rigours of the world market can be achieved only at great cost in terms of efficiency, and any partial de-industrialisation of developed economies which occurs because of relocation of productive capacity in the Third World has to accepted. All this will become more evident as new NICs emerge, an occurrence confidently expected by Harris. He even sees the 'debt crisis' as having positive value here; it forces developing countries into the world market and counters attempts to reduce dependence, which can only fail.[65] Harris also maintains that a more integrated world economy will provide the foundation for reduced military conflict, the erosion of nationalism, and an increasing uniformity of conditions for working classes everywhere. He rehabilitates Marx's original idea of global socialist revolution based on an international proletariat which inherits a world where the means of production have been everywhere developed.[66]

Critics have nowhere provided a refined alternative prognosis. Instead they have formulated only a patchwork of objections which indicate the great uncertainties inherent in the global economy. The bulk of the Third World, even those areas which have grown very quickly, can still be represented as a 'chamber of horrors' in which unemployment, mass poverty and sweated labour prevail. The vast gulf between the living standards of the Western working class and those of the proletariat in the backward countries is likely to preclude any recognition of common interests. Moreover, the end of the 'long boom' in the early 1970s slowed growth generally (see Chapter 16 below). Many Third World countries insulated themselves only through extensive borrowing, which brought about the debt crisis of the 1980s. This has cut into their advance drastically, and is likely to continue to do so for many years. If the experience of the South-East Asian 'tigers' is to be duplicated, it will require ever-larger import penetration into advanced economies, which is bound to strengthen protectionist pressures in the West in the face of de-industrialisation. The decline of US hegemony may also threaten the continuance of the liberal economic order in the world economy, perhaps even ushering in a new era of inter-imperialist rivalries.[67]

VI Conclusion

The ambiguities and loose construction introduced wholesale into the theory of underdevelopment by Frank and the dependency theorists provide ample opportunity to weave these considerations into continued support for a neo-Marxist 'Third-Worldism'. But the evidence on the development that has so far occurred is clearly inconsistent with what the dependency theorists claimed in the 1960s. Moreover, the crisis of the Soviet mode of production adds yet more hostile evidence (see Chapter 18 below). It is now increasingly apparent that the principal barrier to global development is not the incorporation of the periphery into the world economy, but whether advanced capitalist countries will continue to act in a manner which allows this incorporation to continue, and whether international coordination mechanisms can sustain the broad stability evident in the post-war years. Thus major uncertainties remain within the economies of the advanced capitalist countries and the rickety institutions which integrate their activities.

Where does this leave the Marxian theory of imperialism, taken as a whole? We saw in section I of Chapter 9 above that the term underwent a metamorphosis in the middle decades of the century. In classical Marxism 'imperialism' referred principally to the relations between the advanced countries, and denoted a 'struggle for economic territory' among the metropolitan centres of monopoly finance capital which led inexorably to world wars. The relations between the major capitalist powers and the backward areas were regarded as being of subsidiary importance. Paul Baran and his followers changed all this. Perhaps now, with the palpable decline of dependency theory, the original usage might sensibly be restored.

There are, however, two serious problems which must be faced in any attempt to rehabilitate the Hilferding–Lenin theory of imperialism. The first is factual: there has been no war between the advanced capitalist states for almost half a century, and never since 1945 has an imperialist conflict appeared likely. To a very large extent this reflects the political conjuncture: the combination of economic and (especially) military dominance by the United States, and the threat – real or supposed – from the Soviet Union. With the evident decline of US 'super-imperialism',[68] and the termination of the Cold War, the *Pax Americana* may itself be coming to an end. So long as there is uneven development on a global scale there remains considerable scope for conflict between the metropolitan powers, as some Marxian writers have always recognised.[69] But the prospect of renewed warfare along classical imperialist lines – involving, say, Europe, Japan and the United States – remains mercifully remote.

This indicates a second difficulty. The Hilferding–Lenin analysis of imperialism requires that capitalists are nationalistic. Whether they internalise the bellicose chauvinism and racist ideology identified by Hilferding[70] is unimportant. What matters is that they believe their own material interests to be intimately connected with those of the nation-states to which, in some sense, they 'belong'. Liberal thinkers such as Cobden and Schumpeter had always maintained this to be an illusion. Capital, they argued, was increasingly cosmopolitan; the interests of its owners were bound up with the peace and prosperity of the world as a whole, and were damaged (as they themselves would come to realise) by militarism and the pursuit of aggresive foreign policies. Nationalistic impulses were atavistic, and freedom of trade and capital movements would give rise to international harmony and cooperation.[71]

Although shared by some Marxists, like Karl Kautsky,[72] this vision was shattered by the two world wars. But the revival of global economic liberalism after 1945 has a real material foundation in the emergence of 'multinational' or 'transnational' capital.[73] Corporations with huge assets on several continents can no longer be regarded automatically as 'American', 'British' or 'Japanese' simply because their head offices are New York, London or Tokyo; patriotism may be, increasingly, unprofitable. To the extent that transnational corporations treat *all* nation states as fair game, and identify with none of them, the continued relevance of the classical Marxian approach to imperialism is in doubt.

Notes

1. Nevertheless Wallerstein frequently expresses himself in structuralist terms, recognising the causal priority of the world economy as a totality, explaining historical developments in functionalist terms, and accepting the relative autonomy of subsystems like state organisations and class structures. See, for example, I. Wallerstein, *The Capitalist World-Economy* (Cambridge: Cambridge University Press, 1979), pp. 20f, 38, 48, 69; Wallerstein, *The Politics of the World-Economy* (Cambridge: Cambridge University Press, 1984), pp. 4, 14, 16, 27ff, 33. Frank and the dependency theorists, too, have sometimes elevated the importance of class structures beyond that allowed logically by their own theories. See, for example, A.G. Frank, *Lumpenbourgeoisie: Lumpendevelopment* (New York: Monthly Review Press, 1972). However, it is Samir Amin who is the worst offender against internal coherence: see S. Smith, 'The Ideas of Samir Amin: Theory or Tautology?', *Journal of Development Studies*, 17, 1980, pp. 5–21.
2. M. H. Dobb, *Studies in the Development of Capitalism* (London: Routledge, 1946); R.H. Hilton (ed.), *The Transition from Feudalism to Capitalism* (London: New Left Books, 1976).
3. R. Brenner, 'The Origins of Capitalist Development: A Critique of Neo–Smithian Marxism', *New Left Review* 104, 1977, pp. 25–92; Brenner, 'Bourgeois Revolution and Transition to Capitalism', in A.L. Beier, D. Cannadine and J.M. Rosenheim (eds), *The First Modern Society* (Cambridge: Cambridge University Press, 1989), pp. 271–304.
4. Brenner, 'Origins'.
5. M.C. Howard, *Modern Theories of Income Distribution* (London: Macmillan, 1979), pp. 171–2.
6. The clearest outline of Althusser's ideas can be found in P. Anderson, *Arguments Within English Marxism* (London: New Left Books, 1980).
7. J.G. Taylor, *From Modernisation to Modes of Production* (London: Macmillan, 1979).
8. See n.1 above and A. Foster-Carter, 'The Modes of Production Controversy', *New Left Review*, 107, 1978, pp. 47–77.
9. L. Althusser, *For Marx* (London: Allen Lane, 1969); Althusser, *Lenin and Philosphy and Other Essays* (London: New Left Books, 1971); see also Ch. 11 of volume I of this book.
10. P.P. Rey, *Les Alliances de Classes* (Paris: Maspero, 1973), pp. 11ff.
11. T. Benton, *The Rise and Fall of Structural Marxism* (London: Macmillan, 1984), p. 17.
12. P.P. Rey, *Colonialisme, Néo–colonialisme et Transition* (Paris: Maspero, 1971); Rey, *Les Alliances*; H. Wolpe (ed.), *The Articulation of Modes of Production* (London: Routledge & Kegan Paul, 1980); J.S. Kahn and J.R. Llobera (eds), *The Anthropology of Pre–Capitalist Societies* (London: Macmillan, 1981).
13. L. Althusser and E. Balibar, *Reading Capital* (London: New Left Books, 1970); Taylor, *From Modernisation*; Wolpe, *Articulation*.
14. E. Laclau, 'Feudalism and Capitalism in Latin America', *New Left Review*, 67, 1971, pp. 19–38.

15. Wolpe, *Articulation*, pp. 1–43.
16. Laclau, 'Feudalism'.
17. Althusser and Balibar, *Reading Capital*; cf. I. Steedman, 'Marx on Ricardo', in I. Bradley and M. Howard, *Classical and Marxian Political Economy* (London: Macmillan, 1982), pp. 115–56.
18. See G. Hodgson, *The Democratic Economy* (Harmondsworth: Penguin, 1984), Chs 6 and 7.
19. For a discussion of 'pure capitalism' in the work of Kozo Uno, see T.T. Sekine, 'Uno–Riron: A Japanese Contribution to Marxian Political Economy', *Journal of Economic Literature*, 13, 1975, pp. 847–77.
20. G.A. Cohen, 'Forces and Relations of Production', in J. Roemer (ed.), *Analytical Marxism* (Cambridge: Cambridge University Press, 1986), pp. 11–22.
21. Benton, *Rise and Fall*; L. Kolakowski, 'Althusser's Marx', in R. Miliband and J. Saville, *Socialist Register 1970* (London: Merlin, 1970), pp. 11–28.
22. T.H. Ashton and C.H. Philpin (eds), *The Brenner Debate* (Cambridge: Cambridge University Press, 1985), pp. 322–3; R. Brenner, 'The Social Basis of Economic Development', in Roemer, *Analytical Marxism*, pp. 23–53.
23. Brenner, 'Origins', pp. 30–2, 75–7; Ashton and Philpin, *Brenner Debate*, pp. 10–63, 213–327; Brenner, 'Social Basis', pp. 29, 33–4, 46–8.
24. Ashton and Philpin, *Brenner Debate*, pp. 297–9.
25. Brenner, 'Origins', pp. 32–3, 35–6, 75–7.
26. Ashton and Philpin, *Brenner Debate*, pp. 29, 45ff, 54ff, 59–63, 290, 299–300, 306, 312ff; Brenner, 'Social Basis'. On the use of the comparative historical method, see T. Parsons, *The Structure of Social Action* (New York: McGraw-Hill, 1937), Part III and T. Skocpol, *States and Social Revolutions* (Cambridge: Cambridge University Press, 1979), Ch. 1.
27. R. Brenner, 'Dobb on the Transition from Feudalism to Capitalism', *Cambridge Journal of Economics* 2, 1978, pp. 121–40.
28. Brenner, 'Origins', pp. 80ff.
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30. Ibid, pp. 60–1; see also P. O'Brien, 'European Economic Development: The Contribution of the Periphery', *Economic History Review*, XXXV, 1982, pp. 1–18.
31. K. Marx, *Capital*, I (London: Lawrence & Wishart, 1970), pp. 152, 270 (Chs 6 and 10).
32. M.C. Howard, 'Fernand Braudel on Capitalism: A Theoretical Analysis', *Historical Reflections*, 12, 1985, pp. 469–83.
33. I. Wallerstein, *The Modern World–System I* (New York: Academic Press, 1974), pp. 7, 127, 347–8; Wallerstein, *Capitalist World–Economy*, pp. 8–9, 14, 53ff, 60ff, 135–7, 161, 220, 286ff; Wallerstein, *Politics*, pp. 1ff, 12, 14, 27, 162–3.
34. A.G. Frank, *Capitalism and Underdevelopment in Latin America* (Harmondsworth: Penguin, 1971), p. 159. There is, of course, no need to maintain either that modes of production or class relations will always override the world economy, or to take the opposite extreme position. Wallerstein might be more correct for the nineteenth century than for the sixteenth, while Brenner's thesis would be stronger for the sixteenth century than the nineteenth (as he himself seems to recognise; see Ashton and Philpin, *Brenner Debate*, pp. 322–3, and Brenner, 'Social Basis', pp. 29, 50).
35. Ashton and Philpin, *Brenner Debate*, pp. 26–7, 31ff, 218–19, 233–42, 252; Brenner, 'Origins', pp. 45–6; Brenner, 'Social Basis', pp. 32–3; Brenner, 'Dobb', pp. 124–5.
36. Brenner, 'Social Basis', p. 29.
37. At one point, Brenner seeks to meet this kind of criticism directly. However, his argument is exceptionally weak; see ibid, p. 31.

38. K. Marx, *Critique of Political Economy* (London: Lawrence & Wishart, 1971), pp. 19–23; G.A. Cohen, *Karl Marx's Theory of History: A Defence* (Princeton, NJ: Princeton University Press, 1978). For a cogent argument that the 'Preface' to the *Critique* should not be taken as defining Marx's real views, see A.R. Prinz, 'Background and Ulterior Motive of Marx's "Preface" of 1859', *Journal of the History of Ideas* 30, 1969, pp. 437–50.
39. Cohen, *Karl Marx's Theory*, p. x.
40. Cohen, *Karl Marx's Theory*, Ch. IV.
41. Ibid, pp. 152ff.
42. J. Faaland, *Population and the World Economy in the 21st Century* (Oxford: Basil Blackwell, 1982), p. 162. The development thesis has been criticised for assuming that transhistorical motivations do exist, and Cohen has expressed some doubts on this score; see A. Levine and E.O. Wright, 'Rationality and the Class Struggle', *New Left Review*, 123, 1980, pp. 47–68; Cohen, *Karl Marx's Theory*, pp. 23, 152–5; Cohen, 'Reconsidering Historical Materialism', *Nomos*, XXVI, 1983, pp. 227–52; G.A. Cohen and W. Kymlicka, 'Human Nature and Social Change in the Marxist Conception of History', *Journal of Philosophy*, LXXXV, 1988, pp. 171–91. Attacks on the primacy thesis have tended to be methodological; see J. Elster, 'Cohen on Marx's Theory of History', *Political Studies*, XXVIII, 1980, pp. 121–8; G.A. Cohen, 'Functional Explanation: Reply to Elster', *Political Studies* XXVIII, 1980, pp. 129–35; J. Elster, 'Marxism, Functionalism and Game Theory: The Case for Methodological Individualism', *Theory and Society*, 11, 1982, pp. 453–82; G.A. Cohen, 'Reply to Elster on "Marxism, Functionalism and Game Theory"', *Theory and Society*, 11, 1982, pp. 483–96; and J. Elster, 'Further Thoughts on Marxism, Functionalism and Game Theory', in Roemer, *Analytical Marxism*, pp. 202–20. For Cohen's most recent thoughts on historical materialism, see his *History, Labour and Freedom* (Oxford: Clarenden Press, 1988).
43. Cohen, *Karl Marx's Theory*, pp. 61ff, 139ff, 160, 181ff, 248, 320. See, however, Cohen, *History*, pp. 25–9.
44. R.H. Fogel and S.L. Engerman, *Time on the Cross* (Boston, Mass.: Little, Brown and Co., 1974); J.R. Hicks, *A Theory of Economic History* (Oxford: Oxford University Press, 1969); H. Friedmann, 'World Market, State, and Family Farm: Social Bases of Household Production in the Era of Wage Labour', *Comparative Studies in Society and History*, 20, 1978, pp. 545–86; H. Friedmann, 'Simple Commodity Production and Wage Labour in the American Plains', *Journal of Peasant Studies*, 6, 1979, pp. 71–100; Wallerstein, *Capitalist World-Economy*, pp. 206ff; P. Bardhan, 'Marxist Ideas in Development Economics: An Evaluation', in Roemer, *Analytical Marxism*, pp. 64–77; Cohen, *Karl Marx's Theory*, Ch. 8; see also Chs 2 and 3 above.
45. Cohen, *Karl Marx's Theory*, pp. 23, 135, 140–2, 152–7, 169–77, 181ff, 197–201; Brenner, 'Social Basis', p. 41.
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52. Ibid, pp. 9, 19–20, 115ff, 125, 157ff, 253; Brenner, 'Origins', pp. 91ff; A. Gershenkron, *Economic Backwardness in Historical Perspective* (Cambridge, Mass.: Harvard University Press, 1966). See also N. Harris, *The End of the Third World* (Harmondsworth: Penguin, 1987), pp. 22–3, 170ff.
53. Warren, *Imperialism*, pp. xiii, 7, 9–10, 14, 27, 30ff, 48ff.
54. Ibid, p. 113.
55. A. Lipietz, 'Marx or Rostow?', *New Left Review*, 132, 1982, pp. 48–58.
56. Warren, *Imperialism*, pp. 9, 113–4, 128ff.
57. See E. Hazelkorn, '"Capital" and the Irish Question', *Science and Society* 44, 1980, pp. 326–56; Hazelkorn, 'Some Problems in Marx's Theory of Capitalist Penetration into Agriculture: The Case of Ireland', *Economy and Society*, 10, 1981, pp. 284–315.
58. Howard and King, *Political Economy*, Ch. 14.
59. Warren, *Imperialism*, pp. 115, 171ff.
60. Ibid, pp. 3–4, 7–8, 27, 39ff, 48ff, 55ff, 81ff.
61. Harris, *End of the Third World*; see also Harris, *Of Bread and Guns* (Harmondsworth: Penguin, 1983).
62. Harris, *End of the Third World*, pp. 19, 24ff, 30–69, 892ff, 119, 130; see also Warren, *Imperialism*, pp. xii, 18, 45ff, 143ff, 176, 184, 253.
63. Harris, *End of the Third World*, pp. 84ff, 115ff, 127ff, 143ff, 149ff, 163ff, 189ff.
64. Harris, *End of the Third World*, pp. 93ff, 124ff, 129–30, 142ff, 187.
65. Ibid, pp. 81–2, 87ff, 91, 125ff, 142, 165ff, 192ff.
66. Ibid, pp. 155ff, 196–202; see also Warren, *Imperialism*, pp. xi–xiii, 5–6.
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73. R. Murray, *Multinational Companies and Nation States* (Nottingham: Spokesman Books, 1975); H. Radice (ed.), *International Firms and Modern Imperialism* (Harmondsworth: Penguin, 1975), especially contributions by S. Hymer, R. Murray, B. Warren, E. Mandel and B. Rowthorn.

Part IV
Value and Exploitation

12
Value Theory Before Sraffa

I Introduction to Part IV

This part is devoted to the Marxian theories of value and exploitation. It tells, as simply as we have been able to tell, a very long and complicated story. Readers should be warned that the structure of this part of the book is somewhat unusual. It contains two chapters (12 and 14) which are broadly chronological in their discussion of the transformation of values into prices of production, and two on Srafian economics (13 and 15) which are largely analytical in nature and deal only incidentally with the evolution of ideas over time. This division of the subject-matter is admittedly rather awkward, and necessarily involves some repetition. It seems, however, to be an inescapable consequence of the material with which we are concerned.

This chapter outlines the analysis of the Marxian theory of value from early in the century until the late 1950s. For the most part it merely confirmed previous results, especially those of Dmitriev and Bortkiewicz, although in doing so more rigorous and general formulations were sometimes provided. Only with the publication of Piero Sraffa's *Production of Commodities by Means of Commodities*[1] in 1960 did really novel developments occur. This, too, corroborated known results, but in addition it brought new and more fundamental issues into contention which wholly overshadowed past analysis. Matters were never quite the same again, and it is therefore reasonable to divide the twentieth-century discussion of value theory into two phases: the pre-Sraffian round which closes in 1957 with the contributions of Seton and Samuelson, and the post-Sraffian stage. However, the full import of Sraffa's work proved difficult to assess at first, and its impact was felt episodically over many years.

Both the difficulty and the delayed impact of Sraffa's book point to the need for a self-contained summary of the arguments which are implicit in it. This is provided in Chapter 13, interrupting the discussion of the transformation debate which is resumed in Chapter 14, where we take the history of the transformation problem through to the end of the 1980s. Chapter 15 is, like Chapter 13, mainly analytical in content. It offers a critical assessment of Sraffian economics as a whole, introducing issues which were first raised at various points in the 1970s and 1980s but which would have been indigestible if inserted into the preceding chapter.

The Production of Commodities was a puzzling book in a number of respects. The models it presented were exceedingly abstract, and the emphasis was placed squarely on conceptual precision and logical rigour, coupled to an extreme economy in exposition. Sraffa explained its purpose in the most cryptic of terms, provided only minimal guidance as to the significance of the propositions which he established, and remained aloof from the fierce controversies which his work engendered. Yet it had taken him nearly 40 years to complete the book, his commitment to some form of Marxism was widely rumoured, and his intellectual stature has been equalled by few other economists.[2]

Not surprisingly, then, it took many years for the significance of Sraffa's results to be appreciated. Initially Ronald Meek, in one of the few perceptive reviews of the book, glimpsed the basis for a 'magnificent rehabilitation' of Marxian political economy.[3] Nevertheless, it was in a very different area that the first dramatic impact of Sraffa was felt. Chapter 13 outlines how it became evident in the 'Capital Controversies' of the mid-1960s that *The Production of Commodities* contained a devastating attack on those forms of neoclassical theory which had been at the forefront in criticising Marxism. Coupled with Sraffa's earlier critique of Marshallian theory in 1926,[4] it was clear by the end of the decade that only the Walrasian version of neoclassicism might remain viable.[5] The coherence of Walrasian analysis had not as yet been subject to systematic examination in the light of Sraffa but, whatever this would yield, it was clearly a less suitable instrument for traditional neoclassical apologetics.

The comfort which Marxists might draw from this was qualified very quickly. As Chapter 14 below indicates, Samuelson opened up what was to become the second round of controversy in value theory by claiming that Sraffa's work supported a conclusion he had already come to in 1957: Marx's theory was a 'complicating detour' and should be abandoned (see section IV of Chapter 12). During the course of the 1970s Sraffians themselves substantiated this but, more importantly, also went well beyond it: the 'detour' was possible only in particular technologies, while in others it did not exist at all. Chapter 13 reviews these arguments, and sets the scene for the following chapter, which deals with the debate on Marx's theory of value during the years in which the Sraffian critique of Marx was undertaken.

The final chapter of Part IV takes up the view of many Sraffians that their critique of Marx is in fact progressive for Marxian political economy. They see *The Production of Commodities* as bringing about a theoretical rejuvenation by absorbing Marxism into a more general 'surplus tradition' of thought. In fact this point was frequently stressed at the same time as the critique of Marx was undertaken in the 1970s and, as already noted, had been voiced by Meek as early as 1961. It gave rise to a Marxist response somewhat different to that examined in Chapter 14: one which fully accepts the logic of the Sraffian analysis of Marx, but rejects the relevance of the conceptual structure from which it originates. In this perspective the 'surplus tradition' is itself a form of vulgar economy, whereas Marxism is a unique system of thought which can resist a Sraffian re-assessment by arguing that it is no more convincing than previous versions of revisionism.

In addition, Chapter 15 explains how surplus theorists have sought to develop economics beyond Sraffa and simultaneously to continue their critique of neoclassical theory. In the mid-1970s they articulated their attack on Walrasian theory, which hinged on the charge that, although immune from the logical deficiencies evident in other forms of neoclassical theory, general equilibrium analysis cannot explain the uniform rate of profit characteristic of an equilibrium in competitive capitalism.[6] Consequently only the surplus tradition, which includes both Marx and Sraffa, is a genuinely scientific political economy. Vulgar economy, it is claimed, has finally been undermined. Supply and demand theorists, however, have refused to accept this conclusion, and have instead launched a counter-critique. Section V of Chapter 15 indicates how this exposes severe deficiencies in all forms of the surplus paradigm, including those of Sraffa and Marx. But this is at the end of a very long story, which begins in the next section of this chapter with an acccount of developments in value theory before Sraffa.

II The Theory of Value: 1914–39

As we saw in Chapter 3 of the first volume of this book, the two most important writers on the Marxian theory of value in the years immediately preceding the First World War were Rudolf Hilferding and Ladislaus von Bortkiewicz. Hilferding emphasised the social and historical dimensions of Marx's 'objectivist' theory of value which, he claimed, gave it more explanatory power than contemporary 'subjectivist' utility theory; but he had nothing to say about the analytical difficulties of transforming values into prices of production. For his part Bortkiewicz regarded Marx's general approach to value theory as inferior to that of Ricardo, but also developed an algebraic solution to the transformation problem. Marx had postulated two equalities or 'invariance conditions': total value must equal total price, and total surplus value must equal total profit. This implied that the general rate of profit prevailing in a regime of prices of production equalled – and could be regarded as determined by – the ratio of surplus value to total capital in a regime of labour values. Bortkiewicz, however, denied that this was in general possible. Except under special assumptions, only one of Marx's two invariance conditions could be satisfied, and the 'price' and 'value' rates of profit were generally unequal.

Something must be said here concerning a contemporary of Bortkiewicz's whom we unjustifiably overlooked in the first volume of this book. The Russian mathematician Georg von Charasoff, born in Georgia in 1877, spent the 20 years after 1896 in political exile in Germany and Switzerland. In 1909–10 he published a remarkable two-volume critical analysis of Marxist theory,[7] in which he anticipated many of the results of the 1960s and 1970s. These included such Sraffian themes as the standard commodity, the device of 'subsystems', the distinction between 'basic' and 'non-basic' commodities, and the definition of value in quantities of 'dated labour' (see Chapter 3 of volume I of this book and Chapter 13 below). Charasoff was also the first to interpret the transformation of values into prices of production as a Markov process (Chapter 14, section IV), and can claim to be the discoverer of what Michio Morishima later described as the 'Fundamental Marxian Theorem', which states that a necessary and sufficient condition for there to be positive profits is that surplus value be positive.[8]

All this suggests that Charasoff is no less significant in the history of Marxian economics than V.K. Dmitriev, whose work has received belated but generous recognition and became widely known after much of it was translated into English (see volume I of this book, Chapter 3, section IV). But Charasoff's analysis proved to be far too demanding for his contemporaries. His books were briefly reviewed by Otto Bauer, who dismissed them as the work of a latter-day Physiocrat.[9] Fleeting references to Charasoff can also be found in the writings of Nikolai Bukharin, Henryk Grossmann and Natalie Moskowska. None of these theorists, however, was able to absorb Charasoff's insights, still less to develop them.

Before 1939 very little further progress was made in the theory of value, either in Germany or in Russia. Henryk Grossmann, for example, asserted both the importance of the formation of a general rate of profit and the continuing relevance of labour values as an analytical and historical starting-point. But Grossmann had the effrontery to criticise earlier Marxists like Luxemburg and Bauer for neglecting the transformation problem and presenting their crisis theory in value rather than price terms, ignoring the fact that the objection applied with equal force to his own model of economic breakdown published only three years earlier![10] Despite his perceptive discussion of the 'qualitative' and 'quantitative' aspects of the theory, Franz Petry's *Social Content of the Marxian Theory of Value*, which appeared posthumously in 1916, entirely ignored the quintessentially quantitative question of transformation.[11] Several years later (the exact date is unclear) the Menshevik I.I. Rubin published an exceptionally lucid exposition of Marx's value theory, stressing the significance of his concept of fetishism. Rubin's book was notable for the emphasis which it gave to the qualitative issues of value theory and for its explicit identification of the volume III analysis as a model of dynamic equilibrium, and price of production as a 'theoretically defined centre of equilibrium'. But Rubin offered no criticism of Marx's 'solution' and made no reference to Bortkiewicz.[12] The last, and least successful, of the pre-war studies was Emil Walter's attempt in 1936 to show that both the Marxian invariance conditions could be sustained. To obtain this result he required that the ratio of price of production to value differ, for each commodity, from department to department. Bortkiewicz had denoted the price–value ratios for means of production, wage-goods and luxuries by x, y and z respectively, with x, for example, taking the same numerical value whether the means of production in question were used in department I or II or III (see volume I of this book, Chapter 3, section V). Walter's analysis abandoned this feature of the Bortkiewicz model, and thus provided no solution at all.[13]

More perceptive was Otto Kühne, who in 1922 reformulated Bortkiewicz's model to eliminate the confusion of physical quantities and labour time units which he claimed to have found. Apart from this, Kühne's paper added little that was new, and seems to have gone largely unnoticed.[14] Seven years later Natalie Moszkowska concerned herself primarily with the question of the Marxian invariance conditions. Moszkowska accepted that only one of the two conditions will normally hold, and attacked Hilferding for his insistence that both were required. Unlike Bortkiewicz, however, Moszkowska set total value equal to total price.[15] She conceded that surplus value and profit now diverged, and the Marxian rate of exploitation differed from the ratio of profits to wages. But, she maintained, surplus labour did still determine profit. 'The dependence of two quantities upon one another need not take the form of an equality. Equality is only one of the conceivable relations of dependence between them'. Both Schmidt and Tugan-Baranovsky had been wrong to deny this.[16]

In fact the rate of profit can be established without any reference whatever to value magnitudes. This was demonstrated, in 1939, by the remarkable Japanese economist Kei Shibata,[17] who in addition anticipated the Okishio Theorem on the falling rate of profit (see Chapter 7 above). It had also been proved by John von Neumann in 1932, when he first presented to a seminar at Princeton the famous growth model which was published in German in 1937, and republished in English translation in 1945.[18] The result was also implicit in the input–output analysis developed by Wassily Leontief in the 1930s.[19] However, although the von Neumann and Leontief models were to make important contributions to Marxian theory in later years (see section III below, and Chapters 14 and 15 below), their authors did not apply them to the labour theory of value or the transformation problem. Shibata, by contrast, was interested in precisely these questions. He set out a five-sector model, with a money commodity; two types of machinery; two consumer-goods; and homogeneous labour. Where inputs precede and outputs follow the arrows, the model can be written schematically as

Machine 2 + Labour → Money

Machine 1 + Labour → Machine 1

Machine 1 + Labour → Consumer good 1

Machine 2 + Labour → Machine 2

Machine 2 + Labour → Consumer good 2

In Shibata's rather cumbersome notation, the production of a unit of money requires c_0 units of machine 2, and a_0 units of labour which are paid a real wage – defined in terms of the first consumer-good – of W_0; the production process takes t_0 time units. The input coefficients of machines and labour for the remaining four industries are denoted by the subscripts 11, 21, 12 and 22 respectively; W_{11}, W_{21}, W_{12} and W_{22} are the respective real wage rates; k_1 and k_2 are the prices of the two machines; p_1 and p_2 are the prices of the two consumption goods; and i is the uniform rate of profit. Assuming that the real wage rates are exogenously determined, Shibata then writes:

$$
\begin{aligned}
(c_0k_2 + a_0W_0p_1)\ (1+i)^{t_0} &= 1\\
(c_{11}k_1 + a_{11}W_{11}p_1)\ (1+i)^{t_{11}} &= k_1\\
(c_{21}k_1 + a_{21}W_{21}p_1)\ (1+i)^{t_{11}} &= p_1\\
(c_{12}k_2 + a_{12}W_{12}p_1)\ (1+i)^{t_{12}} &= k_2\\
(c_{22}k_2 + a_{22}W_{22}p_1)\ (1+i)^{t_{22}} &= p_2
\end{aligned}
\qquad (12.1)
$$

There are five equations in this system, and five unknowns: p_1, p_2, k_1, k_2 and i. The first equation shows that the receipts obtained from producing one unit of money (the price of which is obviously set equal to unity) must be just sufficient to refund the capitalists' machine- and wage-costs, together with the general rate of profit (i) compounded over the t_0 periods taken up by the production process. The remaining four equations have an analogous meaning.

Shibata concludes this part of his analysis as follows:

> We have in the above arrived at prices and general profit rate without referring to value but with special reference to objectively identifiable entities, such as technical coefficients of production, viz., amounts of

concrete producers' goods and of labour needed for the production of a unit of the respective products, and real wage levels.'[20]

He concluded that the problem could be formulated, and solved, in terms of labour values, but that it was not necessary to do so. Expressing all magnitudes in value terms would add nothing to the solution obtained without them.[21] Thus Shibata, like Dmitriev and Charasoff before him, anticipated one of the most important conclusions of Samuelson in 1957 and of the Sraffian economists of the 1960s and 1970s (see section IV below and Chapter 13 below).

III Bortkiewicz Rediscovered

By the mid-1930s Nazism and Stalinism had rendered impossible all serious work on Marxism in both Germany and the Soviet Union. Not surprisingly, the geographical axis of Marxian economics shifted; henceforth developments in value theory would be published in English and, to a very great extent, would originate in Britain and the United States. Shibata's article, however, although written in English, had no more impact on subsequent debates than his earlier paper on the falling rate of profit; its appearance in a Japanese journal, at the very outbreak of the Second World War, served to minimise its influence. For Anglo-Saxon writers to contribute to the controversy it was necessary for them to become familiar with the earlier contributions written in German. This had to await the publication in 1942 of Paul Sweezy's *Theory of Capitalist Development*, Chapter 7 of which contained a detailed and enthusiastic summary of Bortkiewicz's solution. It seems that this was all quite new to the two leading British economists with an interest in the labour theory of value: there is no mention of Bortkiewicz in Joan Robinson's *Essay*, published in the same year as Sweezy's book, while Maurice Dobb's review of Sweezy described the chapter in question as its 'most novel part', and Bortkiewicz's writings as 'little known'.[22]

Whatever the reasons for Robinson's and Dobb's neglect of Bortkiewicz – which may have amounted to nothing more than unfamiliarity with German – it was Sweezy's presentation which provided the basis for the debates of the next 15 years. Sweezy made no serious criticism of Bortkiewicz and, in particular, accepted the latter's conclusion that only one of the Marxian invariance conditions could be maintained. But, he claimed, 'no significant theoretical issues are involved in this divergence of total value from total price. It is simply a question of the unit of account.' For Sweezy the true importance of Bortkiewicz's solution was its demonstration that 'a system of price calculation can be derived from a system of value calculation'. This was what had interested Marx.

> He believed that he could solve it by using an average rate of profit calculated directly from the value magnitudes. This was an error, but it was an error which pales into insignificance when compared with his profoundly original achievement in posing the problem correctly. For, by this accomplishment, Marx set the stage for a final vindication of the labour theory of value, the solid foundation of his whole theoretical structure.[23]

For Sweezy, however, the labour theory of value was not primarily a microeconomic doctrine. 'Why not start with price calculations?', he asked, in what may have been an oblique reference to Oskar Lange's recently-published appraisal of Marxian and neoclassical theory. 'A Marxist can safely concede something to this point of view', since labour values offer 'little assistance in dealing with individual prices and profits'. Orthodox theory 'is more useful in this sphere than anything found in Marx or his followers'. But, Sweezy argued, this is not true at the level of the system as a whole, where value calculations are essential for a clear account of 'the origin and nature of profits as a deduction from the product of total social labour . . . value calculation makes it possible to look beneath the surface phenomena of money and commodities to the underlying relations between people and classes'. The fetishism inherent in price calculations, on the other hand, mystifies these relations and encourages gross errors like the productivity theory of profit.[24]

The first criticism of Bortkiewicz from an English Marxist came in 1948 when J. Winternitz published a short note in the *Economic Journal*; this was the first time that the Marxian theory of value had featured in its columns. Winternitz objected to two unnecessary assumptions in Bortkiewicz's analysis.[25] The first was his requirement that all surplus value be consumed by the capitalists, so that simple reproduction prevailed. Any general solution, Winternitz argued, should be capable also of dealing with net saving and hence, in Marx's terms, with expanded reproduction. Second, Bortkiewicz had identified gold with the luxury commodity produced by department III, setting its price equal to unity. This, Winternitz claimed, was 'an arbitrary and unjustified assumption which makes the sum of prices deviate from the sum of values'.[26]

Winternitz's own analysis removes both assumptions. We present it in a slightly modified form. The subscripts 1, 2 and 3 denote the three departments: I produces means of production, II wage-goods, and III luxuries for capitalist consumption. The value relations are written:

$$
\begin{aligned}
c_1 + v_1 + s_1 &= a_1 \\
c_2 + v_2 + s_2 &= a_2 \\
c_3 + v_3 + s_3 &= a_3 \qquad (12.2)
\end{aligned}
$$

where the c, v, s and a magnitudes refer respectively to the constant capital, variable capital, surplus value and total value in each department. Equation (12.2) is a more general version of the Bortkiewicz system, which assumed simple reproduction:

$$\begin{aligned} c_1 + v_1 + s_1 &= c_1 + c_2 + c_3 \\ c_2 + v_2 + s_2 &= v_1 + v_2 + v_3 \\ c_3 + v_3 + s_3 &= s_1 + s_2 + s_3 \end{aligned} \tag{12.3}$$

Winternitz follows Bortkiewicz by denoting the ratios of price of production to value in the three departments as x, y and z. The rate of profit is p, and can be written as:

$$p = \frac{a_1x - (c_1x + v_1y)}{(c_1x + v_1y)} = \frac{a_2y - (c_2x + v_2y)}{(c_2x + v_2y)} \tag{12.4}$$

Consider the second term in equation (12.4). The numerator gives total sales proceeds in department I (a_1x), minus costs ($c_1x + v_1y$): it shows the profits received by capitalists in that department. The denominator is total capital employed there, expressed in prices rather than values; note that Winternitz, like Bortkiewicz, deals only with circulating capital. Taken as a whole, the second term thus defines the rate of profit in department I. Similarly, the third term gives the rate of profit in department II, which in equilibrium is equal to that in department I. Department III is for the moment ignored, since (as will shortly be demonstrated) conditions of production in luxury industries have no effect upon the general rate of profit.

The price relations of the system can now be written as:

$$\begin{aligned} (c_1x + v_1y)(1 + p) &= a_1x \\ (c_2x + v_2y)(1 + p) &= a_2y \\ (c_3x + v_3y)(1 + p) &= a_3z \end{aligned} \tag{12.5}$$

which can be compared with Bortkiewicz's price equations, incorporating his assumption of simple reproduction:

$$\begin{aligned} (c_1x + v_1y)(1 + p) &= (c_1 + c_2 + c_3)x \\ (c_2x + v_2y)(1 + p) &= (v_1 + v_2 + v_3)y \\ (c_3x + v_3y)(1 + p) &= (s_1 + s_2 + s_3)z \end{aligned} \tag{12.6}$$

Winternitz's system (12.5) has three equations and four unknowns (p, x, y and z). To obtain the missing equation Bortkiewicz had set $z = 1$, but Winternitz follows an alternative procedure:

The obvious proposition in the spirit of the Marxian system is that the sum of prices is equal to the sum of values. This is not a tautological or meaningless thesis. It says that the sum of all prices changes only and in so far as the number of hours necessary to produce the aggregate output or the value of the money commodity changes.

He thus writes:

$$a_1 + a_2 + a_3 = a_1x + a_2y + a_3z = a \tag{12.7}$$

He further defines:

$$m = \frac{x}{y} \tag{12.8}$$

From equations (12.5), (12.7) and (12.8) the rate of profit can be derived:

$$p = \frac{a_1m}{c_1m + v_1} - 1 \tag{12.9}$$

together with solutions for x and z:

$$x = \frac{am(c_1m + v_1)}{a_1m(c_3m + v_3) + (a_1m + a_2)(c_1m + v_1)}$$

$$z = \frac{a_1(c_3m + v_3)x}{a_3(c_1m + v_1)} \tag{12.10}$$

Finally, y can be derived by substituting equation (12.8) into the expression for x in equation (12.10). This solution applies to both simple and expanded reproduction.[27] It does however entail – and Winternitz might well have drawn this out explicitly – that in general the sum of surplus value differs from the sum of profits.

In the following year Winternitz's paper was commended by Sweezy in the introduction to his translation of Bortkiewicz.[28] He was however criticised by Sweezy's compatriot Kenneth May for restricting his analysis to three departments.[29] May himself soon generalised the Winternitz solution to n industries, using an input–output model in the first application of Leontief's analysis to the transformation problem. There is no need here for a detailed exposition of May's solution as its essence was contained, in simplified form, in Francis Seton's much more influential 1957 paper which will be discussed in the following section. May's conclusions, though, do deserve some attention. He made a very important analytical point in noting that the aggregation of *n* industries into a three-department model of the type used by Bortkiewicz and Winternitz was possible only under very special assumptions. In general, 'individual commodities must be considered because they enter into the production of different industries in different proportions and hence the constant capitals . . . involved in aggregate industries have prices of production and values in different ratios in different industries'.[30] Subject to this important reservation, the transformation problem was 'merely a formal matter', and 'practically trivial mathematically'.[31]

The Winternitz-May analysis seems to have provoked some controversy among British Marxists before being publicly endorsed by Maurice Dobb in 1954.[32] Two years later Ronald Meek suggested a slightly different approach to the problem. For Meek, earlier writers had misinterpreted one of Marx's invariance conditions. Equation (12.7) on p. 236 above was not what Marx had in mind. Marx's assertion that the sum of prices be equal to the sum of values, Meek argued, should be respecified as requiring that:

$$\frac{\Sigma a}{\Sigma v} = \frac{\Sigma a_p}{\Sigma v_p} \tag{12.7a}$$

where $\Sigma a = a_1 + a_2 + a_3$

$\Sigma v = v_1 + v_2 + v_3$

$\Sigma a_p = a_1 x + a_2 y + a_3 z$

and $\Sigma v_p = (v_1 + v_2 + v_3)\, y$

Meek had little difficulty in showing that, in general, equation (12.7a) was inconsistent with (12.7), and would itself be valid only if the organic composition in department II were equal to the average in the economy as a whole.[33] A rather similar interpretation was offered, almost twenty years later, by David Laibman.[34] Meek himself subsequently repudiated his 1956 article, acknowledging that it had added little or nothing to Bortkiewicz's conclusions.

IV Seton and Samuelson

There appeared in 1957 two important but contrasting papers, by Francis Seton and Paul Samuelson, which set the seal on the first round of the modern transformation debate.[35] (As will be seen in Chapter 14 below, Samuelson was to initiate the second round with an even more influential 1971 article in the *Journal of Economic Literature.*) Seton's work focused more directly on Marx's analysis of transformation, both simplifying May's formulation and generalising his solution to allow all n commodities to be used as inputs in all n industries. Again the underlying framework is that of Leontief input–output analysis. Seton writes k_{ij} as the input of commodity j into the production of the ith commodity, measured in labour value and including both constant and variable capital ('machine feeding' and 'worker feeding', as Seton puts it);[36] e_i represents the amount of commodity i absorbed by capitalist consumption and by investment, also measured in value terms; s_i is the surplus labour performed by workers in industry i; and a_i is the total value of the output of the ith commodity. Thus Seton's value system is

$$\begin{array}{l} k_{11} + k_{21} + \ldots + k_{n1} + e_1 = a_1 \\ k_{12} + k_{22} + \ldots + k_{n2} + e_2 = a_2 \\ \quad . \quad\; . \quad \ldots \quad . \quad\; . \quad . \\ k_{1n} + k_{2n} + \ldots + k_{nn} + e_n = a_n \\ \quad s_1 + s_2 + \ldots + s_n = s \end{array} \tag{12.11}$$

Row i ($i = 1 \ldots n$) equates the labour value of the output of commodity i (a_i) to the sum of the values of the ith commodity used as an input in all n industries, plus capitalist consumption of and investment in commodity i. Column i shows the labour values of all the n inputs used in the ith industry, together with the surplus labour performed there; and each column sums to a_i.

Seton then constructs the corresponding price system. He writes p_i as the price-value ratio of commodity i, and π as the ratio of total profit to total price of production; $\rho = 1 - \pi$ is what Seton terms the 'cost ratio'. These two concepts are closely related to the rate of profit (r), since $r = \pi/(1 - \pi)$ and $\rho = 1/(1 + r)$. Seton's price system is:

$$\begin{array}{l} k_{11}p_1 + k_{12}p_2 \ldots + k_{1n}p_n = \rho a_1 p_1 \\ k_{21}p_1 + k_{22}p_2 \ldots + k_{2n}p_n = \rho a_2 p_2 \\ \quad . \qquad . \quad \ldots \quad . \qquad . \\ k_{n1}p_1 + k_{n2}p_2 \ldots + k_{nn}p_n = \rho a_n p_n \end{array} \tag{12.12}$$

Row i ($i = 1 \ldots n$) sets the inputs of commodity i, expressed in price terms, equal to the total proceeds from the sale of commodity i (in price terms), from which capitalists' profits have been removed by multiplication by the 'cost-ratio' ρ. For example, the magnitude $\rho\ a_1p_1$ in the first equation is what the proceeds of capitalists in industry 1 would have to be in order to allow them only to cover their costs, without making any profits. Column i indicates the amounts of the ith commodity inputs needed to produce each commodity, also in price terms. There are n equations in system (12.12), one for each sector, and $n + 1$ variables: the n prices $p_1 \ldots p_n$ and the cost-ratio ρ. Seton demonstrates that the system can be solved for ρ and $n - 1$ *relative* prices.[37] He also demonstrates that Marx was correct in one of his claims: price of production will be greater than, equal to or less than labour value, depending on whether the organic composition of capital in the industry concerned is greater than, equal to or less than the average for the economy as a whole.[38]

The second part of Seton's article deals with the invariance conditions, only one of which is needed to convert relative prices into absolute prices. Seton explores very carefully the special assumptions under which Marx's own conclusions would be valid, with total value equal to total price, total surplus value equal to total profit, and the 'value' rate of profit equal to the 'price' rate of profit. This requires both that the organic composition of capital in department III be equal to the social average, and that the system be in a state of simple (not expanded) reproduction.[39] In general these conditions clearly will not hold and, in any event, 'there does not seem to be an objective basis for choosing any particular invariance postulate in preference to all the others, and to that extent the transformation problem may be said to fall short of complete determinancy'.[40]

Seton's article was a landmark in the modern discussion of the transformation problem. He provided a proof that prices could be derived from labour values in a multi-sector economy, and his formulation was taken over by the great majority of later mathematical economists who dealt with the question, with only minor modifications. Seton also demonstrated the conditions under which the rate of profit is always positive, being one of the first to identify what Michio Morishima would later term the 'Fundamental Marxian Theorem', which states that a positive rate of exploitation guarantees a positive rate of profit, and vice versa (see Chapters 13 and 14 below).[41] However, Seton ended his article on a cautious note: 'While the internal consistency and determinacy of Marx's conception of the transformation process, and the formal inferences he drew from it, have been fully vindicated by this analysis, the same can certainly not be said of the body of the underlying doctrine, without which the whole problem loses much of its substance and *raison d'être*.'[42]

Paul Samuelson, whose technical analysis of Marxian economics was published in the same year as Seton's paper, had even stronger reservations. Samuelson had just co-authored the classic text on linear economics[43] and used the framework to evaluate the Marxian treatment of prices, wages, profits, unemployment and economic growth; only a small section of his article was devoted to the theory of value. He sets out a model of a two-sector economy in which the following relations hold:

$$a_1 \text{ labour} + b_1 \text{ machines} \rightarrow 1 \text{ machine}$$
$$a_2 \text{ labour} + b_2 \text{ machines} \rightarrow 1 \text{ consumer good} \qquad (12.13)$$

Here a_1 and b_1 are the inputs of labour and of machines which are required to produce one machine, and a_2 and b_2 are the corresponding input coefficients in consumer-good production. Writing w as the real wage rate (measured in consumer goods per unit of labour), and r as the profit rate, Samuelson sets capitalists' receipts in each department equal to their costs of production, plus profits, and obtains a two-sector analogue of Seton's system (12.12):

$$(wa_1 + p_1b_1)(1 + r) = p_1$$
$$(wa_2 + p_1b_2)(1 + r) = p_2 \qquad (12.14)$$

Samuelson then derives the prices of the two commodities in terms of the wage:

$$\frac{p_1}{w} = \frac{a_1(1 + r)}{1 - b_1(1 + r)}$$
$$\frac{p_2}{w} = \frac{a_2(1 + r)[1 - b_1(1 + r)] + a_1(1 + r)b_2(1 + r)}{1 - b_1(1 + r)} \qquad (12.15)$$

Samuelson concludes from this that the 'so-called "transformation problem" is rather pointless', since equations (12.14) and (12.15) 'determine all market magnitudes in terms of a_1, b_1; a_2, b_2; r; w'. Labour values are not required. As we saw in section I, this was what Kei Shibata had argued back in 1939, and what Mühlpfort and Dmitriev had realised in the 1890s (see Chapter 3 of volume I of this book). But Samuelson went further. It is certainly possible, he agreed, to 'evaluate all the Marxian expressions as functions of these same variables'. But, he continued, 'logically this transformation goes from exchange values to Marxian-defined values – not vice versa!'[44] Again this was not an original view. It had been anticipated by Lehr in the 1890s (see p. 35 of volume I of this book), and Joan Robinson had made an identical point in 1950: 'the whole argument is condemned to circularity from birth, because the values which were to be "transformed into prices" are arrived at in the first instance by transforming prices into values'.[45]

In fact this is untrue so far as Samuelson's own presentation is concerned. Marx's value magnitudes can be derived from (12.13) in the following way. Writing λ_1 and λ_2 as the value of a unit of each commodity, we have:

$$\begin{aligned} \lambda_1 &= a_1\lambda_1 + b_1 \\ \lambda_2 &= a_2\lambda_1 + b_2 \end{aligned} \tag{12.16}$$

where, for example, a_1 is the amount of direct labour needed to produce one machine, and $b_1\lambda_1$ is the quantity of indirect labour required.

Substitution reveals that:

$$\begin{aligned} \lambda_1 &= \frac{a_1}{1 - b_1} \\ \lambda_2 &= \frac{b_2 a_1}{1 - b_1} + a_2 \end{aligned} \tag{12.17}$$

Once we know λ_1, the value of the constant capital used in each department can be calculated. Given λ_2 and w, the value of labour power can be ascertained. Finally, knowledge of λ_1 and λ_2 establishes the value of output in each sector, and surplus value can be derived as a residual. When one unit of each commodity is produced, we have:

	Constant capital	*Variable capital*	*Surplus value*	*Total value*
Sector 1	$b_1\left[\dfrac{a_1}{1-b_1}\right]$	$wb_1\left[\dfrac{b_2a_1}{1-b_1}+a_2\right]$	$a_1 - wa_1\left[\dfrac{b_2a_1}{1-b_1}+a_2\right]$	$\dfrac{a_1}{1-b_1}$
Sector 2	$b_2\left[\dfrac{a_1}{1-b_1}\right]$	$wa_2\left[\dfrac{b_2a_1}{1-b_1}+a_2\right]$	$a_2(1-w)\left[\dfrac{b_2a_1}{1-b_1}+a_2\right]$	$\dfrac{b_2a_1}{1-b_1} + a_2$

(12.18)

No price magnitudes are involved in (12.18), only the input coefficients a_1, b_1, a_2 and b_2, and the real wage w. Samuelson's claim as to the priority of prices over values would, however, be valid if there were alternative methods of producing one of the two commodities, since the method chosen would depend upon the rate of profit.

In terms very similar to those of Robinson, Samuelson concluded that the Marxian theory of value explains the deviation of prices from values only in the sense that 'truth always equals "error plus a variation" ', the variation in this case being the degree to which the Bortkiewicz price–value ratios differ from unity. The labour theory of value provides an accurate theory of price only when profits are zero. Samuelson praised Ricardo for recognising this where Marx had not. Marx's postulate of an equal rate of exploitation in all industries was merely a 'complicating detour'. 'Marxolaters, to use Shaw's term, should heed the basic economic precept, valid in all societies: Cut your losses!',[46] and abandon the labour theory of value altogether.

Notes

1. P. Sraffa, *The Production of Commodities by Means of Commodities* (Cambridge: Cambridge University Press, 1960).
2. Sraffa, *Production*, pp. v–vi; R.M. Goodwin, 'A Note on Wages, Profits and Fluctuating Growth Rates', *Cambridge Journal of Economics*, 7, 1983, pp. 305–9; M. Blaug, *Great Economists Since Keynes* (Brighton: Wheatsheaf, 1985), pp. 236–8; O.G. Hamouda, (ed.), *Controversies in Political Economy: Selected Essays of G.C. Harcourt* (New York: New York University Press, 1986), pp. 75–110; J. Eatwell and C. Panico, 'Sraffa, Piero', in J. Eatwell, M. Milgate and P. Newman (eds), *The New Palgrave: A Dictionary of Economics* (London: Macmillan, 1987), volume IV, pp. 445–52.
3. R.L. Meek, 'Mr. Sraffa's Rehabilitation of Classical Economics', *Scottish Journal of Political Economy*, 8, 1961, pp. 119–36.
4. P. Sraffa, 'The Laws of Return Under Competitive Conditions', *Economic Journal*, 36, 1926, pp. 535–50; I. Steedman, 'Sraffian Interdependence and Partial Equilibrium Theory', *Cambridge Journal of Economics*, 12, 1988, pp. 85–95.
5. Game theory, which is increasingly recognised as the most general form of neoclassical theory, has never been analysed by Sraffians. It is doubtful whether they would accept even that it was a form of economics. See Ch. 17 below for its possible relevance to Marxism.
6. P. Garegrani, *Il Capitale Nelle Teoria Della Distribuzione* (Milan: Guiffre, 1960) seems to have been the first to state the basic idea of the Sraffian critique of general equilibrium theory.
7. G. von Charasoff, *Karl Marx Über die Menschliche und Kapitalistische Wirtschaft* (Berlin: Hans Bondy, 1909); *Das System des Marxismus: Darstellung und Kritik* (Berlin: Hans Bondy, 1910).
8. The only secondary sources on Charasoff known to us are M. Egidi and G. Gilibert, 'La Teoria Oggettiva dei Prezzi', *Economia Politica*, 1, 1984, pp. 43–61, and H. Duffner and T. Huth, 'Georg Charasoff's Theory of Value, Output and Prices of Production', mimeo, University of Bremen, 1987. See also H.D. Kurz, 'Die Deutsche Theoretische Nationalökonomie zu Beginn des 20. Jahrhunderts Zwischen Klassik und Neoklassik', in B. Schefold (ed.), *Studien zur Entwicklung der Ökonomischen Theorie VIII* (Berlin: Duncker & Humblot, 1989), pp. 44–6.
9. O. Bauer, 'Marx–Literatur', *Der Kampf*, February 1911, pp. 237–8.
10. H. Grossmann, 'Die Wert–Preis Transformation bei Marx und das Krisenproblem', *Zeitschrift für Sozialforschung*, 1, 1932, pp. 55–84, reprinted in Grossmann, *Aufsätze zur Krisentheorie* (Frankfurt am Main: Verlag Neue Kritik, 1973), pp. 45–74; cf. volume I, Ch. 16, of this book.
11. F. Petry, *Der Soziale Gehalt der Marxschen Werttheorie* (Jena: Gustav Fischer, 1916); see also R. Hilferding, review of Petry, *Grünberg's Archiv für die Geschichte des Sozialismus und der Arbeiterbewegung*, 1919, pp. 439–48.

12. I.I. Rubin, *Essays on Marx's Theory of Value* (Montreal: Black Rose, 1973), Ch. 18; for Rubin's use of equilibrium terminology see Rubin, *Essays*, pp. 67, 224, 229, 233. (This is a translation of the third, 1928 edition; the book presumably first appeared in the early 1920s.)
13. E.J. Walter, 'Zum Problem der Wertrechnung und Preisrechnung nach Bortkiewicz', *Zeitschrift für Schweizerische Statistik und Volkswirtschaft*, 72, 1936, pp. 376–91.
14. O. Kühne, *Untersuchungen Über Wert- und Preisrechnung des Marx'schen Systems* (Greifswald: L. Bamberg, Greifswalder Staatswissenschaftliche Abhandlungen, 1922).
15. N. Moszkowska, *Das Marxsche System: Ein Beitrag Zu Dessen Aufbau* (Berlin: Verlag Hans Robert Engelmann, 1929), Ch. 1.
16. Ibid, p. 24 n21. On Tugan–Baranovsky see Ch. 10 of volume I of this book.
17. K. Shibata, 'On the General Profit Rate', *Kyoto University Economic Review*, 14, 1939, pp. 40–66.
18. J. von Neumann, 'A Model of General Economic Equilibrium', *Review of Economic Studies*, 13, 1945, pp. 1–9.
19. R. Dorfman, P. Samuelson and R. Solow, *Linear Programming and Economic Analysis* (New York: McGraw–Hill, 1958), Chs 9 and 10.
20. Ibid, p. 45.
21. Ibid, pp. 46–7.
22. P.M. Sweezy, *The Theory of Capitalist Development* (New York: Monthly Review Press, 1970; first published 1942), Ch. 7; cf. J. Robinson, *An Essay on Marxian Economics* (London: Macmillan, 1942), Ch. 3 and M.H. Dobb, review of Sweezy, *Science and Society*, 7, 1943, pp. 270–5. There is no entry for either 'Bortkiewicz' or 'transformation problem' in the index of Dobb's *Political Economy and Capitalism* (London: Routledge, 1937).
23. Sweezy, *Theory*, pp. 122–3; cf. Dobb, review, p. 271, where he describes the transformation problem as having 'mainly a formal significance'.
24. Sweezy, *Theory*, pp. 128–30; cf. O. Lange, 'Marxian Economics and Modern Economic Theory', *Review of Economic Studies*, 2, 1935, pp. 189–201.
25. J. Winternitz, 'Values and Prices: A Solution to the So–Called Transformation Problem', *Economic Journal*, 58, 1948, pp. 276–80.
26. Ibid, p. 278.
27. Winternitz, 'Values and Prices', pp. 279–80.
28. P.M. Sweezy, 'Editor's Introduction' to Sweezy (ed.), *Karl Marx and the Close of his System* (New York: Kelley, 1966; first published 1949), p. xxxii. Sweezy refers (n.2) to a longer version of Winternitz's paper; to the best of our knowledge this was never published.
29. K. May, 'The Structure of Classical Value Theories', *Review of Economic Studies*, 17, 1949–50, pp. 60–9; cf. May, 'Value and Price of Production: A Note on Winternitz's Solution', *Economic Journal*, 58, 1948, pp. 596–9.
30. May, 'Structure', pp. 68–9.
31. Ibid, p. 67; May, 'Value and Price', p. 596; cf. R.L. Meek, *Studies in the Labour Theory of Value* (London: Lawrence & Wishart, 1956), p. 196, and J. Robinson, review of Sweezy, *Karl Marx*, *Economic Journal*, 60, 1950, pp. 358–63.
32. M.H. Dobb, 'A Note on the Transformation Problem', pp. 273–9 of Dobb, *On Economic Theory and Socialism* (London: Routledge & Kegan Paul, 1954). In a 'Postscript' (pp. 279–91), Dobb states that the note had been privately circulated, but not published; one can only guess at the circumstances.
33. R.L. Meek, 'Some Notes on the "Transformation Problem"', *Economic Journal*, 66, 1956, pp. 94–107, reprinted in Meek, *Economics and Ideology and Other Essays* (London: Chapman & Hall, 1967), pp. 143–57.

34. D. Laibman, 'Values and Prices of Production: The Political Economy of the Transformation Problem', *Science and Society*, 37, 1973–4, pp. 404–36. Laibman, however dissociated himself from Meek: see section III of Ch. 14 below.
35. F. Seton, 'The "Transformation Problem"', *Review of Economic Studies*, 24, 1957, pp. 149–60; P.A. Samuelson, 'Wages and Interest: a Modern Dissection of Marxian Economic Models', *American Economic Review*, 47, 1957, pp. 884–912.
36. Seton, '"Transformation Problem"', p. 150.
37. Ibid, pp. 150–2.
38. Ibid, pp. 157–60.
39. Ibid, pp. 154–6.
40. Ibid, p. 153; original stress deleted.
41. All these conclusions are contained in one footnote: ibid, p. 151, n.2.
42. Ibid, p. 160.
43. R. Dorfman, R.M. Solow and P.A. Samuelson, *Linear Programming and Economic Analysis* (New York: McGraw-Hill, 1957).
44. Ibid, p. 890.
45. Robinson, review, p. 362.
46. Samuelson, 'Wages and Interest', pp. 891–2.

13
Sraffa and the Critique of Marxian Theory

I The 'Capital Controversies' and the Return of Samuelson

Marxian economics was at a very low ebb in 1957, and no one sprang to the defence of Marx against Samuelson's strictures. The political climate remained profoundly hostile, with the Cold War and vestigial McCarthyite pressures still very strong in the United States, and the communist parties of Western Europe fracturing in the wake of the Hungarian revolution and Khrushchev's revelations concerning the Stalin era. There were at this time few professed Marxian economists of any academic standing – as we saw in Chapter 6 above, Paul Baran was the only full professor in the entire United States who claimed to be a Marxist – and none capable of taking on an opponent as technically formidable as Samuelson. The evident failure of Marxism to explain the long post-war boom (see Part III above) had in any case weakened the ability of such theorists as Sweezy, Dobb and Baran himself to resist the influence of bourgeois economies.

The reopening of the debate on Marx's theory of value occurred only after a combination of circumstances had seemingly strengthened Marxian analysis. Interest grew with the first signs of a faltering in the 'long boom', apparent from about 1966, and the student radicalism which reached a climax two years later. And this more favourable milieu for the reception of Marxian ideas was coupled with significant developments at the intellectual level. Piero Sraffa's *The Production of Commodities by Means of Commodities*, published in 1960, was to engender the 'Capital Controversies', fatally undermining those forms of neoclassical theory which had always been most aggressive towards the socialist movement.[1]

The first casualty was the theory associated with J.B. Clark who, at the end of the nineteenth century, formalised the idea that distribution could be consistently explained in 'trinitarian' terms. The remuneration of each of the 'factors of production' – land, labour and capital – was explained by each

Biography of Piero Sraffa

Piero Sraffa was born in Turin in 1898, the son of a professor of law. Between 1916 and 1920 he attended the University of Turin, where he came under the influence of socialist ideas and, in 1919, established an enduring friendship with Antonio Gramsci. The appearance of his article, 'The Laws of Return under Competitive Conditions', in the *Economic Journal* in 1926, which attacked Marshall's theory of value, established his reputation as a theorist of considerable brilliance. He accepted a position at Trinity College, Cambridge, in the following year, and remained there until his death in 1983. The two subsequent works for which Sraffa is most famous are his editing of Ricardo's *Works*, and *The Production of Commodities by Means of Commodities*, but all of his contributions to economic theory were marked by great originality and finesse. At Cambridge he influenced both Maurice Dobb and Joan Robinson, as well as a large number of talented students, including Ronald Meek, Pierangelo Garegnani and Luigi Pasinetti. However, he took virtually no public role in the great controversies which his theories engendered.

factor's relative scarcity and its productive contribution to output. Clark used his results to argue vociferously against all theories of exploitation, and to justify the distribution of income under capitalism.[2] During the twentieth century these polemical aspects of the theory were partially suppressed, but the more analytical content proved extremely influential among neoclassical theorists. In the mid-1960s the Sraffian critics demonstrated that this analysis was in fact logically incoherent, except in very special circumstances. Factors of production (as Clark and his successors conceived of them) did not receive their marginal products; in particular, the productivity of capital played no role in explaining profits.[3]

Böhm-Bawerk's alternative formulation of neoclassical ideas on capital and profit,[4] which served as a basis for his own direct attack on Marx's theory of value (see Chapter 3 of volume I of this book), proved no more secure. Sraffa's results indicated that the Austrian reduction of produced means of production to a series of dated 'original' factors of production – labour and land – could not be performed in the case of production processes using fixed capital. Furthermore, even with circulating capital technologies, Böhm-Bawerk's theory of accumulation and distribution was shown to be fatally flawed on other grounds.[5]

All this seemed to confirm the long-standing Marxian critique of 'vulgar economy'. As Marxists had always maintained, capitalist relations of production could not be absorbed into technology. If the means of production were treated fetishistically the consequence was logical incoherence, not simply conceptual confusion.[6] For a time this greatly strengthened the position of Marxian economists. Maurice Dobb and Ronald Meek, as well as others influenced by Sraffa's ideas, attempted to use *The Production of Commodities* to bring about a full-scale renaissance of Marxian political economy (see Chapter 15 below). In doing so the earlier objections raised by Dmitriev and Bortkiewicz against neoclassical theory were thrown into relief, and it was now very much the turn of orthodox supply and demand theorists to be in retreat.

In fact, leading neoclassical economists quickly accepted that the offensive against Clarkian and Austrian analysis had been successful.[7] However, not only did they maintain that the leading form of their theory – Walrasian general equilibrium analysis – remained unscathed, but there were various attempts to use Sraffian analysis against Marxian value theory, the most prominent of which was undertaken by Paul Samuelson in the early 1970s (see Chapter 14 below).[8] So far as quantitative value theory was concerned, Samuelson's critique of Marx proved to be correct in a much more fundamental sense than he himself realised at the time. Sraffian economists would soon extend the criticism of Marx far beyond the charge that the transformation problem was a 'complicating detour'.[9] And it appeared to many Marxists, as well as to neoclassical writers, that the attack on Marx was even more destructive than had been the results of the 'Capital Controversies' against neoclassical theory a decade earlier. The remainder of this chapter outlines the Sraffian critique of Marx, and the following two chapters deal with Marxist reactions. However, as Chapter 15 makes clear, the Sraffians were much more favourably disposed to Marxian economics than to neoclassical analysis. They argued that *The Production of Commodities*, properly understood, would allow the revival of Marxian value theory in a reconstituted form.

II The 'Complicating Detour' Confirmed

Samuelson's charge that the transformation problem was a 'complicating detour' was not a new one. As we saw in Chapter 3 of volume I of this book, at the turn of the twentieth century Mühlpfort, Dmitriev and Bortkiewicz had each suggested that prices of production could be determined from knowledge of physical input coefficients and the wage, without the intervention of labour values. In the 1930s Shibata provided an explicit demonstration of how this could be achieved in the context of a very simple model of production. An implicit proof that this was also possible for the *n*-sector case was furnished by Seton's famous article of 1957, while Joan Robinson had claimed since the early 1940s that value analysis was redundant (see Chapter 12 above). One of the most striking aspects of Sraffa's work is that it confirmed these conclusions and, moreover, did so for very much more complex cases. Sraffa's analysis encompassed joint production technologies as well as single-product activities; fixed and circulating capital; the use of non-produced inputs like land in addition to produced commodities; and the existence of alternative production processes. In each case Sraffa showed how equilibrium prices could be derived directly from information concerning conditions of production and the distribution of income.[10]

This may be illustrated by considering the technology in Table 13.1, which is one of the more complicated systems treated by Sraffa (but not the most complex, which would also include non-produced goods and recognise that the production processes had been drawn from a larger set of alternatives).[11] The a_{ij} represent inputs of commodity j in process i, b_{ij} are the corresponding outputs, and the l_i are the amounts of direct labour which are used. The system therefore incorporates joint production, since there can be more than one output from each process. It also allows there to be items of fixed capital. Some of the a_{ij} may represent machines of various types and ages, in which case they would also be represented on the right-hand side of the arrow by appropriate b_{ij}s, signifying that the process reproduces them as machines which are one period older. In other words, a durable capital good is treated as a set of disparate commodities differing by stage of obsolescence, so that the older goods which remain at the end of the production period are treated as by-products of the process.[12]

Table 13.1 *A Sraffian technology involving joint production and fixed capital*

$$a_{11} + a_{12} + \dots a_{1n} + l_1 \rightarrow b_{11} + b_{12} + \dots b_{1n}$$

$$a_{21} + a_{22} + \dots a_{2n} + l_2 \rightarrow b_{21} + b_{22} + \dots b_{2n}$$

$$\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots$$

$$a_{n1} + a_{n2} + \dots a_{nn} + l_n \rightarrow b_{n1} + b_{n2} + \dots b_{nn}$$

Table 13.2 *The system of Table 13.1 written in price terms*

$$(a_{11}p_1 + \dots a_{1n}p_n)(1 + r) + l_1w = b_{11}p_1 + \dots b_{1n}p_n$$

$$(a_{21}p_1 + \dots a_{2n}p_n)(1 + r) + l_2w = b_{21}p_1 + \dots b_{2n}p_n$$

$$\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots$$

$$(a_{n1}p_1 + \dots a_{nn}p_n)(1 + r) + l_nw = b_{n1}p_1 + \dots b_{nn}p_n$$

Table 13.3 *The system of Table 13.1 written in value terms*

$$a_{11}\lambda_1 + \ldots a_{1n}\lambda_n + l_1 = b_{11}\lambda_1 + \ldots b_{1n}\lambda_n$$

$$a_{21}\lambda_1 + \ldots a_{2n}\lambda_n + l_2 = b_{21}\lambda_1 + \ldots b_{2n}\lambda_n$$

....

$$a_{n1}\lambda_1 + \ldots a_{nn}\lambda_n + l_n = b_{n1}\lambda_1 + \ldots b_{nn}\lambda_n$$

Obviously some of the a_{ij} and b_{ij} may be zero, since not all processes will necessarily utilise all inputs and produce every output. And some may be single-product processes, where all b_{ij}, save one, are zero. But on Sraffa's assumptions, and irrespective of the exact nature of the input–output relations, prices can be derived directly from the conditions of production, supplemented by information on the distribution of income (that is, the level of the wage or rate of profit).[13]

The system in price terms is shown in Table 13.2. This incorporates Sraffa's usual treatment of wages as paid in arrears at the end of the production period, so that the 'wage fund' is not part of the capital on which profit accrues.[14] The p_i are equilibrium prices, w is the wage, and r is the rate of profit. Provided that either w or r is taken as exogenous, all commodity prices and the value of the other distributional variable (r or w) can be determined. This may be seen intuitively by noting that there are n processes of production and $n + 1$ endogenous variables ($p_1 \ldots p_n$, and either r or w). Since one price can be eliminated by taking it as the unit of price measurement (setting its value equal to unity), we have sufficient information to solve for all other prices and the other distributional magnitude.[15]

That this proves to be possible should not really occasion surprise. Labour values are *derived* magnitudes, which depend upon exactly the same factors as do prices. Marx himself worked from labour values to prices of production. But as Table 13.3 indicates, these labour values (λ_i) can be determined only from the information on input-output relations contained in Table 13.1. Marx's 'journey' therefore involves a detour which is redundant from the viewpoint of quantitative value theory, as can be seen from Figure 13.1. Marx's procedure is to move from conditions of production and income distribution, through a detour into labour values and surplus values, to prices of production and profits. Sraffa's more direct route misses out the calculation of values and surplus values, but has the same starting-point and the same destination.

Sraffa's 'solution' to the transformation problem is thus one in which the problem is solved by side-stepping it in favour of the more fundamental issue of deriving commodity prices and the rate of profit from data on conditions of production and income distribution. So far as quantitative value theory is concerned, Marx's approach is both excessively elaborate and disguises the

Figure 13.1 *Sraffa's and Marx's 'journeys' compared*

MARX'S JOURNEY	Conditions of production Real wage →	Values Surplus value →	Transformation algorithm →	Prices of production Rate of profit
SRAFFA'S JOURNEY	Conditions of production Real wage →		→	Prices of production Rate of profit

real nature of the causation. Therefore Mühlpfort, Dmitriev, Bortkiewicz, Shibata and Samuelson, in questioning Marx's claim for the logical priority of values,[16] all receive powerful confirmation for their views in *The Production of Commodities.*

Sraffa's analysis also reinforces the arguments of some earlier critics who had found Marx's other assertions on the relation of labour values to prices of production to be problematic. Thus Bortkiewicz was correct to defend Ricardo, and criticise Marx, on the irrelevance of the production of luxuries to the determination of the profit rate.[17] Sraffa also corroborates Bortkiewicz's proof that, in general, the profit rate cannot be represented by Marx's formula $s/(c + v)$;[18] the inappropriateness of aggregating values into c, v and s, which Kenneth May pointed to;[19] Tugan-Baranovsky's criticism of Marx's law of the falling rate of profit;[20] and Lehr's accusation that, once alternative processes of production are allowed, it is labour values that become logically dependent upon prices, rather than the other way round.[21]

Powerful as all this is, Sraffa's analysis goes far beyond the rigorous confirmation of the work of other critics. His own framework can be used to demonstrate even more fundamental deficiencies in Marx's theory of value. Transformation is not only a 'complicating detour'; the excursion may actually prove to be impossible. Moreover, even in cases where Marx's extended journey is feasible, the important relations of exploitation which he believed to be revealed by it cannot always be established. In other words, the 'complicating detour' turns out to be a dead end. These two issues form the subject matter of the next two sections. Section V then indicates how *The Production of Commodities* suggests that the damage can be minimised.

III The Non-Existence of the 'Complicating Detour'

Marx invariably treated the labour values of produced commodities as positive magnitudes, as did both later critics and defenders of Marxian economics. Then, in 1975, Ian Steedman pointed out that Sraffa's analysis revealed the existence of contrary cases.[22] The consequences of this are dramatic. First, labour values may not be defined, or they may be zero, so that Marx's transformation cannot be undertaken; his route to prices of production simply does not exist, and Sraffa's 'journey' is the only one possible. Second, labour values can be negative. This, together with the possibility that labour values may be zero, in turn undermines the Fundamental Marxian Theorem which states that positive profits imply, and are implied by, positive surplus value. In fact, however, a positive rate of profit may be associated with a negative or zero rate of exploitation, and positive profits can co-exist with negative or zero surplus value.

These are counter-intuitive results. If direct labour is utilised in all production processes, how can outputs fail to have well-defined labour values, and how could these values be anything other than positive? This section deals with the first question, and the following section with the second problem. We begin by providing two numerical examples which generate undefined and zero labour values respectively.[23]

Table 13.4 depicts one particular case from that family of Sraffian systems represented in Table 13.1. The corresponding price equations are written in Table 13.5, and there exists an economically meaningful equilibrium. Assuming that commodity 1 acts as the unit of price measurement (so that $p_1 = 1$) and that the real wage is one unit of commodity 2, paid in arrears, equilibrium is given by $p_1 = 1$, $p_2 = 4$, $w = 4$ and $r = 0.25$. However, we cannot reach this conclusion through Marx's 'detour' into labour values. In Table 13.6 the system is written in value terms; it leads to the inconsistent equations:

$$\begin{aligned} \lambda_1 + \lambda_2 &= 1 \\ 2\lambda_1 + 2\lambda_2 &= 1 \end{aligned}$$

so that labour values cannot be computed, and there are, in consequence, no clearly specified value magnitudes to transform into prices of production.

Table 13.4 *A numerical example of the type of system represented in Table 13.1*

	Inputs				*Outputs*	
	Commodity 1	*Commodity 2*	*Labour*		*Commodity 1*	*Commodity 2*
Process 1	4	0	1	→	5	1
Process 2	0	6	1	→	2	8

Table 13.5 *The system of Table 13.4 written in price terms*

$$4p_1(1 + r) + w = 5p_1 + p_2$$
$$6p_2(1 + r) + w = 2p_1 + 8p_2$$

Table 13.6 *The system of Table 13.4 written in value terms*

$$4\lambda_1 + 1 = 5\lambda_1 + \lambda_2$$
$$6\lambda_2 + 1 = 2\lambda_1 + 8\lambda_2$$

A similar conclusion follows if some labour values are zero. This possibility is illustrated in Tables 13.7 to 13.9. Again taking commodity 1 as the unit of price measurement, and assuming that the real wage is one unit of commodity 2, paid in arrears, an economically meaningful equilibrium exists, with $p_1 = 1$, $p_2 = 2/3$, $w = 2/3$ and $r = 0.25$. But, as with the first example, Marx's 'complicating detour' is not possible. The value system in Table 13.9 implies that $\lambda_1 = 0$ and $\lambda_2 = 1$, so that the labour value for commodity 1 vanishes and there is again nothing to transform.

Table 13.7 *A second numerical example of the type of system represented in Table 13.1*

	Inputs				*Outputs*	
	Commodity 1	*Commodity 2*	*Labour*		*Commodity 1*	*Commodity 2*
Process 1	4	0	1	→	5	1
Process 2	0	12	1	→	2	13

Table 13.8 *The system of Table 13.7 written in price terms*

$$4p_1(1 + r) + w = 5p_1 + p_2$$
$$12p_2(1 + r) + w = 2p_1 + 13p_2$$

Table 13.9 *The system of Table 13.7 written in value terms*

$$4\lambda_1 + 1 = 5\lambda_1 + \lambda_2$$
$$12\lambda_2 + 1 = 2\lambda_1 + 13\lambda_2$$

These results seem strange because there is a tendency to think of labour values in the context of single-product production processes, where indeterminate and zero values cannot occur; they arise only in joint production systems. But these cannot be dismissed as complicating details of limited relevance, since they are pervasive in any actual economy: the slaughter of sheep, for example, yields wool, hides, blood, offal and various cuts of meat.[24] It is also possible to provide an intuitive explanation of these apparently perverse results. If positive amounts of direct labour are used in production processes, the labour value of the net output must be equal to the total quantity of this direct labour. The net product in the system represented in Table 13.4 is (5 − 4) + (2 − 0) = 3 units of commodity 1, plus (1 − 0) + (2 − 0) = 3 units of commodity 2. Since the direct labour inputs are 2, this net product must have a total labour value of 2. However, it is not possible to allocate this labour value between the component parts of the surplus product because each process produces net outputs in the same proportions.

A necessary condition for the calculation of individual labour values, therefore, is that the processes produce net outputs in different proportions. This is met by the system in Table 13.7, where net output is (5 − 4) + (2 − 0) = 3 units of commodity 1 and (1 − 0) + (13 − 12) = 2 units of commodity 2. But in this case process 2 is physically more productive with regard to commodity 1, and has the same productivity in the production of commodity 2. Even though the net output as a whole will have a labour value equal to 2 (which is the amount of direct labour used in the system), the labour value of commodity 1 must be zero. If we were to keep the total labour input constant, but to transfer part of it from process 1 to process 2, we would increase the production of commodity 1 while that of commodity 2 remains the same. Since the labour value of the total net output must remain unchanged at 2, the labour value of commodity 1 must be zero.

IV The Marxian Detour as a Dead End

In this section another consequence of joint production is illustrated which is no less damaging for Marx's theory. Even if labour values are determinate and non-zero, some may be negative. This can undermine the Fundamental Marxian Theorem which connects surplus value to profit, as is shown in a third numerical example presented in Tables 13.10 to 13.12. Assuming as before that $p_1 = 1$, and the real wage is one unit of commodity 2, paid in arrears, the price equilibrium derived from Table 13.11 is : $p_1 = 1, p_2 = 2$, $w = 2$ and $r = 0.25$ The labour value of commodity 2, however, is negative, since Table 13.12 generates $\lambda_1 = 1\frac{1}{2}$ and $\lambda_2 = -\frac{1}{2}$.

Table 13.10 *A third numerical example of the type of system represented in Table 13.1*

	Inputs				Outputs	
	Commodity 1	*Commodity 2*	*Labour*		*Commodity 1*	*Commodity 2*
Process 1	4	0	1	→	5	1
Process 2	0	16	1	→	2	20

Table 13.11 *The system of Table 13.10 written in price terms*

$$4p_1 (1 + r) + w = 5p_1 + p_2$$
$$16p_2 (1 + r) + w = 2p_1 + 20p_2$$

Table 13.12 *The system of Table 13.10 written in value terms*

$$4\lambda_1 + 1 = 5\lambda_1 + \lambda_2$$
$$16\lambda_2 + 1 = 2\lambda_1 + 20\lambda_2$$

Again this result seems odd, but it is easily explained intuitively. The net output of the system in Table 13.10 is $(5 - 4) + (2 - 0) = 3$ units of commodity 1, plus $(1 - 0) + (20 - 16) = 5$ units of commodity 2, with process 2 being physically more productive with regard to both commodities. Consequently labour could be transferred from process 1 to process 2, and more of both commodities could be produced as net output. However, this larger net output must embody no more labour than that saved by reducing the operation of the least productive process. This is only possible if one commodity has a negative labour value.

Together, the two numerical examples of the previous section and the one just considered lead to a general conclusion: the labour values of all commodities will be determinate and positive only when net outputs are produced in different proportions by the different processes, and when no process dominates in productivity. As we have seen, such conditions are not required to prevail for price equilibria to exist. Thus models in which processes produce net outputs in the same proportions, and systems in which one process is more productive than others, are perfectly acceptable. In particular, the fact that one process dominates in productivity does not imply that other processes cannot be profitably used by capitalists; in an equilibrium all processes are equally profitable.

So far as transformation is concerned, negative labour values – unlike indeterminate and zero values – need pose no special difficulty. The units in which commodities are measured are arbitrary. It is therefore possible to take units to be embodied labour values whenever they can be calculated and are non-zero. Prices then become prices 'per unit of labour value', or price–value ratios. Given the wage, and a designated unit of measurement for price–value ratios, a solution could exist for those prices and the rate of profit. In the case where there are negative labour values, a negative entry for inputs and outputs would occur. However, this would indicate only that an economically meaningful solution would involve the corresponding price–value ratios being non-positive, so that the purchase and sale of such commodities involve positive expenditures.

But transformation cannot now accomplish what Marx considered essential, namely, to show that a positive rate of profit has its origin in a positive rate of surplus value. Calculating the magnitudes of the constant and variable capitals, and surplus values, we find that the system in Table 13.10 has $c_1 = 6$, $c_2 = -8$, $v_1 = -\frac{1}{2}$, $v_2 = -\frac{1}{2}$, $s_1 = 1\frac{1}{2}$ and $s_2 = 1\frac{1}{2}$. Thus the rate of exploitation is negative, while the rate of profit is positive (at $r = 0.25$). Calculations for the example in Table 13.7 reveal that $c_1 = 0$, $c_2 = 12$, $v_1 = 1$, $v_2 = 1$, $s_1 = 0$, and $s_2 = 0$. There is no surplus value in the system, and the rate of surplus value is zero, even though the rate of profit is again positive (at 0.25).

It is also possible to find production systems in which there is negative surplus value and positive profits (and not just a negative *rate* of surplus value coexisting with a positive *rate* of profit). Steedman's original example is reproduced in Table 13.13. Assuming the unit of price measurement to be the wage (so that $w = 1$), and the real wage – paid in arrears – to consist of $\frac{1}{2}$ unit of commodity 1 and 5/6 units of commodity 2, the equilibrium is $p_1 = 1/3$, $p_2 = 1$, $w = 1$ and $r = 0.2$. Total profits are $9\,^1/_6$, and positive. However, aggregate surplus value equals -1, and is negative.

Table 13.13 *Steedman's example*

	Inputs				*Outputs*	
	Commodity 1	*Commodity 2*	*Labour*		*Commodity 1*	*Commodity 2*
Process 1	25	0	5	→	30	5
Process 2	0	10	1	→	3	12

Thus the Fundamental Marxian Theorem does not hold generally. A positive rate of surplus value is not a necessary condition for a positive profit rate, and positive surplus value is not necessary for positive profits. Consequently, exploited labour is not in general a 'prior concrete magnitude . . . which could possibly be regarded as constituting the ultimate source of profits'.[25] This has ramifications beyond value and exploitation theory. The fact that labour values can be undetermined, negative or zero makes Marx's original analysis of the 'laws of motion' suspect, for these laws are presented in terms of aggregate value categories (c, v and s) which are assumed to be well-defined positive magnitudes. Thus, even in the absence of other considerations, the possibility that some aggregate value categories are undetermined or of perverse sign would generate scepticism about Marx's macroeconomic 'laws of motion'.

One particular 'law of motion' is the proposition that the organic composition of capital rises with capitalist development. Considering this 'law', Ernest Mandel writes that

> the absolute inner limit of the capitalist mode of production . . . lies in the fact that the mass of surplus value itself necessarily diminishes as a result of the elimination of living labour power from the production process in the course of the final stage of mechanization – automation. Capitalism is incompatible with fully automated production . . . because this no longer allows the creation of surplus value.[26]

If this is interpreted as the claim that positive surplus labour is a necessary condition for positive profits, then it was refuted as early as 1898 by Dmitriev,[27] and again by Sraffa's *Production of Commodities*. Imagine that the production processes in the numerical example of Table 13.10 are fully automated, so that the direct labour inputs in each case are zero instead of unity. Table 13.11 will be exactly as before, except that the w terms vanish because no direct labour is used. A positive rate of profit and positive equilibrium prices, however, will still exist; assuming commodity 1 to be the numeraire, the solution is $p_1 = 1$, $p_2 = 0.7$ and $r = 0.425$. Mandel's argument is clearly wrong. Providing only that there is a physical surplus of commodities – whether or not produced with direct labour – profits are positive.[28]

This conclusion, however, is not damaging to Marx's theory of surplus value, which was specific to capitalist society; a fully automated economy is, by definition, non-capitalist, since it uses no wage labour. Nonetheless, it does indicate a more serious problem for Marx's theory of value and exploitation. Even in non-automated economies where the difficulties of calculating labour values and carrying out transformation are absent, Marx's belief in the unique surplus-creating properties of labour power is problematical. In such circumstances one could, for instance, compute oil-coefficients which indicate the amount of oil embodied in each commodity, and these could be 'transformed' into prices of production in the same way that Marxian economists have traditionally transformed labour values. Moreover, 'profits are positive if and only if each produced commodity possesses the property of exploitability . . . Every produced commodity used in production must be capable of giving up such a surplus . . . for any . . . profits . . . to be forthcoming'.[29] From this viewpoint there is nothing special about labour-power, contrary to what Marx believed.

V A New Sraffian Detour in the Spirit of Marx

Can anything be saved from this wreckage? A full answer to this question must await discussion of the post-Sraffa debate on the transformation problem in Chapter 14, and the critical evaluation of Sraffa's own work in Chapter 15. But there is one line of defence suggested by *The Production of Commodities* which can be outlined here. It applies only to the theory of exploitation, and offers nothing to repair the damage done to the Marxian theory of value. Nor does it address the problem highlighted at the end of section IV. Nevertheless, since Marxists may argue that value theory was primarily a vehicle for the analysis of surplus value, they could perhaps accept the criticisms of sections II, III and IV and yet claim that the analysis dealt with here ultimately substantiates the heart of Marx's political economy, since the theory of value itself is of secondary importance, full automation does not exist, and it can be argued that exploitation has meaning only in relation to labour power (see Chapter 14 below). Furthermore, the Sraffian argument about to be considered is clearly within a Marxian tradition; it refers to one of Marx's initial contentions, subjects it to rigorous scrutiny, and then indicates that the original formulation is correct in spirit, if not in letter.

As part of his analysis of transformation Marx maintained (i) that a commodity which was produced by a process with an organic composition of capital equal to that of the economy as a whole would have a price of production equal to its labour value; and (ii) that its own conditions of production would be sufficient to determine the rate of profit. Treating his conception of the profit rate and his method of transformation as unproblematic, this proposition is correct. Marx's formula for the rate of profit can be written as $e/(k + 1)$ by dividing the numerator and denominator of the more usual expression $s/(c + v)$ *by* v, where e is the rate of surplus value and k is the economy-wide organic composition of capital. Since e is the same in all sectors, and the 'average' industry has an organic composition equal to k, the profit rate of this industry (calculated from its own labour value categories, c, v and s) must be equal to that prevailing throughout the system as a whole. This means that it receives as profit all its own surplus value and nothing more than its own surplus value so that, in Marx's transformation procedure, its price of production is equal to its labour value.[30]

The argument is in fact flawed, both because Marx was wrong to believe that the profit rate could be represented by $s/(c + v) = e/(k + 1)$, and because his transformation applied only to outputs.[31] However, Sraffa's analysis indicates that the idea of an 'average industry', serving as a surrogate for the whole economy, can be given an alternative expression, and Marx's argument can be substantiated. In *The Production of Commodities* Sraffa argues that the proportions of any of the systems of production which he considers may be altered by expanding and contracting the various industries, while the properties of the original system remain unchanged.[32] In the rearranged system, which Sraffa terms the standard system, the following propositions hold:

1. the total output of each commodity bears the same proportion to its use in aggregate as an input;
2. the ratio of the net product to capital in the standard system gives the maximum rate of profit, both for that system and for the system in its original proportions;
3. when this net product (referred to by Sraffa as the standard commodity) is taken as the unit of price measurement, the rate of profit in the standard system corresponding to any wage is equal to the rate of profit in the original system for the same wage;
4. the equilibrium price of the standard commodity will equal its labour value, and the rate of profit in the original system can be represented as a ratio of surplus value to capital in the standard system.[33]

These propositions can be illustrated with the aid of a simple numerical example. It is easiest to do so without entering into the complexities arising from joint production (which will be considered in Chapter 15 below). Thus, instead of using one of the examples already presented, a new one is provided in Tables 13.14 and 13.15.[34] In the original system, aggregate input-output proportions vary; the proportion for commodity 1 is unity; it is (45/28.5) or 1.6 for commodity 2; and it is (48/41) or 1.2 for commodity 3. These ratios can be brought into standard proportions by enlarging process 1 by a factor of 4/3, scaling down process 2 to 4/5 of its former size, and leaving process 3 in its initial state. Now the aggregate input–output proportions are the same: $24/20 = 36/30 = 48/40 = 1.2$.

This magnitude, which Sraffa represents by the symbol $(1 + R)$, defines the maximum rate of profit for the standard system, and also for the original system. Regarding the standard system, R cannot be increased no matter what happens to relative prices. So far as the original system is concerned, if we write the system of Table 13.14 in the price terms of Table 13.2, and set the wage equal to zero (so all the net product accrues as profit), the resulting rate of profit will equal R ($= 0.2$), and this is again the maximum profit rate. More generally, as Sraffa points out, the original system 'consists of the

Table 13.14 *The original system from which a standard system is constructed in Table 13.15*

	Inputs					*Outputs*		
	Cdty 1	*Cdty 2*	*Cdty 3*	*Labour*		*Cdty 1*	*Cdty 2*	*Cdty 3*
Process 1	9	12	6	3/16	→	18	0	0
Process 2	5	12.5	15	5/16	→	0	45	0
Process 3	4	4	20	8/16	→	0	0	48
Totals	18	28.5	41	1		18	45	48

Table 13.15 *The standard system for the system of Table 13.14*

	Inputs					*Outputs*		
	Cdty 1	*Cdty 2*	*Cdty 3*	*Labour*		*Cdty 1*	*Cdty 2*	*Cdty 3*
Process 1	12	16	8	4/16	→	24	0	0
Process 2	4	10	12	4/16	→	0	36	0
process 3	4	4	20	8/16	→	0	0	48
Totals	20	30	40	1		24	36	48

same basic equations as the Standard system, only in different proportions', and 'particular proportions . . . cannot alter. . . mathematical properties'.[35]

If the standard commodity is used as the unit of price measurement, so that in our example $4p_1 + 6p_2 + 8p_3 = 1$, and the wage is set at any feasible level, then, because of this property, the rate of profit will be the same in both the standard and the original system. And it is capable of a very simple representation in terms of the categories of the standard system:

$$r = \frac{\text{net product} - \text{wages}}{\text{aggregate means of production in price terms}} \qquad (13.1)$$

Given that Sraffa assumes the total labour used in the whole system to be equal to one unit, it follows that

$$r = R(1 - w) \qquad (13.2)$$

where w is the wage (measured in units of the standard commodity).[36] Thus, for our numerical example, if $w = 0.5$ then $r = 0.1$ in both the original system and the standard system.

This in turn allows a Marxian representation of the rate of profit. The labour value of the net product of any system of production must equal the total direct labour used in that system (see section III above). Thus in the case of the standard system it must equal unity, and the price of the standard commodity is equal to its labour value. Furthermore, the rate of profit in the standard system can always be represented as the ratio of the system's surplus value to the labour value of the aggregate means of production. The labour value of the net product of the standard system can be decomposed into v_s and s_s, where v_s is the labour value of the wage and s_s is the residual surplus value; the subscript s denotes the standard system. The labour value of the means of production in the standard system can, similarly, be denoted by c_s. Hence the maximum rate of profit (R) equals $(v_s + s_s)/c_s$. We know that $r = R(1 - w)$, and that $(1 - w)$ is simply the proportion of the net product of the standard system which goes to profit. Thus:

$$r = R(1 - w) = \frac{(v_s + s_s)}{c_s} \cdot \frac{(1 - v_s)}{v_s + s_s} = s_s/c_s \tag{13.3}$$

This is the ratio of surplus labour, or surplus value, to the labour value of the capital employed.[37] Clearly a positive s_s is a necessary and sufficient condition for a positive r, given that c_s is positive. Dividing the numerator and denominator of (13.3) by v_s yields

$$r = \frac{s_s/v_s}{c_s/v_s} = \frac{e}{k} \tag{13.4}$$

So this version of the Fundamental Marxian Theorem also holds in terms of the *rate* of surplus value and the *rate* of profit. Moreover, since for any wage the rate of profit in the standard system must equal that in the original system, the profit rate in the original system may also be represented as the ratio of surplus value to capital.

Meek concludes that:

> Sraffa is postulating precisely the same relation between the . . . rate of profits and the conditions of production in his "standard" industry as Marx was postulating between the . . . rate of profits and the conditions of production in his industry of 'average organic composition of capital' . . . Sraffa's 'standard industry', seen from this point of view, is essentially an attempt to define 'average conditions of production' in such a way as to achieve the identical result Marx was seeking.[38]

From this perspective, the standard system gives transparency to the capitalist system and renders 'visible what was hidden'.[39] This, of course, was exactly what Marx sought to achieve in all his work on value and exploitation.

VI Conclusion

Taken as a whole, Sraffa's *Production of Commodities* has an ambiguous relation to Marxian political economy. The theory of value is shown to be valid only for special cases, and Marx's own exposition of his theory of exploitation is similarly shown not to be general. Joint production can cause both theories to be vacuous, or to generate perverse results. But Sraffa does not address questions of qualitative value theory and his treatment is, therefore, not comprehensive, while his own device of the standard commodity may be used to rescue one form of Marx's theory of exploitation (see, however, Chapter 15 below). Moreover, as we will see in Chapter 15, some Sraffians argue that, since Sraffa's paradigm is within the same 'surplus tradition' of economics as that of Marx, Marxian economics is actually strengthened by his work because the defects of Marx's own specific form of surplus economics are exposed and shown to be extraneous to the surplus approach itself. At the same time, critics of Sraffa have pointed to serious limitations in his economics, and by so doing have brought into question the whole surplus tradition, including the particular version developed by Marx. Before we consider these wider issues in Chapter 15, however, we must discuss the effects which the 'Sraffian revolution' has had upon the treatment of the transformation problem.

Notes

1. I. Steedman, (ed.), *Sraffian Economics: Volumes I and II* (Aldershot: Edward Elgar, 1988) contains many of the important articles which constituted the 'Capital Controversies'.
2. J.B. Clark, *The Distribution of Wealth* (London: Macmillan, 1899); M.C. Howard, *Profits in Economic Theory* (London: Macmillan, 1983), Ch. 12.
3. G.C. Harcourt, *Some Cambridge Controversies in the Theory of Capital* (Cambridge: Cambridge University Press, 1972) provides an excellent account of the debate.
4. E. von Böhm-Bawerk, *The Positive Theory of Capital* (New York: Stechert, 1891).
5. Harcourt, *Cambridge Controversies*; M.C. Howard, 'Austrian Capital Theory: An Evaluation in Terms of Piero Sraffa's "Production of Commodities by Means of Commmodities" ', *Metroeconomica*, 32, 1980, pp. 1–23.
6. A. Bhaduri 'On the Significance of Recent Controversies on Capital Theory: A Marxian View', *Economic Journal*, 79, 1969, pp. 532–9. See also G.C. Harcourt, 'The Theoretical and Social Significance of the Cambridge Controversies in the

Theory of Capital' in J. Schwartz, (ed.), *The Subtle Anatomy of Capitalism* (Santa Monica, Cal: Goodyear, 1977), pp. 285–303.

7. P.A. Samuelson, 'A Summing Up', *Quarterly Journal of Economics*, 80, 1966, pp. 563–83.
8. Neoclassicals have also claimed that the chief results undermining Clarkian and Austrian theory – reswitching and capital reversal – are theorems of neoclassical economics. See R.M. Solow, 'Testimony I: An Interview' in G.R. Feiwel (ed.), *The Economics of Imperfect Competition and Employment* (New York: New York University Press, 1989), pp. 542–3, and F.H. Hahn, 'Robinson–Hahn Love-Hate Relationship: An Interview', in G.R. Feiwel, (ed.), *Joan Robinson and Modern Economic Theory* (New York: New York University Press, 1989), pp. 895–910.
9. It began with I. Steedman, 'Positive Profits With Negative Surplus Value', *Economic Journal*, 85, 1975, pp. 114–23, and was extended in I. Steedman, *Marx After Sraffa* (London: New Left Books, 1977). Steedman was, however, anticipated in part by M. Morishima, *Marx's Economics* (Cambridge: Cambridge University Press, 1973) and by B. Schefold, *Piero Sraffa's Theorie der Kuppelproduktion, des Kapitals und der Rente* (Basle: private publication, 1971).
10. Conditions of production may include 'social' as well as 'technical' determinants of input–output relations, although Sraffa himself makes no comment to this effect.
11. More complex systems are analysed in Chs. 14 and 15 below.
12. Only 'by treating capital goods at different stages of wear and tear as *qualitatively* different goods, so that each capital good newly defined can serve only for one period, can we adequately deal with the age structure of capital': M. Morishima, *Theory of Economic Growth* (Oxford: Oxford University Press, 1969), p. 89; see also ibid, Ch. 6, and M. Morishima, *Marx's Economics* (Cambridge: Cambridge University Press, 1973), Ch. 13.
13. Sraffa's assumptions are not presented systematically but are scattered throughout the text and appendices of *The Production of Commodities by Means of Commodities* (Cambridge: Cambridge University Press, 1960). They are listed in I. Bradley and M. Howard, 'Piero Sraffa's "Production of Commodities by Means of Commodities" and the Rehabilitation of Classical and Marxian Political Economy', in I. Bradley and M. Howard, (eds), *Classical and Marxian Political Economy: Essays in Honour of Ronald Meek* (London: Macmillan, 1982), pp. 229–54. Some of Sraffa's assumptions are subjected to critical analysis in Ch. 15 below.
14. Sraffa, *Production of Commodities*, p. 10. It is not clear *a priori* whether it is more reasonable to assume *ex post* payment of wages, or to treat them as paid in advance at the beginning of the production period: see Steedman, *Marx After Sraffa*, pp. 103–5. For our purposes, nothing important hinges on this assumption.
15. Sraffa assumes that each of the systems which he analyses consists of data and relations which ensure that, given the wage or rate of profit, the endogenous variables are determined at economically meaningful levels. He expresses this assumption by explicitly stating that, in each system, the number of distinct process is equal to the number of commodities; see Sraffa, *Production of Commodities*, pp. 5, 7, 44, 63, 77 and 78. However, he recognises that this is not in general an adequate representation of his assumption concerning determination; ibid, pp. 59, 74–5, 90–1. We return to this matter in Ch. 15 below.
16. K. Marx, *Capital*, III (London: Lawrence & Wishart, 1972), pp. 167–7 (Ch. IX); K. Marx, *Theories of Surplus Value*, Part II (London: Lawrence & Wishart, 1972), p. 190 (Ch. X, section A4); R.L. Meek, *Smith, Marx and After* (London: Chapman & Hall, 1977), pp. 126, 151; M.C. Howard and J.E. King, *The Political*

14
Marxian Value Theory After Sraffa

I Introduction

As we indicated in the previous chapter, the impact of Sraffa's *The Production of Commodities by Means of Commodities* was by no means immediate. The initial effect was to generate an attack upon neoclassical theory, which resulted in the 'Cambridge Controversies' of the mid-1960s. Although this was relevant to the Marxian analysis of 'vulgar economy', it did not bear upon the logical coherence of Marxian political economy itself, and it was not until the 1970s that the direct implications for Marxian economics began to be appreciated. Meanwhile, the questions raised by Francis Seton and Paul Samuelson in the 1950s awaited answers (see Chapter 12 above). It remained to be seen whether Samuelson's conclusions could be generalised to an n-sector model, and whether (as Engels and others had supposed) the transformation of values into prices of production could legitimately be regarded as a historical as well as a logical process (see volume I of this book, Chapter 3, section II). Also unresolved were important methodological issues concerning the role of mathematical models in the appraisal of Marxian value theory, and the relative significance of the qualitative and quantitative aspects of the problem.

This chapter is structured largely, but not entirely, in a chronological fashion. The following section deals with the – very sparse – literature on the transformation problem which appeared between 1958 and 1971, when Paul Samuelson returned to the fray with a long and intensely provocative article in the *Journal of Economic Literature*. Section III surveys the heated controversy which broke out between Samuelson and his Marxian critics, while section IV discusses the significance of the analytical contributions made by Michio Morishima and Ian Steedman in the mid-1970s, which were outlined in Chapter 13 above. Morishima was also involved in reopening the discussion of the 'historical transformation problem', which is assessed in section V.

From the late 1970s onwards, several new attempts were made to solve the logical problem of transformation, and these form the subject of section VI, along with certain additional difficulties which were identified in the course of the 1980s. Section VII is thematic rather than chronological, touching on a number of objections to the labour theory of value which came to the fore in the last two decades but were not directly related to transformation. Finally, section VIII contains some conclusions on the standing of the Marxian theories of value and exploitation at the beginning of the 1990s. Note, however, that Chapter 15 can in a sense be read as an extended conclusion to the present chapter, and that some of the substantive and methodological problems dealt with here will resurface in the appraisal of 'rational choice Marxism' in Chapter 17.

II Early Contributions

The most important contribution to the transformation literature in the 1960s was Ronald Meek's review of Sraffa, which was summarised in section V of Chapter 13 above. Apart from this, relatively little of any significance was published during this decade, and as late as 1973 Maurice Dobb could complain that the discussion 'has remained . . . somewhat restricted, even recondite; and for the most part it has evoked little interest (or even awareness) among Marx-disciples and interpreters', who had concentrated instead on the questions of crisis and imperialism.[1]

In 1961 Michio Morishima and Francis Seton demonstrated that the transformation procedure could be undertaken in reverse: that is, labour values could be derived from prices of production, using information on conditions of production and the distribution of the net product.[2] They concluded from this that positivist objections to the labour theory of value were unfounded. Value was not a metaphysical concept, as Joan Robinson (among others) had suggested. 'Whatever the usefulness or irrelevance of the Marxian value concept as a description of "reality" or a guide to action, it is at least operationally meaningful.'[3]

Two years later the Norwegian writer Leif Johansen returned to a theme which had interested several writers at the turn of the century: the possibility of reconciling the labour theory of value with marginal utility analysis (see volume I of this book, pp. 191–2). Johansen set out two models of price determination. In the first model, workers had fixed subsistence requirements which determined the equilibrium real wage in the traditional Marxian manner, while capitalists maximised neoclassical utility functions subject to a budget constraint. Marginal utilities now determined the quantities of commodities which were consumed by the capitalists, but not their prices. In the second model, workers as well as capitalists had utility functions, and the rate of profit became indeterminate without a separate theory of income distribution or – the variant preferred by Johansen – the specification of a minimum utility level for workers. Prices were now influenced indirectly by marginal utilities, since any shift in workers' utility functions would affect the rate of profit and thereby alter prices of production.[4]

Following Seton's 1957 article an era began in which mathematical techniques were applied to the analysis of value and exploitation much more enthusiastically than ever before. Initially, however, there was little response to these two papers, and the same can be said of the highly critical comments on the transformation problem made in 1963 by Nobuo Okishio in a paper which is generally remembered only for its rigorous attack on Marx's falling rate of profit theorem (see Chapter 7, section III, above).[5] The only other important text to appear before the commencement of the Samuelson controversy was Andras Brody's *Proportions, Prices and Planning*, first published in Hungarian and then, in 1970, in English.[6] As will be seen in sections V and VI below Brody anticipated several aspects of the subsequent debate, but his book had little immediate impact in the West and probably even less in the East, where creative intellectual endeavour still met with immense obstacles.

Meek's interpretation of Sraffa was largely ignored in these years, with one significant exception: Sraffa's Cambridge colleague Maurice Dobb began to isolate himself from many of his fellow-communists by his insistence that *The Production of Commodities* offered a vindication of Marx no less than a damning indictment of neoclassical economics. In a very influential article which appeared in 1970 in the Dutch journal *De Economist*,[7] Dobb located Sraffa in a classical tradition which included, he claimed, Karl Marx no less than Bortkiewicz and Dmitriev (on whom see volume I of this book, Chapter 3, sections IV and V). All had shown the rate of profit to depend on 'the conditions of production of the input-producing industries (whether wage-goods or constituents of constant capital) and *on these alone*'.[8] There was nothing in Sraffa's few remarks on the theory of distribution, Dobb maintained, which was inconsistent with Marx. The capitalist monopoly over the means of production was implicit in Sraffa's model, and even his treatment of wages as containing part of the surplus product could be regarded as a realistic response to the circumstances of modern capitalism.[9] These arguments were amplified in Dobb's last book, in which he highlighted the methodological similarities between Sraffa, the classical economists and Marx. All of them viewed distribution as logically separate from exchange, and in each case prices were to be derived from the distribution of income (together with conditions of production) and not vice versa. This 'pre-Jevonian order or pattern of determination' served to demarcate their ideas very sharply from those of neoclassical theorists.[10] Chapter 15 below assesses this very influential interpretation of the history of economic thought.

III The Samuelson Controversy

In 1969 or 1970 Paul Samuelson obtained a grant from the National Science Foundation in the United States to finance a study of Marxian value theory. He published a preliminary summary of his findings in the latter year,[11] and a much longer paper appeared in 1971 in the *Journal of Economic Literature*.[12] Samuelson's conclusions were basically those which he had reached in 1957 (see Chapter 12 above, section II). The labour theory of value was a complicating detour; prices of production and the general rate of profit could be derived directly from information on conditions of production and the distribution of income; Marx's theory of surplus value was therefore unnecessary for an understanding of profit in a capitalist economy.

While the earlier paper had been ignored by Marxian economists, the 1971 article provided a furious controversy. Several reasons may be adduced for this difference in critical reaction. Interest in Marxism generally was much greater, and there were many more Marxian economists in academic employment than ever before. The *Journal of Economic Literature* was less technical, and had a wider readership, than the more forbidding *American Economic Review*. By 1971, moreover, Samuelson was a commanding figure in orthodox economics, with a much higher public profile than he had enjoyed in the 1950s. In 1970 he had been awarded a Nobel Prize, and the various editions of his introductory text had already sold more copies than any other economics book in the English language. Generations of students around the world had learned their elementary theory from Samuelson's *Economics*. There was, lastly, a question of style. The 1957 article had been restrained and scholarly in tone. Parts of Samuelson's 1971 paper were by contrast (and deliberately?) provocative:

> For when you cut through the maze of algebra and come to understand what is going on, you discover that the 'transformation algorithm' is precisely of the following form: 'Contemplate two alternative and discordant systems. Write down one. Now transform by taking an eraser and rubbing it out. Then fill in the other one! *Voila!*. You have completed your transformation algorithm'. By this technique one can 'transform' from phlogiston to entropy; from Ptolemy to Copernicus; from Newton to Einstein; from Genesis to Darwin – and, from entropy to phlogiston . . . It tells us something about the need for a systematic survey and elucidation of the transformation problem that this uncontroversial and prosaic truth is nowhere underlined in what is now a copious literature, stretching over more than three-quarters of a century.[13]

It was this 'eraser theorem' which, more than anything else, enraged Samuelson's Marxian readers.

The then editor of the *Journal of Economic Literature*, Mark Perlman, soon received a large number of critical notes and comments. His response was rather odd. The only submissions which were accepted for publication came from distinguished academic economists. In two extremely brief contributions, Abba Lerner bizarrely accused Samuelson of making 'unwarranted concessions to the so over-thoroughly demolished labor theory of value', while Joan Robinson claimed that he had conflated classical-Marxian and neoclassical models.[14] William Baumol argued that Samuelson had misunderstood Marx's intentions. Marx

> was concerned primarily with the relationship between profits and surplus value and only incidentally (as a means to get at the former) with that between prices and values . . . The competitive process, that appears to show that land is the source of rent and capital the source of profits and interest, is merely a distributive phenomenon and conceals the fact that labor is the only socially relevant source of output. This is the significance of the value theory and the transformation analysis of Marx.[15]

This Samuelson denied, maintaining instead that his 'erase and replace theorem' applied equally to the transformation of surplus value into profit; Baumol replied that his own article had been devoted to the nature of Marx's objectives, not to the different question of whether he had succeeded or failed.[16] Finally, Michio Morishima defended his book *Marx's Economics*, published in 1973 at the height of the debate, which he believed to be even more critical of Marx than Samuelson had been, yet provided arguments by which Marx's principal insights could be preserved.[17]

None of these contributions was especially profound, but a further clutch of comments addressed to the *Journal of Economic Literature* remained unpublished. Instead Perlman commissioned Martin Bronfenbrenner 'to outline for economists uninitiated into "Marxism–Modernism" controversy, what this latest round is about'. It is unclear whether his brief included synopses of the six rejected papers, but this was what he supplied. Their tone, he noted, ranged 'from the scholarly to the vituperative'.[18] From Bronfenbrenner's account it seems that only one took an explicitly neoclassical perspective, while four had attempted to defend the Marxian theory of value.[19] Evidently Perlman's choice of articles for publication was less than even-handed, and Samuelson, in a section headed 'Reactions to Quoted Writers', found it 'a bit odd to be commenting on abortive articles that have not been accepted for publication'.[20]

Two of the rejected comments were subsequently published elsewhere. That by the veteran Council Communist, Paul Mattick,[21] made three substantive points. First, he stressed (correctly) that Marx's theory of value shared with bourgeois equilibrium analysis the property of being a 'theoretical device' or 'mental construct', which was therefore not 'susceptible to direct observation'.[22] Second, he argued that Marx's principal concern had been with the question 'why the social labor relations appear as value relations'. Marx had asked 'how the concept of value could arise altogether' (in the first place?), and he found the answer in the specific class relations of the capitalist mode of production.[23] This implied a distinction between the qualitative and quantitative aspects of value theory which was to feature prominently in other critiques of Samuelson, and to be used against Sraffian critics of Marx (see Chapter 15 below). Third, Mattick argued that the labour theory of value could be corroborated only at the level of the entire economy: 'The law of value finds its empirical verification not in everyday price relations but in the overall fall or rise of the prices of production . . . The system as a whole is susceptible to value analysis.'[24] A related conclusion would later be drawn, much more rigorously, by Michio Morishima (see section IV below). Samuelson had understood none of this, Mattick maintained. He was a vulgar economist; his algebra was 'highfalutin rubbish', and he had 'wasted his time and the National Science Foundation's money'.[25]

If Mattick had combined scholarship and vituperation, David Laibman's attack on Samuelson was a model of restraint.[26] Laibman first presented his own, geometrical solution to the transformation problem, which replaced the conventional invariance conditions, involving the equality of total value and total price and/or total surplus value and total profit, with the requirement that the rate of exploitation be the same in value and in price terms. Laibman justified this revision on the grounds that the class struggle between workers and capitalists revolved around the rate of exploitation, not the rate of profit.[27] Like Mattick, Laibman also complained that Samuelson had only dealt with the quantitative aspects of the problem, ignoring the more significant qualitative dimension. Samuelson had entirely failed to grasp 'the problem of value as a social category', thereby revealing himself to be 'a terrible *political* economist, in the Marxian sense of the word'. 'To advance his side of the debate', Laibman concluded, '[Samuelson] must step over the arbitrary boundary between the "philosophical-sociological" and the "economic-analytic" to confront the definition of value as a category of social relations.'[28]

This crucial distinction between the qualitative and quantitative problems of value originates with Marx, and was emphasised by Paul Sweezy in his *Theory of Capitalist Development.*[29] In 1975 Howard and King suggested that it might usefully be applied to the analysis of income distribution,[30] and this was indeed implicit in Baumol's argument against Samuelson. In his (necessarily) brief comments on Laibman's then-unpublished article, Samuelson dismissed the whole idea as 'a false perception' which involved 'an almost-comical fetishism and word-play'.[31] This is quite incorrect, and Samuelson's error probably served to weaken the impact of his own analysis by throwing out the (qualitative) baby along with the (quantitative) bathwater. A strong case can in fact be made that the two problems of value are logically separate. If this is so, it is possible to accept the substance of Marx's analysis of the qualitative issues while abandoning – on Samuelsonian grounds – his quantitative theory of value.[32] Laibman rejected this conclusion, and Sweezy eventually recoiled from it,[33] but it has attracted some of the less dogmatic defenders of the continued relevance of qualitative value theory with its apparent promise of peaceful coexistence between Sraffians and orthodox Marxists (see Chapter 15 below).[34]

Mattick was not the only critic to identify Samuelson as a vulgar economist.[35] It was a charge which he himself vigorously denied: 'My vantage-point in the discussion was *not* neoclassical. It was Sraffian! . . . What I said is what Joan Robinson, no neoclassicist, has been saying all along.'[36] Neither did Samuelson repudiate the orthodox theory of distribution; he simply refused to take sides.[37] All he wished to do was to destroy the myth of Karl Marx as a Merlin, who had revealed 'the mysteries below the surface of things that cannot yield to conventional political economy'.[38] In this he was, as we have seen, only partly successful because he failed to appreciate the importance of the qualitative dimension to value theory. However, at the end of the debate Samuelson did retreat a little from his 1971 polemic, qualifying his adherence to the 'eraser theorem'[39] and describing Marx as 'an original and creative shaper of the science of political economy'.[40]

IV Enter Morishima and Steedman

Meanwhile, on the other side of the Atlantic, a furious debate was taking place. It centred, at first, on Maurice Dobb's endorsement of a classical-Marxian synthesis (see section II above). Dobb was the doyen of English Marxian economists, a leading (if occasionally dissident) theoretician of the Communist Party of Great Britain, and also Piero Sraffa's closest friend at Cambridge. In view of Sraffa's resolute silence on the controversies provoked by his book, Dobb's interpretation of his ideas rapidly assumed canonical status, and Dobb himself became the principal target for the defenders of orthodox Marxism.

The initial stages of the attack were launched in the newly-established journal *Economy and Society*, in which first Geoff Pilling and then Suzanne de Brunhoff identified major differences between the Ricardian and Marxian theories of value. Ricardo's method, they argued, was quite unlike that of Marx, with its dialectics, contradictions, historical specificity, and distinctions between form and content, essence and appearance, quality and quantity. Marx's concepts were unique; there was no counterpart in classical political economy to his analysis of use value and exchange value, or abstract and concrete labour. Above all, as Marx had recognised, Ricardo was to be criticised for his conflation of price and value.

Dobb's invention of a 'classical-Marxian' tradition in the theory of value was thus profoundly mistaken.[41]

Similar conclusions were reached (from a slightly different perspective) by Dobb's colleague Bob Rowthorn in a widely-read critique of what he termed the Cambridge, Anglo–Italian or 'neo-Ricardian' school.[42] (A more common term now is 'Sraffian'.) Rowthorn particularly objected to the reading of Marx 'as though he were an English classical economist'.[43] In fact Marx had assailed Ricardo's treatment of surplus value as a purely distributive phenomenon, since this led him to neglect the production process, and had also attacked his confusion of labour and labour power and his inability to distinguish constant and variable capital.[44] Because of their analytical debt to Ricardo, Rowthorn maintained, the neo-Ricardians were unable to comprehend Marx's concept of a mode of production, and therefore exaggerated the technical aspects of production at the expense of the social, regarding it as 'an a-social or natural process'.[45] Neo-Ricardian algebra was consistent with several different modes of production, and thus failed the crucial Marxian test of historical specificity. There was a real danger that Marxists would become 'trapped within a debate whose terms of reference were laid down by vulgar economists such as Böhm-Bawerk, on the one hand, and neo-Ricardians such as Bortkiewicz on the other'.[46]

The weakness of these claims had already been demonstrated by Ronald Meek in the long introduction to the second (1973) edition of his *Studies in the Labour Theory of Value*, in which he showed how Sraffa's highly abstract models of reproduction could be rendered historically and socially specific. Meek applied Marx's 'logical-historical method'[47] to formulate a series of Sraffian models, beginning with simple commodity production and moving successively through a stage of early capitalism, with different profit rates in the various industries, to the mature capitalism of *Capital*, volume III, where a single rate of profit prevailed. Sraffa's reluctance to present his ideas in this way did not, Meek concluded, make him a vulgar economist, nor did it vitiate a unified classical-Marxian approach to the theories of value and exploitation.

At this point the formidable talents of Michio Morishima were brought to bear on Marxian economics. Apart from Brody's text, Morishima's *Marx's Economics*, which was published in 1973, was the first book-length analysis of its subject in mathematical terms. It was soon followed by an equally difficult paper in *Econometrica*, and then by a more popular presentation of the arguments written jointly with George Catephores.[48] Morishima seems to have been the first to explore systematically the implications for the labour theory of value of the problems posed by joint production, fixed capital, and the existence of alternative processes of production; as understood by Marx, labour values could in some circumstances be negative or undefined (see Chapter 13, section IV, above). Influenced more by von Neumann than by Sraffa, Morishima argued that these difficulties could be overcome – and could *only* be overcome – by redefining the value of a commodity as the *minimum* quantity of labour needed to produce it. When necessary and surplus labour are calculated in terms of these 'true' or 'optimum values' – and *only* then – what Morishima termed the Fundamental Marxian Theorem could be generally established: a positive rate of exploitation entails a positive rate of profit, and vice versa.[49]

The objections to this, from a Marxian viewpoint, are twofold. It is clearly not the way in which Marx himself defined value (nor could it be, since the relevant mathematics was not invented during his lifetime).[50] More important, Morishima's 'true values' are non-additive. This means that it is no longer possible to define the value of a commodity as the sum of the constant capital, variable capital and surplus value embodied in it.[51] But many of Marx's best-known propositions rest on the assumption that values are indeed additive, which he regarded as too obvious to require justification. The reproduction models of volume II of *Capital*, for example, must be reformulated once additive values are abandoned. Thus Morishima's recasting of Marxian economics in von Neumann form had ramifications which extended far beyond the theories of value and exploitation. And, although he had shown that a Fundamental Marxian Theorem might be preserved in the face of joint production, Morishima had not established the desirability of doing so, still less its necessity. In other words, Morishima's value analysis might still be regarded as itself a 'complicating detour'.

These issues were soon addressed, very forcibly, by Ian Steedman. In his 1975 paper in the *Economic Journals*,[52] (see Chapter 13 above), Steedman admitted that the paradox of negative surplus value and positive profits could be avoided if Morishima's 'true values' were invoked.[53] But there was no compelling reason to do so. 'Anything that can be expressed in terms of value magnitudes', he argued in his book *Marx After Sraffa*, 'can be expressed without them, since they are only derivative of the more fundamental physical production conditions and real wages.' Steedman concluded (provocatively) that 'it can scarcely be over-emphasized that the project of providing a materialist account of capitalist societies is dependent on Marx's value magnitude analysis *only* in the negative sense that continued adherence to the latter is a major fetter on the development of the former'.[54] Although this conclusion came from a Marxist who had argued his case in the *Bulletin of the Conference of Socialist Economists* and *New Left Review*,[55] it was, as several reviewers noted, virtually identical with Samuelson's 'eraser theorem'.[56]

What, then, was left of Marx 'after Sraffa'? For Morishima and Catephores it was the Fundamental Marxian Theorem, expressed in terms of Morishima's 'true values', which explained profits in terms of surplus labour. Steedman's student, Geoff Hodgson, claimed that even this was redundant, since the very notion of embodied labour 'can be nothing more than a metaphor, devoid of material basis in any social reality and any corresponding phenomenal form'. The real basis of profit was, for Hodgson, the surplus product, which 'is measured by its price'.[57] In *Marx After Sraffa* Steedman argued that Sraffa's achievement had been to provide a basis for Morishima's Fundamental Marxian Theorem expressed in terms of 'true values'.[58] Two years later, however, he followed Hodgson, not Morishima, in denying that surplus value, or surplus labor, could account for the existence of profit. They are 'both ways of calibrating the surplus [product] . . . the existence of exploitation (narrowly defined) and the existence of profit are no more than two sides of the same coin: they are merely "labour" and "monetary" expressions of the fact that there is a physical surplus'.[59]

V The 'Historical Transformation Problem' Revisited

Several years previously, Andras Brody had confronted Paul Sweezy's question, 'why not start from prices?', and had supplied a Hegelian answer. For Hegel, 'the history of a thing is the thing itself'. Hence 'our ideas and categories are reflections of real processes and there is advantage in developing them in the same order as they appeared in history'. Since values are, in Marx's words, 'not only theoretically but also historically *prius* to the prices of production', it was necessary to begin with the analysis of value, and surplus value, if anything sensible was to be said about prices and profits.[60] Some later writers claimed that neglect of the 'historical transformation problem' by Morishima and Samuelson represented a major defect in their respective arguments.[61]

The historical dimension to the transformation problem was elaborated upon by Engels after Marx's death, and subsequently taken up by Rudolf Hilferding (see volume I of this book, Chapter 3, sections 2–3). Among modern writers, Ronald Meek emphasised it most, since he regarded its solution as an important vindication of Marx's logical–historical method. Meek maintained that the status of the labour theory of value differed in each of the various historical stages outlined by Marx. In non-commodity-producing societies there was either no exchange at all, so that the question of value did not arise; or there was sporadic barter in which exchange ratios were largely a matter of chance. The theory of value was irrelevant at this stage. The second stage was that of simple commodity production, and here the labour theory of value applied without qualification. In early capitalism, when competition was too weak to equalise the rate of profit across all industries, the same was true. In mature capitalism, however, free competition established a uniform profit rate, and it was in this fourth stage that prices of production emerged, differing systematically from labour values. Finally, in post-capitalist (socialist or communist) society, commodity production would be abolished, and with it the need for any theory of value. Both 'value' and 'price of production' were historically specific concepts, and as a historical process the transformation from the former to the latter came about during the transition from early to mature capitalism, in the sense defined above.[62]

The first and, as it proved, decisive challenge to this view was posed by Morishima and Catephores in the *Economic Journal* in 1975.[63] (The number of articles on value and exploitation accepted for publication in this journal in the mid-1970s has never been exceeded, before or since). Morishima and Catephores posed the question, 'when was the value epoch?' There were both historical and logical reasons, they claimed, why it could not have been simple commodity production. Historically, there never was such a mode of production, even during the disintegration of feudalism in Western Europe. Some feudal economic relations persisted in this period, while the continued importance of subsistence production and the pronounced immobility of labour demonstrated that commodity production was imperfectly developed. Moreover, simple commodity production was logically impossible, since the vital concept of abstract labour, without which the theory of value was inapplicable, presupposed the suppression of any preference for one type of work against another. This could occur only under capitalism.[64]

Did the 'value epoch' then correspond to what Meek had described as early capitalism? Morishima and Catephores rejected this, too. They argued that Meek's analysis had ignored merchant capital, which represented an intermediate stage between feudalism and industrial capitalism. Merchants' profits had come from unequal exchange rather than from the exchange of equivalents; evidently the labour theory of value did not apply here. The genesis of industrial capital involved merchants extending their activities, first as contractors in the putting-out (or domestic) system and then by establishing factories. At no point in this historical process was it obvious that commodities had exchanged at prices reflecting their labour values.[65] Morishima and Catephores concluded that Marx had intended simple commodity production as an ideal type or 'logical simulation', which he used to explain the emergence of profit; it implied nothing about the determinants of prices in pre-capitalist economies. In fact commodities had never sold at their labour values, and the transformation problem should be interpreted as a purely logical one, its solution being 'essentially a static, atemporal, analytical device'.[66]

Although Meek defended his corner, it was to little avail,[67] and subsequent attempts to vindicate the historical status of the transformation problem have been few and unsuccessful.[68] Three general conclusions may be drawn from this aspect of the debate on transformation. First, the application of the logical–historical method to value theory is not as easy as Meek had implied.[69] Second, it remains the case that 'we know very little about allocation and pricing in societies where exchange and the calculus of costs and benefits are not widespread'.[70] Third, and most important, the (quantitative) labour theory of value cannot be rescued by reference to the historical priority of values over prices.

VI The Logic of Transformation Once Again

The multi-faceted nature of the transformation problem will by now be evident. By the end of the 1970s it had become a whole set of problems involving the quantitative relation of values to prices in diverse historical and logical contexts. The quantitative theory had also become infused with qualitative considerations, on which there was a variety of opinion and mutual misunderstandings. Furthermore, despite the kaleidoscopic controversies on the historical transformation, on the implications of joint production, fixed capital, and alternative processes, on the merits (or necessity) of making the 'complicating detour'; despite all this, the last word had yet to be said on the issues originally posed in the simple, one-commodity, one-process model introduced by Marx in *Capital*, volume III.[71]

The first (and least successful) attempt to vindicate Marx stemmed from Anwar Shaikh's claim that Marx's own transformation procedure was not erroneous, as generally believed, but was rather to be interpreted as the first stage of an iterative process from which the correct (Bortkiewicz) prices of production would eventually emerge. That is, the prices derived in volume III should be regarded only as a first approximation, and the same algorithm should be applied first to them, then to the 'second-stage' prices, and so on, with the Bortkiewicz solution being approached asymptotically.[72] Although at the time Shaikh's argument caused quite a stir, and was endorsed by no less a figure than Paul Sweezy,[73] it was neither original nor convincing. The germ of a similar notion is to be found in the pre-1914 writings of Georg von Charasoff (see Chapter 12, section II, above), while both Brody and Morishima had anticipated the application of Markov matrices to the transformation problem. The difficulty was, as Morishima noted, that the initial starting-point was arbitrary.[74] Hodgson observed, rather acidly, that Shaikh's iterative procedure would eventually yield an approximation to the correct prices of production even if one began not with labour values, but with 'the number of letters in the name of the commodity when that name is translated into Serbo-Croat'.[75] And Paul Samuelson, at the prompting of Wassily Leontief, had already devised a similarly meaningless 'gibberish' model of prices.[76]

More interesting is what Hunt and Glick, in their *New Palgrave* entry on the transformation problem, term the 'new solution'.[77] This was first published in 1980 by the French writer G. Duménil, but the US economist Duncan Foley had been working along similar lines and their argument has since been supported by others.[78] The most accessible account is given by Foley in his *Understanding Capital*.[79] Consider a two-sector economy producing steel and wheat by means of steel and human labour, under the following conditions:

$$\tfrac{1}{2} \text{ steel} + 1 \text{ labour} \rightarrow 1 \text{ steel}$$
$$\tfrac{1}{4} \text{ steel} + 1 \text{ labour} \rightarrow 1 \text{ wheat}$$

The labour values of steel (λ_s) and wheat (λ_w) can be calculated in the same way as in earlier examples:

$$\begin{aligned} \tfrac{1}{2}\lambda_s + 1 &= \lambda_s \\ \tfrac{1}{4}\lambda_s + 1 &= \lambda_w \end{aligned} \tag{14.1}$$

giving $\lambda_s = 2$ and $\lambda_w = 1.5$ Foley assumes the value of money (which is produced outside the system) to be unity, and the money wage to be 0.5. If the workers consume only wheat, they are thus able to buy $0.5/1.5 = 0.33$ units of it.

The value system can now be written as:

	c	v	s	$(c+v+s)$	$e=s/v(\%)$	$r=s/(c+v)(\%)$
Steel	1	½	½	2	100	33 ⅓
Wheat	½	½	½	1½	100	50
Total/average	1½	1	1	3½	100	40

(Note that this economy is not in a state of simple reproduction, since the output of steel exceeds the quantity used as inputs in the two sectors.) To transform these magnitudes into prices of production, Foley makes two crucial assumptions, which constitute the invariance conditions of the 'new solution'. The first sets the sum of values equal to the sum of prices, but only for the *net* product (Marx, and Bortkiewicz, had insisted that this condition apply to the gross product). The second requires that variable capital be unchanged by the transformation. In effect, Foley redefines the value of labour power: it is no longer the labour embodied in the bundle of wage-goods consumed by the worker, but rather the value of money multiplied by the money wage.[80] The price relations can then be written as:

$$\begin{aligned} (\tfrac{1}{2}p_s + \tfrac{1}{2})(1 + r) &= p_s \\ (p_s + \tfrac{1}{2})(1 + \mathrm{r}) &= p_w \\ (p_s - \tfrac{1}{2}p_s) + (p_w - p_s) &= 2 \end{aligned} \tag{14.2}$$

where the third equation establishes the equality of the net product in terms of prices (the left-hand side) and values (the right-hand side). The solution to (14.2) is $p_s = 2.208$, $p_w = 1.448$ and $r = 37.65\%$, giving the following price system:

	Constant capital	*Variable capital*	*Profits*	*Price of production*	*Rate of profit* (%)
Steel	1.104	0.5	0.604	2.208	37.65
Wheat	0.552	0.5	0.396	1.448	37.65
Total/Average	1.656	1	1	3.656	37.65

The characteristics of the 'new solution' are readily identifiable. The net product is the same (= 2) in both values and prices; variable capital is also unchanged (= 1). It follows that one of Marx's invariance conditions is satisfied, since the sum of surplus value equals the sum of profits (= 1); and the rate of exploitation is also unchanged in the system as a whole (= 100 per cent). But the value of the gross output (3.5) is less than its price (= 3.656); constant capital in value terms (= 2) is less than in prices (= 2.208); and the rate of profit in the value system (= 33.3 per cent) is below that in the price system (= 37.65 per cent). This final discrepancy would certainly have worried Marx.[81] Moreover, the transformation process has involved an increase in the real wage, since workers can now buy (0.5)/(1.448) = 0.345 units of wheat instead of 0.33. This implies that the supposed logical priority of values over prices has evaporated: 'the distribution assumption requires ex post knowledge. The actual set of prices must be known before the rate of wages can be established. One cannot move step by step from values into prices. The two realms must be considered separately while the new solution only provides a mapping procedure from one to the other.'[82] Lastly, it must be recalled that this is a single-product, single-process model, in which the problems posed by joint production, fixed capital and alternative methods of production have not been encountered. In sum, it must be doubted whether the 'new solution' is a real improvement over the more traditional methods of dealing with the transformation problem; and neither overcomes Samuelson's charge that working with labour value categories is a complicating detour.

All this is purely static: that is to say, it is concerned with the properties of an 'equilibrium' profit rate and 'equilibrium' prices of production,[83] and not with the process by which, in a competitive capitalist economy, these equilibrium magnitudes might be established. Marx seems once again to have regarded it as self-evident that capital would move from industry to industry in search of higher profits until a uniform rate of profit prevailed, although he recognised that this might involve considerable turbulence. In the 1980s, however, it became apparent that matters were more complicated than this.

The problem was posed simultaneously by Emmanuel Farjoun and Moshe Machover and, in rather different form, by H. Nikaido.[84] Farjoun and Machover marshalled an impressive array of evidence to support their claim that profit rates were in fact highly unequal, even within industries, and that the 'law of equal price' was also empirically false. This, they argued, was a necessary outcome of the process of capitalist competition itself: 'under any reasonable theorization of the concept of competition, forces that tend to scramble rates of profit away from equality are at least as real and powerful as those that pull towards uniformity'. These forces include the uneven development of technology and the use of predatory underpricing as a strategy to secure higher long-run profits by bankrupting competitors.

> The general point to be grasped is the following: competition, by its very essence, is a disorderly process – and the freer it is, the more disorderly. Because of this, it would tend to destroy rather than preserve a uniformity in the rate of profit if such uniformity were ever imposed on the system. To expect competition to preserve an initial parity in rates of profit is as unreasonable as expecting all horses in a race to finish together just because they started together.[85]

Farjoun and Machover concluded from this that price formation must be regarded as a stochastic process. The only valid theory of price is a probabilistic one, and Marx's deterministic analysis in *Capital*, volume III, was therefore a mistake. Economic magnitudes cannot be measured in terms of equilibrium prices, since this concept is inapplicable to any actual capitalist economy. A non-price system of measurement is needed, and – given the unique status of labour as the 'essential substance' of economic activity – this can only be human labour. Marx would have done well to remain true to the labour value theory of volume I.[86]

This is an intriguing argument, which has some basis in Marx's own treatment of competition as the theory of a dynamic process rather than a static outcome.[87] The notion of a probabilistic 'bridging theory' between the decisions of individual economic units and the behaviour of the system as a whole is an appealing one.[88] And Farjoun and Machover are quite right to insist that the volume III uniform rate of profit, and the corresponding prices of production, are theoretical entities which cannot be directly observed in capitalist reality.[89] But this does not render these concepts meaningless, any more than the fact that the concept of abstract labour *is* an abstraction destroys the coherence of the labour theory of value. Farjoun's and Machover's analysis thus rests on an ultra-empiricism which is inconsistent with any defensible version of Marx's economic methodology.

Participants in the debate initiated by Nikaido approach the problem in a manner which is very similar to the way in which sophisticated neoclassical theorists treat equilibrium analysis. Various disequilibrium adjustment mechanisms are examined in very simple contexts to see if the dynamics of the system bring about prices of production involving an equal rate of profit. The results are not reassuring. They 'range from the demonstration of complete instability . . . to the demonstration that prices of production are at least locally stable . . . It can also be demonstrated . . . that prices, outputs and profit rates are fluctuating or oscillating within boundaries.' Furthermore, most of the analyses 'refer only to a circulating capital model . . . and the demonstrated results depend on the type of formalisation, the reaction coefficients as well as on additional [assumptions]'. Thus the question of convergence remains open, and so therefore does the theoretical and empirical significance of prices of production and an equal rate of profit (see also Chapters 15 and 17 below).[90]

VII Other Problems in the Theory of Value

The debate on value theory has not been confined to the transformation problem. In this section we touch on several issues which are not directly related to the derivation of prices of production from labour values. First, there is a complex of questions centring on the peculiar status of the commodity 'labour power'.[91] One problem, originally raised by Marx himself, concerns the 'reduction' of skilled to unskilled (or complex to simple) labour. Is an hour of highly-skilled labour to 'count' for more than an hour worked by an unskilled labourer and, if so, how are the weights calculated which are to be assigned to workers with differing degrees of skill? Marx's own solution has been heavily criticised, both for its formal weaknesses[92] and for its deficiencies as a theory of relative wages.[93] One alternative, proposed by adherents to the Uno School of Japanese Marxian economists, is a radical egalitarianism which regards an hour of labour as producing an identical quantity of value, no matter how highly qualified or trained the worker who performs it.[94] This, however, offers no theory of relative wages or of prices of production.

A separate issue, which is so closely intertwined with the first as to be often confused with it, concerns the segmentation of the market for labour power. Differences in pay between workers with identical skills are substantial. They seem also to be systematic rather than random, depending on the characteristics of both the employer (big firms, for example, paying more than small ones), and those of the worker (so that racial minorities and women receive less than white men). The early analysis of segmented labour markets was undertaken by neo-institutionalist economists,[95] but the underlying ideas have proved popular also with Marxians, who have interpreted these phenomena as evidence of a 'divide and conquer' strategy on the part of capital in its dealings with an otherwise recalcitrant labour force.[96] The associated explanation of wage discrimination is more convincing than its neoclassical rivals, and this indeed is one area in which Marxian economics is clearly superior to orthodox theory.[97] Segmentation does, however, entail that rates of exploitation differ between different sections of the proletariat. The full analytical (and political) implications of these variations remain to be fully explored.[98]

Cutting across all these difficulties is the assertion, made with increasing frequency in recent years, that Marx was fundamentally mistaken in his treatment of labour power. The argument is in two parts. First, commodities are by definition produced for sale on the market; this is not the case for labour power; hence labour power cannot be a commodity.[99] Second, the coefficients which express the conditions of production are socially as much as technically determined; they are the result of unending conflict at the workplace over the intensity of labour and the division of tasks. This poses real problems in analysing the use-value of labour power. 'The enjoyment of the use-value of any other commodity is non-problematic: the bread does not resist being eaten. Not so with labor-power. Its "use-value" is not delivered, it is not offered, it is not consumed. It must be extracted',[100] in the face of conscious resistance by the workers in the process of production. Marx's conception of labour power as a commodity suppresses this crucial idiosyncrasy and threatens – paradoxically – to eliminate class struggle from the core of his political economy.[101]

These objections are closely connected to another. Feminists complain, with considerable justice, that Marx's value theory degrades women's domestic labour by categorising it as 'useful but unproductive'. Useful, because it is essential for the reproduction of (predominantly) male labour power, and thus for the reproduction of the capitalist mode of production itself; unproductive, since it produces neither commodities, nor value, nor surplus value.[102] This is not the only context in which Marx's attempt to distinguish between productive and unproductive labour has generated controversy. The growth of circulation expenses, and the large (and until recently increasing) economic activities of the state, also caused intense debate, most especially in the 1970s.[103]

Three further problems must also be mentioned. The Marxian theory of rent, traditionally neglected by friend and foe alike, had in fact been criticised by Samuelson as early as 1959, on the grounds that the use of non-produced inputs was itself sufficient to make relative prices diverge from relative labour values.[104] Twenty years later a flurry of articles attempted to resurrect Marx's analysis of absolute rent, which is bound up with his transformation of values into prices of production in industries which use natural resources, and to distinguish Marx's concept of differential rent from that of Ricardo.[105] This question has a significance which extends well beyond the problems of urban land prices where it originally arose, since rent may be paid wherever labour is in some sense 'more productive' in one field of employment than in another. There is thus a close connection between the analysis of rent and the definition of labour value where alternative processes of production are in use.[106] This has further ramifications for the application of the labour theory of value to international trade, and in particular for the analysis of unequal exchange between nation-states, or geographical areas at different stages of economic development.[107]

There is also, and finally, the question of monopoly, which is almost invariably ignored in the literature on transformation.[108] Prices of production are competitive prices, presupposing free competition and a strong tendency for the formation of a uniform rate of profit. One way of dealing with the problem of monopoly is to deny its existence on the grounds either that competitive prices have always been overwhelmingly powerful or that they have been greatly strengthened, on a global scale, by the emergence of transnational capital.[109] Baran and Sweezy took an alternative approach, replacing Marx's prices of production with a neoclassical theory of equilibrium monopoly price which Sweezy has justified – very contentiously – as representing a 'second' transformation.[110] A third type of analysis, which has found surprisingly little favour with Marxian economists, would require the adoption of Michal Kalecki's 'post-Keynesian' model of oligopoly pricing, with a hierarchy of profit rates reflecting differences in the degree of monopoly power enjoyed by capitalists in different branches of the economy.[111]

VIII Conclusion

The qualitative labour theory of value emerges from the post-war discussions essentially unscathed. Production is an inherently human process, the title of Sraffa's book notwithstanding. Beneath the phenomena of exchange can be found a social division of labour. Because the producers relate to each other through the medium of commodity exchange they are also alienated from each other, and their perceptions of social reality are distorted by the resulting fetishism of commodities. This is why labour occupies a 'privileged' place in political economy, and why the 'energy', 'corn' or 'peanut' theories of value, discussed in section V of Chapter 13 above, totally miss the qualitative significance of Marx's labour theory of value.[112]

The position is quite different with respect to the quantitative theory of value. In volume III of *Capital*, Marx made two bold assertions. He argued, first, that the transformation problem could be solved; that the sum of prices equalled the sum of values, the sum of profits equalled total surplus value, and that the uniform rate of profit which prevailed in a regime of prices of production was thereby pre-determined by the ratio of surplus value to the value of constant plus variable capital. Second, he maintained that prices and profits could *only* be derived from labour values, which thus had logical priority.

Marx's first claim is not, in general, correct. Even in a single-product, single-process model it is valid only under very special assumptions. Once joint production, fixed capital and alternative processes are allowed for, it is almost always false. Weaker versions of Marx's claim can be substantiated. The rate of profit can be expressed as a function of the conditions of production, plus the distribution of income between workers and capitalists. Using Morishima's 'true' or von Neumann values, it can be written as a function of value magnitudes, and the Fundamental Marxian Theorem – a positive rate of profit entails a positive rate of exploitation, and vice versa – can be upheld. Only in this attenuated version does Marx's first claim prove to be justified.[113]

His second claim, however, is false. Marx's 'complicating detour' was indeed unnecessary; as Joan Robinson put it, half a century ago, 'none of the important ideas which he expresses in terms of the concept of *value* cannot be better expressed without it'.[114] In particular, the labour theory of value is not necessary for a theory of exploitation, even in a qualitative sense. Profits arise, as Marx himself explained, because of the capitalist class monopoly over the mean of production in an economy which produces a surplus. The class monopoly is the ability of capitalists to deny access to the means of production which they own. Since the majority of the population cannot survive without such access, capitalists can establish an effective claim on part of what is produced. Subject to the qualifications noted in the previous paragraph, profits can be expressed in quantities of surplus labour. But this is only one possible scale of measurement, and is not essential to the theory of exploitation.

Although these conclusions remain controversial, adherence to the quantitative labour theory of value continues to decline. What is to replace it? Many Marxian economists have simply retreated into qualitative value analysis. The difficulty with this response is that Marx's analysis of commodity exchange, capital accumulation and crisis was conducted in value terms, and needs to be reformulated in a more acceptable way. Some writers simply adopt a non-Marxian theory of price, as in Baran's and Sweezy's *Monopoly Capital* (see Chapter 6 above), the semi-Keynesian models of cyclical growth developed by Howard Sherman, or the Kaleckian analysis of monopoly capitalism associated with Keith Cowling and Malcolm Sawyer.[115] In the following chapter we assess an alternative reaction, more openly hostile to neoclassical analysis, which draws instead on the

Sraffian theory of equilibrium price and seeks to construct on this foundation a system of political economy which rehabilitates the essential elements of Marx's qualitative value analysis, albeit without using his value categories.

Notes

1. M. Dobb, *Theories of Value and Distribution Since Adam Smith* (Cambridge: Cambridge University Press, 1973), p. 161.
2. M. Morishima and F. Seton, 'Aggregation in Leontief Matrices and the Labour Theory of Value', *Econometrica*, 29, 1961, pp. 203–20.
3. Ibid, p. 205; cf. J. Robinson, *An Essay on Marxian Economics* (London: Macmillan, 1942), Ch. 3. See also J.S. Szumski, 'The Transformation Problem Solved', *Cambridge Journal of Economics*, 13, 1989, pp. 431–52.
4. L. Johansen, 'Labour Theory of Value and Marginal Utilities', *Economics of Planning* 3, 1963, pp. 89–103.
5. N. Okishio, 'A Mathematical Note on Marxian Theorems', *Weltwirtschaftliches Archiv*, 91, 1963, pp. 296–8 and (especially) p. 297, n.1.
6. A. Brody, *Proportions, Prices and Planning: A Mathematical Restatement of the Labour Theory of Value* (Amsterdam: North-Holland, 1970).
7. M. Dobb, 'The Sraffa System and the Critique of the Neo-Classical Theory of Distribution', *De Economist*, 118, 1970, pp. 347–62.
8. Ibid, p. 356; original stress.
9. Ibid, pp. 358, 360.
10. Dobb, *Theories*, p. 261.
11. P.A. Samuelson, 'The "Transformation" From Marxian "Values" to Competitive "Prices": A Process of Rejection and Replacement', *Proceedings of the National Academy of Sciences*, 67, 1970, pp. 423–5.
12. P.A. Samuelson, 'Understanding the Marxian Notion of Exploitation: A Summary of the So-Called Transformation Problem between Marxian Values and Competitive Prices', *Journal of Economic Literature*, 9, 1971, pp. 399–431.
13. Ibid, p. 400.
14. A. Lerner, 'A Note on "Understanding the Marxian Notion of Exploitation"', *Journal of Economic Literature*, 10, 1972, p. 50; J. Robinson, 'Samuelson and Marx', *Journal of Economic Literature*, 11, 1973, p. 1367; see Samuelson, 'The Economics of Marx: an Ecumenical Reply', *Journal of Economic Literature*, 10, 1972, pp. 51–7, and 'Comment', *Journal of Economic Literature*, 11, 1973, p. 1367, for his response.
15. W.J. Baumol, 'The Transformation of Values: What Marx "Really" Meant: an Interpretation', *Journal of Economic Literature*, 12, 1974, pp. 56, 59.
16. P.A. Samuelson, 'Insight and Detour in the Theory of Exploitation: A Reply to Baumol', *Journal of Economic Literature*, 12, 1974, pp. 62–70; W. J. Baumol, 'Comment', *ibid.*, pp. 74–5.
17. M. Morishima, 'The Fundamental Marxian Theorem: a Reply to Samuelson', *Journal of Economic Literature*, 12, 1974, pp. 71–4; Samuelson had criticised Morishima's book in his reply to Baumol, and reiterated his objections in Samuelson, 'Rejoinder: "Merlin Unclothed", a Final Word', *Journal of Economic Literature*, 12, 1974, pp. 75–7. Morishima's work will be discussed in section IV of this chapter.
18. M. Bronfenbrenner, 'Samuelson, Marx and Their Latest Critics', *Journal of Economic Literature*, 11, 1973, p. 58.

19. The neoclassical writer was Murray Wolfson, and the Marxians J. Cartelier, B. Jossa, David Laibman and Paul Mattick; the theoretical allegiance of the sixth, G. Bjornson, is unclear (ibid, pp. 62–3).
20. P.A. Samuelson, 'Samuelson's Reply on Marxian Matters', *Journal of Economic Literature*, 11, 1973, p. 67.
21. P. Mattick, 'Samuelson's "Transformation" of Marxism into Bourgeois Economics', *Science and Society*, 36, 1972, pp. 258–73; for Mattick's earlier work see section I of Ch. 1, and section IV of Ch. 5 above.
22. Mattick, 'Samuelson's "Transformation", pp. 263, 269.
23. Ibid, p. 267.
24. Ibid, p. 272.
25. Ibid, pp. 263, 273.
26. D. Laibman, 'Values and Prices of Production: The Political Economy of the Transformation Problem', *Science and Society*, 37, 1973–4, pp. 404–36; Laibman thanked Samuelson for comments on section IV of the article (p. 430, n.24).
27. Ibid, pp. 414–25; this is not the same condition as that imposed by Meek (cf. section II of Ch. 12 above and Laibman, 'Values', pp. 412–13).
28. Ibid, pp. 432, 435.
29. P. M. Sweezy, *The Theory of Capitalist Development* (New York: Monthly Review Press, 1970; first published 1942), p. 25: cf. E.K. Hunt, 'The Meaning and Significance of the Transformation Problem: Two Contrasting Approaches', *Atlantic Economic Journal*, XVII, 1989, pp. 47–54, whose distinction between empiricism and rationalism carries very similar implications.
30. M.C. Howard and J.E. King, *The Political Economy of Marx* (Harlow: Longman, 1st edn, 1975, pp. 161–2; 2nd edn, 1985, pp. 174–7).
31. Samuelson, 'Samuelson's Reply on Marxian Matters', p. 67.
32. Howard and King, *Political Economy*, pp. 161–2 (1st edn); pp. 176–7 (2nd edn).
33. P.M. Sweezy, 'Marxian Value Theory and Crises', *Monthly Review*, 31, July–August 1979, pp. 1–17.
34. D. Elson, 'The Value Theory of Labour', in D. Elson (ed.), *Value: The Representation of Labour in Capitalism* (London: CSE Books, 1979), pp. 115–80; see also D. Gleicher, 'The Ontology of Labor Values: Remarks on the "Science and Society" Value Symposium', *Science and Society*, 49, 1985–6, pp. 463–71.
35. See also G. Southworth, 'Samuelson on Marx: A Note', *Review of Radical Political Economics* 4, 1972, pp. 103–11.
36. Samuelson, 'Samuelson's Reply on Marxian Matters', p. 64.
37. Samuelson, 'Marx as Mathematical Economist', in G. Horwich and P.A. Samuelson (eds), *Trade, Stability, and Macroeconomics: Essays in Honor of Lloyd A. Metzler* (New York: Academic Press, 1974), p. 288.
38. P.A. Samuelson, 'Rejoinder: "Merlin Unclothed"', p. 76.
39. Samuelson, 'Marx As Mathematical Economist', p. 301, where he writes of values and prices as representing 'a dual accounting system'; cf. J.E. King, 'Samuelson's Marx–Kritik', *Social Scientist* 33, 1975, pp.3–13, pp. 6–7, who notes that the logical structure of the transformation from values into prices is the same as that from Imperial to metric measures, and that this does not entail that one is 'correct' and the other 'false', and Southworth, 'Samuelson on Marx', p. 108.
40. Samuelson, 'Marx As Mathematical Economist', p. 292.
41. G. Pilling, 'The Law of Value in Ricardo and Marx', *Economy and Society*, 1, 1972, pp. 281–307; S. de Brunhoff, 'Marx as an A-Ricardian: Value, Money and Price at the Beginning of "Capital"', *Economy and Society* 2, 1973,

pp. 421–30; cf. B. Fine, *Marx's 'Capital'* (London: Macmillan, 1975), and B. Fine and L. Harris, 'Controversial Issues in Marxist Economic Theory', *Socialist Register*, 1976, pp. 141–78. The relevant articles are collected in B. Fine (ed.), *The Value Dimension: Marx Versus Ricardo and Sraffa* (London: Routledge & Kegan Paul, 1986). This paragraph draws heavily on Fine's lucid 'Introduction' to that volume.

42. R. Rowthorn, 'Neo-Ricardianism or Marxism?', *New Left Review*, 86, 1974, pp. 63–87; an earlier version appeared as 'Neoclassical Economics and Its Critics: A Marxist View', *Pakistan Economic and Social Review*, 11, 1973, pp. 316–48.
43. Rowthorn, 'Neo-Ricardianism or Marxism?', p. 87.
44. Ibid, pp. 82–7; cf. Howard and King, *Political Economy*, (1985), pp. 91–107, and I. Steedman, 'Marx on Ricardo', in I. Bradley and M.C. Howard (eds), *Classical and Marxian Political Economy: Essays in Honour of Ronald Meek* (London: Macmillan, 1982), pp. 115–56. Steedman argues that Marx's critique of Ricardo was unjustified.
45. Rowthorn, 'Neo-Ricardianism or Marxism?', p. 84; cf. F. Roosevelt, 'Cambridge Economics as Commodity Fetishism', *Review of Radical Political Economics*, 7, 1975, p. 7. The same charge was laid against Samuelson: see King, 'Samuelson's Marx-Kritik', p. 9.
46. 'Rowthorn, 'Neo-Ricardianism or Marxism?', p. 75; cf. A. Medio, 'Neoclassicals, Neo-Ricardians, and Marx', in J. Schwartz (ed.), *The Subtle Anatomy of Capitalism* (Santa Monica, Cal.: Goodyear, 1977), pp. 381–411.
47. R.L. Meek, 'Karl Marx's Economic Method', in Meek, *Economics and Ideology and Other Essays* (London: Chapman & Hall, 1967), pp. 93–112.
48. M. Morishima, *Marx's Economics* (Cambridge: Cambridge University Press, 1973); Morishima, 'Marx in the Light of Modern Economic Theory', *Econometrica*, 42, 1974, pp. 611–32; Morishima and G. Catephores, *Value, Exploitation and Growth* (New York: McGraw-Hill, 1978). See also the reviews of *Marx's Economics* by C.C. von Weizsäcker, *Economic Journal*, 83, 1973, pp. 1245–54; I. Steedman, *Manchester School*, 41, 1973, pp. 355–6; and E. Nell, *Journal of Economic Literature*, 11, 1973, pp. 1369–72.
49. The Fundamental Marxian Theorem can be traced back at least as far as F. Seton, 'The "Transformation Problem"', *Review of Economic Studies*, 24, 1957, p.151, n.2; see also Okishio, 'Mathematical Note', pp 292–3. It was thus not discovered by Samuelson in 1971, as suggested by C.C. von Weizsäcker, 'On Ricardo and Marx', in E.C. Brown and R.M. Solow (eds), *Paul Samuelson and Modern Economic Theory* (New York: McGraw-Hill, 1983), pp. 203–10.
50. On Marx as 'an intrinsic mathematician', see Morishima, 'Marx in the Light', pp. 612–13; for a discussion of alternative definitions of value in these circumstances, see Howard and King, *Political Economy* (1985), pp. 150–6.
51. Morishima, *Marx's Economics*, pp. 181–6; Morishima and Catephores, *Value*, pp. 36–7.
52. I. Steedman, 'Positive Profits With Negative Surplus Value', *Economic Journal*, 85, 1975 pp. 114–23.
53. M. Morishima, 'Positive Profits With Negative Surplus Value: a Comment', *Economic Journal* 86, 1976, pp. 599–603; I. Steedman, 'Positive Profits with Negative Surplus Value: A Reply', *Economic Journal*, 86,1976, pp. 604–8.
54. I. Steedman, *Marx After Sraffa* (London: New Left Books, 197), p. 207 (original stress); cf. P. Garegnani, 'Sraffa's Revival of Marxist Economic Theory: An Interview With Pierangelo Garegnani', *New Left Review*, 112, 1978, pp. 71–5.

55. I. Steedman, 'The Transformation Problem Again', *Bulletin of the Conference of Socialist Economists* 2, 1973, pp. 37–42; I. Steedman, 'Value, Price and Profit', *New Left Review*, 90, 1975, pp. 71–80.
56. See the reviews of *Marx After Sraffa* by G.C. Harcourt, *Journal of Economic Literature*, 17, 1979, pp. 534–6; J. Roemer, *Science and Society*, 43, 1977, pp. 95–9; and L. Mainwaring, *Manchester School*, 47, 1979, pp. 305–7; see also H. Kurz, 'Sraffa After Marx', *Australian Economic Papers*, 18, 1979, pp. 52–70.
57. G. Hodgson, 'Exploitation and Embodied Labour Time', *Bulletin of the Conference of Socialist Economists*, 5, 1976, pp. GH 1O, GH 18; cf. Hodgson, 'Marxist Epistemology and the Transformation Problem', *Economy and Society*, 3, 1974, pp. 357–92; Hodgson, 'A Theory of Exploitation Without the Labor Theory of Value', *Science and Society*, 44, 1980, pp. 257–73; D. Laibman, 'Exploitation, Commodity Relations and Capitalism: A Defense of the Labor–Value Formulation', *Science and Society*, 14, 1980, pp. 274–88.
58. Steedman, *Marx after Sraffa* pp. 34–5, 192–4.
59. I. Steedman, 'Thinking Again About Profits', *New Statesman*, 5 January 1979, p. 11; see also J.E. King, 'Value and Exploitation: Some Recent Debates', in I. Bradley and M.C. Howard, *Classical and Marxian*, pp. 157–87.
60. Brody, *Proportions*, p. 94; K. Marx, *Capital*, III (Moscow: Foreign Languages Publishing House, 1962), p. 174; Sweezy, *Theory of Capitalist Development*, pp. 128–30.
61. Nell, 'Review of *Marx's Economics*', p. 1371; King, 'Samuelson's Marx–Kritik', p. 9.
62. Meek, *Studies in the Labour Theory of Value*, (London: Lawrence and Wishart, 1956), 1st edn, pp. 198–200; cf. (1973) 2nd Edn, pp. xxxii–xl.
63. M. Morishima and G. Catephores, 'Is There an "Historical Transformation Problem?"', *Economic Journal*, 85, 1975, pp. 309–28.
64. Ibid, pp. 313–20.
65. Ibid, pp. 321–3.
66. Ibid, pp. 318, 325.
67. R.L. Meek, 'Is There an "Historical Transformation Problem?" A Comment', *Economic Journal*, 86, 1976, pp. 342–7; M. Morishima and G. Catephores, 'The "Historical Transformation Problem"; A Reply', *Economic Journal, 86, 1976*, pp. 348–52.
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69. Morishima and Catephores, '"Historical Transformation"' (1975), pp. 325–6.
70. M. Desai, 'The Transformation Problem', *Journal of Economic Surveys*, 2, 1988, p. 320.
71. D.M. Nuti, 'The Transformation of Labor Values into Production Prices and the Marxian Theory of Exploitation', in Schwartz, *Subtle Anatomy*, p. 103; see also G. Abraham–Frois and E. Berrebi, *The Theory of Value, Prices and Accumulation* (Cambridge: Cambridge University Press, 1979), pp. 217–18; King, 'Value and Exploitation', pp. 161–2.
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74. Brody, *Proportions*, pp. 90–1; Morishima, 'Marx in the Light', pp. 624–4.
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102. B. Bradby, 'The Remystification of Value', *Capital and Class*, 17, 1982, pp. 114–33; D. Purdy, *Social Power and the Labour Market* (London: Macmillan, 1988).
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15
Marxian Political Economy and Surplus Economics

I Sraffian Marxism

Sraffian economists[1] have remained essentially unmoved by all attempts to salvage Marx's theory of value, and have continued to maintain that the critique outlined in Chapter 13 above holds true: the labour-value categories, however reformulated, are at best redundant and at worst contradictory or erroneous. At the same time Sraffians have claimed that their analysis of Marx is constructive, arguing that Sraffa and Marx both belong to a 'surplus paradigm' and so share the same perspective and methodology. Thus they argue that their critique of Marx is an 'internal' one, and that Marxian political economy has really been strengthened because the defects in the original formulation have been exposed and shown to be irrelevant to the more general approach which underpins it. In consequence, Sraffa's work represents a secure foundation upon which the surplus paradigm can be developed and the real insights of Marxism reconstituted.[2]

These writers have differed in their definition of the surplus, but the essential idea is always the same: surplus constitutes disposable resources. The net output of any economic system is divided into two components: that required for the reproduction of outputs, representing necessary costs of production or reproduction, including necessary labour costs; and the remaining element of net output, which represents the surplus. The economy's outputs can be ensured irrespective of how the surplus is used, although its use will affect the dynamics of the system (see Chapters 6 and 9 above). Receipt of the surplus corresponds to no exchange of equivalents, and represents no cost of production. Thus property incomes – which have always been considered to be the main forms through which surplus is distributed in class societies – are easily conceived to be the fruits of exploitation, and many Sraffians explicitly accept such a description as appropriate.[3]

In capitalism, profits are the principal form of property income and their distribution in competition occurs through the formation of prices of production which equalise the rate of profit and simultaneously allow economic reproduction to occur. Thus profits do not represent the remuneration of any 'factor of production', nor do prices reflect relative scarcities, as in neoclassical economics.[4] In the surplus perspective there is a 'circular process' of the production of commodities by means of commodities, in contrast to the neoclassical view 'of a one-way avenue that leads from "factors of production" to "consumption goods"'.[5] In addition, no notion of reproduction or surplus need figure in neoclassical theory, or, if appended, need take on no significance; commodities may be produced, but they are not conceived as reproduced inputs incorporating a surplus over and above the inputs required for their production.[6] Furthermore, for those adhering to the surplus paradigm it is the requirements of production and reproduction which predominate in determining economic behaviour, which cannot appropriately be characterised as the choices of autonomous agents (see Chapter 17 below). Instead there are classes, defined by their role in the production and distribution of the surplus.[7]

The surplus theorists' analysis of value has been undertaken in terms of a particular concept of competitive equilibrium, usually referred to as 'long-period' states or 'centres of gravitation'.[8] Rates of profit and the wage rates of homogeneous types of labour are each assumed to be uniform between different sectors, and units of the same commodity trade at the same price. These features are evident in the Sraffa systems outlined in Chapter 13, and Marxian treatment of the transformation problem has typically conformed to this notion of equilibrium (see Chapter 3 of volume I of this book, and Chapters 12 and 14 above). But the Sraffians claim to have rigorously examined the properties of these economic states, while Marxians have not; their critique of Marx has been one result, and their attack on neoclassical theory has been another (see Chapter 13 above).

For the Sraffians, the significance of Marx's own value theory is purely historical: it was the principal medium through which the surplus paradigm was preserved and extended after the decline of Ricardian economics. However, since other economists, like Dmitriev, Leontief and von Neumann subsequently advanced the surplus approach beyond Marx, and in doing so revealed important limitations in Marx's work, Sraffians claim that it is essential to be revisionist if the truths of Marxism are to be preserved. Nonetheless, modern theorists of the surplus paradigm are not united in their views as to exactly what this requires. Garegnani, Eatwell and Milgate favour an approach based squarely upon *The Production of Commodities*. Morishima, Goodwin and perhaps Pasinetti argue that linear production theory, and especially the work of von Neumann, is more robust. Joan Robinson and the post-Keynesians prefer the work of Keynes, as interpreted by Kalecki, as the principal mode of advance (see Chapter 5 above), while

Marglin and Harris are more eclectic (see section IV below). One common quality of all these positions is that the amalgamation of Marx's ideas with those of other economists has the effect of diluting their specifically Marxian component, so that it becomes unclear as to what modern Marxian political economy exactly is. This ambiguity is exacerbated by the fact that the characteristics of the surplus paradigm are sometimes defined in opposition to neoclassical theory, and there have been different views as to what precisely the essence of neoclassicism is.[9]

The next section outlines how intellectual historians have interpreted the development of economic thought, and especially theories of value, in the light of Sraffa. They maintain that there have been two principal strands of analysis since the rise of capitalism: the surplus tradition, and supply and demand theory. Section III deals with the Marxian critics of this position, who claim that it is wholly inappropriate to incorporate Marx into a stream of political economy which also includes bourgeois thinkers like Ricardo and Sraffa. This is followed in section IV with an outline of how modern surplus theorists have sought to extend their approach to economics beyond *The Production of Commodities*, while section V deals with the criticism which their endeavours have provoked.

II The Surplus Tradition in the History of Economic Thought

Some of the similarities between Marx and Sraffa were quickly perceived by both Ronald Meek and Maurice Dobb.[10] In due course they each rewrote the history of economics in terms of Sraffa's work, arguing that at least since the eighteenth century economic theory had developed in two traditions: the supply and demand approach, and the surplus paradigm.[11] Dobb maintained that Adam Smith was the pivotal figure from which both traditions drew. Ricardo and Marx had extended the surplus approach in the nineteenth century, while Dmitriev, Bortkiewicz, Leontief, von Neumann and Sraffa were the leading lights of the twentieth century. Meek's emphasis was somewhat diferent. His extensive knowledge of Physiocracy led him to elevate the importance of Smith in formulating the paradigm of modern surplus theory,[12] and his researches into the origins of historical materialism reinforced this conclusion.[13] Meek argued that prior to Smith no economist had properly conceptualised the class structure of capitalist societies, and had not recognised the importance for accumulation of capitalist class relations. Furthermore, although Meek did not question the centrality of Ricardo's work in the surplus tradition, he was less convinced that Sraffa's own interpretation of the development of Ricardian economics was beyond reproach. Dobb had cooperated extensively with Sraffa in completing *The Works of David Ricardo*, and was no doubt influenced by Sraffa's views on the exact nature of Ricardo's theory.[14]

However, neither Meek nor Dobb found it difficult to rewrite the history of economic thought in the light of Sraffa's work, because it conformed so closely to their own established views. Prior to 1960 each had sought to locate Marx firmly within the tradition of classical political economy, and to argue that classical analysis could not be regarded simply as an embryonic form of neoclassical economics (as many non-Marxist historians of thought had done).[15] Furthermore, they both died – Dobb in 1976, Meek in 1978 – before it became clear that the logic of Sraffa's critique went well beyond treating the transformation problem as a 'complicating detour' (see Chapter 13 above). Their work on intellectual history therefore facilitated that of more single-minded Sraffians who have continued to argue for the 'dual tradition' interpretation of the history of economic ideas, yet also accept the full force of the Sraffian critique of Marx. Garegnani has closely examined the structure of the classical and Marxian theories of value, arguing that each is logically and historically compatible with a Keynesian theory of effective demand.[16] Milgate has claimed that Keynes himself can be interpreted as a 'long period' theorist, and his analysis can be freed from its residual neoclassical elements which were undermined by the 'Capital Controversies' of the 1960s. Indeed, Milgate and Eatwell have maintained that the logical deficiencies of neoclassical capital theory totally subvert any other interpretation of Keynes's work, and require that Keynesian theory be relocated within the surplus paradigm.[17]

The evolution of supply and demand theory has also received attention from the Sraffians. Garegnani, Eatwell and Milgate have all argued that neoclassical general equilibrium theory abandoned the traditional 'object' of value theory – long-period equilibria – during the 1930s, under the influence of Hicks and Hayek. It then became apparent that the Walrasian view of economic relations was not in general compatible with the existence of a uniform rate of profit. For this reason notions of inter-temporal equilibrium and temporary equilibrium, involving unequal rates of return on the supply price of capital goods, came to replace long-period centres of gravitation, which had previously dominated the analysis of value theorists in both traditions. Coupled to the devastating critique of other forms of neoclassical theory, Sraffian economists have therefore claimed that the surplus paradigm is the only coherent approach to political economy.[18]

Dobb himself became an exponent of this view.[19] Prior to *The Production of Commodities* he had argued for the virtues of classical and Marxian political economy against neoclassical theory, but he had never made an all-out attack on the logical coherence of supply and demand analysis, declaring with Meek only that it was conceptually flawed and ideologically motivated.[20] After the impact of Sraffa there was a significant shift in his emphasis. Dobb now declared that the scientific status of neoclassical theory had been completely undermined; by implication, Marx's own aim of totally routing vulgar economy[21] had been fulfilled.

III Marxian Critics of the Surplus Tradition

Many Marxists have resisted the incorporation of Marx into the surplus paradigm, often also claiming that the Sraffians and their predecessors are themselves vulgar economists. They argue instead that Marxian political economy is unique, representing a sharp break with classical analysis and incapable of absorption into a Sraffian stream of thought without irreparable harm to its own integrity. These critics do not need to question the logical coherence of the Sraffian attack on Marx's value theory; indeed, some freely admit that it is formally sound. Instead they reject the terms of reference within which the critique of Marx is made, and accept only the attack on neoclassical theory, since it too is a vulgar economy (see Chapter 14 above).[22]

In his review of Dobb's *Theories of Value and Distribution Since Adam Smith*, Paul Sweezy provided a moderate version of this criticism. It is

> true that Marx's theory built upon and developed that of Ricardo in several directions. But Marx, totally unlike Ricardo, conceived his task to be the construction of a comprehensive and uncompromising critique of the whole capitalist order, including even its best efforts to explain its own workings; and in carrying out this task he broke wholly new ground and established a counter-tradition to that of classical as well as neoclassical economics . . . the very title of the book of Sraffa, who, in Dobb's treatment, is the contemporary embodiment of the tradition to which he refers . . . is in sharp contrast to Marx's approach. Marx was emphatically not concerned with the 'production of commodities by means of commodities.' His subject was the production of commodities by means of human labour[23]

In the same spirit, other Marxists have charged Dobb and Meek with consistently minimising the significance of Marx's criticism of classical political economy.[24]

There is one respect in which this is true. Marx incorporated into his value categories a set of qualitative properties, as well as quantitative content. He formulated a 'value theory of labour' as well as a 'labour theory of value'.[25] In other words, Marx's concepts sought to express the social relations of commodity-producing systems in an explicit manner which was absent from classical political economy.[26] Dobb can be accused with some justice of virtually ignoring Marx's critique of classical economics, and Meek of illegitimately reading into Smith's and Ricardo's value theories the qualitative properties that only emerge explicitly with Marx's work. By doing this they minimised the discontinuity, and devalued Marx's justified claim that a fetishistic perspective pervades the economics of his classical predecessors.[27] Marx's economics was not simply a linear continuation of classical political economy, and this is true irrespective of whether the Sraffian critique of Marx's quantitative value theory is sound.

However, the Marxian critics have passed over in silence the attempts by Meek and others to employ the Sraffian framework in qualitative analysis parallel to that of Marx's original endeavours.[28] And, more importantly, they have failed to recognise that the holistic nature of Marx's value categories makes a defect in any of their dimensions a flaw in the overall structure of the theory. Only by emphasising the qualitative dimension of value theory, to the virtual exclusion of the quantitative, is it really possible to see a wholly different tradition in the intellectual history of Marxism running through Hilferding, Petry and Rubin to Sweezy and Rosdolsky, with the Sraffians lumped together with the neoclassicals as vulgar economists.[29]

While the Marxian critics of Sraffa have failed to engage this rather elementary point, they have raised two deeper issues. First, the Sraffian critique adopts particular conventions governing the allocation of embodied labour between jointly-produced commodities which Marx did not pronounce upon. It follows, critics argue, that the Sraffians have read far too much significance into their own results, and have not demonstrated conclusively that their reading of Marx's quantitative value analysis is the appropriate one.[30] Second, scientific analysis is but one element of Marxism, which seeks also to be a critical theory aimed at transforming the existing order. There is nothing in the Sraffian framework which could compensate adequately for the ideological-political loss that results from eliminating all reference to the concept of surplus value.[31]

Nonetheless, these arguments cannot justify the strategy of 'carry on regardless' which some Marxists have adopted in the face of the Sraffian critique. The ambiguities of Marx's quantitative value theory have been misused by anti-Sraffian Marxists. The perversities outlined in Chapter 13 are very much more in the results than they are in the procedures and assumptions which generate them. Steedman's critics have all too often retreated into accounts of the 'true' nature of value–price relations which are indefinite and opaque, and certainly do not address the deductive and formal account of value theory found in volume III, as distinct from volume I, of *Capital*.[32] In volume III Marx is recognisably in the tradition of Ricardo, and this is additionally evidenced by Engels's treatment of the 'Prize Essay Competition' (see Chapters 2 and 3 of volume I of this book).[33] And the political-ideological role of the labour theory of value relies on its scientific truth.[34] The separation of science and politics would threaten the whole basis of the Marxian project, as demonstrated by the use of Marxism as a state ideology under Stalin (see Chapter 2, section III, above).

Anti-Sraffian Marxists are on stronger ground when they move from defending Marx to attacking the stark architecture of Sraffa's own economics. Even here, though, they have erroneously read into Sraffa's work properties which it does not contain. The fact that *The Production of*

Commodities itself has no analysis of the labour and circulation processes does not imply that it is inherently incapable of treating these matters, as Steedman has demonstrated.[35] Charges that Sraffian theory is limited to relations of exchange, treats production as a matter of technology and incorporates a fetishistic perspective,[36] are without substance. This conclusion is buttressed by the fact that Sraffians have sought to build a comprehensive political economy upon Sraffa's original work, as we show in the next section.

IV Beyond the Theory of Value

Surplus theorists have adopted various research programmes to extend and enrich their approach to political economy. Not all have regarded *The Production of Commodities* as the most suitable point of departure; some prefer the models of Leontief and von Neumann. But all have recognised that where Marx's ideas are relevant they need to be incorporated into the work of non-Marxian theorists, including that of anti-Marxists like Keynes and Schumpeter. Nevertheless, this form of revisionism is self-consciously less aggressive than many earlier versions, and has had as a general aim the strengthening of Marxian insights on capitalist development, rather than casting further doubt upon them.

Garegnani, Eatwell and Milgate not only emphasise the particular virtues of Sraffa's treatment of value, but also claim that it accurately reflects the overall structure of causation which operates in capitalist economies. The 'object' of the theory of value – long-period equilibrium – allows analysis to focus upon the 'persistent and systematic' forces which operate through competition, and abstracts from the complicating and transitory influences of disequilibrium. The data of value theory (technology, outputs and a distributional variable), from which equilibrium prices and other distributional variables are derived, reflect the lack of any general causal relationships between actual changes in outputs, distribution, prices and technical progress. Consequently the determinants of each element of these data are largely separate from each other, and political economy therefore requires a segmented approach involving different explanations of each type of variable, rather than the simultaneous determination of all variables from a single set of data, as attempted by neoclassical theorists.

Sraffians claim that the hallmark of the classical and Marxian approach to economic theory is separable explanations of each type of variable or sets of systematically inter-related variables (like the rate of profit and equilibrium prices), and the subsequent consideration of the interactions between them. This is to be sharply contrasted with the methodology of simultaneous determination employed in the supply and demand tradition. The procedures of surplus theory reflect the belief that, although all phenomena in a capitalist economy continually interact, there are subsets of relations which are relatively autonomous. Thus they can initially be treated as separate, and the question of their interactions with other phenomena (which are themselves empirically variable) can be postponed to a later stage.[37]

As so far developed there are real weaknesses in these Sraffian ideas. Garegnani, Eatwell and Milgate have given far more attention to laying down the rules of theory construction than to actually building any theory beyond Sraffa. Where they have attempted to do so, it does not always appear to conform to their methodological strictures.[38] They have not addressed the question of whether the 'one issue at a time' procedure of Ricardo and Marx represents a genuine view about causation, or simply reflects their analytical inadequacies in treating systemic inter-relations. Nor have they examined whether the supposedly 'persistent and systematic forces' of capitalist competition will lead economies to converge toward long-period equilibria. Others have done so, and their results taken as a whole are not encouraging; non-convergent adjustment paths appear quite possible and thereby weaken the argument that long-period equilibria act as 'centres of gravitation'.[39]

Not surprisingly, some modern theorists within the surplus paradigm have narrowed their focus to the sequence of long-period equilibria in steady-state growth, which Marx first began to analyse in his reproduction models.[40] By adding the assumption of constant returns to scale to *The Production of Commodities*, its results can be incorporated into linear production theory, which also includes the work of Leontief and von Neumann.[41] Moreover, it is possible to link this analysis of production with Kalecki's treatment of effective demand considered in Chapter 5, and to do so in a way which complements Sraffa's theory of value.

Equation (5.2) on page 104 of Chapter 5 above can be rewritten as

$$P = (1 - s_c)P + I \tag{15.1}$$

where P represents profits, I stands for investment, and s_c is the savings propensity of the capitalist class. Dividing through by K (which symbolises the capital stock) and rearranging terms, equation (15.1) becomes

$$P/K = (I/K) / s_c \tag{15.2}$$

On a steady state growth path, P/K is the equilibrium rate of profit (r) and the rate of accumulation (I/K) equals the rate of growth of output (g). Equation (15.2) can then be written as

$$r = g/s_c \tag{15.3}$$

The rate of profit is thus determined by the rate of accumulation and the savings ratio of the capitalist class. When this rate of profit is substituted into the data of Sraffian analysis, all endogenous variables of the long-period equilibria are determined. Kalecki's distribution theory and Sraffian value theory are fused together in a consistent whole.

Luigi Pasinetti has shown that equation (15.3) is not dependent upon the assumption that workers' savings are zero (which underlies equation (15.1)).[42] And he has used equation (15.3) in support of the surplus paradigm against the critics of Marxism:

> For more than a century now, since the time of Marx and Böhm-Bawerk, economic theorists have been debating whether the rate of profits is due to any 'productivity' of capital . . . But new horizons have been opened. In the long run . . . the rate of profit is determined by the . . . rate of growth divided by the capitalists' propensity to save, independently of any 'productivity' of capital . . . and indeed independently of anything else'.[43]

This fits clearly with the general perspective of Marxian political economy, for it is the accumulation process and class actions which are important, not the 'Holy Trinity' of 'factors of production' interacting through exchange relations.[44]

However, steady state growth models are only first approximations to an understanding of the turbulent conditions of accumulation in actual capitalism.[45] Pasinetti himself has gone well beyond them, and in doing so has opened up avenues of direct relevance to other issues of Marxian theory. In *Structural Change and Economic Growth* he explored the properties of economies experiencing uneven rates of technical change and evolving patterns of consumption, indicating *inter alia* a tendency towards underconsumption which many Marxists have always considered to be a principal contradiction of capitalist development (see volume I of this book, and Chapter 1 and Part II above).[46] The overaccumulation strand of Marxian crisis theory has also received a boost from Richard Goodwin's incorporation of disequilibrium into the von Neumann growth model.[47] His results are very much in the tradition of Otto Bauer and Paul Sweezy (see Chapter 6 of volume I of this book, and Chapter 1 above). But Goodwin's cyclical analysis is far more rigorous, and incorporates Schumpeterian elements as well as those drawn from Marx.

Yet another strand of surplus theory has formulated models of accumulation and crisis which are even more eclectic, but clearly show the influence of Marx and treat issues central to Marxian political economy. Joan Robinson's *Accumulation of Capital* was the first and remains the most famous,[48] but there are others, notably those of Stephen Marglin, Donald Harris and the post-Keynesian school.[49] Hostility toward neoclassical theory is probably as important a force in motivating post-Keynesian writers as the inclination towards Marx, but the two influences have tended to complement each other, even if they are not logically connected (see Chapter 5 above). In this sense Christopher Bliss was right to claim that the principal conflict in the high theory of modern economic analysis has been between Marxism and 'vulgar economy'.[50]

The conflict has not, however, been one-sided. *The Production of Commodities* drew blood in a way in which supply and demand theorists could understand, and they have launched counter-attacks. Samuelson's critique of the transformation problem in the early 1970s occurred in the wake of the neoclassicals' defeat in the 'Capital Controversies', but was quickly overtaken by the deeper criticisms of orthodox Marxism emerging from the tradition of surplus theory itself (see Chapters 13 and 14 above). Since then, he and other neoclassical theorists have taken aim at more substantial targets, and some of their arguments have found an echo among anti-Sraffian Marxists. Orthodox economists and orthodox Marxists are no doubt strange bed-fellows, but they have shared the objective of neutralising the larger claims of the Sraffians, and of absorbing Sraffa's work into the structure of neoclassical theory as a 'special case'. However, it is the supply and demand theorists who have set the pace, and their dissection of surplus economics has revealed grave weaknesses, which have also not left Marx's own political economy unscathed.

V Limitations of Sraffian Analysis

The location of classical and Marxian political economy within a surplus tradition has brought an avalanche of criticism from some historians of economic thought, such as Samuel Hollander, for whom there has been only one, supply and demand, tradition of analysis since Smith, and this includes Marx.[51] This, however, remains a minority position, which is rejected even by neoclassical historians of economic thought who show few signs of sympathy with modern versions of surplus theory but accept that the interpretation of classical and Marxian political economy in such terms makes much greater sense.[52] The arguments of Sraffa, Dobb and Meek on the history of nineteenth century thought have therefore met with wide acceptance, and are not confined to theorists within the surplus tradition.[53]

However, this judgement is not so frequently extended to the work of Leontief and von Neumann in the twentieth century. Samuelson has indeed charged that under Sraffa's influence economists have misinterpreted von Neumann's growth model,[54] which at no point threatens any of the propositions of neoclassical general equilibrium theory.[55] Furthermore, Samuelson argues that his own work, together with that of Arrow, Debreu and Koopmans, has demonstrated how pivotal Leontief and von Neumann have been in the development of modern supply and demand theory.[56]

Samuelson also claims that von Neumann's framework is more general than that of Sraffa, a view shared by some within the surplus tradition itself.[57]

Hahn has reinforced these arguments by asserting that there is no proposition in *The Production of Commodities* which contradicts the results of neoclassical general equilibrium theory; that neoclassical theory can itself generate Sraffa's results and, moreover, show the restrictive assumptions which are required for them to prevail; and that it is therefore reasonable to see Sraffian economics as a special case of neoclassical theory. In particular, long-period equilibria will result from neoclassical general equilibrium models only for particular initial endowments of capital stocks and structures of final demands. In general, Hahn argues, profit-maximising activities will not be compatible with equilibria as Sraffians imagine them: that is, including an equalisation of the rate of profit on the reproduction price of capital goods. Competitive equilibrium involves an equal rate of return on all assets, but neoclassical theory recognises that only under particular conditions will asset prices equal their costs of production.[58]

There is an element of irony in this neoclassical attack on Sraffian theorists, and also in their reaction to it. The position of the neoclassical critics is formally identical to that which the Sraffians adopted in relation to Marx's economics. Neoclassicals fully concur with Steedman's claim that his evaluation of Marx represented 'an argument in logic' and, 'should anyone wish to challenge it, they must do so either by finding a logical flaw . . . or by rejecting explicitly and coherently one or more of the assumptions on which it is based'.[59] But they also extend this claim to their own critique of Sraffian theory in terms of modern general equilibrium analysis. On the other hand, the Sraffians' defence of their own economics mimics that of many anti-Sraffian Marxists – they accept the logical coherence of the criticism, but deny the appropriateness of their opponents' conceptualisation.[60]

Anti-Sraffian Marxists have frequently sided with the neoclassicals, failing to realise how damaging their criticisms are for Marx's own analysis.[61] Modern supply and demand theory reveals important deficiencies in *all* forms of surplus theory, which are not dependent upon acceptance of a neoclassical view of the world. One problem lies in Sraffa's assumption that a 'uniformity principle' holds, where not only is the wage and rate of profit the same in all processes, but the price of each commodity is identical irrespective of whether it is an input or an output. Assuming competitive conditions will not ensure prices are stationary. Take, for example, the following system:

$$a_{11}\, p_1{}^1\, (1 + r) + l_1\, w = p_1{}^2$$
$$a_{21}\, p_1{}^1\, (1 + r) + l_2\, w = p_2{}^2$$

The superscripts on prices refer to time and, if prices are unconstrained to be uniform (so that it is possible for $p_1^1 \neq p_1^2$), specifying r and the numeraire is not sufficient to determine either prices or the wage.[62]

This particular cause of underdetermination also threatens the link between profits and surplus. Output prices may differ from input prices in such a way that a positive surplus is neither a necessary nor a sufficient condition for positive profits.[63] Thus the usefulness of treating the economic system as involving reproduction and surplus extraction is suspect, for neither concept may be linked to exchange phenomena once the possibility of non-stationary prices is accepted. Consequently, the vision of causation in surplus theory where production and specific distributional relations completely determine exchange relations is no longer a compelling one. This, in turn, questions the particular applications of the materialist conception of history which many theorists within the surplus tradition have made in order to integrate their economics into a general social theory.[64]

Even if exchange relations are as Sraffian economists imagine them to be, so that a stationary price vector prevails, there is still a problem with their treatment of the production structure, which entails that the number of processes and commodities are equal. This assumption appears to be economically arbitrary, for it is both possible and reasonable to imagine economies involving joint production where the number of processes which exist is less than the number of commodities which are produced. The determination of the endogenous variables in such a situation is something which is outside the scope of a Sraffa-based economics unless additional assumptions are specified.[65] Again, this 'in no way supports Marx against Sraffa: with the number of processes less than the number of products, Marx's labour values cannot even be computed'.[66]

These limitations in the Sraffian treatment of exchange and production also have important consequences for the reconstruction of Marx's theory of exploitation through the device of the standard commodity, which was outlined in section V of Chapter 13 above. In the absence of stationary prices, and without an equality between the number of processes and commodities, the standard commodity either cannot be constructed, or fails to act as a surrogate for the economic system as a whole. Each eventuality implies that the argument of section V in Chapter 13 can hold only for particular technologies and types of exchange relations, and is not generally valid.

There have also been damaging internal disputes among surplus theorists themselves. Joan Robinson in particular has been severely critical of the Sraffians' equilibrium methodology. One lesson she claims to have learned from Marx 'was the need to think in terms of history, not of equilibrium'.[67] Economies move from an 'irrevocable past into the unknown future',[68] and the 'anarchy of production' makes failures of coordination endemic. In her view the principal rationale for analysing long-period equilibria can only be that of Marx regarding the reproduction models: they can be used to highlight how fragile such conditions are, thus revealing various types of disturbance to which real economies are subject.[69] Anti-Sraffian Marxists have raised similar objections[70] and, indeed, they would find broad agreement among those neoclassical economists whose use of equilibrium models likewise does not reflect a belief that they correspond closely to reality.[71]

Thus disputes between Sraffians, anti-Sraffian Marxists and neoclassicals have sometimes made it difficult to understand exactly what divides them. It is certainly true that modern supply and demand theory is considerably less 'vulgar' than Marx believed its earlier forms to be. For example, it has revealed potential causes of crisis and instability in capitalist economies by considering rigorously what conditions threaten the existence of an equilibrium and preclude market forces from converging to equilibria. Moreover, the lack of clear differentiation between schools of thought was further exacerbated during the 1980s with the emergence of the 'rational choice Marxists', who accept the Sraffian critique of Marx as well as the neoclassical critique of the Sraffians, and consequently reject the surplus paradigm as an appropriate vehicle for the further development of Marxian political economy. Instead, they accept neoclassical methodology, and analyse Marxian problems with the tools of supply and demand analysis. We consider their work in Chapter 17 below; first, though, we turn to questions of crisis theory.

Notes

1. Not all economists who have employed Sraffa's analysis can be regarded as Marxists: Paul Samuelson is a leading example. Nevertheless many lean towards Marx, albeit at various angles of inclination, and it is with their work that we are principally concerned in this chapter.
2. J. Eatwell, review of J.E. Roemer's *Analytical Foundations of Marxian Economic Theory*, *Contributions to Political Economy*, 1, 1982, pp. 106–9. E.J. Nell, 'Theories of Growth and Theories of Value', *Economic Development and Cultural Change*, 16, 1967, pp. 15–26 gives a very good exposition of the surplus paradigm. See also I. Steedman, 'Thinking Again About Profits', *New Statesman*, 5 January 1979, pp. 10–12; M.C. Howard, *Profits in Economic Theory* (London: Macmillan, 1983), chapter 2; and P. Garegnani, 'Surplus Approach to Value and Distribution', in J. Eatwell, M. Milgate and P. Newman (eds), *The New Palgrave: A Dictionary of Economics* (London: Macmillan, 1987), volume IV, pp. 560–74.
3. Nell 'Theories'; J.E. Eatwell, 'Controversies in the Theory of Surplus Value: Old and New', *Science and Society*, 38, 1973, pp. 281–303; 'Mr. Sraffa's Standard Commodity and the Rate of Exploitation', *Quarterly Journal of Economics*, 89, 1975, pp. 543–55; J.E. King, 'Value and Exploitation: Some Recent Debates', in I. Bradley and M. Howard (eds), *Classical and Marxian Political Economy* (London: Macmillan, 1982), pp. 157–87; Garegnani, 'Surplus Approach', pp. 570–3; B. Jossa, 'The Theory of Exploitation in Marx', paper presented to

the History of Economics Society, University of Toronto, June 1988. See also G.A. Cohen, 'The Labour Theory of Value and the Concept of Exploitation', in I. Steedman, *et al* (eds), *The Value Controversy* (London: Verso, 1981), pp. 202–23, and Ch. 13, section VI, above.

4. L.L. Pasinetti, 'Again on Capital Theory and Solow's "Rate of Return"', *Economic Journal*, 80, 1970, pp. 28–31; P. Garegnani, 'Sraffa's Revival of Marxist Economic Theory', *New Left Review*, 112, 1978, pp. 71–5. Sraffian economists frequently characterise neoclassical economics in an erroneous manner; see Howard, *Profits*, pp. 148–9 and Howard, *Modern Theories of Income Distribution* (London: Macmillan, 1979), pp. 60–3, 74-75, 122–34.
5. P. Sraffa, *Production of Commodities by Means of Commodities* (Cambridge: Cambridge University Press, 1960), p. 93.
6. For an account of the neoclassical concepts of consumer's and producer's surplus see H.R. Varian, *Intermediate Microeconomics* (New York: Norton, 1990), 2nd edn, pp. 240–57, 297, 366, 373, 387, 422.
7. Here a broad similarity of view exists with that of the Althusserian structuralists, but neither the Sraffians nor the Althusserians have attempted to form a bridge to the others' work. And it would be difficult to do so for many reasons, not the least of which is that the Sraffians would necessarily be sharply critical of Althusser's own peculiar form of Marxian fundamentalism in value theory. See Howard, *Profits*, pp. 11–16, 143–44, 153–5; Howard, 'Economics on a Sraffian Foundation: A Critical Analysis of Neo-Ricardian Theory,' *Economy and Society*, 16, 1987, pp. 317–40; and L. Althusser and E. Balibar, *Reading Capital* (London: New Left Books, 1970).
8. See G.C. Harcourt, *The Social Science Imperialists* (London: Routledge & Kegan Paul, 1982), Ch. 15, and Eatwell, Milgate and Newman, *New Palgrave*, volume I, pp. 392–4.
9. S.A. Marglin, *Growth, Distribution and Prices* (Cambridge, Mass.: Harvard University Press, 1984) provides a good discussion of neoclassical theory; see especially pp. 12, 313, 317, 321, 328ff, 524ff, 529–32, 537–8, 540. See also I. Bradley and M. Howard, 'An Introduction to Classical and Marxian Political Economy', in Bradley and Howard, *Classical and Marxian*, pp. 1–43.
10. R.L. Meek, 'Mr. Sraffa's Rehabilitation of Classical Economics', *Scottish Journal of Political Economy*, 8, 1961, pp. 119–36; M.H. Dobb, 'An Epoch Making Book', *Labour Monthly*, 1961, pp. 487–91.
11. M. Dobb, *Theories of Value and Distribution Since Adam Smith* (Cambridge: Cambridge University Press, 1973); R.L. Meek, *Smith, Marx and After* (London: Chapman and Hall, 1977). See also K. Bharadwaj, *Classical Political Economy and the Rise to Dominance of Supply and Demand Theories* (London: Longman, 1976) and V. Walsh and H. Gram, *Classical and Neoclassical Theories of General Equilibrium* (Oxford: Oxford University Press, 1980).
12. R.L. Meek (ed.), *Precursors of Adam Smith* (London: Dent, 1973).
13. R.L. Meek, *Social Science and the Ignoble Savage* (Cambridge: Cambridge University Press, 1976).
14. P. Sraffa, 'Introduction' in *The Works of David Ricardo: Volume I*, edited by P. Sraffa (Cambridge: Cambridge University Press, 1951), pp. xiii–lxii; B.H. Pollitt, 'The Collaboration of Maurice Dobb in Sraffa's Edition of Ricardo', *Cambridge Journal of Economics*, 12, 1988, pp. 55–65.
15. M. Dobb, *Political Economy of Capitalism* (London: Routledge & Kegan Paul, 1937); R.L. Meek, *Studies in the Labour Theory of Value* (London: Lawrence & Wishart, 1956).
16. P. Garegnani, 'Notes on Consumption, Investment and Effective Demand: II', *Cambridge Journal of Economics*, 3, 1979, pp. 63–82; 'Value and Distribution in

the Classical Economists and Marx', *Oxford Economic Papers*, 36, 1984, pp. 291–325.

17. M. Milgate, *Capital and Employment* (London: Academic Press, 1982); J. Eatwell and M. Milgate (eds), *Keynes's Economics and the Theory of Value and Distribution* (Oxford: Oxford University Press, 1983).
18. P. Garegnani, 'On the Change in the Notion of Equilibrium in Recent Work on Value and Distribution: a Comment on Samuelson', in M. Brown, K. Sato and P. Zarembka (eds), *Essays in Modern Capital Theory* (Amsterdam: North-Holland, 1976), pp. 25–45; M. Milgate, 'On the Origin of the Notion of "Intertemporal Equilibrium"', *Economica*, 46, 1979, pp. 1–10. Many of the entries in Eatwell, Milgate and Newman in *The New Palgrave* represent the most recent and comprehensive expression of this view: see, for example, I, pp. 357–68; II, pp. 179–83, 726–8; III, pp. 238–40; 598–9, 605–8, 786–7; IV, pp. 253–4, 560–74, 868–72; and M. Blaug, *Economics Through the Looking Glass: The Distorted Perspective of the New Palgrave Dictionary of Economics* (London: Institute of Economic Affairs, 1988).
19. Dobb, *Theories*, pp. 247ff; M. Dobb, 'The Sraffa System and Critique of the Neoclassical Theory of Distribution', *De Economist*, 118, 1970, pp. 347–62. Meek held back from this view; section V below shows that he was wise to do so.
20. Dobb, *Political Economy*; R.L. Meek, *Economics and Ideology* (London: Chapman & Hall, 1967).
21. See J.E. King, 'Marx as an Historian of Economic Thought', *History of Political Economy*, 11, 1979, pp. 382–94.
22. See, for example, P. Mattick, review of Dobb, *Science and Society*, 38, 1974, pp. 222–3.
23. P.M. Sweezy, review of Dobb, *Journal of Economic Literature*, 12, 1974, pp. 481–3; see also P.M. Sweezy, 'Marxian Value Theory and Crises', in Steedman, *Value Controversy*, pp. 20–35.
24. B.J. McFarlane, 'McFarlane on Dobb', in H.W. Spiegel and W.J. Samuels (eds), *Contemporary Economists in Perspective* (Greenwich, Conn.: JAI Press, 1984), pp. 595–621; G. Pilling, 'Law of Value in Ricardo and Marx', *Economy and Society*, 1, 1972, pp. 281–307.
25. D. Elson, 'The Value Theory of Labour' in D. Elson (ed.), *Value: The Representation of Labour in Capitalism* (London: CSE Books, 1979), pp. 115–80.
26. M.C. Howard and J.E. King, *The Political Economy of Marx* (Harlow: Longman, 1985), 2nd edn, pp. 43–8, 52–9, 167; see also Ch. 14 above.
27. Marx's most detailed analysis of classical economics is in *Theories of Surplus Value* (London: Lawrence & Wishart, 1971–72), Part I, pp. 69–97, 155–74; Part II, pp. 161–235, 342–585.
28. R.L. Meek, 'Introduction to the Second Edition' in *Studies* (2nd edn, 1973), pp. i–xliv; G. Hodgson, *Capitalism, Value and Exploitation: A Radical Theory* (New York: Monthly Review, 1982); S.J. Pack, *Reconstructing Marxian Economics* (New York: Praeger, 1985).
29. R. Hilferding, 'Böhm-Bawerk's Criticism of Marx' in P.M. Sweezy (ed.), *Karl Marx and the Close of his System* (New York: Kelley, 1966), pp. 121–96; F. Petry, *Der Soziale Gehalt der Marxschen Werttheorie* (Jena: Fisher, 1916); I.I. Rubin, *Essays on Marx's Theory of Value* (Montreal: Black Rose, 1973; first published c.1920); P.M. Sweezy, *The Theory of Capitalist Development* (London: Dobson, 1946); R. Rosdolsky, *The Making of Marx's 'Capital'* (London: Pluto Press, 1977). See also Ch. 3 of volume I of this book.
30. E. Mandel and A. Freeman (eds), *Ricardo, Marx, Sraffa* (London: Verso, 1984), pp. 19–25, 213ff, 222; B. Fine and L. Harris, *Rereading 'Capital'* (London: Macmillan, 1979); P.A. Swanson, 'The Labor Theory of Value and Fixed

Capital', *Review of Radical Political Economics*, 18, 1986, pp. 1–21; M. Itoh, *The Basic Theory of Capitalism* (London: Macmillan, 1988), pp. 174–8.
31. E.O. Wright, 'Reconsiderations', in Steedman, *Value Controversy*, pp. 161–2; H. Cleaver, *Reading Capital Politically* (Austin: University of Texas Press, 1979).
32. See, for example, Elson, *Value*; Mandel and Freeman, *Ricardo*; B. Fine, *The Value Dimension: Marx Versus Ricardo and Sraffa* (London: Routledge & Kegan Paul, 1986); and Steedman, *Value Controversy*, pp. 224ff.
33. Furthermore, some of the criticisms which Marx made against Ricardo's theory of value are invalid. Despite preceding Marx and lacking the richness of his qualitative value analysis, Ricardo was nevertheless sometimes correct, and Marx was sometimes wrong. See I. Steedman, 'Marx on Ricardo', in Bradley and Howard, *Classical and Marxian*, pp. 115–56.
34. Howard and King, *Political Economy*, Ch. 2.
35. I. Steedman, *Marx After Sraffa* (London: New Left Books, 1977), pp. 16–26, 77–87, 112–15.
36. See, for example, F. Roosevelt, 'Cambridge Economics as Commodity Fetishism', *Review of Radical Political Economics*, 7, 1975, pp. 1–30. J.B. Davis, 'Sraffa, Wittgenstein and Neoclassical Economics', *Cambridge Journal of Economics*, 12, 1988, pp. 29–36 provides a broader perspective in defence of Sraffa.
37. Garegnani, 'Value and Distribution' and 'Surplus Approach'; Eatwell and Milgate, *Keynes's Economics*. In this sense Sraffian theory again dovetails with that of structuralists who have questioned the more deterministic forms of historical materialism. However, since both groups have been rather insular, no real links have been established with like-minded theorists in other disciplines (see section I above).
38. See Howard, 'Economics on a Sraffian Foundation', pp. 321–4.
39. See n.90 of Ch. 14 above.
40. K. Marx, *Capital II*, (London: Lawrence & Wishart, 1970), Chs 20 and 21.
41. L.L. Pasinetti, *Lectures on the Theory of Production* (London: Macmillan, 1977); L. Mainwaring, *Value and Distribution in Capitalist Economies* (Cambridge: Cambridge University Press, 1984).
42. L.L. Pasinetti, *Growth and Income Distribution* (Cambridge: Cambridge University Press, 1974).
43. Ibid, pp. 144–5.
44. Harcourt, *Social Science Imperialists*, p. 236.
45. See, for example, D.J. Harris, 'The Theory of Economic Growth: From Steady States to Uneven Development' in G. Feiwel (ed.), *Contemporary Issues in Macroeconomics and Distribution* (London: Macmillan, 1985), pp. 378–94.
46. L.L. Pasinetti, *Structural Change and Economic Growth* (Cambridge: Cambridge University Press, 1981).
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65. Bradley and Howard, 'Piero Sraffa's "Production of Commodities"', p. 248. This is in fact a complex issue. Steedman and Schefold have sought to show rigorously that, apart from 'fluke' cases, the number of processes will be equal to the number of commodities, but in doing so they have made assumptions which are wholly unreasonable. See Howard, 'Economics on a Sraffian Foundation', pp. 326–8, and J.E. Woods, *The Production of Commodities: An Introduction to Sraffa* (London: Macmillan, 1990), Ch. 11.

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Part V
Current Controversies

16
The 'Second Slump': Theories of Crisis after 1973

I The End of the Long Boom

By the early 1970s there were clear signs that the long post-war boom was over. The quarter-century after 1945 had seen a 'Golden Age' of rapid economic growth throughout the advanced capitalist world and (for most countries) virtually continuous full employment, while real wages had grown steadily but not so rapidly as seriously to threaten the profitability of capital.[1] After 1973, however, accumulation slowed considerably. The GDP of four major European countries (the UK, France, West Germany and the Netherlands) plus Japan, which had grown at an annual rate of 5.6 per cent between 1950 and 1973, rose by an average of only 2.1 per cent per annum between 1973 and 1984, and the growth rate of output per hour worked fell from 5.3 to 2.8 per cent per annum over the same period. For the United States the decline was only slightly less marked: from 3.7 to 2.3 per cent (GDP) and 2.5 to 1.0 per cent (GDP per hour worked) respectively.[2] The rise in unemployment was even more dramatic. Male unemployment in Britain, for example, ranged from 1.1 per cent to 3.6 per cent between 1953 and 1970; from 1971 to 1980 the range was 3.6 per cent to 8.7 per cent, and in 1981–3 unemployment rose from 13.7 per cent to 16.7 per cent. The experience in other countries was similar, if less extreme.[3] Both the rate of profit and the share of profits in net output fell in the 1970s,[4] while inflation – an irritant rather than a major problem in earlier decades – accelerated dramatically.

Some economists, both orthodox and Marxian, interpreted these developments as further evidence of those 'long waves' of economic growth first identified by Parvus and Kondratiev (see Chapter 1, section I, above). According to these theorists, capitalism was characterised by 50 year fluctuations on to which the more familiar 7–10 year trade cycles were superimposed. In the long upswing the average rate of capital accumulation is high, cyclical booms are powerful, and depressions are correspondingly weak, as indeed they had been for 25 years after 1945. During the long downswing, however, slow growth resulted from a combination of weak booms and relatively deep and prolonged depressions. The inter-war years could be interpreted as one such Kondratiev downswing, and the period after 1970 as another.[5]

By no means all Marxian theorists were persuaded of the existence of long waves, which had in any case themselves to be explained. And the differences between the Great Depression and the much milder, more inflationary crises of the 1970s and 1980s were too apparent for any simple analogy between the two periods to carry much conviction.[6] There was, though, general agreement among Marxists both that the rate of profit had declined very significantly and that this was the crucial mechanism behind the slowdown in capital accumulation. In accounting for this falling profit rate, Marxian economists drew upon three of the four theories used by a previous generation to explain the Great Depression: the volume III, rising organic composition model; underconsumptionism; and the Bauer–Dobb–Sweezy analysis of overaccumulation (Chapter 1, section II, above).[7] Only the fourth approach, involving disproportionalities between the various departments of production, lacked adherents after 1970. The 1973 oil crisis did reflect a serious disproportionality between the output of manufactured commodities and the supply of energy. But it was universally interpreted by Marxian economists as an effect of much deeper economic problems, rather than as the underlying cause of the decline in profitability.

The remaining three strands of thought, embellished in various ways, alone or in combination, form the basis for all serious Marxist discussion of the collapse of the long boom.[8] Their different claims may be outlined algebraically. Following Thomas Weisskopf,[9] we can write the rate of profit as an identity:

$$r \equiv \frac{P}{K} \equiv \frac{Y}{Z} \cdot \frac{Z}{K} \cdot \frac{P}{Y} \tag{16.1}$$

Here P represents total profits; Y is net output; K stands for the capital stock; and Z denotes potential output (that is, the level of output which would be produced if the capital stock were fully utilised). The rate of profit is thus the product of the rate of capacity utilisation (Y/Z), the potential output-capital ratio (Z/K) and the profit share (P/Y). Allowing for the fact that equation (16.1) is expressed in market prices instead of labour values, it allows a clear distinction to be drawn between the three competing theories. A decline in the rate of profit can result, first, from underconsumption, which would give rise to realisation difficulties and reduce the rate of capacity utilisation (Y/Z). Or it could be caused by an increase in the organic composition, which will be reflected in a fall in the potential output–capital ratio (Z/K).[10] Finally, the rate of profit may decrease due to a decline in the profit share (P/Y) brought about by overaccumulation (which Weisskopf terms the 'rising strength of labour' thesis). In principle, empirical research should be able to determine which of the three factors dominated the post-1970 decline in the rate of profit, though in practice there are very substantial difficulties in the way.

We investigate the underconsumptionist interpretation in section II, turning in the next section to the rising organic composition approach. Two variants of the over-accumulation theory are discussed in sections IV-V, while the specific problems posed by the enhanced economic role of the state form the subject-matter of section VI. In the final section we draw some substantive and methodological conclusions.

II Underconsumption Revisited

It will be recalled from previous chapters that modern Marxist theories of underconsumption differ considerably on points of detail but possess a common core. This is the proposition that wages rise too slowly for working-class consumption to keep pace with the expansion of output, leading to deficiencies of effective demand. There are two obvious difficulties confronting an underconsumptionist explanation of the events of the 1970s and early 1980s. The first concerns the distribution of income. Both before and during the initial stages of the crisis which began in 1973, wages and salaries were increasing as a share of net income, in sharp contrast to the 1920s when (at least in the United States, where the crisis began) the labour share had declined. Second, there is the question of 'stagflation'. Whereas after 1929 the price level fell sharply in every capitalist country, the post-1973 crisis saw the inflation rate reach heights hitherto unprecedented in peacetime. If underconsumptionism won very few converts after 1970,[11] it was very largely because of these anomalies.

The doyen of Marxian underconsumptionists, Paul Sweezy, attempted to grapple with them. Although his co-author Paul Baran had died in 1964, Sweezy remained active, both as joint editor with Harry Magdoff of the journal *Monthly Review* and as one of its principal contributors on economic subjects. Sweezy did not publish a revised edition of *Monopoly Capital*, but important shifts of emphasis can be discerned in his subsequent writing. He still insisted in the early 1980s that 'the immediate cause of stagnation is the same now as it was in the 1930s – a strong propensity to save and a weak propensity to invest'.[12] While apparently maintaining his commitment to underconsumptionism, however, Sweezy no longer invoked the 'law of rising surplus' as the fundamental contradiction of monopoly capital. Instead he endorsed a Kaleckian model of overinvestment: 'it is true that investment by capitalists is the generator of economic growth. But it is equally true that investment tends to produce an overaccumulation of capital, which in turn leads to recurrent crises.'[13] The 'tragedy of investment', as Kalecki had put it, is that it simultaneously increases both effective demand and productive capacity: 'a strong incentive to invest produces a burst of investment which in turn undermines the incentive to invest'.[14] The slowdown after 1973 was one such 'investment retardation', brought about by previous overaccumulation in older industries which could not be offset by sufficiently rapid expansion in the new sectors of US industry.[15]

To account for inflation Sweezy combined elements of monetarism with the structuralist theory suggested by Charles L. Schultze in 1959.[16] According to Schultze, the downward price rigidity characteristic of monopolistic sectors of the economy meant that changes in the composition of demand were inherently inflationary. Prices rose in those industries where demand was increasing, and failed to fall in sectors where demand had declined. Structural inflation of this type could co-exist with substantial excess capacity and unemployment, Sweezy noted. Oligopolists, not trade unionists, were the villains of the piece, and the inflationary effects of the class struggle, which were given an exaggerated importance by European writers, were largely irrelevant to the weakly-unionised United States.[17] It was the power of the oligopolies, Sweezy argued, which explained the failure of Keynesian demand management policies after 1973. Keynesian theory assumed free competition; under oligopoly, increased demand led to rises in prices, higher profits, increased costs and ultimately (as a result of the rising cost of living) to higher wages rather than an expansion of output. The result was general inflation: 'In a nutshell: the deeper the stagnation and the stronger the counter-acting financial forces, the worse the inflation.'[18] The long boom had, in fact, been founded on the continuous growth of both private and public debt. The 'financial explosion' after 1945 had opened up profitable investment opportunities in real estate and construction, and had stimulated luxury consumption out of the spiralling interest payments. But this 'hyperexpansion' of the financial sector was 'obviously pathological and parasitical.'[19] It constituted 'the secret of the long postwar boom and of the return of stagnation in the 1970s. As the boom began to peter out, stagnation was fought off for some years by more and more debt creation, more and more frantic speculation, more and more inflation.' The day of reckoning was now at hand.[20]

There are several objections to Sweezy's analysis. First, he never succeeded in getting to grips with the 'profit squeeze' of the late 1960s and early 1970s, which is difficult to reconcile with the 'rising surplus' proclaimed by *Monopoly Capital.* It could be contended, in accordance with the spirit of the earlier work, that the apparent reduction in the rate of exploitation was a statistical illusion produced by the continuing growth of unproductive activities. Sweezy did not, however, pursue this line of argument, nor did he make any attempt to correct or update Phillips's estimates of the economic surplus.[21] A second and more serious criticism concerns the inadequacy of Sweezy's theory of investment, which again appears inconsistent with the analysis of *Monopoly Capital.* Mere references to the double-edged nature of investment – which are generally recognised by bourgeois economists who do not accept Sweezy's views, and have been since the earliest days of the Harrod–Domar growth model – do not establish the existence of a tendency towards stagnation. For this a more precisely specified model would be required, together with both a rebuttal of the objections raised against Sweezy's earlier analysis of underconsumption (see section IV of Chapter 6 above) and some evidence that the model really did apply to events surrounding the end of the long boom. Sweezy provides none of this.

Third, his account of inflation is unsatisfactory. Schultze's structural theory does offer a plausible explanation of the mild rises in the general price level experienced during the 1950s, but sectoral demand shifts simply did not occur rapidly enough to generate the double-digit inflation rates of the 1970s. And, so far as monetary factors are concerned, Sweezy was not entirely consistent, sometimes treating them as being of secondary importance and on other occasions as the primary cause of inflation.[22] Moreover, the connection between money and inflation is more problematic than Sweezy recognises. It is possible to advocate a sort of Marxist monetarism, along the following lines. The value of commodity money – that is, gold – depends, like that of any other commodity, on the quantity of labour which is socially necessary to produce it. Hence the value of gold can vary only with changes in the productivity of labour in the gold-mining industry. In the circulation of commodities, however, gold is replaced by paper money, bank deposits and credit, which act as representatives or 'tokens' of the labour embodied in gold. The larger the number of tokens per ounce of gold, the smaller is the quantity of labour which they represent, since more tokens are needed to represent the equivalent in gold of the labour embodied in the commodities which they are used to buy.[23] Even accepting, for the sake of argument, the validity of the quantitative labour theory of value (see Chapters 12–15 above), there are grave difficulties with this approach to the theory of inflation. There is no reason why an increased quantity of (non-commodity) money should be regarded as the underlying *cause* of inflation. Indeed, it is more consistent with Marx's writings on the subject, and with the behaviour of modern financial institutions, to interpret monetary expansion as the *effect* of increases in the overall price level sparked off by real disturbances: for example, by class conflict over the distribution of income between wages and profits.[24]

Thus Sweezy's monetarism stands the true relationship between money and prices on its head. But he once again fails to elaborate his argument, and simply takes it for granted that there is a connection between monetary growth and price inflation. This has some bearing upon the fourth and final flaw in Sweezy's analysis as a whole: the unsupported, contradictory and sometimes entirely false predictions to which it led him. Thus there was no analytical foundation for his prognosis, in 1981, that a financial catastrophe was impending, and in effect he renounced it four years later.[25] Nor was the Reagan administration's massive armaments expenditure 'violently inflationary', as Sweezy had expected it to be, and the sustained and powerful economic recovery to which it contributed so greatly was more than just 'a normal inventory correction'.[26] All in all, Sweezy's treatment of stagflation is unconvincing.

III The Falling Rate of Profit Yet Again

Efforts to apply the falling rate of profit theory to post-1973 developments can be assessed under three headings. There are, first, several theoretical contributions attacking the significance of the Okishio Theorem. Second are the (very few) empirical analyses of trends in the organic composition of capital and their relation to the profit rate. Finally, a number of writers offer neither new analytical formulations nor any relevant evidence, but defend Marx's volume III theory on purely methodological grounds.

It will be recalled that the Okishio Theorem states it to be impossible for a cost-reducing innovation to lower the rate of profit without simultaneously increasing the real wage. This points to an inconsistency at the heart of Marx's argument, because the very increases in the organic composition which reduce the profit rate are supposed also to increase unemployment, thereby preventing any sustained growth in real wages (see Chapter 7 above).[27] One response to this has been to deny the validity of the Theorem outside the special case where the economy is in long-run equilibrium and only circulating capital is employed (to which Okishio had limited his own analysis). In the short run the productivity of constant capital may differ from firm to firm, raising the possibility (canvassed by Marx) that an innovation may raise the rate of profit for the enterprise which introduces it while reducing the profit rate for capitalists as a whole.[28] As early as 1967 the Soviet economist A.A. Koniüs had questioned whether Okishio's proof applied to economies which used fixed capital. In 1979 there appeared, independently of each other, two elaborate and painstaking articles demonstrating that the Theorem did indeed apply to fixed capital.[29] It was soon objected by N. Salvadori, however, that Okishio's theorem did not cover the general case of joint production. Here there are exceptions, and Marx's position can be correct.[30] As it takes only one example to refute a general theorem, it must be conceded that technical progress, rising unemployment and a falling rate of profit are after all compatible, in principle, in a system where joint production exists. The significance of these conclusions for explaining the end of the long boom, however, remains unclear. Certainly

Marx's theory of the falling rate of profit is not valid in all cases, nor even in all cases of joint production.

A second theoretical line of attack on the Okishio Theorem was mounted in 1978 by Anwar Shaikh, who noted that, in the original circulating capital model, the profit rate (profits/capital) was identical with the profit *margin* (profits/costs). According to Shaikh, Okishio had in fact demonstrated only that technical change would raise the profit margin, holding real wages constant. This, Shaikh observed, was fully consistent in a more general model with a declining *rate* of profit.[31] This is true but irrelevant, since the profit margin is not a sensible target variable for capitalists.[32] It would be irrational for the capitalist to adopt an innovation which increases the profit margin at the expense of a lower profit rate, since this would reduce total profits for a given capital.[33]

The final theoretical reaction accepts the formal validity of the Okishio Theorem but denies its importance in a capitalist economy where real wages do not remain constant in the face of technical progress but rise, whether there is mass unemployment or not. In such an economy the rate of profit will fall if productivity growth is not rapid enough to offset the growth in wages. This can be seen by writing the profit rate as:

$$r \equiv \frac{P}{K} \equiv \frac{P}{Y} \cdot \frac{Y}{L} \cdot \frac{L}{K} \tag{16.2}$$

We here ignore the distinction between actual and potential output. P/Y is the profit share in net output; Y/L is the average productivity of labour; and L/K is the inverse of the capital–labour ratio. If we replace the Okishio assumption of a constant real wage, per unit of labour power, with the more realistic postulate that real wages grow at the same rate as the labour productivity, P/Y will remain constant. The rate of profit will then fall only if technical progress raises output per worker (Y/L) less rapidly than capital per worker (K/L). This entails an increase in the capital–output ratio (K/Y), which can be loosely interpreted as a reflection of Marx's organic composition of capital.[34]

This third approach is by far the most relevant to explaining the 'new slump'. Immune to logical challenge, it also identifies the important variables governing the tendency of the rate of profit: real wage and productivity growth, and trends in the ratio of capital to net output. We investigate the first and second of these variables in the next two sections of this chapter. What of the third? What evidence is there that the post-1973 decline in profitability actually was associated with an increase in the organic composition of capital, loosely proxied by the capital–output ratio?

It is remarkable just how few of the defenders of the falling rate of profit analysis have felt called upon to answer this question, which is central to Marx's own argument. Ernest Mandel, for example, has insisted repeatedly that the downswing in the long wave, which he identifies as having begun in the late 1960s, coincided with a sharp increase in the organic composition of capital. This, he claims, resulted from the exhaustion of the 'third technological revolution' in which advances in electronics and nuclear power had cheapened the elements of constant capital and had largely offset the effects of a continuously rising technical composition.[35] We leave aside the issue of whether nuclear energy has cheapened anything except human life, and ignore the contentious assertion that productivity advances in the electronics industry tapered off after 1965, noting only that not one of the 57 statistical tables in Mandel's *Second Slump* has any bearing on the organic composition.

Weisskopf's scrupulously careful examination of the US experience provides no evidence of a significant decrease in the ratio of potential output to capital (that is, Z/K in equation (16.1)) before 1975, by which time the decline in the rate of profit was well under way. Smith, however, documents a growing capital–output ratio in a number of advanced capitalist countries during the 1970s, though he notes that the fall in the profit share (P/Y in equation (16.1)) contributed more than this to the declining profit rate, especially in manufacturing industry. Hargreaves Heap also identifies an increase in capital–output ratios, associated with an increase in the relative price of raw materials. Finally, Lipietz reports a clear increase in the capital-output ratio in France after 1973, following two decades of stability or decline, and cites evidence of a similar increase in West Germany and the UK (after the mid-1950s) and also in Japan and the United States (from the mid-1960s onwards). Lipietz, too, sees the declining profit share as equally significant.[36]

For some Marxian economists these (rather inconclusive) investigations are fundamentally misconceived, since Marx's 'law of the tendency' was not meant to be an empirical prediction concerning the secular course of the profit rate. In Marxian language it lays bare 'an inherent barrier of capital, which is constantly surpassed in the course of development'; it is 'an exposition of contradictory tendencies'.[37] This implies that Marx's analysis can never be wrong, because it is empirically empty and serves only as a taxonomic device to isolate the principal factors which influence the rate of profit, in both directions, without any pretension to reveal which will predominate in an actual capitalist system at a given point in time. Whatever one thinks of this argument, it is clear that it can have no bearing whatever on the causes of the 'second slump', nor can it be used to counter empirical analyses of the variables in Marx's argument.

IV 'Overaccumulation' and the Profit Squeeze

As it became apparent that increases in the organic composition of capital could at best have played only a minor part in reducing the rate of profit, attention began to shift to the rate of exploitation, as reflected in the profit share in net output. Previous Marxist discussion of this variable had been more concerned with the prospect that long-run *increases* in the rate of exploitation might offset a tendency for the organic composition to rise (see Chapter 7 above). At the beginning of the 1970s, however, two British writers pointed to a marked squeeze on profitability in the previous two decades, with the decline in the profit share being the chief contributor to the falling rate of profit. Andrew Glyn and Bob Sutcliffe attributed this to the growth of rank-and-file union militancy, which had pushed up money wages. In the face of intensified international competition, British capitalists were unable fully to pass on increased costs in the form of higher prices, so that their profit margins declined.[38] In 1975 Raford Boddy and James Crotty argued that the same process had been responsible for a significant fall in the rate of profit in the United States.[39] A similar theme became more and more pronounced in the writings of Ernest Mandel, who had always regarded the weakness of the European working class (the product first of fascist repression and then of the Second World War) as a major foundation for the post-1945 expansion. By 1980 Mandel was plotting a (metaphorical) 'class struggle curve', stressing the 'relative autonomy' of 'subjective factors' such as the class struggle, and rejecting the possibility of a renewed long upswing unless the organised working class had been decisively defeated beforehand.[40] And an idiosyncratic version of over-accumulation theory can be detected in the crisis theory of the Japanese Uno School.[41]

Empirical corroboration of the profit squeeze in the United States was provided in 1979 by Thomas Weisskopf. His decomposition of changes in the profit rate in the United States in the five post-war cycles from 1949 to 1975 is summarised in Table 16.1. It will be seen that the rate of profit fell between the first and third cycles, then recovered, and decreased again (quite sharply) between the fourth and fifth cycles. Decreases in the profit share (P/Y) account for most of the fall, with no evidence of any clear trend in the potential output-capital ratio (Z/K) or in the degree of capacity utilisation (Y/Z); the latter actually rose significantly between the third and fourth cycles, explaining the increase in the rate of profit in this period. Having established his 'rising strength of labour' thesis, Weisskopf proceeded to distinguish its 'offensive' and 'defensive' aspects:

> The long-term decline in the rate of profit from 1949 to 1975 was almost entirely attributable to a rise in the true share of wages, which indicates a rise in the strength of labour. This rise, however, was largely defensive in nature. The working class did not succeed in making real wage gains commensurate with the growth of true productivity; it merely succeeded in defending itself somewhat more successfully against a long-term deterioration in the terms of trade than did the capitalist class.[42]

In particular, the 'rising strength of labour' protected real wages from the impact of the OPEC oil price increases in 1973.

Table16.1 *The rate of profit and its determinants in the United States, 1949–75*

Variable	*Full period*	*First cycle 1949.4-1954.2*	*Second cycle 1954.2-1958.2*	*Third cycle 1958.2-1960.4*	*Fourth cycle 1960.4-1970.4*	*Fifth cycle 1970.4-1975.1*
Profit rate (r)	12.1	13.7	12.0	11.4	13.1	9.4
Profit share (P/Y)	19.2	21.6	19.7	19.1	19.1	15.5
Ratio of actual to potential output (Y/Z)	83.6	85.0	83.3	79.8	84.7	82.3
Capacity output to capital ratio (Z/K)	75.5	74.7	73.0	75.0	78.0	73.2

Source: Derived from Weisskopf, 'Marxian Crisis Theory', Table 2, p. 351.

Weisskopf's analysis relates only to the period before 1975, and only to the United States, but the profit squeeze does seem to have been an international phenomenon, and to have continued at least until the end of the decade. Comprehensive documentation of this was provided in 1984 by Glyn and two colleagues, who also elaborated a general theory of over-accumulation.

> The basic idea of overaccumulation is that capitalism sometimes generates a higher rate of accumulation than can be sustained, and thus the rate of accumulation has eventually to fall. Towards the end of the postwar boom, an imbalance between accumulation and the labour supply led to increasingly severe labour shortage. The excess demand for labour generated a faster scrapping of old equipment. Real wages were pulled up and older machines rendered unprofitable, allowing a faster transfer of workers to the new machines. This could in principle have occurred smoothly: as profitability slid down, accumulation could have declined gently to a sustainable rate. But the capitalism system has no mechanism guaranteeing a smooth transition in such circumstance. In the late sixties the initial effect of overaccumulation was a period of feverish growth, with

> rapidly rising wages and prices and an enthusiasm for get-rich-quick schemes. These temporarily masked, but could not suppress, the deterioration in profitability. Capitalist confidence was undermined, investment collapsed and a spectacular crash occurred. Overaccumulation gave rise, not to a mild decline in the growth rate, but to a classic capitalist crisis.[43]

It was accompanied by inflation, as capitalists increased prices in order to offset the growth in wage costs, with the price rises being validated through monetary expansion (itself the result of higher business borrowing) and bringing in their train further increases in money wages.[44]

The analysis of Armstrong, Glyn and Harrison reveals several differences from that of Glyn and Sutcliffe a decade earlier, most notably in ascribing the faster rate of wage inflation very largely to the effect on labour demand of increased investment, playing down the autonomous impact of working-class militancy at the point of production. In fact their treatment is open to serious criticism on precisely this score. Their international unemployment data, for example, relate solely to the ten years after 1965, giving the quite misleading impression that full employment was nowhere established before that date. Yet the labour shortage in the UK, to take only one example, was more severe in the 1950s than at any subsequent date, and it is therefore not clear why the profit squeeze was delayed until the late 1960s.[45]

There is, however, no reason why the overaccumulation thesis must be interpreted in exactly this way. A more plausible story can be told in terms of the lagged effect of sustained high employment, working in conjunction with workers' increased aspirations for rising living standards as their collective self-confidence and industrial militancy revived after the defeats experienced by the previous generation. Profits were squeezed when wage pressure grew at a time when productivity growth was slowing down, and in addition the terms of trade were deteriorating and the state was taking an ever-larger share of average earnings through progressive income taxation.[46] Thus interpreted, 'overaccumulation' becomes a variant of the Kaleckian 'political business cycle'.[47]

A further problem with overaccumulation theory concerns the supposed acceleration of investment expenditure from the mid-1960s, which resulted entirely from the increased weight of Japan in the world economy; accumulation did not speed up in any individual capitalist nation.[48] There are also doubts concerning the exact relationship between rising investment and the profit squeeze. Armstrong, Glyn and Harrison explain it partly in terms of rising raw material costs (most notably the increased oil price after 1973), and in part via the growth of international competition which coincided with the faster rate of accumulation. Most important, however, was the slower rate of productivity growth in the 1970s. The significance of this international phenomenon can be seen if we write:

$$\frac{W}{Y} \equiv \frac{W}{L} \cdot \frac{L}{Y} \tag{16.3}$$

where W represents total wages, W/L is the average wage and L/Y is the inverse of Y/L, the average productivity level. This suggests a wider conception of the profit squeeze, in which both wages and productivity play a part. Armstrong, Glyn and Harrison explain the productivity slowdown by diminishing productivity of capital investment, reflected in rising capital–output ratios; by the closing of the technological gap between the United States and its European and Japanese competitors, with the consequent loss of the 'advantage of relative backwardness' derived from catching up with North American industry; and by the exhaustion of gains from the reorganisation of work, due in appreciable measure to workplace resistance against speed-up, de-skilling and increased intensity of labour.[49] However, they do not regard it as being centrally important to the decline in profitability. As we shall see in the following section, this contrasts sharply with the views of Marxian economists in both France and the United States, who came to attach more weight to this final factor than to those stressed in the Armstrong, Glyn and Harrison analysis of overaccumulation.

V Hearts, Minds and Regimes of Accumulation

The productivity slowdown dominated the analysis of both the French 'regulation' school in the 1970s and the writings of Marxian economists in the United States in the following decade. Most prominent among the French writers was Michel Aglietta, whose *Theory of Capitalist Regulation* was published in 1976 and translated into English three years later. The title – and that of the school itself – is rather misleading. By the terms 'regime of accumulation' and 'mode of regulation', the French economists were in effect delineating a series of stages in the development of capitalist production, each characterised by a particular method of organising work and of meeting consumption needs. The theme of Aglietta's book is the crisis of the most recent, or 'Fordist', stage.

The stage before Fordism is 'Taylorism', which involves the widespread adoption of techniques for the 'scientific management' of production. In Fordism the mass production made possible by semi-automatic assembly line methods was matched by the expansion of mass consumption due to higher real wages and increased social welfare payments. Crises of underconsumption, like that responsible for the Great Depression, had therefore been avoided in the two decades after 1945. But from the later 1960s onwards, Aglietta maintained, the limits to Fordism had become increasingly evident. In the first place, the pace and intensity of work had increased.

This gave rise to physical fatigue and nervous exhaustion among the working class, reducing labour productivity and raising absenteeism rates. Second, since individual piecework was unsuited to Fordist management systems, it was becoming more and more difficult to motivate the workforce. Again productivity growth was adversely affected, and this was exacerbated by the deepening of class conflict on the shop floor. As a result of all this, real wages began to rise faster than productivity after several decades of relative decline. To resolve the ensuing crisis of profitability would require a fundamental reorganisation of work, which was perhaps foreshadowed by the growing capitalist interest in job enrichment and the establishment of 'semi-autonomous' work groups: 'neo-Fordism', as Christian Palloix described it.[50]

This very bald summary does not do justice to Aglietta, whose argument is considerably more subtle and complex. It can be extended to take account both of the 'peripheral Fordism' of the 'Newly-Industrialising Countries' and of the rising costs of collective consumption, with their serious implications for the economic functions of the capitalist state (see section VI below). Aglietta's analysis can also be reinterpreted within the falling rate of profit framework, as we saw in the previous section, in such a way that the profit rate falls when productivity growth cannot keep pace with the increase in real wages.[51] And Aglietta himself, echoing the views of Baran and Castoriadis, writes at some length of the hidden costs of Fordism: 'an increasing density in the individual use of commodities and a notable impoverishment of non-commodity interpersonal relations'. In other words, the regulation school does not offer a narrowly economistic theory; the crisis of Fordism is a multi-dimensional one.[52]

There was already considerable interest in these questions in the English-speaking countries. British Marxists dealt with them under the forbidding title of the 'labour process debate', but there was initially little inclination to link it with the productivity slowdown or the economic crisis, and work organisation remained the territory of Marxian sociologists, industrial relations theorists and labour historians.[53] That there were important implications for the economy, narrowly defined, was pointed out by Geoff Hodgson in an unduly neglected article in 1982. Hodgson cited a number of cross-sectional studies of manufacturing industries which had revealed the productivity levels of British workers to be anything from one-half to one-fifth those of workers in West Germany, France and the United States. He noted also the brief but informative case of the three-day week in 1974, when the Heath government's restrictions on energy use had led to a sudden 50 per cent increase in hourly productivity (there had been a 40 per cent reduction in hours worked but only a 10 per cent decline in output). Hodgson concluded that productivity was a variable, not a technologically-given constant. The use-value of labour power could not be determined in advance of its actual use.[54]

As we saw in Chapter 6 above, Marxian political economy in North America was greatly influenced for almost three decades by the very distinctive ideas of Paul Baran and Paul Sweezy, who had themselves been deeply affected by the Critical Theory of the Frankfurt school. Although the explosive growth of 'radical' economics which began in the mid-1960s soon dethroned *Monopoly Capital* as the principal authoritative text, its influence meant that Marxian economists in the United States were considerably more open than the majority of their European counterparts to the possible economic significance of 'non-economic' or 'superstructural' variables. Thus they studied work organisation; inequality and discrimination in the labour market; the family and the sexual division of labour; the political economy of education; and the theory of the state; all in addition to the traditional analysis of economic crisis.[55]

By the early 1980s Samuel Bowles, David M. Gordon and Thomas Weisskopf were arguing that these factors were essential dimensions of crisis theory. Their explanation of long waves emphasised the role of what they termed the 'social structure of accumulation', which comprised a system of labour management, an international monetary mechanism, and a network of raw material supplies. It was the social structure of accumulation which provided the economic and political stability that enabled favourable profit expectations to be restored at the end of a normal cyclical downturn, so that capital accumulation could resume. Such a cycle was 'reproductive'. In a 'non-reproductive' cycle, however, the social structure of accumulation proved incapable of restoring profitability, and basic institutional changes were needed for the resumption of sustained and profitable growth. The first non-reproductive cycle had been that of 1926–9, preceding the Great Depression; the second was in 1969–71, and ushered in the long downswing after 1973.[56]

The impression that there is a strong family likeness between the French concept of a 'regime of accumulation', and the Bowles–Gordon–Weisskopf notion of the 'social structure of accumulation', is strengthened by the latter's influential 'Hearts and Minds' analysis of the productivity slowdown, which they attribute to a combination of declining innovation by business and a decrease in work intensity. The fall in inputs of effort, they argue, can be explained by the 'Marx effect': productivity is the outcome of conflict between capital and labour, and is therefore determined by the degree of worker motivation, the extent of labour resistance, and (conversely) the effectiveness of employer control of work. All these factors deteriorated, from the viewpoint of capital, in the late 1960s, not least because of a sharp reduction in the cost to workers of losing their jobs as welfare benefits grew and the average duration of unemployment declined. This had prepared the ground for the post-1973 crisis, which was greatly exacerbated by declining capacity utilisation rates and adverse movements in the terms of trade.[57]

Bowles, Gordon and Weisskopf published a longer, popular version of their argument under the arresting title of *Beyond The Wasteland*, a book which broke new ground in two ways. First, it attempted to measure the 'costs of corporate power', as reflected in the degree of economic waste generated by the capitalist system in the United States. Similar in some respects to the analysis of *Monopoly Capital*, but radically different in others, their definition of waste included the output forgone because of excess capacity; the effect of misallocation and underutilisation of labour; and the excess of resources devoted to the military, health care, energy, crime control and marketing activities beyond what would be required in a rationally organised economy. They concluded that, in 1980, useful output could have been 50 per cent higher than that actually attained.[58]

The second new feature of *Beyond The Wasteland* was its detailed analysis of the radical policies required to resolve the crisis. A new social structure of accumulation must be evolved, Bowles, Gordon and Weisskopf argued, greatly enhancing the power of working people against corporate capital. They proposed a wage-led strategy for recovery based on a return to full employment at higher real wages, which would increase effective demand, boost worker morale and thereby increase productivity growth, and force capitalists to mechanise their factories on pain of competitive extinction. To be effective this must be accompanied by greater legal protection for trade unions and a massive extension of democratic control over the workplace and the natural environment.[59] Although presented as 'an instrument of mobilisation' with a potentially powerful anti-capitalist dynamic,[60] this essentially populist programme more closely resembles the 'historic compromise' advocated by the 'Euro-communist' parties in Italy and Spain during the 1970s.

Many orthodox economists have found themselves quite comfortable both with the Bowles–Gordon–Weisskopf model of capitalist behaviour and with their underlying hypothesis concerning the productivity slowdown, if not with the econometric evidence invoked in its support.[61] All this no doubt underlay Devine's objection that Bowles, Gordon and Weisskopf 'neither criticise capitalism, nor advocate socialism'. However, whether or not their position is an orthodox one matters less than its substantive merits.[62] These are variable, as *Beyond The Wasteland* is stronger on diagnosis than prescription. Among the Marxists, only the underconsumptionist Al Szymanski seriously questioned its explanation of the productivity slowdown. Drawing on international data, Szymanski claimed that productivity growth would be increased (not reduced) by greater job security, and that it was in fact stagnation which had dragged productivity down, rather than vice versa.[63] Other critics objected, more convincingly, that Bowles, Gordon and Weisskopf had paid insufficient attention to the international dimensions of the crisis, which ruled out a high-wage reformist strategy in any one capitalist country alone. Nor were its political prospects too bright, especially in Ronald Reagan's United States.[64]

VI The State and the Crisis

Bowles, Gordon and Weisskopf could thus be accused of the central error of all reformism, being too inclined to treat the state as a neutral intermediary which could be conquered by the working class and its allies and used in their interests. As we saw in Chapter 5 above, rejection of this basically liberal or social-democratic conception of the state was one of the most distinctive features of Marxian reactions to Keynes. Until very recently, however, Marxian economists had very little to put in its place other than the traditional formulae of orthodoxy. Simply to assert that the state 'serves the interests of capital' is to say remarkably little about the determinants of its economic activities, or their effects. Even the most sophisticated post-war analysis – Baran's and Sweezy's account of the obstacles to expanding civilian government spending in the United States – went hardly at all beyond these unhelpful generalities (see section III of Chapter 6 above).

It was increasingly clear by the early 1970s that the nature and limitations of crisis management needed a more developed political economy of the state. In opposition to Baran and Sweezy, several writers identified ways in which the expansion of non-military government expenditure by the state might contribute to the accumulation of capital. Most significant were those forms of spending which reduced the value of labour power, via state provision of education, health care and social security. As production became more complex, and techniques changed with increasing rapidity, so demand grew for skilled, healthy, mobile and flexible workers. The 'welfare state' could thus be interpreted as a response to capital's growing needs.[65]

This simple functionalist account, however, was really nothing more than an extension of traditional Marxian views, and did little to address criticisms of the orthodox treatment of the state as a mere prisoner of a monolithic ruling class. Other Marxists were more radical, recognising that the state is an arena of class conflict, which raises the prospect both of concessions being won by the working class against the interests of capital, and of a degree of 'relative autonomy' for the state itself in these struggles. Thus the internal structure, personnel and practices of the state become important in their own right. There are, moreover, unavoidable conflicts of interest between capitalists which must be mediated by the state.[66] And state expenditure is contradictory in a number of ways. It increases productivity through improvements in the quality of labour power, and reduces it by rendering important spheres of productive activity immune from competition and encouraging waste (see section V of Chapter 8 above). It promotes recovery from crisis and simultaneously damages the mechanisms of recovery by protecting inefficient capitalists and weakening the disciplinary power of mass unemployment. And there is constant tension between the demands of accumulation – higher disposable profits, lower company taxation – and the requirements of legitimation. Workers become accustomed to accepted levels of welfare benefits and respond favourably only to continually increasing provision; this 'ratchet effect' is a major source of upward pressure on the level of state expenditure and an important factor in the 'fiscal crisis of the state',[67] Lagging productivity growth in services, as against manufacturing industry, is another significant element in the fiscal crisis.[68]

Nevertheless, many of the most important issues in the political economy of the state remain open. Consider first the incidence of taxation, which will fall entirely upon capital only on the assumption that real, post-tax wages are already at an irreducible minimum level. If this is not the case, capitalists may find it profitable to pass on part of the tax burden to the working class through higher prices or lower wage payments. But Marxian economics has no theory capable of explaining how large a proportion can be shifted between classes in these ways. The position is little better with respect to the impact of government expenditure. Some writers emphasis the operation of a 'crowding-out' effect similar to that of orthodox macroeconomics. Others view state spending as a sink for surplus capital, reducing the tendency towards underconsumption or a falling rate of profit. Furthermore, to the extent that the state provides a 'social wage', this may leave unaffected the private wage paid by the employer, and raise the worker's overall standard of living; or it may permit a reduction in wages and amount merely to the socialisation of the costs of education, child care, health and social security. Finally, part of state expenditure may take the form of direct or indirect subsidies to private capital. The relative importance of these effects remains controversial, as does the closely related question of which state employees can be regarded as productive, and which as unproductive, labour.

Disagreement on these rather basic issues makes it inevitable that Marxian economists should also be divided over the role and possible impact of the state at the end of the long boom. Most would argue, with Ron Smith, that the precipitate decline in US economic hegemony made effective international regulation more difficult, increasing the potential volatility of the system as a whole and undermining capitalist confidence in the profitability of accumulation. Many would also accept his claim that the impact of the 1973 crisis was ameliorated by state intervention: 'Although co-ordination was inadequate, it was substantial, and the integrity of the international financial system was preserved in 1974–5 when, without intervention, a panic of 1929 dimensions might well have occurred.'[69] The same was true of the stock market crash of 1987; in neither case did the dislocation of financial markets result in a huge realisation crisis. The exact significance of these developments remains unclear. 'What would be the long-run implications of government's undertaking to guarantee the financial system against the kind of collapse and generalised deflation that was the prelude to the Great Depression of the 1930s?' This question, asked by Paul Sweezy and Harry Magdoff, awaits an answer.[70]

Significantly, full employment was not restored, except to a limited extent in North America as a by-product of the great Reagan arms boom. In most of Western Europe restrictive fiscal and monetary policies were used to reduce inflation, weaken the working class, increase unemployment and reverse the profit squeeze. Cuts in welfare spending were central to the process, and were increasingly accompanied by the sale of state enterprises, deregulation of private industry and a major retreat from the principle of progressive taxation. Few Marxian writers, if any, had anticipated this revival of economic liberalism in the 1980s. As late as 1978, for example, Erik Olin Wright had predicted a continuing expansion of state intervention, transforming 'state monopoly capitalism' into a fully-fledged 'state capitalism' and intensifying the legitimation crisis of the system.[71] Even Michel Aglietta, who conceded the possibility that the state might withdraw from the provision of some public goods and services, nevertheless concluded that 'the coming massive socialisation of the conditions of life will destroy free enterprise as the pillar of liberal ideology' and create a totalitarian state capitalism.[72] Margaret Thatcher came as a considerable (and very unpleasant) shock.

VII Lessons of the Second Slump

Marxian economists had been deeply divided in their interpretation of the Great Depression of the 1930s. The majority favoured an underconsumptionist explanation, but there was also energetic support for disproportionality theories and for the volume III analysis of the falling rate of profit. Differences were also evident in their prognoses, some writers asserting the fundamentally unchanging nature of the capitalist mode of production while others saw evidence that a qualitatively different state capitalist system was in the making (see Chapter 1 above). If anything, the divisions were even deeper in the 1980s than they had been in the 1930s. Most Marxian accounts of the end of the long boom hinged on some variant of the overaccumulation thesis, but underconsumptionists and advocates of the falling rate of profit theory remained vocal, and the overaccumulationists disagreed among themselves on many important points of detail. Only rarely was a theoretical synthesis proposed.[73] In short, controversy is as vigorous as it ever was.

Two contrasts do, however, stand out. The first is the substantial weakening of the base–superstructure dichotomy as applied to crisis theory. Most contemporary explanations of the Great Depression were essentially economistic, relying on narrowly conceived models of capital accumulation which made no reference to ideology, class conflict or the organisation of work. This has changed, and the dogmatic economic scientism of Marxism in the age of the Second International has few remaining defenders. The result is a political economy which is much richer, if also necessarily less confident and precise, and which corresponds to the central features of 'Western Marxism'.[74]

The second contrast is also, and even more directly, methodological in nature. Few if any of the theoreticians of the 1930s questioned the validity of functionalist arguments, according to which the economy is driven by the (conflicting) 'needs' or (contradictory) 'logic' of capital, the motivations of individual decisions being largely irrelevant. This is no longer the case, as can be seen, for example, in the debates over the organisation of production. Under the combined influence of neoclassical economic thought and anti-functionalist philosophers of science, Marxian political economists are beginning to demand that the 'laws of motion of capitalist society' be grounded in rational choices by individual capitalists and workers. The issues which this raises form the subject of the next chapter.

Notes

1. A. Glyn, A. Hughes, A. Lipietz and A. Singh, 'The Rise and Fall of the Golden Age', pp. 39–125 of S.A. Marglin (ed.), *The Golden Age of Capitalism* (Oxford Clarendon Press, 1989): see also P. Armstrong, A. Glyn and J. Harrison, *Capitalism Since World War Two* (London: Fontana, 1984).
2. A. Maddison, 'Growth and Slowdown in Advanced Capitalist Economies: Techniques of Quantitative Assessment', *Journal of Economic Literature*, 25, 1987, p. 650. See also A. S. Blinder, *Hard Heads and Soft Hearts* (New York: Addison-Wesley, 1987), pp. 40–1.
3. Symposium, 'Unemployment', *Economica* n.s., 53, 1986 (Supplement), Data Appendices, p. S369; the same source contains broadly comparable data for a number of other capitalist countries.
4. Armstrong, Glyn and Harrison, *Capitalism*, pp. 255–9; G. Duménil, M. Glick and J. Rangel, 'The Tendency of the Rate of Profit to Fall in the United States', *Contemporary Marxism*, 9, 1984, pp. 148–64, which also contains international data; and E. Downe, 'The Behaviour of Postwar Rates of Return in Capitalist Countries', *Review of Radical Political Economics*, 18, 1986, pp. 101–10.
5. E. Mandel, *Late Capitalism* (London: New Left Books, 1975), Ch. 4; Mandel, *Long Waves of Capitalist Development* (Cambridge: Cambridge University Press, 1980); D.M. Gordon, 'Up and Down the Long Roller Coaster', in Union for Radical Political Economics, *U.S. Capitalism in Crisis* (New York: URPE, 1978), pp 22–35; cf. C. Freeman, J. Clark and L. Soete, *Unemployment and Technical Innovation: A Study of Long Waves and Economic Development* (London: Frances Pinter, 1982).
6. M. Bleaney, 'The Present Crisis in Historical Perspective', *Economy and Society*, 14, 1985, pp. 407–28.

7. 'Overaccumulation' is sometimes used in an underconsumptionist sense, or to describe an increasing organic composition; in this chapter we employ the term solely to denote a rate of accumulation rapid enough to generate downward pressure on the rate of exploitation via increases in wages or reductions in work effort resulting from a growing demand for labour power.
8. For synthetic formulations see M. Castells, *The American Crisis and American Society* (Oxford: Blackwell, 1980); R. Smith, 'Crisis in World Capitalism', in S. Aaronovitch and R. Smith (eds), *The Political Economy of British Capitalism: A Marxist Approach* (London: McGraw-Hill, 1981), pp. 176–92; and E. Mandel, *The Second Slump* (London: Verso, 1980), the latter being the subject of a highly critical review by A. Hussain, 'Symptomatology of Revolution', *Economy and Society*, 9, 1980, pp. 348–58. For an attempt to apply the three theories sequentially to three stages of capitalist development see E.O. Wright, *Class, Crisis and the State* (London: New Left Books, 1978).
9. T.E. Weisskopf, 'Marxian Crisis Theory and the Rate of Profit in the Postwar U.S. Economy', *Cambridge Journal of Economics* 3, 1979, pp. 341–78; cf. R. Alcaly, 'An Introduction to Marxian Crisis Theory', in URPE, *U.S. Capitalism in Crisis*, pp. 15–22.
10. In Marxian terms Z/K can be written as $(v + s)/(c + v)$. If the rate of exploitation (s/v) is held constant, this will vary inversely with the organic composition (c/v).
11. A rare exception is Michael Lebowitz, a staunch defender of the falling rate of profit theory in the 1970s, who switched to an underconsumptionist theory of crisis in the following decade; compare his 'Marx's Falling Rate of Profit: A Dialectical View', *Canadian Journal of Economics*, 9, 1976, pp. 232–54 and 'The General and the Specific in Marx's Theory of Crisis', *Studies in Political Economy*, 7, 1982, pp. 5–25.
12. P.M. Sweezy, 'Why Stagnation?', *Monthly Review*, 34, June 1982, p. 6.
13. P.M. Sweezy and H. Magdoff, 'Supply-Side Theory and Capital Investment', *Monthly Review*, 34, April 1983, p. 3; cf. Sweezy, *Modern Capitalism and Other Essays* (New York: Monthly Review Press, 1972), pp. 39–41, and 'The Crisis of American Capitalism', *Monthly Review*, 32, October 1980, pp. 2–3.
14. Sweezy, 'Why Stagnation?', p. 8.
15. Sweezy and Magdoff, 'Supply-Side Theory', p. 7.
16. C.L. Schultze, *Recent Inflation in the United States* (Washington, DC: Joint Economic Committee of the US Congress, 1959).
17. P.M. Sweezy, 'Varieties of Inflation', *Monthly Review*, 30, March 1979, pp. 44–9, reviewing F. Hirsch and J. Goldthorpe (eds), *The Political Economy of Inflation* (Cambridge, Mass.: Harvard University Press, 1978).
18. P.M. Sweezy, 'The Economic Crisis in the United States', *Monthly Review*, 33, December 1981, p. 8.
19. P.M. Sweezy and H. Magdoff, 'The Financial Explosion', *Monthly Review* 37, December 1985, pp. 1–10; Sweezy, 'Economic Crisis', p. 3.
20. Sweezy, 'Why Stagnation?', p. 8.
21. F. Moseley, 'The Rate of Surplus Value in the Postwar U.S. Economy: a Criticism of Weisskopf's Estimates', *Cambridge Journal of Economics*, 9, 1985, pp. 57–79; T.E. Weisskopf, 'The Rate of Surplus Value in the Postwar Economy: A Response to Moseley's Critique', *Cambridge Journal of Economics*, 9, 1985, pp. 81–4.
22. Compare Sweezy, 'Varieties of Inflation', p. 48, and 'Economic Crisis', pp. 4–7, 9.
23. O. Jacobi, J. Bergmann and W. Mueller-Jentsch, 'Problems in Marxist Theories of Inflation', *Kapitalistate*, 3, 1975, pp. 107–25; D. Lavoie, 'Marx, the Quantity

Theory, and the Theory of Value', *History of Political Economy*, 18, 1986, pp. 155–70.

24. D.K. Foley, 'On Marx's Theory of Money', *Social Concept*, 1, 1983, pp. 5–19; R. Rowthorn, 'Conflict, Inflation and Money', *Cambridge Journal of Economics*, 1, 1977, pp. 215–39.
25. Sweezy, 'Economic Crisis', pp. 1, 3; Sweezy and Magdoff, 'Financial Explosion', p. 10.
26. Sweezy, 'Economic Crisis', p. 9; Sweezy and Magdoff, 'Supply–Side Theory', p. 9.
27. For a simple restatement of the Okishio Theorem see S. Bowles, 'Technical Change and the Profit Rate: A Simple Proof of the Okishio Theorem', *Cambridge Journal of Economics*, 5, 1981, pp. 183–6.
28. G. Reuten and M. Williams, *Value–Form and the State: The Tendencies of Accumulation in Capitalist Society* (London: Routledge & Kegan Paul, 1989), pp. 122–38.
29. A.A. Koniüs, 'On the Tendency of the Rate of Profit to Fall', in C.H. Feinstein (ed.), *Socialism, Capitalism and Economic Growth: Essays Presented to Maurice Dobb* (Cambridge: Cambridge University Press, 1967), pp. 72–83; J. Alberro and J. Persky, 'The Simple Analytics of Falling Profit Rates, Okishio's Theorem and Fixed Capital', *Review of Radical Political Economics*, 11, 1979, pp. 37–41; J.E. Roemer, 'Continuing Controversy on the Falling Rate of Profit: Fixed Capital and Other Issues', *Cambridge Journal of Economics*, 3, 1979, pp. 379–98. See also J.E. Woods, 'Okishio's Theorem and Fixed Capital', *Metroeconomica*, 37, 1985, pp. 187–97.
30. N. Salvadori, 'Falling Rate of Profit With a Constant Real Wage. An Example', *Cambridge Journal of Economics*, 5, 1981, pp. 59–66. See also C. Bidard, 'The Falling Rate of Profit and Joint Production', *Cambridge Journal of Economics*, 12, 1988, pp. 355–60; N. Salvadori and I. Steedman, 'Four Questions Concerning Joint Production', *Political Economy: Studies in the Surplus Approach*, 4, 1988, p. 226; and J.E. Woods, *The Production of Commodities: An Introduction to Sraffa* (London: Macmillan, 1990), pp. 285–6.
31. A. Shaikh, 'Political Economy and Capitalism: Notes on Dobb's Theory of Crisis', *Cambridge Journal of Economics* 2, 1978, pp. 233–51; see also the symposium on Shaikh's article in *Cambridge Journal of Economics*, 4, 1980, pp. 61–83.
32. Roemer, 'Continuing Controversy', pp. 387–8.
33. P. Van Parijs, 'The Falling Rate of Profit Theory of Crisis: A Rational Reconstruction by Way of Obituary', *Review of Radical Political Economics*, 12, 1980, p. 11.
34. G. Duménil, M. Glick and J. Rangel, 'The Tendency of the Rate of Profit to Fall in the United States. Part II: The Pattern of Irreversibility', *Contemporary Marxism*, 10, 1985, pp. 138–52; A. Lipietz, 'Behind the Crisis: The Exhaustion of a Regime of Accumulation. A "Regulation School" Perspective on Some French Empirical Works', *Review of Radical Political Economics*, 18, 1986, pp. 13–32; D.K. Foley, *Understanding Capital: Marx's Economic Theory* (Cambridge, Mass.: Harvard University Press, 1986), pp. 136–9.
35. Mandel, *Late Capitalism*, Ch. 4; Mandel, *The Second Slump*, Ch. 5.
36. Weisskopf, 'Marxian Crisis Theory'; Smith, 'Crisis', p. 181; S. Hargreaves Heap, 'World Profitability Crisis in the 1970s: Some Empirical Evidence', *Capital and Class*, 12, 1980, pp. 66–84; Lipietz, 'Behind the Crisis', pp. 18–26. See also A. Henley, 'Labour's Shares and Profitability Crisis in the United States', *Cambridge Journal of Economics*, 11, 1987, pp. 315–30 and D. Papadimitriou, 'The Political Economy of Greece: an Empirical Analysis of Marxian Economics', *European Journal of Political Economy*, 6,1990, pp. 181–99.

37. M.A. Lebowitz, 'Marx's Falling Rate of Profit: A Dialectical View', *Canadian Journal of Economics*, 9, 1976, p. 232; B. Fine, *Theories of the Capitalist Economy* (London: Edward Arnold, 1982), p. 122; cf. J. Christiansen, 'Marx and the Falling Rate of Profit', *American Economic Review*, 66 (Papers and Proceedings), 1976, pp. 20–6. For Lebowitz's recantation, see 'Marx's Falling Rate of Profit'.
38. A. Glyn and B. Sutcliffe, *British Capitalism, Workers and the Profit Squeeze* (Harmondsworth: Penguin, 1972).
39. R. Boddy and J. Crotty, 'Class Conflict and Macro Policy: The Political Business Cycle', *Review of Radical Political Economics*, 7, 1975, pp. 1–19. See, however, R. Jankowski, 'The Profit–Squeeze and Tax Policy: Can the State Actively Intervene?', *Review of Radical Political Economics*, 19, 1987, pp. 18–33.
40. Mandel, *Long Waves*, pp. 50, 111–15.
41. T. Morris–Suzuki, *A History of Japanese Economic Thought* (London: Routledge, 1989), p. 119; S. Clarke, 'The Basic Theory of Capitalism: A Critical Review of Itoh and the Uno School', *Capital and Class*, 37, 1988, pp. 133–49.
42. Weisskopf, 'Marxian Crisis Theory', p. 370.
43. Armstrong, Glyn and Harrison, *Capitalism*, p. 235; a schematic summary of the argument is given in ibid, p. 267. For a formal model of overaccumulation, see D.J. Harris, 'Accumulation of Capital and the Rate of Profit in Marxian Theory', *Cambridge Journal of Economics*, 7, 1983, pp. 311–30.
44. Ibid, pp. 263–8.
45. M. Bleaney, 'Marxian Economics and the World Economy', *Economy and Society*, 15, 1986, pp. 503–15.
46. Mandel, *Long Waves*; Bleaney, 'Present Crisis'; Armstrong, Glyn and Harrison, *Capitalism*, pp. 271–90; Rowthorn, 'Conflict'; P. Skott, 'Effective Demand, Class Struggle and Cyclical Growth', *International Economic Review*, 30, 1989, pp. 231–47.
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17
Rational Choice Marxism

I The Nature of Rational Choice Marxism

Rational choice Marxism originated as a distinct school of thought in the 1970s and grew rapidly during the 1980s. Many Marxists who took no part in its initiation have become 'converts', while those who continue to criticise it nevertheless tend to treat it respectfully. The overall approach exhibits three main characteristics. First, rational choice Marxists have shown a concern for rigour and clarity to a degree unusual in Marxian theory. This is why the school is sometimes referred to as 'analytical Marxism'. Great attention has been paid to the exact meaning of concepts, the process of deduction by which conclusions are derived, and how far these conclusions can sustain traditional Marxian propositions. Thus the claim of historical materialism that the relations of production impede the forces of production has been critically evaluated by asking what it could mean, what meanings are the most sensible, and how far they are actually true. There can be no doubt that in the process much light has been shed on the strengths and weaknesses of the materialist conception of history.[1]

Second, in analysing Marx's work, the concepts and ideas of non-Marxian theory have figured prominently, and especially those of analytical philosophy, mathematical model-building, modern psychology and neoclassical economics. Rational choice Marxism is therefore clearly revisionist, although the widespread infusion of 'bourgeois' ideas into Marxism since the 1920s hardly makes this a novel characteristic in itself. However, in the case of analytical Marxists, the revisionism is most evident in methodology, rather than in substantive analysis, and this reverses the typical view of what is weakest in Marxism. Although critical – sometimes highly critical – of Marx's central claims, rational choice Marxists have frequently demonstrated that much of his analysis is correct, and that this can be demonstrated by using non-Marxian theory.

Third, there is a pronounced tendency to deduce Marxian propositions about socio-economic systems from the rational behaviour of decision-makers. It is this feature which makes analytical Marxists also rational choice Marxists. And it allows them to be seen as a reaction to Althusser's structuralism, which dominated the Marxian intelligentsia in the 1960s (see Chapter 11 above), and to Sraffian political economy, which at the same time sought to convert Marxism into a surplus economics founded on structuralist principles (see Chapters 13 and 15 above). Nevertheless, rational choice Marxists have made no systematic attempt to engage either form of thought directly, nor have they given any indication that they think it worthwhile to do so. In fact rational choice Marxists rarely discuss the work of Marxists other than Marx, and they give the impression that they do not hold most work in Marxism after Marx in very high esteem.

The principal rational choice Marxists of concern to Marxian economics are Gerry Cohen, Robert Brenner, Jon Elster and John Roemer. Their works differ not only in the topics considered, but also in the commitment to individualist forms of explanation, the qualifications attached to the importance of rational choices, and the employment of neoclassical economic reasoning. Cohen's reformulation of a technological version of historical materialism, which has already been considered in Chapter 11, argues only that rationality is a dominant force in human behaviour, and that in conditions of scarcity it will operate in such a way as to develop the forces of production. Deviations from rational behaviour need not be excluded, and Cohen accepts that explanations do not have to be cast in behavioural terms, rational or otherwise; functional explanation can be perfectly legitimate. Rational choice figures more prominently in the different version of historical materialism advanced by Brenner, which was also considered in Chapter 11 above. But there is little formal analysis of the structure of choice facing economic agents in his work, and Brenner often talks of *classes* as acting rationally, rather than individuals. Only Roemer and Elster are strongly committed to a methodology of 'microfoundations', focusing upon the rational choices of individuals as the basis for understanding all social and economic phenomena.

Rational choice Marxism, therefore, comes in varying degrees of purity and, since Cohen's and Brenner's ideas have been considered in Chapter 11, our concern in this chapter is with the more extreme versions of rational choice Marxism: Roemer's economics and Elster's defence of its methodology. Section II provides an outline of Roemer's treatment of Marxian economics, which is criticised in section III. Sections IV and V treat the logic of microfoundations, and examine how far it is consistently expounded by both Elster and Roemer. In the final section we conclude by discussing their main contributions to Marxian political economy.

II Roemer's Treatment of Marxian Economics

Roemer has comprehensively examined Marx's economics,[2] but his most original criticism is that Marxian theory has traditionally associated social and economic phenomena by assumption, when they are in fact conceptually distinct and possibly separate in actual history. In his view, a rigorous approach requires theorists to deduce syndromes of characteristics; they should be formulated as theorems, not made into axioms. More specifically, Roemer maintains that the distribution of the productive forces, specific relations of production, class positions and forms of exploitation can in principle be isolated from each other, so that, if they are actually found to be combined, this needs to be explained in terms of the rational choices of the individuals involved. He provides a series of abstract models to support and illustrate this claim. Roemer shows that it is possible to have exploitation, defined in terms of Marx's labour values, without the production of a surplus and without the existence of classes, which in commodity-producing systems are defined by market positions: employer and employee, lender and borrower. On the other hand, he argues, there can be class division without exploitation; exploiters are not *ipso facto* wealthier than the exploited; and exploitation can be accomplished through commodity and credit markets in the absence of markets for labour power.

Logically distinct phenomena, however, are in practice frequently found together. Roemer is well aware of the obvious historical facts, and one purpose of his abstract, ahistorical models is to shed light upon the conditions which must hold for there to be a 'class–exploitation correspondence', a 'class–wealth correspondence' and an 'exploitation–wealth correspondence'. Proving that such associations result from specified conditions will then shed light upon the determinants of actual historical situations where class, exploitation and wealth are joined together, and also indicate what would have had to occur for actual history to have been different in specific ways.

We may illustrate Roemer's argument by explaining how exploitation can occur in simple commodity production.[3] Imagine a society of independent artisans and farmers, each operating processes of production drawn from a known technology with unskilled labour. The techniques differ in what they produce and the inputs which are required, but in the absence of joint production the labour values of different commodities can be calculated without difficulty. Producers also differ in the stocks of commodities which they own, and with which they operate production processes. In each period every producer seeks exactly to replace the commodities used up in production during that period, and all net revenue from sales is used for consumption. Patterns of consumption will be determined by the optimising behaviour of the producers, on the basis of their preferences, relative prices and initial endowments of assets. In Walrasian equilibrium (where prices are determined by conditions of market clearance) there is no assurance that the labour value of any producer's consumption will equal the labour value of his or her outputs.[4] Some producers can therefore be exploited, and some can be exploiters, as measured by the difference between the labour values of the commodities which they produce and of those which they consume.

There is, however, no wage labour because there is no market for labour power, and there are no classes because all producers are *petit-bourgeois*. Clearly, then, commodity-producing systems in which the producers are free in the classical liberal sense but which involve exploitation are not necessarily synonymous with capitalist economic systems.

Nor does capitalist exploitation necessarily involve wage labour, as another of Roemer's examples illustrates.[5] Imagine now an economy with two types of differently-endowed agents, the wealthy and the poor. The poor cannot produce all their own consumption requirements with their meagre resources, given the available technology. To survive, they are forced to sell their labour power to the wealthy, who use it in production together with their more abundant stocks of other means of production. There is in consequence a capitalist class of employers and a working class. In a general equilibrium, with all agents optimising and all markets cleared, the former will normally be exploiting the latter. This is unexceptional, but another solution which does not involve wage labour is possible. The poor, instead of hiring themselves out on a labour market, might rent the means of production owned by the wealthy. They would then produce on their own account, either separately or in association; exploitation, arising from their hiring the means of production from the wealthy, would now take place through the credit market. Other than this institutional change, however, the situation will be identical to that in the first case. There is a capitalist class which lends capital, and a working class which rents the means of production. Indeed, Roemer proves that there is an exact correspondence between the two cases: exploitation can occur to the same degree, irrespective of whether the poor hire capital or capitalists hire the poor. It follows that wage labour and capitalist exploitation are not coterminous.[6]

From such examples Roemer does not deduce that capitalist exploitation is unimportant, nor that wage labour is accidental. Rather, he concludes that it is the unequal distribution of assets which is primarily responsible for exploitation, and that the predominance of labour markets over credit markets arises from certain advantages which capitalists derive from this medium of exploitation, such as the ability to intensify the labour process, and which are not apparent in the case just considered. But Roemer does claim that the significance of the labour process in Marxian economics has been greatly exaggerated. In particular, many Marxists have erroneously believed that domination within production is responsible for both exploitation and class antagonisms.[7] For Roemer, inequality in the ownership of means of production is the primary factor in each case. It so constrains agents' rational choices that these choices almost invariably generate capitalist class relations involving exploitation and conflict, even if domination in the labour process is absent.[8]

An obvious limitation of Roemer's argument is its dependence upon a notion of exploitation cast in terms of labour values. As we saw in Part IV above, embodied labour coefficients may not be defined, or may be of perverse sign, and they are not in general logically prior to prices. Roemer provides his own account of the problems associated with labour values,[9] and his analysis of class, exploitation and markets does not reflect either a commitment to preserving the labour theory of value or ignorance of its deficiencies. He uses a labour measure of exploitation because of its simplicity, and because he wants to debate with other Marxists on the fundamental causes of exploitation. He also shows some interest in pointing out to neoclassical economists that the existence of mutual gains from trade does not imply the absence of exploitation; instead, in market economies, it is through trade that exploitation occurs. Neoclassical tools such as Walrasian price theory are therefore turned against the apologetic arguments of neoclassical economists.[10]

However, the analytical deficiencies associated with the concept of labour value, together with other considerations, do prompt Roemer to formulate a theory of exploitation in different terms. The new theory – often referred to as the property-rights approach to exploitation – is cast explicitly in game-theoretic concepts, and can be summarised as follows.[11] Imagine a society – it can be of any type – comprising N people, with a well-defined distribution of ownership rights over property. Roemer would define a subset of agents S as exploited when there is a hypothetically feasible alternative distribution of property rights which is egalitarian with regard to some form of property, and not less egalitarian with regard to all other forms of property, and which would make S better off if it withdrew from existing society under the new distribution. If the rest of society $(N - S)$ would be made worse off by such a withdrawal they would be classed as exploiters, for their welfare depends in part on enforcing a less egalitarian distribution of property which imposes losses upon S relative to the more egalitarian distribution. Since there may be a large number of hypothetically feasible alternatives, and numerous partitions of N into S and $(N - S)$, there can be many different types of exploitation, and many groups of exploiters and exploited. Roemer concentrates on feudal exploitation (based on property rights in the labour power of others), capitalist exploitation (arising from an unequal distribution of alienable productive assets other than labour power), and socialist exploitation (due to different endowments of inalienable skills in a context of socialised property). His theory, however, can be applied to the exploitation of women and ethnic minorities,[12] and he shows that the examples given earlier, which used a labour value definition of exploitation in specific circumstances, are special cases of the property-rights conception of exploitation.

This framework has proved to be extremely influential in the work of other Marxists. Erik Olin Wright, for example, has used it to illuminate the complexities of class positions in modern capitalist societies, indicating *inter alia* how the middle classes can be located precisely, and the tensions inherent in their intermediate positions.[13] However, Roemer's own interests seem to lie predominantly with normative issues, and in this regard he is critical of his own general theory. He questions the usefulness of both a labour value conception of exploitation and his own property-rights definition in coming to terms with the ethics of distribution. Roemer was motivated to reformulate exploitation theory because of the manifold deficiencies in the traditional Marxian account, but he believes that even his property-rights measures of exploitation provide imperfect indices of injustice. There are, he argues, cases where capitalist exploitation may be just, or, at least, not unjust. Socialist exploitation, on the other hand, raises the complex question of how far it is legitimate for people to benefit from their own superior innate abilities.[14]

III Some Limitations of Roemer's Marxism

Roemer emphasises that the chief source of capitalist exploitation is unequal ownership of the means of production, when these means of production are in scarce supply. He is especially concerned to refute the view that exploitation arises only from within the labour process, and he criticises those Marxists who consider the labour process to be of primary importance. These different views are not directly related to Marx's own position. Roemer attacks other Marxists, not Marx. However, some of Marx's own statements suggest that he, too, might be found deficient by Roemer's standards. Marx is certainly contemptuous of exchange theories of profit, and implies that markets *per se* are irrelevant for the understanding of exploitation; there is no exploitation in his model of simple commodity production (see Chapters 10 and 11 above). And the importance given in *Capital* to the distinction between labour and labour power indicates that for Marx the labour process is indeed of special relevance to capitalist exploitation.

These arguments can be taken as meaning that Marx would not have accepted Roemer's theory of exploitation, which is thus not only highly original, but also a powerful critique of Marx. Nevertheless, such an interpretation would be incorrect. Marx's criticism of exchange theories of profit was made in the context of his evaluation of Mercantilist ideas, and it represents a criticism of pure exchange theories of profit. He argued that the gains from trade in value terms must be zero; one party's advantage is exactly matched by the other party's loss. In order for there to be a net gain there must be production of value in excess of the value of inputs used.[15] Marx's argument is correct, and Roemer's many examples of exploitation do not generate contrary results because they all involve production in an essential way. Thus Marx and Roemer agree; without production there would be no exploitation.

However, according to Marx the existence of production is not sufficient for exploitation to occur. In his model of simple commodity production prices are proportional to labour values, and each producer receives, through exchange, value exactly equivalent to that produced. This is so irrespective of the endowments of producers; whether they are equal or unequal makes no difference. Only with capitalist relations of production does exploitation arise.[16] This is a point that Roemer does dispute. He claims that exploitation can occur under simple commodity production; it does not require capitalist relations.

Neither Marx nor Roemer has made a logical error. Their results differ because each appeals to a different theory of price. Marx believes that the Ricardian labour theory of value applies to simple commodity production; Roemer's model is based on a Walrasian theory of supply and demand. With values proportional to prices, no producer can be in receipt of more or less value than that which he or she produces. When prices are not proportional to labour values, they can. Historically, Marx and Roemer are both on weak ground. The highly imperfect markets associated with actual systems of commodity production in which producers own their means of production imply that neither Ricardo's nor Walras's theory of price would have much relevance (see section V of Chapter 14 above). Consequently the results of both Marx and Roemer lack empirical foundation.

Capitalist class relations which, according to Marx, are responsible for exploitation are for him the result of a process of primitive accumulation. Involved in this process, as Marx understands it, is the dispossession of the producers. Therefore capitalist class relations develop *pari passu* with increasing inequality in property endowments. Marx also makes it clear that he believes the distributional change to be the cause of the relational change.[17] His position is thus very similar to, if not actually identical with, that of Roemer. On the arguments of both theorists, therefore, it is inequality in the ownership of the productive forces which is responsible for capitalist exploitation.

This is reinforced by a consideration of Marx's remarks on merchant capital, manufacture and modern industry. While he defines the capitalist mode of production in terms of wage labour, Marx recognises that merchant capitalists can exploit producers through a credit market, as in the domestic system.[18] He is therefore aware of an important historical case where capitalist exploitation is not associated with wage labour, and thus he does not claim that a labour market is essential for it to occur. Again, Marx is at one with Roemer. It is true that Marx does not consider credit markets to be isomorphic with labour markets, but his reasons for differentiating them are much the same as those to which Roemer appeals in explaining why a labour market is dominant in capitalism. For Marx, the labour market is first associated with 'manufacture', in which there is no change in the technical basis of production but simply a greatly expanded division of labour.

Capitalist exploitation nevertheless exists, and occurs in what is now a capitalist mode of production. The production of 'relative surplus value' is, however, constrained by technology which, resting as it does on handicraft skills, means that 'capital is constantly compelled to wrestle with the insubordination of the workmen'.[19] What capitalists ideally require is that the inherited form of the labour process be transformed and, according to Marx's argument, this becomes possible with the advent of 'modern industry'. This is characterised not only by factory production but also by power machinery, which facilitates a de-skilling of workers and allows enhanced domination by capitalists, who increase exploitation by intensifying labour. This is what the 'labour process' theorists concentrate upon (see Chapter 16 above), and set in the context of Marx's economics as a whole their work does not contradict any of the claims which Roemer makes as to the primary importance of unequal property endowments.[20] According to Marx's political economy, exploitation is only increased in the capitalist labour process; it does not originate with it. And Roemer himself accepts that domination within the labour process does increase exploitation.[21]

When it is viewed in terms of Marx's own economics, the originality of Roemer's treatment of exploitation is thus less pronounced. Insofar as he is correct to claim priority for property relations over the labour process, and to scold others for any contrary emphasis, he is doing no more than recommend that Marxian political economy 'return to Marx'. This is disguised only by the way in which he constructs his theory, which differs from Marx's own procedure. And here there is a real strength in Marx which is not duplicated in Roemer. The focus in Roemer's model-building is almost wholly upon logical relationships. He employs the standard comparative static methodology of neoclassical economics, but applies it to the analysis of alterations in institutional forms and changes in variables that neoclassical economists typically ignore. The method requires that the exogenous elements be independent of each other, so that singular *ceteris paribus* alterations can be made, and their causal effect upon endogenous variables can be isolated. Marx, by contrast, employs a 'logical–historical' analysis in which models conform much more closely to the 'special cases' which he believes are actually evident in history, and it omits altogether any consideration of purely hypothetical worlds. Causal relations are assessed by comparing models of different historical configurations; but these are different in several respects, not just one, so that singular *ceteris paribus* variations cannot be made, or their causal effects assessed.

Roemer's procedure is clearly the more 'general', in that it can be applied to imaginary as well as real economies and can change parameters individually when they are joined together in historical situations. But precisely because of this it ignores the actual interdependences between those elements which it treats as exogenous. Marx's method, on the other hand, is expressly intended to capture such interdependencies, and to assess the significance of real changes in history.[22] His use of this method is not beyond reproach (as we have seen in section V of Chapter 14 above), but the method itself is much more suitable for Marxian political economy than is Roemer's neoclassicism.

Marx claims (rightly) that the characteristics of individuals (such as their preferences), the degree of technological sophistication, and property rights are all highly interdependent. Roemer's neoclassical methodology (as opposed to what Roemer actually believes), however, treats them as independent. Each can then be varied in isolation, and the changes in the endogenous variables (like the degree of exploitation) can be said to have been caused by the variation in an exogenous component. Thus Roemer's isomorphism theorem on credit and labour markets assumes that a change in the institutional structure leaves the index of exploitation unchanged, and requires that production processes are unaffected by whatever market is in operation. We have seen, though, that Marx claims (rightly) that the introduction of a labour market will ultimately revolutionise production processes. Similarly, Roemer's belief that it is the distribution of property which accounts for capitalist exploitation, and not the capitalist labour process, rests upon an analysis in which the labour process remains unchanged whether it is operated in a capitalist or a non-capitalist mode of production. On this question his distance from Marx could hardly be greater, and his models do not even address the issues which are raised by the 'labour process' theorists.

Roemer's ahistorical methodology is no accident. It reflects the fact that his chief concern is not historical at all. His theoretical endeavours are dominated by ethics.[23] He is, subject to certain reservations, a radical egalitarian, and he believes this to be a position which it is natural for Marxists to take. This is by no means obvious. Marx clearly expressed moral sentiments, and some of these were protests against inequalities. Much less clear, though, is the status which his mature theory of historical materialism assigned to such beliefs. And arguments for any particular interpretation of Marx's texts must recognise that the limitations of Marxism may mean that a revised ethical doctrine is required by modern socialists. If this is to incorporate moral principles which socialists have historically thought to be important, it will not be an unqualified egalitarianism. Rationalism and libertarianism have been themes of at least equal importance in socialist thinking, and the realisation of these ideals may constrain the achievement of equality.[24]

The deficiencies of method and of purpose in Roemer's economics join together in his general theory of exploitation, which is based upon feasible redistributions of property rights. It is not clear exactly what variables are to be included in defining what is feasible.[25] Roemer disregards the incentive effects of particular distributions, although he is not unaware of their importance for efficiency.[26] He also recognises that economies of scale can divide distributions which he believes to be unjust from those that can be classed as exploitative.[27] In addition he abstracts from transition costs, thus raising the question of the time period over which the consequences of an alternative distribution are to be assessed.[28] These consequences themselves bristle with problems. Do all members of a coalition have to benefit from the alternative which defines them as exploited? Are the losses of the exploiters to be judged as totally irrelevant? Roemer's willingness to take agents' own preferences as the criterion of judgement requires the satisfaction of the Pareto criterion for members of the exploited coalition. This is a partial ordering of insufficient scope to judge any actual redistributions, and also most hypothetical ones which are likely to be feasible.[29] And Roemer's unwillingness to disregard the property rights of the exploiters, if they are based on a morally clean past, contradicts the whole thrust of the exploitation theory. Roemer points to it himself as a reason why exploitation is an imperfect index of injustice, and this in turn raises the question of why he continues to believe Marxism to be an appropriate medium for moral theory.[30]

IV Microfoundations and Marxism

Roemer's ethical sentiments are not the only aspect of his individualism which may be in tension with Marxism. Equally apparent in his work, and that of Jon Elster, is methodological individualism. This doctrine requires that all social phenomena are to be explained in terms of individual actions; that the aggregate characteristics of wholes should be reduced to the choices of agents; and that there should be microfoundations for macro phenomena.[31] Most Marxists have been hostile to the doctrine, as is evident for example in the debate between Hilferding and Böhm-Bawerk in the early twentieth century, and the strictures of the Althusserian structuralists over 50 years later.[32] It is, however, deeply rooted in neoclassical economics; from the Marginal Revolution onwards, its high theorists have always prided themselves on constructing models of various types of decision-maker, and in showing how the performance of economic systems may be derived from choices, or the exogenous determinants of those choices (preferences, technologies and endowments).[33] Since the early 1960s some Keynesian economists, too, have increasingly subscribed to the same methodology, in part because they were successfully criticised by neoclassical theorists for lacking models of individual behaviour from which their macroeconomic results could be derived.[34] If Marxism were to succumb to the same attack, it would find itself in very respectable company. And the development of all social science from the same individualist methodology is exactly what Roemer and Elster desire. Differences between schools of thought would be then reduced to those of substantive analysis, and the 'tools of the trade' would be common property, allowing a real dialogue to take place.

It is not obvious that Marxism would be thoroughly dispossessed by such an occurrence, despite Lukács's claim that the originality and uniqueness of Marxism lies in its method.[35] Marx and Engels themselves made statements which appear to be in accord with methodological individualism.[36] However, Jon Elster maintains that Marx was not consistent, and that a crude functionalism and a teleology deriving from a speculative philosophy of history sometimes replaced scientific explanation in his writing.[37] Marxists since Marx have, if anything, been even less committed to the imperatives of methodological individualism, and some of their arguments are also shown to be flawed from the perspective of Elster's social science. Nevertheless, exposing the deficiencies in the specific arguments of others is not equivalent to establishing a general methodological position in favour of reductionism. And the other arguments adduced by rational choice Marxists to support a microfoundational approach are not decisive.[38]

'Reduction' will always be an unending procedure because any element of the material world is capable of futher decomposition:

> Everything that is not by its nature indivisible can be shown to have a structure, to be a complex whole capable of analysis into its constituent elements, these elements themselves being related to each other according to rules also to be discovered. It may be the dream of certain sciences to discover ultimately simple entities incapable of further division, but the search for them, as in theoretical physics, is strikingly unsuccessful, since each simple entity that physicists discover turns out on closer acquaintance to be an unsuspected complex one. The indivisible atom of old has failed to be replaced by anything smaller as the presumed 'building-block' of matter.[39]

Furthermore, it is not true that explanations are necessarily improved by 'reduction'. An explanation may actually be weakened by reducing its components to their more elementary parts.

> Societies are collections of individuals, just as individuals are collections of cells; and social phenomena are effects of individuals' actions in much the way that individuals' actions are effects of the behaviours of the cells that compose individuals. It is clear, however, at least for individuals' actions, that ontological reducibility (decomposability without remainder) does not entail explanatory reducibility. The best explanation for individuals' actions need not make essential reference to behaviour at the cellular level.
>
> World War II was, in the sense in question, just an aggregation of subatomic particles in motion. But knowing all there is to know about

these subatomic particles would not help us, in all likelihood, in knowing, say, the causes of World War II. It is fair to speculate that physical descriptions of wars are not even in principle the best explanations of these phenomena, even if wars could be entirely described in physical terms.[40]

Roemer always halts reduction at the level of the individual, conceived as a whole, and provides no reason for refusing any further reduction. Elster suggests that this truncation is appropriate because it is in the nature of a human being to be a complex decision-maker, choosing optimally in a way in which other animals cannot.[41] This defence, however, is beside the point. Quite aside from the issue of whether or not animals optimise, a consistent reductionist methodology implies that all social theory, including propositions conforming to the requirements of methodological individualism, must be considered of 'second best' status, to be improved only by absorption into the biological sciences. But these sciences are not always appropriate for the types of explanation that are required, as the example above indicates, and, even if they were, the possibilities of further reduction would be infinite because 'simple entities' have not yet been found to exist. It follows that reductionism is not an universal methodological rule, and methodological individualism cannot be justified by it.

Nor do Roemer and Elster themselves consistently use individualistic explanations. Elster recognises that non-individualistic causal explanations are acceptable as preliminary assessments of the kinds of issue involved in the questions under investigation. In addition he notes that societies have processes akin to Darwinian natural selection which structure individual decisions.[42] Roemer uses Walrasian economic theory for Marxian purposes, but fails to point out that in its axiomatic formulation it does not require that economic agents be individuals, only that there are well-defined decision-makers, which may be collectivities.[43] Moreover, following the usual Walrasian procedure, Roemer concentrates attention upon equilibrium configurations, ignoring the process of decision and re-decision of which equilibria are terminal states. In addition, the problem of non-uniqueness is ignored altogether. It is frequently the case that a particular equilbrium is consistent with different complexes of individuals' actions, and that any one complex of individuals' actions is consistent with attaining many different equilibria.[44]

Both Roemer and Elster could claim, of course, that all of these examples stem from the underdevelopment of social science, and that they do not question the claim that the best explanations are genuinely individualistic ones. Such a position, however, is not compelling on other grounds. Insofar as there are pre-requisites for economic reproduction, and more specific requirements for an economy of a particular type to reproduce itself, these conditions can be appealed to directly. They tell us something about what must be happening for economic phenomena to be as they are, and we do not need to investigate the behaviour or motivation of individuals to know this.[45] Similarly, the comparative historical method, based upon comparisons of societies in which some phenomenon occurs with societies otherwise very similar in which it is absent, provides information on causes independently of whether it is supplemented by the investigation of individual actions.[46] Both these explanatory forms have an economy which would be lost if they were replaced by microfoundational accounts: that is, they would be more involved and less elegant if reformulated in accordance with methodological individualism. And this quality cannot be devalued by rational choice Marxists themselves, since in their models individuals are pre-eminently rational actors, and economising is a necessary attribute of all rational behaviour. If they are correct in this view, then it must be true for social scientists no less than for other decision-makers.

Jon Elster in particular has considered the exact meaning and properties of individual rationality, and much of his work, rather paradoxically, shows the limitations of a rational choice paradigm.[47] Two aspects of his treatment are particularly noteworthy. First, individuals are considered to be 'social' beings; their preferences, feasible sets and beliefs are all socially conditioned.[48] Second, for choices to be fully rational they must conform to very stringent requirements which are unlikely to be completely met by any agent, and in some cases there will be very significant departures from rationality. Elster's views are thus considerably more sophisticated than those of most neoclassical economists, and much closer to those of the theorists of 'bounded rationality', like Herbert Simon.[49] Roemer also accepts the social nature of individuals and agrees that standard neoclassical models of choice are severely limited, but his treatment is much less extensive than that of Elster.

The choices of any agent can be represented in terms of two elements; preferences over cause–effect combinations, and the feasible set defining those combinations from which choices are to be made. Elster recognises that the two elements may not be independent of each other, and that the contents of each element will vary between individuals in different social positions. And to be classed as rational, according to Elster, it is not enough that an agent make choices based on preferences and that these preferences be consistent. Much more than this is involved: there are dimensions of rationality corresponding to each element in the structure of choice.

Preferences are likely to be adaptive; they will vary over time as circumstances change and as experience accumulates. It is therefore rational for an individual to recognise this and to give some thought to what he or she desires to become; thus rational people will consciously determine their own preferences. Even if preferences were not affected by circumstances and experience, individuals who 'strongly desire what they cannot get . . . will be unhappy', so that such desires are 'irrational'. Rational desires will be those 'optimally adjusted to the feasible set', so that it will again be rational for agents consciously to change their preferences.[50] But Elster also recognises that there will be irrational forces at work, like unconscious mechanisms of dissonance reduction, producing a change in preferences. 'Weakness of will' is in any event an ever-present threat to rational choices.

Perceptions of what constitutes the feasible set may also deviate from rational perceptions, as Elster recognises in his discussion of Marx's theory of ideology. The 'valuable core' of this dimension of Marxism is the notion that 'an ideology involves an understanding of the whole from the point of view of the part'.[51] Elster himself discusses the mechanisms that lead members of a class to confuse their specific interest with those of society in general, and inappropriately to generalise locally valid relations to a wider context. In addition, both preferences and perceptions of feasible sets depend on information and, to be rational, agents must form appropriate beliefs in each case. It is impossible to provide optimality criteria for gathering information because an individual cannot know the value of information that he or she does not have.[52]

Not surprisingly, Elster recognises that individuals may act according to rules of thumb instead of conforming to restrictive neoclassical precepts. Because of this, or because of social conditioning, neoclassical propositions about prisoners' dilemmas are empirically incorrect. Individuals do not take a free ride as frequently as they could be expected to do, and they engage in costly activities like voting in large constituencies when the effect of their individual vote will be negligible.[53]

Thus the doctrine of methodological individualism is unconvincing, especially when supplemented by the requirement that explanations always involve rational choices. The very notion of an individual is itself 'holistic'; there are valid types of explanation which do not need to appeal to choices; and there are many reasons for believing that individuals will not always act rationally, especially in the narrow neoclassical sense. This means that rational choice Marxism is actually further from neoclassical economics, and closer to structuralism, than rational choice Marxists often claim.

V Conclusion

The recognition by Elster and Roemer that individuals are social beings, and that it may be difficult – perhaps impossible – for them to be fully rational, prompts a number of conclusions upon the real importance of extreme versions of rational choice Marxism.

First, although Roemer and Elster use models where agents behave as neoclassical theorists assume, their comments often suggest that they consider such models to be crudely simplistic and in need of extensive refinement. However, they are not always consistent on this, nor do their claims for the importance of a Marxism based on rational choice reflect the limitations of neoclassical methods, and the qualifications on rationality, which they themselves accept.[54] Such considerations underpin the Sraffians' refusal to found political economy upon the choices of individuals. In their view individual choices, as represented by neoclassical theory, are unstable because they involve guesses about an unknowable future, and problematic because they rest upon assumptions about subjectivities whose adequacy cannot be evaluated. On this basis, Sraffians take the position that neoclassical treatments of individual choice represent an insufficiently secure foundation for any theory which attempts to formulate laws about how economic systems operate; exact social science, including Marxism, must be structuralist.[55] Neither Roemer nor Elster provides a convincing rebuttal of this perspective, and much of Roemer's criticism of Marx's economics, such as his support for the Okishio theorem (see Chapter 7 above), is remarkably similar to that of Sraffians.[56] This indicates that structuralism and a microfoundational approach need not necessarily be in conflict. And, in fact, Roemer's and Elster's microfoundations are clearly not in contradiction with much of structuralist economics.

The terminology used by Roemer and Elster to describe their methodology is inappropriate, since they do conceive of individuals as social beings. In consequence they do not reduce properties of wholes to the outcomes of individual choices, because these properties are preserved in the constitution of the individuals who choose. There are macrofoundations for micro behaviour in addition to microfoundations for macro behaviour, and neither one is privileged as against the other. This is the position of sophisticated structuralists: they are not hostile to a concept of the 'individual', only to those ideas about individuals which define them inaccurately.[57] It is true that neoclassical theory can be accurately described as methodologically individualist, since it genuinely seeks to reduce explanations to those of agents' decisions; in its quest for microfoundations, orthodox theory denies the need for macrofoundations. This is appropriate because, in neoclassical economics, individuals' preferences and constraints are treated as exogenous. But, as we have seen, neither Elster nor Roemer believes that the neoclassical vision is a convincing one. They use models founded on neoclassical principles, and make claims about Marxism on this basis, but they do not believe that these principles are true.

Opposing choice to structure creates a false dichotomy, which can be given credence only if rational choice Marxists attribute to structuralists positions which they do not hold. Both Roemer and Elster maintain that the hallmark of structuralism is the view that the constraints upon individual choices severely limit feasible sets, so that choices are either eradicated completely or are so constricted as to be inconsequential.[58] This is a caricature of the structuralist argument, which emphasises that individual decisions are 'determined' by systemic properties because these properties operate upon preferences as well as upon constraints.[59] This view is in fact very close to that of Elster and Roemer. They do not stress, or believe it important to stress, that there is a large element of voluntarism in individual choice. No less than more moderate rational choice Marxists like Cohen and Brenner, they both take a deterministic position which is similar to that of the structuralists.[60] In fact the debate between Elster and Cohen over functional explanation (see section IV of Chapter 11 above) arose because Elster not only insisted that Marxian explanations be capable of formulation in terms of individual actions, but also took the stronger position that no account of social phenomena could be classed as an explanation unless it actually provided a mechanism linking individualistic *explanans* to social *explanandum*. Cohen correctly resisted this doctrine, arguing that while a mechanism must exist it is not necessary for an explanation to refer to it, and therefore that Elster's argument went beyond the logical imperatives placed upon explanation by philosophers of science, and was not a position which Elster himself consistently took. Cohen did not, however, deny that 'elaborations' of functional explanations were desirable, that Marxists had sometimes failed to appreciate this, or that his own elaborations were imperfect and required further strengthening.[61]

Elaborations of non-individualist explanations need not be confined to the formulation of propositions about consciously determined actions, and even individualistic explanations need not be limited to rational choices. From a Marxian perspective, Elster's investigations into rationality may be read as an outline of how the abilities, incentives and pressures to be rational vary historically, and also change with specific circumstances in any conjuncture. From such a viewpoint his work is highly enlightening. For example, it raises doubts about Brenner's claim that the static nature of pre-capitalist societies derives from the decisions of rational agents (see Chapter 11 above).[62] It is possible for habitual modes of conduct to produce outcomes which conform to those that would be generated by rational choices; but, since they are habitual, they retain an inertia in the face of changing circumstances which would be absent if choice actually were rational. The reasons why feudal agents did not quickly adapt their production activities when more efficient techniques became available would then be more understandable. Such a reading of Elster's work would also explain why Cohen's appeal to rationality is not explicitly to rational choice (see Chapter 11 above). Cohen claims only that there is a tendency toward rational behaviour, not that behaviour is always rational, or that the tendency is always in evidence to the same degree.[63]

Recognition of rational action as a historical force of variable intensity also places neoclassical theory in proper perspective. When joined to the fact that preferences and constraints are also historical, it indicates that the main service which neoclassical economics can provide to Marxism is as a counter-factual mode of reasoning. This method proceeds by constructing models in which a phenomenon which exists, and which one is trying to explain, does *not* occur. Then, by comparing the model's assumptions with what appears actually to hold true in reality, clues are provided as to what is in fact causing the phenomenon in question.[64] Consequently, neoclassical models can be used productively without being believed. If this is a correct assessment, Roemer's use of neoclassical theory to tackle the problems of class, exploitation and property rights is at its strongest when it is understood in counter-factual terms.

Viewed from the perspective of the history of Marxism, Roemer's analysis is much less original in substance than in method. The method, however, is essentially that of neoclassical economics, so that, in terms of the history of economic thought as a whole, the novelty lies in joining together elements of different traditions: non-neoclassical problems and neoclassical methods. This is part of a wider 'imperialist' development within orthodox economics, in which areas traditionally thought to be outside the range of neoclassical theory have been treated with established neoclassical methods of analysis, and it may be from this vantage point, rather than that of Marxism, that Roemer's work is best appreciated.[65] But this judgement needs to be qualified in one important respect. During the last 100 years Marxian political economy has generated a wide range of perspectives and many different types of analysis. With some significant exceptions, one common quality has been a casual attitude to the rigorous formulation of models. This is not something that any of the rational choice Marxists can be accused of, least of all Roemer himself, and the precision of rational choice theory could prove to be a healthy influence upon Marxism. In particular, the political economy of socialism, which we consider in the next chapter, is today especially in need of some disciplined habits of thought.

Notes

1. See G.A. Cohen, *Karl Marx's Theory of History: A Defence* (Princeton, NJ: Princeton University Press, 1978), Cohen, *History, Labour and Freedom* (Oxford: Clarendon Press, 1988), and J. Elster, *Making Sense of Marx* (Cambridge: Cambridge University Press, 1985), Part II.
2. J.E. Roemer, *Analytical Foundations of Marxian Economic Theory* (Cambridge: Cambridge University Press, 1981).
3. Our exposition of Roemer's model is less formal than that usually found in his own works. See J.E. Roemer, *A General Theory of Exploitation and Class* (Cambridge, Mass.: Harvard University Press, 1982), Ch. 1; for a more elementary treatment see Roemer, *Free to Lose* (Cambridge, Mass.: Harvard University Press, 1988), pp. 49–51, 100–3.
4. Sraffa's critique of neoclassical economics does not undermine Roemer's use of Walrasian theory because the 'Capital Controversies' and other objections raised by Sraffians against the general equilibrium form of supply and demand analysis are impotent; see Part IV above. The Walrasians have established what Marx

thought to be impossible: the logical coherence of 'vulgar economy'. This, of course, implies nothing about the empirical validity of this form of neoclassical economics.

5. Again, our exposition is intuitive, and Roemer is typically much more rigorous. See Roemer, *General Theory*, Ch. 2; for a simpler exposition see Roemer, *Free to Lose*, pp. 90–9.
6. Roemer, *General Theory*, Ch. 3; Roemer, *Free to Lose*, pp. 91–5. P.A. Samuelson, 'Wages and Interest: A Modern Dissection of Marxian Economic Models', *American Economic Review*, 47, 1957, pp. 884–912; and K. Wicksell, *Lectures on Political Economy* (London: Routledge & Kegan Paul, 1934; first published in 1901), volume I, p. 109 both made the same point many years earlier.
7. H. Braverman, *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century* (New York: Monthly Review Press, 1974); S. Marglin, 'What Do Bosses Do? The Origins and Functions of Hierarchy in Capitalist Production', *Review of Radical Political Economics*, 6, 1974, pp. 60–112; E.O. Wright, *Classes* (London: New Left Books, 1985).
8. J.E. Roemer, 'Should Marxists be Interested in Exploitation?', *Philosophy and Public Affairs*, 14, 1985, pp. 30–65: reprinted in Roemer (ed.), *Analytical Marxism* (Cambridge: Cambridge University Press, 1986), pp. 81–113; Roemer, *Free to Lose*, pp. 23ff, 85–93.
9. Roemer, *Analytical Foundations*; Roemer, *General Theory*.
10. J.E. Roemer, 'New Directions in the Marxian Theory of Exploitation and Class', *Politics and Society*, 11, 1982, pp. 253–88: reprinted in Roemer, *Analytical Marxism*, pp. 81–113.
11. Ibid, pp. 102–10; Roemer, *General Theory*, pp. 194–237; Roemer, *Free to Lose*, pp. 125–47. See also G. Hodgson, 'A Theory of Exploitation Without the Labor Theory of Value', *Science and Society*, 44, 1980, pp. 257–73, and Hodgson, *Capitalism, Value and Exploitation* (London: Martin Robertson, 1982), Ch. 18.
12. J.E. Roemer, 'Divide and Conquer: Microfoundations of a Marxian Theory of Wage Determination', *Bell Journal of Economics*, 10, 1979, pp. 695–705.
13. E.O. Wright, 'What is Middle About the Middle Class?', in Roemer, *Analytical Marxism*, pp. 114–40; Wright, *Classes*.
14. Roemer, 'New Directions', pp. 105–9; Roemer, *General Theory*, pp. 275–6, 278, 288–9; Roemer, 'Should Marxists'; Roemer, *Free to Lose*, pp. 3–4, 9–10, 14, 24–5, 47–51, 52–71, 89, 99ff, 106ff, 125–78; Elster, *Making Sense*, pp. 172–9, 201–4, 227–9, 337.
15. M.C. Howard and J.E. King, *The Political Economy of Marx* (Harlow: Longman, 1985), 2nd edn, pp. 68–70.
16. K. Marx, *Capital*, volume I (London: Lawrence & Wishart, 1970), Ch. 32; Marx, *Capital*, volume III (London: Lawrence & Wishart, 1972), Ch. 10; R.L. Meek, *Studies in the Labour Theory of Value* (London: Lawrence & Wishart, 1973), 2nd edn, pp. 1–xliv; Howard and King, *Political Economy*, pp. 54–9.
17. Marx, *Capital*, I, Part VIII; Marx, *Capital*, III, Chs XX, XXXVI, XXXVII; Marx, *Grundrisse* (Harmondsworth: Penguin, 1973), pp. 497–515.
18. Marx, *Capital*, III, Ch. XX.
19. Marx, *Capital*, I, p. 367 (Ch. XIV, section 5).
20. This, of course, implies nothing about the empirical validity of any 'de-skilling thesis'; see Howard and King, *Political Economy*, Ch. 7.
21. Marx, *Capital*, I, Chs XIII, XIV, XV; Howard and King, *Political Economy*, pp. 57–9; Roemer, 'New Directions', pp. 94, 116–17; Roemer, 'Reply', *Politics and Society*, 11, 1982, pp. 375–83; Roemer, 'Should Marxists', pp. 269–70;

Roemer, *Free to Lose*, pp. 85–8, 96ff, 188–9; Elster, *Making Sense*, pp. 192–3, 284ff. It would be possible to construct a model where exploitation originated solely in the capitalist labour process; see A. Przeworski, 'The Ethical Materialism of John Roemer', *Politics and Society*, 11, 1982, pp. 289–313, M.A. Lebowitz, 'Is "Analytical Marxism" Marxism?', *Science and Society*, 52, 1988, pp. 191–214, and W.H.L. Anderson and F.W. Thompson, 'Neoclassical Marxism', *Science and Society*, 52, 1988, pp. 215–28. See also G.A. Dymski and J.E. Elliott, 'The Taxonomy of Primary Exploitation', *Review of Social Economy*, 47, 1989, pp. 338–72.

22. R.L. Meek, *Economics and Ideology* (London: Chapman & Hall, 1967), pp. 93–112; Meek, *Studies*, pp. i–xliv; Howard & King, *Political Economy*, pp. 54–9.
23. Roemer, 'New Directions', pp. 105–9; Roemer, 'Reply', pp. 393–4; Roemer, *General Theory*, pp. 275–6, 278, 288–9; Roemer, 'Should Marxists'; Roemer, *Free to Lose*, pp. 3–4, 9–10, 14, 24–5, 47–51, 52–71, 89, 99ff, 106ff, 125–78; A. Levine, 'Toward a Marxian Theory of Justice', *Politics and Society*, 11, 1982, pp. 343–62; J. Elster, 'Roemer versus Roemer', *Politics and Society*, 11, 1982, pp. 363–74; Elster, *Making Sense*, pp. 172–9, 201–4, 227–9, 337.
24. A. Wood, *Karl Marx* (London: Routledge & Kegan Paul, 1981); S. Lukes, *Marxism and Morality* (Oxford: Oxford University Press, 1987); R.N. Berki, *Socialism* (London: Dent, 1975); Elster, *Making Sense*, pp. 148, 216–33, 516; A. Przeworski, *Capitalism and Social Democracy* (Cambridge: Cambridge University Press, 1985), pp. 239–48; J.E. Elliott, 'On the Possibility of Marx's Moral Critique of Capitalism', *Review of Social Economy*, 44, 1986, pp. 130–45; see also Ch. 18 below.
25. M. Levi and D.C. North, 'Towards a Property-Rights Theory of Exploitation', *Politics and Society*, 11, 1982, pp. 315–20; Przeworski, *Capitalism*, pp. 223–38.
26. Roemer, 'New Directions', p. 110; Roemer, *Free to Lose*, pp. 13, 54, 70–1, 121, 134, 138–40, 145–7, 158.
27. Roemer, 'New Directions', p. 110.
28. Przeworski, *Capitalism*, pp. 223–8.
29. E.J. Mishan, 'A Survey of Welfare Economics, 1939–59', *Economic Journal*, 70, 1960, pp. 197–256.
30. Roemer, 'Should Marxists'; Roemer, *Free to Lose*, pp. 52–71.
31. Roemer, *Analytical Foundations*, pp. 1–14, 202–20; Roemer, 'Methodological Individualism and Deductive Marxism', *Theory and Society*, 11, 1982, pp. 513–30; J. Elster, 'Marxism, Functionalism and Game Theory: The Case for Methodological Individualism', *Theory and Society* 11, 1982, pp. 453–82; Elster, *Making Sense*, pp. 5–8; Elster, 'Further Thoughts on Marxism, Functionalism and Game Theory', in Roemer, *Analytical Marxism*, pp. 202–20; Przeworski, 'Ethical Materialism'; P. Van Parijs, 'Why Marxist Economics Needs Microfoundations: Postscript to an Obituary', *Review of Radical Political Economics*, 15, 1983, pp. 111–24. S. Lukes, 'Methodological Individualism Reconsidered', *British Journal of Sociology*, 19, 1968, pp. 119–28, and G. Hodgson, 'Behind Methodological Individualism', *Cambridge Journal of Economics*, 10, 1986, pp. 211–24, provide analysis of, and references to, the various debates on methodological individualism.
32. See Ch. 3 of Volume I of this book, and Ch. 11 above.
33. P.A. Samuelson, *Foundations of Economic Analysis* (Cambridge, Mass.: Harvard University Press, 1947), p. 8; C.J. Bliss, *Capital Theory and the Distribution of Income* (Amsterdam: North-Holland, 1975), pp. 28–9, 32, 71–2, 88, 120; M.C. Howard, *Profits in Economic Theory* (London: Macmillan, 1983), pp. 73–7, 153–5.
34. F.H. Hahn, 'Keynesian Economics and General Equilibrium Theory: Reflections on Some Current Debates', in G.C. Harcourt (ed.), *The Microfoundations of*

Macroeconomics (London: Macmillan, 1977), pp. 25–40; M.C. Howard, *Profits in Economic Theory* (London: Macmillan, 1983), pp. 164–77.

35. G. Lukács, *History and Class Consciousness* (London: Merlin, 1971), pp. 1–26.
36. D.F.B. Tucker, *Marxism and Individualism* (Oxford: Basil Blackwell, 1980), pp. 11–34.
37. Elster, *Making Sense*; J. Sensat, 'Methodological Individualism and Marxism', *Economics and Philosophy*, 4, 1988, pp. 189–219 defends Marx against Elster's charges.
38. Neither Roemer, nor Elster, nor other rational choice Marxists who defend methodological individualism, provide a formal and systematic account of the criteria by which explanations are to be judged as more or less adequate; J. Elster, *Nuts and Bolts for the Social Sciences* (Cambridge: Cambridge University Press, 1989) comes closest to doing so.
39. J. Sturrock, *Structuralism* (London: Paladin, 1986), p. vii.
40. A. Levine, Review of *Making Sense of Marx*, *Journal of Philosophy*, 83, 1986, pp. 721–8.
41. J. Elster, *Ulysses and the Sirens* (Cambridge: Cambridge University Press); Elster, 'Introduction' in Elster (ed.), *Rational Choice* (Oxford: Basil Blackwell, 1986), pp. 1–33.
42. J. Elster, *Sour Grapes* (Cambridge: Cambridge University Press, 1983), Ch. 1; Elster, *Making Sense*; P. Van Parijs, 'Functional Marxism Rehabilitated: A Comment on Elster', *Theory and Society*, 11, 1982, pp. 497–512.
43. G. Debreu, *Theory of Value* (New Haven, Conn.: Yale University Press, 1959), p. x.
44. K.J. Arrow and F.H. Hahn, *General Competitive Analysis* (Edinburgh: Oliver & Boyd, 1971); M.C. Howard, *Modern Theories of Income Distribution* (London: Macmillan, 1979), Chs. 1 and 2; K. Arrow, 'Economic Theory and the Hypothesis of Rationality', in J. Eatwell, M. Milgate and P. Newman, (eds), *The New Palgrave: A Dictionary of Economics* (London: Macmillan, 1987), volume II, pp. 69–75; A. Levine, E. Sober and E.O. Wright, 'Marxism and Methodological Individualism', *New Left Review*, 162, 1987, pp. 67–84. See also A. Kirman, 'The Intrinsic Limits of Modern Economic Theory: The Emperor Has No Clothes', *Economic Journal*, 99, 1989, pp. 126–39.
45. E.K. Hunt, 'Rationalism and Empiricism in Economic Theories of Value', *Social Science Journal*, 14, 1978, pp. 11–25; cf. the discussion of information generation and the establishment of institutions in S. Hargreaves Heap, *Rationality in Economics* (Oxford: Basil Blackwell, 1989).
46. See the references in n.26 of Ch. 11 above.
47. J. Elster, *Logic and Society* (Chichester: Wiley, 1978); Elster, *Ulysses*; Elster, 'Beliefs, Bias and Ideology' in M. Hollis and S. Lukes (eds.), *Rationality and Relativism* (Cambridge, Mass.: MIT Press, 1982), pp. 123–48; Elster, 'Introduction'.
48. J. Elster, *The Cement of Society: A Study of Social Order* (Cambridge: Cambridge University Press, 1989).
49. M. Blaug, *Great Economists Since Keynes* (Brighton: Wheatsheaf, 1985), pp. 228–31.
50. Elster, 'Introduction', p. 15.
51. Elster, *Making Sense*, p. 476.
52. Hargreaves Heap, *Rationality*.
53. Elster, 'Introduction', p. 25; G. Marwell and R. Ames, 'Economists Free Ride, Does Anyone Else?', *Journal of Public Economics*, 15, 1981, pp. 295–310.

54. J.E. Roemer, '"Rational Choice" Marxism: Some Issues of Method and Substance', in Roemer, *Analytical Marxism*, pp. 191–201; cf. Elster, *Making Sense.*
55. Howard, *Profits*, pp. 143–4.
56. Compare I. Steedman, *Marx After Sraffa* (London: New Left Books, 1977) with Roemer, *Analytical Foundations.*
57. As when Trotsky argued that historical materialism '*reduced* the individual to the social'; see *Writings of Leon Trotsky* (1932–33) (New York: Pathfinder, 1972), p. 185 (emphasis added).
58. Elster, 'Introduction', pp. 22–4; Roemer, 'Rational Choice Marxism'.
59. L. Althusser and E. Balibar, *Reading Capital* (London: New Left Books, 1970); T. Benton, *The Rise and Fall of Structural Marxism* (London: Macmillan, 1984), pp. 36–45, 64–5, 67, 98, 106.
60. J. Elster, 'Three Challenges to Class', in Roemer, *Analytical Marxism*, pp. 141–61; Elster, *Making Sense*, Ch. 6.
61. See the references in n.42 of Ch. 11 above. Elster now seems to have conceded ground to Cohen, and to have accepted that functional explanation can in principle be a valid form of explanation, but he still dislikes it; see J. Elster, 'Further Thoughts on Marxism'.
62. R. Brenner, 'The Social Basis of Economic Development', in Roemer, *Analytical Marxism*, pp. 23–53.
63. Cohen, *Karl Marx's Theory*, pp. 152ff.
64. Howard, *Profits*, pp. 86, 89, 111, 115, 118, 191.
65. M. Olson, *The Logic of Collective Action* (Cambridge, Mass.: Harvard University Press, 1965); G. Becker, *The Economic Approach to Human Behavior* (Chicago: Chicago University Press, 1976); J. Hirshleifer, 'The Expanding Domain of Economics', *American Economic Review*, 75, 1985, pp. 53–68. See also Ch. 18 below.

18
The Political Economy of Socialism

I Introduction

In the intellectual history of Marxism the political economy of socialism has been dwarfed by the attention given to the capitalist mode of production. Only episodically have the issues of post-capitalist economic organisation come to the forefront, and even then often in very concrete circumstances that limited the generality of any conclusions that might be drawn. Sections II and III below explain how this neglect is inherent in the original Marxian perspective, and the following sections indicate why the economics of socialism have been elevated to a more prominent position since the 1920s, and especially since the 1970s. The dramatic events of 1989, when the depth of the crisis in 'actually existing socialism'[1] became evident, suggest that the topic will dominate Marxian political economy in the 1990s.[2] Treating the economics of socialism separately, and in the final chapter of this book, thus appropriately reflects the history of Marxian political economy itself.

Our treatment is broadly chronological, beginning in the next section with the ideas of Marx and Engels, and continuing in section III with the views of theorists prominent in the Second International. Reflections on the early experiences of the Soviet Union form the topic of section IV, and the famous 'socialist calculation debate' among Western economists in the inter-war years is dealt with in section V. The political economy of Stalinism and de-Stalinisation, which is largely a post-war phenomenon in both Marxian and non-Marxian economics, is outlined in section VI. This provides the background to the discussion over the feasibility of socialism in the 1980s, which is reviewed in section VII.

Before proceding to consider the views of Marx and Engels, however, it is advisable to be aware of the fact that much of the discussion of post-capitalist society has been ill-defined. First, the environment in which socialism has been assumed to exist has been treated circumspectly, and also very differently. Many theorists have implicitly imagined socialism as an isolated system, while others have accepted that it will co-exist with capitalism, to which it has to relate and adjust.[3] At the same time, Marxists have sometimes been unclear whether their ideas relate to periods of transition, or whether they also extend to a new social formation which has stabilised.

Second, the problem of efficiency has been treated inadequately. While Marxists have always believed socialist economic organisation would be more effective than capitalism in satisfying human needs, they have faced difficulties in specifying what this means. According to the materialist conception of history, human nature – consciousness, interests, aspirations and abilities – changes with social relationships, so that human needs would be different in socialism.[4] But determining exactly how they would be different is necessarily a speculative exercise, as therefore is any assessment of the efficiency of socialist economic institutions.[5] The problem is made more tractable when it is assumed that the structure of motivations and wants in post-capitalist society is likely to remain for a long time substantially similar to that prevailing in advanced capitalism. Nevertheless, although many Marxists have believed this to be the most reasonable assumption from which to begin, they have often failed to face its implication, that socialism will be supported only if it excels in satisfying the same set of needs as capitalism and not solely because it is better adjusted to meeting new needs. Consequently, it is imperative to consider exactly why modern capitalism – rather than the capitalism of Marx's day – might fail. In general Marxists have tended to avoid this issue by repeating the traditional arguments about the crisis-prone, wasteful and inhuman conditions prevalent under capitalism, which have so far failed to convince more than a minority of the population in the advanced countries that capitalism needs to be replaced.

Third, socialists have traditionally believed that coercion will be markedly reduced once post-capitalist society has become established, and perhaps even 'wither away' completely. The foundation of this belief is the assumption that all human needs will be more satisfactorily met in socialism, and it is therefore dependent upon the efficiency of socialism.[6] But it has been insufficiently appreciated that, for non-coercive relations to predominate, efficiency must pervade the micro structures, rather than be limited to the macro economy. Otherwise there will be a tendency for 'capitalist acts between consenting adults' to reappear,[7] and socialism will be threatened from within. It follows that any attempt to provide a blueprint for socialism must be especially sensitive to this matter, insofar as enhanced freedom remains the principal motivation for socialist endeavours. However, virtually all formal models of the socialist economy have ignored it. For example, the famous blueprint originating with Oskar Lange in the 1930s (see section

V below), and the inspiration for most modern ideas of market socialism, makes no attempt to engage the issue. Lange simply assumes that the 'socialist rule of law' excluding private property in the means of production will be adhered to.

Fourth, 'actually existing socialisms' have obviously not been efficient or non-coercive, and the question of how far their history is relevant to achieving 'genuine' socialism is deeply problematic. It can be argued, from within the Marxian tradition, that the evident failure of what was described as 'socialism' in the Soviet Union and Eastern Europe has little bearing on the question of the feasibility of a truly liberated society. Marx himself maintained, for most of his intellectual life, that socialism required both a high degree of development of the forces of production and the conscious support and participation of the great mass of the working population. Neither had been forthcoming in 1917 in backward Russia, with its tiny proletariat which soon succumbed to the Bolshevik dictatorship. Neither did the export of the Soviet model on the gun-barrels of the Red Army's tanks at the end of the Second World War constitute a fair test of the viability of Marx's socialist project. As we saw in Chapter 3 above, the Soviet mode of production was widely regarded, by Marxians of several persuasions, either as a new form of class society or as a distorted and perverted type of transitional society whose disintegration was widely predicted.

At the same time, it would be wrong to maintain that the Stalinist experience was wholly irrelevant, if only because some of the economic difficulties upon which it foundered are almost certain to be experienced by any socialist experiment, no matter how favourable the circumstances in which it is conducted. Critics of socialism charge that, by its very nature, any attempt to implement socialism must result in inefficiencies, and can therefore be sustained only by coercion.[8] Nevertheless, the historical conjunctures in which soviet-type socialisms have developed suggest that actual experience must be treated with caution. This cuts both ways. So far as crude growth rates are concerned, the rapid advance prior to the 1960s was heavily dependent upon technological borrowing from advanced capitalism, and is unlikely to be duplicated by other socialisms. On the other hand, the pressing need to achieve military parity in the face of predatory capitalisms has clearly affected the socio-economic organisation of the Soviet Union in ways that are contingent (see Chapters 2 and 3 above).[9]

One implication of these four arguments is that the political economy of capitalism and of socialism need to be closely associated. The economics of socialism, precisely because socialism is supposedly a post-capitalist social formation in which liberation extends beyond that achieved in capitalism, can carry conviction only in terms of a thorough understanding of capitalism. Thus the previous chapters of this book suggest that there are likely to be real limitations to Marxism on this score. Marxian economists have frequently been wrong in their analysis of capitalism, which cannot fail to flow over into their conceptions of socialism. Nonetheless, it is broadly true that prior to 1929 the intimate relation of capitalism and socialism was appreciated. In particular, although there are severe deficiencies in substantive analysis, the methodology of Marx and Engels remains a model of how the economics of socialism ought to be fashioned.

II Marx and Engels on Post-Capitalist Society

Socialist aspirations long predate Marxism, and Marxists have continually been found at fault for criticising earlier ideas on how socialism should be organised, especially since they have failed to provide extended accounts of their own views on the institutional arrangement of post-capitalist society.[10] Certainly Marx and Engels felt no inhibition in pouring scorn on previous socialists' blueprints, yet they were themselves reluctant to elaborate their own beliefs about the structure of future society. Moreover, when they did so it was frequently a response to contemporary events, rather than a balanced discussion of the topic in its own right.[11] In fact this position flowed logically from the nature of their theory. What Marx and Engels contributed above all to the socialist tradition was a scientific perspective in which elements of socialism were seen to arise from within capitalism, as a result of its own development, and they believed that this constrained attempts to formulate ideals independently of what was made possible by existing societies. The audacity of 'scientific socialism' has never ceased to shock friend and foe alike, but behind it is the mundane assumption that the worth of any socialist project depends upon its practicality.

Consequently, it is relatively easy to determine what Marx and Engels thought would be the chief characteristics of post-capitalist economies. These features follow logically from what they believed progressively inhibited capitalism from fully satisfying human needs. The central concept here is that of alienation.[12] Ultimately post-capitalist society would be one without alienation: the products of human activity would cease to govern their creators, but would instead be subject to conscious control. Marx and Engels considered that this required the elimination of commodity production and the eradication of private ownership of the means of production, so that from the outset all forms of future society would curtail market activities toward these ends.[13]

Furthermore, the socialist solution to the inability of capitalism to meet human needs emerged directly from alienation. For Marx, alienated conditions were synonymous with the domain of historical materialism and, in the case of capitalism, he argued that the contradiction between the forces and relations of production hinged on the fact that the forces increasingly called for new socialist relations. All the specific 'laws of motion' in *Capital* – crises of underconsumption, the falling rate of profit and an ever-larger reserve army of unemployed – followed from this. And because the harsh effects of these 'laws' disproportionally affected working-class conditions of life, Marx and Engels viewed the proletariat as the chief agency in the overthrow of capitalism. As a result they maintained that post-capitalist society would take the initial form of a workers' state, even though socialism itself would improve the human condition generally.[14]

For Marx and Engels, the revolutionary activity of the proletariat gives rise to universal emancipation because the same contradiction between the forces and relations of production which underpins revolution also modifies capitalist relations of production in a socialist direction. Thus the proletariat realises only what is already present embryonically within capitalism. Of crucial significance here is Marx's and Engels's claim that capitalist development involves a pronounced tendency to concentrate and centralise the means of production, thereby reducing the scope of commodity relations and providing the basis for the production of use values without the intervention of exchange. This is at the very crux of Marx's and Engels's belief that the socialist economy will be planned.[15]

From this viewpoint of historical materialism, Marx and Engels were thus justified in their criticism of Utopian socialists who, they believed, posited ideals separate from, and frequently in opposition to, actual developments. Moreover, the materialist conception of history relieved them of any obligation to provide detailed blueprints of future society.

> No social order is ever destroyed before all the productive forces for which it is sufficient have been developed, and new superior relations of production never replace older ones before the material conditions of their existence have matured in the framework of the old society. Mankind thus inevitably sets itself only such tasks as it is able to solve, since closer examination will always show that the problem itself arises only when the material conditions for its solution are already present or at least in the course of formation.[16]

Of necessity, then, the extent to which the details of post-capitalist society could be anticipated depended upon the maturity of capitalist development.[17] It is, therefore, wholly inappropriate to charge Marx and Engels themselves with Utopianism, and misguided to believe that historical materialism can be united with new forms of Utopianism.[18] Marx and Engels were certainly wrong in their beliefs on capitalist development, and therefore on the form of any socialist future. But the manner in which they approached the problem remains sensible.

However, they were mistaken in their belief that the crisis-prone nature of capitalism was of crucial importance in demonstrating the superiority of socialism. Even if they had supplied a credible basis for the belief that capitalist economic crises would become increasingly severe, this would not entail that socialism would be preferable, or that it would be preferred by the great majority of the working population. A wasteful and inefficient capitalism, in which resources were shamefully underemployed, might still be better – recognisably better – than any practical alternative. Moreover, even if in capitalism profit rates declined, unemployment rose and underconsumption became more severe, this would not preclude capitalist relations from being re-established at the microeconomic level on the morrow of any anti-capitalist revolution. The macroeconomic consequences of the capitalist mode of production may not enter into individuals' calculations as to the most effective way to produce particular goods. Thus only the superior efficiency of socialist economic organisation in each and every area of production is a guarantee that post-capitalist society will not regress.[19]

These considerations indicate the pivotal importance of the two other arguments Marx and Engels used to justify their support for socialism. First, capitalism was itself socialising the relations of production through the growing concentration and centralisation of capital. Second, the elimination of commodity production corresponded more and more to the deeply felt (if only partially articulated) human need for self-realisation and the overcoming of alienation. But neither claim is easy to substantiate. Marx and Engels erred in their expectation that capitalism would progressively eliminate all commodity relations. While it is true that there is a tendency towards the concentration and centralisation of capital, it has not come anywhere near to organising economic life on non-commodity principles. The relations between large production units are still predominantly money relations; the internal organisation of corporations is an adaptation to external competition; and these structures are frequently established on quasi-market principles.[20] At the same time people show little hostility to markets in meeting their consumption needs, except in specific areas like health provision. In the history of Marxian political economy, however, theorists showed great tenacity in their allegiance to Marx's views on the centralisation of capital, and his hostility to market relations. Nowhere is this more true than in the era of the Second International.

III Socialism and the Second International

Marx combined his scientific socialism with a great enthusiasm for revolutionary politics. As a result there is considerable tension within his work between measured judgements of what is required for socialism to succeed and his impatience to be done with capitalism (see Chapter 7 of volume I of this book). Marx sometimes also gave history a 'meaning' beyond that justified by science, in which post-capitalist society represented the real solution to all theoretical problems of social philosophy and thereby constituted the end of humankind's search for itself.[21] But neither of those two qualifications to his scientific perspective found much of a constituency within German Marxism. For the most part all Marxian writers emphasised the scientific dimension of Marx's work, and many treated socialism as a 'down to earth' matter. The disproportionate influence of Marx's mature writings is evident here, and so too is the fact that Marxism had become the theory of a working-class party forced to serve 'bread and butter' interests (see Chapters 1 and 4 of volume I of this book). Russian Marxism was different, being forced to address the questions of revolution more intensely because of the backwardness maintained by the Tsarist autocracy. But no more than German Marxists did the leading Russian theorists depart from the tenets of scientific socialism. So far as the economics of socialism were concerned, even after the break-up of the Second International in 1914 both Lenin and Bukharin remained disciples of Hilferding, while Bolshevik vanguardism itself had a basis in Kautsky's writings, as Lenin pointed out in *What is to be Done?*.[22]

Unlike the evaluation of many modern Marxists, then, Kautsky's insistence that socialism required the maturation of capitalism, and would be achieved through the rising power of the SPD within established institutions, was generally regarded as legitimate among his contemporaries prior to the First World War. Indeed, his belief that the path to socialism lay through radical reform under parliamentary democracy met little criticism.[23] (Kautsky recognised that violent revolutionary action might be called for, but only as a defensive measure provoked by conservative forces resisting the inevitability of history.)[24] Plekhanov's views on the appropriate strategy under bourgeois democracy were essentially the same, and many Mensheviks hoped to emulate the German party after the 1905 revolution. Lenin did not, but his reasoning focused on the absence of secure constitutional conditions in Russia, not a hostility to Kautskyism as such, which developed only after 1914.[25]

So far as the organisation of a socialist economy was concerned, Kautsky clearly remained true to the ideas of Marx and Engels. Social ownership was to predominate, the allocation of resources was to be planned, and the institutions of power thoroughly democratised. Kautsky made no attempt to specify the exact institutional structure, and for the same reason that Marx had not written 'cookbooks for the future': detailed schemes could not be furnished in advance of historical development.[26] Nevertheless, Kautsky recognised that many elements of capitalism might persist for some time after working-class power had been secured. Marx had accepted this,[27] but Kautsky went further, and was more definite than Marx. This may have reflected the influence of the revisionist controversy (see Chapter 4 of volume I of this book), but he expressed himself in general terms. Although there was to be a much-expanded state provision to meet working-class needs for housing, education and social security, private property in the means of production (especially in agriculture and intellectual activity) would continue, and the need for inequality to maintain work incentives would not cease immediately. Moreover, Kautsky recognised that:

> Money is the simplest means known up to the present time which makes it possible in as complicated a mechanism as that of the modern productive forces . . . to secure the circulation of products . . . It is the means which makes it possible for each one to satisfy his necessities according to his individual inclination . . . As a means to such circulation money will be found indispensable until something better is discovered.[28]

The belief that capitalist advance called for ever more centralisation of the means of production remained very evident in Kautsky's writings,[29] so he never explicitly raised the prospect of a matured socialist economy that would be anything other than fully socialised and planned. Subsequent developments in both theory and practice reinforced this expectation, most notably Hilferding's *Finance Capital* and the experience of the First World War.[30] Hilferding's book documented the organised nature of national capitalist economies, and he explicitly related this to the achievement of socialism.

> Finance capital puts control of social production increasingly into the hand of a small minority of large capitalist associations, separates the management of production from ownership, and socialises production to the extent that this is possible under capitalism . . . The tendency of finance capital is to establish social control of production . . . [This] . . . facilitates enormously the task of overcoming capitalism . . . it is enough for society, through its conscious executive organ – the state conquered by the working-class – to seize finance capital in order to gain immediate control . . . There is no need at all to extend the process of expropriation to the great bulk of peasant farms and small business, because as a result of the seizure of large-scale industry, upon which they have long been dependent, they would be indirectly socialised. It is therefore possible to allow the process of expropriation to mature slowly.[31]

The very great influence of *Finance Capital* on Marxian economic theory thus intensified beliefs that socialism was rooted in 'real developments' which made it the inevitable future (see Chapter 5 of volume I of this book).

Further support for this view appeared in the organisation of the German war economy after 1914. The dramatic effect that this had upon Bukharin and Lenin has already been dealt with in Chapter 13 of volume I of this book. There were novel elements in their treatment, which will be commented on in a moment, but its effects in solidifying the belief that socialism would simply extend the organised nature of modern capitalism was widely shared.[32] The experience of planning also generated the first Marxist blueprint of a socialist economy by the Austrian socialist and polymath, Otto Neurath. In a series of articles after 1916, he outlined how a predominantly socialised, planned and moneyless economy might actually function:

> The total organisation . . . [of the economy] . . . can raise . . . economic efficiency . . . [though planning and] . . . universal statistics . . . Economic plans would have to be designed by a special office which would look on the total national economy as a single giant concern. Money prices would not be important . . . since within the framework of a planned economy such prices, so long as they continue at all, are fixed in an essentially arbitrary manner . . . We must at long last free ourselves from outmoded prejudices and regard a large-scale economy in kind as a fully valid form of economy.[33]

Neurath's writings, coupled with the phenomenon of War Communism in Russia after the revolution, prompted Ludwig von Mises's attack on claims that socialism would be efficient (see section IV below). But, well before this, the groundwork had been laid by other members of the Austrian school. In the closing decades of the nineteenth century, Wieser and Böhm-Bawerk, as part of their critique of Marx's theory of value, argued that the categories of marginalist theory were of universal significance, and were not tied to the historically specific form of capitalist economic organisation. Relative prices were rates of substitution reflecting opportunity costs in conditions of scarcity, and profit represented the extra productivity of 'roundabout' production processes, together with time preference for current consumption over consumption in the future. Thus planners of a modern economy could not dispense with these categories and hope to remain efficient.[34]

This conclusion was buttressed by Enrico Barone in 1908.[35] Arguing from a Walrasian perspective, and greatly influenced by Paretian welfare economics, Barone showed that the conditions required for the efficient allocation of resources were the same for any economy, and were thus independent of particular institutional structures: '[The] . . . system of equations of collectivist equilibrium is no other than that of free competition.'[36] In principle, then, Barone accepted, a socialised, centrally planned and moneyless economy could be efficient, but the very complexity of the conditions of optimality convinced him that it would be impossible practically to fulfil them without the use of a market system. The visible hand of socialism was bound to be distinctly inferior to the 'anarchy of production'.

No form of 'vulgar economy' made an impact on Marxian discussions of the economics of socialism prior to that of Mises in 1920. However, criticism from within the ranks of social democracy did begin to dent the armour of orthodoxy. In the 1890s both German and Russian revisionists questioned

Marx's depiction of the 'laws of motion' of capitalist development, including the centralisation of capital. They also criticised Marx's value theory from the perspective of Austrian analysis. However, the leading revisionists did not explicitly question accepted views of the relationship between socialist economic organisation and modern capitalism. They were more concerned to change political tactics and provide an alternative basis for socialist ethics (see Chapters 4 and 10 of volume I of this book).

The Marxian theory of socialism also received a jolt from the formation of workers' councils in the revolutions of 1905 and 1917, as well as throughout much of Europe in the First World War and its immediate aftermath. This rejuvenated libertarian interpretations of the dictatorship of the proletariat and the commune state which had hitherto been virtually monopolised by anarchists and syndicalists. The orthodox view that socialist revolution would involve attaining democratic control of the existing state apparatus now came under attack from the Marxian left, who argued that the established organisation of state had instead to be 'smashed', and the new political power founded on different principles. Although these views could be given Marxian credentials, largely on the basis of Marx's and Engels's treatment of the Paris Commune, and were not employed by Marxists to question received views on the economics of socialism, they were in tension with the whole idea of a scientifically grounded socialism emerging from the structure of advanced capitalism. If organised capitalism was the antechamber of the socialist economy, historical materialism implied that the centralised, bureaucratised state would prove indispensable, as Marx, Engels, Kautsky and Hilferding sometimes admitted.[37] Both Lenin and Bukharin resisted this implication, but their reasoning was necessarily unconvincing, and after the Bolshevik revolution they were forced to modify their views (see Chapters 6, 13 and 15 of volume I of this book).

IV Reactions to Soviet Experience Prior to Stalinism

After 1917 most Western social democrats remained true to the orthodox view of the socialist economy. Advanced capitalism was increasingly 'organised capitalism', and provided the indispensable economic basis for future society. The principal changes would involve an extension of what was already evident, and would be brought into being by the extension of democracy, which could only result in the political domination of the proletariat (see Chapter 14 of volume I of this book). Not surprisingly many viewed the October Revolution as a Blanquist Utopianism that was bound to fail in the face of overwhelming backwardness. Kautsky argued that the terroristic methods of the Bolsheviks reflected this contradiction, and the absence of democracy ensured that state capitalism, not socialism, would result.[38] This was in accord with his previous views, for he had consistently considered increasing state control and nationalisation in the absence of full democracy as developments wholly within capitalism.[39] Both Lenin and Trotsky penned fierce denunciations of Kautsky, based on their belief that the First World War had opened a new revolutionary epoch. But Kautsky and most other Western socialists did not accept this (see Chapters 5, 12, 13 and 15 of volume I of this book, and Chapter 3 above).

The Bolshevik Left, Spartacists such as Rosa Luxemburg, and the Council Communists attacked the party dictatorship from a similar but much more sympathetic standpoint.[40] They favoured a Commune state, which Bukharin and Lenin had themselves espoused during the First World War. However, none provided a convincing account of how a post-capitalist economy might actually function on such lines.

All Marxian critics of early Soviet practice thus emphasised the importance of the superstructure of political power. Ludwig von Mises – a lifelong and implacable opponent of all forms of socialism – aimed at a more fundamental target. His initial argument in 1920 was poorly structured, and it has been the subject of different interpretations.[41] However, the form of his critique is easy to understand. Mises claimed that without private property there could be no exchange, and, in the absence of exchange the rational valuation of different resources would be impossible, so that they could not be used economically and only chaos would result. The choice (turning Rosa Luxemburg's epigram against her) was either capitalism or barbarism:

> If the intellectual dominance of socialism remains unshaken, then in a short time the whole cooperative system of culture which Europe has built up over thousands of years will be shattered . . . All efforts to realise socialism lead only to the destruction of society . . . [and] . . . to a return to the self-sufficiency of the closed, domestic economy . . . [involving] . . . hand-to-mouth production for one's own needs.[42]

This conclusion reflected the experience of War Communism, and should not be taken as an integral part of Mises's argument, which centred on questioning the efficiency of a planned, socialised and moneyless economy as outlined by Neurath and Bukharin.[43]

Apparent confirmation of Mises's less extreme claims appeared with the move to the NEP, and the interpretation given to it by many Marxists who saw it as the first step towards the restoration of capitalism. More significant from a theoretical viewpoint, however, were the conclusions reached by some Soviet economists. During 1920 there was considerable discussion of the problems of a moneyless economy and the schemes that had recently been proposed (including that of Neurath) to plan without markets. The difficulties exposed by neoclassical theorists were recognised; in particular, without money to serve as a common denominator for the aggregation of costs and benefits, rational calculation appeared to be impossible in practice.

Against Mises, it was accepted that a moneyless economy might function tolerably well, but it could not be efficient in achieving the goals of planners or in meeting consumers' needs.[44] Whether Bolshevik theorists themselves began to accept this remains unknown. During the 1920s all factions in the party became committed to the NEP, but there is no conclusive evidence that leading Bolsheviks believed that the socialist economy itself would be anything other than as it had been traditionally imagined. Support for the NEP was as a mode of transition, not as a structure which exhausted the aims of the revolution (see Chapter 15 of volume I of this book, and Chapter 2 above).

Given the prominence which Bukharin's ideas have attracted since the early 1970s as a model for current attempts to restructure the Soviet mode of production,[45] it is appropriate to note that they are at best tangential to the issue. By contrast, although Trotsky's revolutionary fanaticism and ruthlessness in the civil war makes him a less endearing figure to most reformers, his ideas on the political economy of socialism were far more acute. The underconsumptionist economics which Bukharin employed to justify his own version of the NEP, and his preference for autarky, were thoroughly wrong-headed, while the critical comments that he levelled against Stalinism emerged only in the late 1920s, and were then expressed in Aesopian language.[46] Trotsky defined the principal problem correctly, and in doing so was much closer to traditional Marxian presuppositions.

> In the long struggle between two irreconcilably hostile social systems – capitalism and socialism – the outcome will be determined *in the last analysis* by the relative productivity of labor under each system . . . [The] . . . socialist economy now under construction can be defended . . . only if it continually comes closer to the prevailing levels of technology, production costs, quality, and price in the world economy.[47]

Moreover, Trotsky explicitly and repeatedly recognised the role which market relations and money prices can play in correcting planning mistakes and judging success. He used all of this to expose the irrationalities and inefficiencies of the Stalinist command economy in a way which now appears prophetic.[48] The real problem with Trotsky's critique is precisely its accuracy in depicting what have proved to be systemic problems of command economies, for they appear to come very close to supporting at least part of Mises's argument.

V Lange's Reply to Mises

Throughout the interwar period there were various attempts by Western socialists to parry Mises's attack on socialism. Some of these restated orthodox beliefs that capitalism itself was rapidly transcending market organisation, or pointed to the possibility that central planners might solve the equations for efficient allocation as specified by Barone, and occasionally they outlined how a fully planned, socialised and moneyless economy might work, as Neurath continued to do. Others were more radical. Accepting that Mises had revealed a genuine problem, they imagined that socialist property might be combined with commodity production; in this approach, public ownership alone exhausted the meaning of socialism.[49]

It was not until 1936 that Oskar Lange provided a sophisticated rebuttal of Mises's argument, which preserved a conception of post-capitalist society that extended beyond legal property forms, found a place for planning, and allowed the implementation of egalitarian values.[50] There are indications that Lange gave some credence to the idea that 'organised capitalism' might provide a basis by which market relations could be overcome.[51] But it was not this to which he appealed in his famous reply to Mises, and in 1935 he explicitly accepted that neoclassical theory was of far greater relevance to the economics of socialism than Marxian political economy (whose strength, he believed, lay in understanding the historical evolution of the capitalist system as a whole).[52] In the following year, Lange proceeded to argue on neoclassical grounds that the absence of private ownership in the means of production did not imply the end of market exchange, and that the existence of market exchange did not preclude planning and the realisation of important socialist values.

Lange's socialist blueprint assumes the public ownership of all means of production, but allows private ownership of consumption goods over which there is free market choice, as there is for occupations. A central planning board fixes prices for all items of state property, and guarantees production units that they can buy and sell any amount of goods at these prices. Managements are instructed to maximise profits, taking prices as given. In the event that there are excess demands or supplies, the central planners alter the prices in the manner of a Walrasian auctioneer until markets clear (although Lange seems to allow disequilibrium trading). Allowance for external effects and the provision of public goods can be easily incorporated into the process. Lange was thus able to claim that prices would be 'rational' and resource allocation efficient. No 'real world' capitalism could ensure this, he claimed, because of the existence of disequilibrium, market power and inadequate policies with respect to externalities. Moreover, Lange pointed out that planners could also fix the interest rate to bring about any desired rate of accumulation, which would be financed from renting state property to producing units, and from taxes. In addition, state resources might be used to offset income inequalities arising from the operation of a free labour market.

The details of Lange's scheme are unimportant relative to its general principle,[53] which is to use a price system to plan the economy, rather than

Biography of Oskar Lange

Oskar Lange was born in Tomaszow, Poland, in 1904. His father was a textile manufacturer, and the family of German origin. At university in Poznan and Crakow during the 1920s he studied law and economics, and became a student at the London School of Economics in 1929. Lange moved to the United States in 1934, lectured at various universities, and finally became Professor of Economics at the University of Chicago in 1943. In the early post-war years he served as Polish ambassador in Washington and at the United Nations, after which he returned to academic life in Poland and was deeply involved with the economic management of the Polish economy. As a socialist theorist, Lange is chiefly remembered for the model of market socialism which he formulated in 1936, but he also published extensively in many branches of economics. Throughout his life he sought to synthesise aspects drawn from different schools of economic thought, and remained convinced that non-Marxian theory was especially useful for the planning of socialist economies. Lange died in 1965.

treating planning as an alternative method of allocation. This possibility rests, in turn, upon treating property ownership as a set of rights which may be delegated to particular agents, and does not entail that social ownership involve detailed central control of all economic activities. Thus Lange implicitly criticised Marx, and most other Marxists, at the same time as he attacked Mises. On Lange's argument, it is not true that forms of property ownership are closely tied to relations of production, and the effects of commodity production depend upon the institutions governing the operation of markets. In fact one way of understanding Lange's reasoning is as an attempt to use Wieser's and Böhm-Bawerk's claims about the universality of value relations against both Marx and Mises, and in support of socialism.

Defenders of Mises's critique of socialism, notably Friedrich von Hayek and Lionel Robbins, found their position considerably weakened by Lange's polemic. Among academics it quickly became accepted as the definitive answer to the Austrian critics of socialism.[54] Maurice Dobb, however, took a different line.[55] He agreed that Lange had refuted Mises, but not that he had done so on the strongest grounds. Dobb was by this time a firm supporter of the command economy in the Soviet Union. In 1928, in his *Russian Economic Development*, he had argued that the key aspect of post-capitalist society was proletarian political power (meaning by this the dictatorship of the Communist Party), and that economic policy should be determined according to circumstances.[56] By the early 1930s, though, he was committed to a new position which viewed socialism as synonymous with Soviet planning, and the command economy as not only representing post-capitalist society but also as an alternative method of economic development to that offered by capitalist industrialisation.[57]

Dobb argued that rapid growth was far more significant in improving welfare than the efficiency of resource allocation, which he took to be the principal topic of neoclassical economics. In *Political Economy and Capitalism* he drew a sharp contrast between the classical-Marxian tradition of economic theory, which focused on the objective factors lying behind development, and the static subjectivism ushered in by the Marginal Revolution.[58] In Dobb's view, both Mises and Lange were guilty of an obsession with equilibrium, neglecting accumulation and structural transformation. At the same time, he believed, they each overestimated the informational requirements of central planning, especially of investment planning. Indeed, according to Dobb the ignorance of investors in decentralised systems, whether capitalist or market socialist, was the principal deficiency of these types of economy. The actions of autonomous agents could only be based on guesses about an uncertain future, and led to cyclical fluctuations and other sources of waste which reflected the fact that coordination occurred *ex post*. So far as consumption activities were concerned, Dobb accepted that there was a case for the use of markets. But the allocation of existing means of production and their future expansion were better left to planners, who could centralise the relevant information and calculate an *ex ante* coordination. In any event, Dobb argued, consumers' preferences could not constitute a rational criterion by which to judge economic policy, since they were endogenous. This was neglected by welfare economics, and sharply deflated the significance of its theorems, which were in any case weak because Pareto optima were non-unique.

Although Dobb never went as far as Paul Sweezy, who dismissed Lange's central planning board as a 'price fixing' agency,[59] the upshot of his evaluation of all forms of market socialism was that they would function in much the same way as capitalism. At only one point did he give Lange's ideas some positive value for socialist construction. If the price adjustment mechanism was a genuine *tâtonnement*, so that market relations could be confined to shadow pricing, the efficiency of planning might thereby be improved. Dobb thus anticipated much of the literature on 'optimal planning' that would emerge in Eastern Europe after Stalin's death.[60] However, Dobb remained adamant that any attempt to allow markets a genuine role in the allocation of means of production and accumulation would undermine the advantages of socialism (see section VI below for an outline of Dobb's views on market socialism after Stalin's death).

Dobb also noted that progress in economic theory was strengthening the case for central planning. He pointed to the formulation of input–output analysis, which represented a far more refined tool for achieving coordination than the Soviet system of material balances. Unknown to him at the time, other advances were occurring with the same potential, especially von Neumann's work on growth and Kantorovitch's discovery of linear programming.[61] And in the 1950s Baran launched the theory of underdevelopment, which dramatically increased the popularity of the Soviet strategy for economic development (see Chapter 9 above). Simultaneously, economic analysis was moving against the Austrians. Keynes's *General Theory* was clearly the most important event (see Chapter 5 above), but neoclassical economists were increasingly adopting a Walrasian paradigm which could easily be used to reinforce the claims of market socialists.[62] There were even defections from the Austrian ranks. In 1942, in his famous *Capitalism, Socialism and Democracy*, Joseph Schumpeter went a long way towards restating the classical Marxian beliefs as to why socialism was inevitable.[63]

However, Mises and Hayek conceded virtually nothing. Instead they set about clarifying, reformulating and elaborating the contents of Mises's original argument in 1920.[64] In the process they broke decisively with neoclassical theory, and emphasised those variables which radical Keynesians have always accepted as of crucial importance: future uncertainty and the expectations of investors. They even took their stand in favour of capitalism on exactly the same ground which Dobb had used to justify Soviet planning: the ability to generate rapid economic advance. They faced long years in the wilderness, but by the 1970s there were clear signs that their tenacity was eventually yielding returns.

At the crux of neo-Austrianism was the argument that neoclassicals treated as exogenous what were in fact endogenous variables. Preferences and technical coefficients were not data which could be used in the same way by decision-makers in different kinds of environment. They changed over time, and the principal force of change, according to Hayek, was new knowledge arising from the rivalry of economic agents. Competition was for him much more a process than a specific economic structure, and prices were the most effective conveyor of new information which allowed agents to coordinate their behaviour in changing circumstances. This was true generally, but, Hayek argued, the beneficial consequences were maximised in free market economies founded on private ownership. Any restraint on exchange inhibited the communication function of prices, while socialisation of property weakened the motivational and disciplining effects of profits and losses. Economic progress required that mistakes be paid for and competence be rewarded.[65]

From this Austrian perspective, Lange's article was seen as a rebuttal of Barone, not Mises. Both Barone and Lange assumed that preferences and technical conditions were given, and that economic agents maximised as programmed and passive automatons within the rules of the game specified by the political authorities. As neoclassical economists, the Austrians argued, Barone and Lange never really broke with the spurious objectivism characteristic of classical political economy, to which Dobb had appealed in his rationalisation of central planning.

The Austrian critique of neoclassical economics has found a receptive audience among some neoclassical economists themselves. Over the last two decades they have paid increasing attention to the importance of imperfect knowledge, including principal-agent relationships involving moral hazard and the possibility of free riders. One consequence has been to view some forms of pre-capitalist economic relationships, like sharecropping, more favourably than before, on the grounds that they can be efficient responses to the uncertain environment in which they exist (see Chapter 11 above). But the new approach has led to a more critical view of socialism. The seminal work here is that of Alchian and Demsetz, who argue that the hierarchical authoritarian structure of capitalist production units is rooted in considerations of efficiency, not simply in a specific type of property relation. Without supervision, work effort will decline, and in the absence of the proprietor's rights to residual income (profit) there will be no incentive to supervise effectively. It is these factors, they maintain, which explain why 'capital employs workers' rather than 'workers employ capital'.[66]

Nevertheless, the Austrians have also met with a critical response. Other neoclassical economists have joined with Sraffians and Keynesians to expose a serious lack of robustness in model specification, and uncover errors of deduction, while also providing hypothetical counter-examples to theoretical generalisations of the Austrians.[67] Moreover, the economic history of capitalist economies hardly supports grandiose Austrian claims; very often state capitalisms have been more dynamic (see Chapter 11 above). Nor does the Great Depression suggest that the communication function of prices always works well (see Chapter 1 above), especially when contrasted with the phenomenal growth rates achieved under Stalinism (see Chapter 2 above, and section VI below). However, the actual experience of planning in Eastern Europe has provided some evidence for the Austrians' attack on socialism. This, at least, is the conclusion of leading economists who have not only studied but worked within 'actually existing socialism'.[68]

VI The Economics of Stalinism and De-Stalinisation

Some of the claims made for the Soviet model of development by Maurice Dobb and Paul Baran appear to have been borne out by growth statistics. Between 1928 and 1985 the 'Soviet Union's annual average growth rate of GNP . . . was 4.2 percent, or 4.7 percent when the five World War II years are excluded . . . [and] . . . the Soviet record is still among the best for such an extended period'.[69] This was not lost on Oskar Lange, who in the 1950s and 1960s looked on central command planning much more favourably.[70]

At this time Lange's colleague in Poland, Michal Kalecki, also saw no fundamental economic problems with the overall approach, although he did criticise taut planning and the heavy emphasis on investment, and he favoured some decentralisation along the lines of Yugoslavia's system of 'self-management'.[71] Western development economists focusing on the Third World, as well as many mainstream analysts concerned with accelerating growth in industrialised capitalist economies, also believed that salvation might lie in state planning.[72] In 1961 the goal of overtaking the USA within ten years was incorporated into the programme of the Communist Party of the Soviet Union by Nikita Khrushchev,[73] and many in the West agreed that there was a fair chance that it might be achieved.

Khrushchev also sought to reform Stalinism by markedly reducing the powers of the terror apparatus and providing a modicum of basic civil liberties. His own view of the past was a highly conservative variant of Trotsky's analysis of degeneration in the superstructure: all problems resulted from the immense concentration of power in Stalin's own person. This so-called deviation from Leninist norms of collective leadership was euphemistically referred to as the 'cult of the personality', and the resulting 'crimes' against the party and 'mistakes' of the leader were sketched in the 'secret speech' of 1956.[74] Despite sending massive shock waves through the international Communist movement, Khrushchev failed to explain how Stalin's dictatorship had occurred, why it was especially terroristic, and how the degeneration had failed to touch the transition to socialism or the socialist mode of production, both of which were held to be in accordance with Leninist doctrine. However, the de-Stalinisation actually implemented was consistent with Khrushchev's 'theory' insofar as it was concerned primarily with the emancipation of the bureaucracy. What Khrushchev and his successors failed to discover was an alternative mechanism to terror for controlling the apparatus. Consequently corruption mushroomed and exacerbated the economic problems which Soviet leaders began to regard with increasing concern in the 1960s.[75]

De-Stalinisation was itself partly a response to these economic problems. The vast labour reserves and natural resources available at low cost had been significantly reduced by 30 years of rapid advance, while much of the capital equipment embodied technology close to the frontier of knowledge, and this inhibited future growth on the basis of borrowing Western expertise in the same manner as in the past.[76] In order to move on to an intensive growth path there had to be greater scope for initiative, which required more secure conditions and an increased supply of consumer goods to enhance incentives as well as provide legitimacy for the more civilised dictatorship. But in itself this made more serious a set of problems already evident in command planning. The system had functioned by ruthlessly protecting the targets of priority sectors. When the plans for the military and heavy industry were threatened, inputs had been diverted from non-priority sectors, so that the burden of miscalculations was concentrated in other areas like the production of consumption goods. By weakening the difference in status between different 'departments' there was added pressure for consistent planning, which had already been intensified by the increased complexity of the economy resulting from past development. Actual experience was thus showing that Barone's misgivings about the possibility of efficient central planning had a core of truth, at least for a relatively mature economy.

Economic development also disguised serious problems that Marxian theorists of the command economy had failed to anticipate. The Soviet Union had substituted current growth for future growth by excessively depleting natural resources, failing to protect the environment, and under-investing in infrastructure (for example, roads and storage capacity).[77] This showed that the resource allocation propositions of neoclassical economics were not limited to the realm of statics, as both Dobb and Baran had believed. The intense pressure on production units to increase outputs, which made for taut planning, forced up current growth but also had a disastrous effect on the quality of goods produced. Again this was outside the vision of most Marxians, who tended to view each type of commodity as a homogeneous entity. When the Soviet Union began to reform after Stalin's death, it was thus faced with important problems which arose from the very success of past advances, and on which prevailing theory had little to say.

The attempt to decentralise decision-making through a wider use of markets and more autonomy for production units, which began in the 1960s, was a rational response, and broadly in accord with the theories of market socialists in the inter-war years. Their ideas had, in fact, been strengthened by advances in the understanding of the stability properties of price systems, and by the optimal planners who sought to use mathematical programming techniques in the calculation of sectoral proportions and rational prices relevant for implementing planning goals. But, both in the Soviet Union and in the countries of Eastern Europe, attempts at reform met stubborn and effective resistance from bureaucracies whose interests they threatened. Moreover, the reforms that were implemented have not proved successful. Growth rates continued to decline: for the Soviet Union, from 5.7 per cent in the 1950s to around 2 per cent in the early 1980s.[78] The 'actually existing socialisms' of Eastern Europe found it impossible even to maintain their positions as 'followers', let alone become economic leaders by 'overtaking' the West. It was this desperate situation that finally produced the crisis evident since the mid-1980s, and which brought about a revolutionary situation when the rulers realised that they were unable to 'maintain their rule in unchanged form' and their internal divisions allowed 'fissures through which the discontent and indignation of the oppressed . . . [could] . . . burst forth'.[79]

Following the lead of various Central Committees in Eastern Europe, between 1956 and his death in 1976 Maurice Dobb effortlessly adjusted to the need for decentralisation, which he had in fact anticipated.[80] He now more clearly saw the Stalinist economy as a device to overcome backwardness through extensive growth, and recognised that its success brought with it the need for increased flexibility. He provided some fine analysis of the microeconomic inefficiencies resulting from maintaining an outmoded form of economic management. But Dobb's criticism of neoclassical welfare economics remained acute,[81] and he took the view that central control of investment was still essential. His proposal was for decisions over current outputs to be reorganised along market lines, while planners retained control over accumulation. However, Dobb recognised that this was an artificial distinction and would be difficult to implement.[82]

Many other Marxists in the West, like Isaac Deutscher, welcomed de-Stalinisation and decentralisation as the beginning moves towards 'genuine socialism', and this view has been frequently restated. But for Charles Bettelheim, Paul Sweezy and their followers, the reforms in Eastern Europe threatened to institutionalise *particular* interests, rather than secure socialist unity. They were as opposed to socialism with markets as they were to bureaucratic centralism (see Chapter 9 above). Such a view prompted the Swedish social democrat, Assar Lindbeck, to ask of these Marxists how they thought the coordination of economic activities might actually be brought about and, more particularly, how it could be done efficiently. In his view there was no third way between the bureaucracy inevitably associated with central command planning and decentralisation through the greater use of markets. Lindbeck received no satisfactory answer, and nor have those who have repeated the question.[83] Indeed, the support which both Bettelheim and Sweezy gave to Maoism went a long way towards rejecting the problem itself. Ignoring the disastrous economic performance under Mao, and interpreting the Cultural Revolution in a very peculiar fashion,[84] they opposed 'economism' altogether in favour of the disruption of established social relations through continual class struggle. Sweezy was even moved to ask why 'Eastern European countries and the Soviet Union have to get into the rat race with the capitalist world'.[85]

Much weightier analyses have emerged from Eastern European economists themselves, and especially from Janos Kornai, who has sought to explain regularities evident in 'actually existing socialisms', whether they be reformed or remain centralised command economies. Over time, Kornai located the chief defect at ever deeper levels. In the 1950s, 'overcentralisation' was considered the root cause of problems; by the 1970s 'rushed growth' became the fundamental issue, in the 1980s the essential malfunctions were traced to 'soft budget constraints', while by 1990 the role of state ownership in sustaining soft budget constraints was increasingly emphasised.[86] The absence of financial discipline on firms, effectively precluding any form of bankruptcy, ensures that, unlike most firms in capitalism which are 'demand-constrained', East European enterprises have been 'resource-constrained'. This has brought about an insatiable demand for inputs, resulting in minimal labour discipline, hoarding of means of production, shortages, poor quality, price-insensitive behaviour, strong inflationary tendencies and corruption. These problems ensure that attempts to decentralise are periodically reversed and reforms are always imperfect, as well as being ineffective in reversing relative economic decline.

Tamas Bauer has applied these ideas in the explanation of investment cycles, which are well documented in Eastern European economies. According to him there is a persistent tendency for investments to rise to a level which cannot be sustained, ultimately forcing retrenchment, and thus cyclical growth.[87] 'Crises' do not take exactly the same form as those in capitalist societies – in particular, unemployment rates show much less fluctuation – but it is clear that the advantages Dobb always claimed for the social control of accumulation must be viewed with some scepticism. An increasing number of Western economists have also claimed that the many inefficiencies and malfunctioning of predominantly capitalist economies stem from essentially the same syndrome which Kornai denotes by the term 'soft budget constraints'.[88] Thus problems arising from social democratic policies are seen as milder versions of congenital deficiencies accompanying any attempt to moderate the 'anarchy of production'. All this has provided much support for the neo-Austrian vision, because it questions any sustained attempt to realise traditional socialist values while retaining microeconomic efficiency, but must itself be qualified by the questions of relevance raised in section I above, and the broader discussion of economic efficiency in section VII below.

VII Feasible Socialism

The experience of 'actually existing socialisms' has had a noticeable impact on many socialists. Since the late 1970s there has emerged a considerable literature criticising the views of earlier Marxists, reviewing the evidence and analyses of non-capitalist forms of economic organisation, providing blueprints of socialisms which are thought to be both desirable and practical, and indicating how they might be attained.[89] And the revolutions of 1989 posed, with some force, two questions: whether a Third Way[90] exists between Stalinism and capitalism, and, if so, precisely what it consists of. The absence of any convincing answers to these questions goes a long way to explaining the overwhelming popular support for the restoration of capitalism in several of the Eastern European countries. From the early 1960s, however, there had been much rethinking on the part of Marxian economists in Poland, Hungary, Czeckoslovakia (during the Dubcek regime) and in Yugoslavia, where genuine independence from Moscow combined with an official ideology of 'self-management' to give expression to the claim that precisely such a Third Way had been discovered there. Eastern revisionists like Ota Šik[91] and Branko Horvat[92] emphasised the role of markets both to ensure the efficient allocation of resources and to reduce the power of the state bureaucracy. They also stressed the advantages offered by some variant of workers' management of industry, which would give workers an interest in accumulation and reduce the inflationary pressure for rapid growth in current consumption,[93] in addition to humanising the production process and ameliorating economic alienation. The Yugoslav experience captured the interest of many non-Marxian economists in the West, and in the 1970s there emerged a substantial neoclassical literature on the economics of self-management which analysed the behaviour of worker-managed enterprises from the perspective of orthodox microeconomics.[94]

In the West, the most significant work on market socialism from a writer of socialist persuasions is Alec Nove's *Economics of Feasible Socialism*, since it is informed by a lifetime study of Eastern European economies and takes very seriously the arguments reviewed in the preceding sections of this chapter. He argues for a 'mixed' economy in the true sense of the word, with public corporations running basic utilities, workers' cooperatives active in medium- and small-scale production, and private or family concerns operating in many service industries and in retail distribution. Nove's views typify what are now widely-held beliefs among modern Marxians: if socialism is to continue as a non-Utopian project it must incorporate markets, hard budget constraints, and some private ownership of the means of production.[95]

Not surprisingly, this has met resistance. In particular, Ernest Mandel continues to argue the case for the attractiveness and realism of a socialism founded on collective ownership, equality, cooperation and planning, and excluding both markets and bureaucracy.[96] (Most unusually for a Trotskyist, Mandel is also a firm supporter of workers' self-management.) Nove's own scheme of 'feasible socialism' has been the principal target for Mandel's restatement of a traditional Marxian economics of socialism but, in the light of the developments since Mises's original critique in 1920, Nove has had no difficulty in exposing its flaws.[97] In fact, Mandel's fundamentalism is even weaker than Nove recognises. He attempts to incorporate a notion of the Commune state with an economy running as a giant factory, in the belief that working-class politics and trends in technological development operate to realise both. Quite apart from the fact that the evidence shows no pronounced tendency for the role of market relations to diminish,[98] the voting procedures which Mandel imagines will define the social interest are likely to exhibit precisely those inefficiencies and paradoxes highlighted by neoclassical social choice theorists.[99] Consequently, even if considerations of economic performance are set aside, genuine communal control may be impossible to achieve in the way Mandel imagines.

There is really only one point at which Nove's model of feasible socialism is different from that of other modern revisionists: although he favours cooperatives wherever possible, workers' control is not given the central place in his scheme. There are strong grounds for misgivings as to the viability of economic democracy, even though it has been a consistent theme in non-Leninist and anti-Stalinist strands within Marxism, from Council Communists of the early 1920s to libertarian Marxists like Paul Mattick, Raya Dunayevskaya and Cornelius Castoriadis (who broke with Trotskyism for precisely these reasons).[100] Theory and evidence on self-management reveals that important inefficiencies and inequities can arise. The special interests of particular groups of workers can be institutionalised and may result in a type of 'collective capitalism' which functions even less well than a capitalism based on private property.[101] These deficiencies can in fact be regarded as the 'rational kernel' of Bettelheim's and Sweezy's opposition to all species of decentralised reforms.

However, neither the theory nor the evidence on self-management is at all conclusive. From a theoretical perspective, the consequences are very sensitive to the specific organisational form: the powers of workers' management institutions relative to those of other groups, like consumers; the extent of market competition; and the 'hardness' of budget constraints. The empirical evidence includes examples of successful producer cooperatives, in which the members positively value their ability to participate, and can hold their own in competition with capitalist firms.[102] It is, therefore, reasonable for other socialists to place more importance on self-management than Nove does and many claim that campaigning for economic democracy now constitutes the most rational strategy for moving beyond capitalism.[103] In arguing this they have highlighted an important limitation in Nove's own *Feasible Socialism.*

Although Nove has persistently accused Marxists of Utopianism, he himself is open to the same charge.[104] Nowhere does he locate the specific interests which would form the agency through which his own model might be implemented. Instead, he relies upon the reasonableness of his ideas to attract popular support. By contrast, those emphasising the importance of democratic participation argue that it not only constitutes the essence of a libertarian socialism, but that it is also the principal springboard from which a strategy of transition can be constructed. Samuel Bowles and Herbert Gintis point out that virtually all protest movements in Western Europe and North America since the era of Absolutism have used the language of democratic liberalism. Conflicts have been over which set of rights are to prevail – those of property or the person – and a movement dedicated to socialism can found itself upon pre-Marxian ideals in a way that most classical Marxists failed to recognise.[105] By its very nature, capitalism cannot implement fully those values of liberty, equality and fraternity which have been traditionally used in the defence of bourgeois society. Consequently capitalism can be 'hoist with its own petard'.[106]

Furthermore, it can also be argued that an extension of democratic participation in the economy will improve efficiency. A diffusion of decision-making power to actual producers will tap the sources of knowledge and productivity which capitalism seals off in authoritarian structures of wage labour,[107] while also reducing the monitoring and enforcement costs which Alchian and Demsetz claim to be minimised by capitalism. In other words, while Bowles, Gintis and Hodgson accept much of the Austrian critique of centralised command planning, and object to non-democratic forms of market socialism, they maintain that the critics' own arguments can be used to make the case for democratic socialism.[108] Moreover, the perspective of scientific socialism can be employed to support these claims. Many institutions within advanced capitalist economies have been modified through profit-sharing, co-ownership and co-determination, as well as by smoothing the harsher edges of hierarchical organisation. Nowhere is this very pronounced, but the developments which have occurred suggest that the idea of socialist relations emerging within the womb of capitalism may be given a new meaning.[109]

Against this, capitalism's very real strength lies in its ability to innovate, which Marx pointed to in the *Communist Manifesto*.[110] It provides relatively open access to the means of production for those who are willing to bear the risks of innovation, and also an environment with minimal constraints on the waging of economic war against agents who remain attached to existing technologies. Schumpeter emphasised this in his classic defence of 'creative destruction' which he believed he found in Marx: the 'system is cruel, unjust, turbulent, but it does deliver the goods, and damn it all, it's goods . . . [that people] . . . want'.[111] But it is precisely here that the traditional Marxian critique of capitalism retains its force; it is both rational and economic to try to preserve the dynamism whilst minimising the cruelty, injustice and turbulence. And the fact that this can be done is evidenced by the successful reforms achieved by social democracy. Many modern Marxists believe that those reforms can be extended much further when coupled to a radical democratisation, which will socialise economic processes far more than is possible in capitalism.[112]

Radical democratisation will inevitably undermine some established individual rights in capitalism. However, since these rights concern the use of property regardless of their effect upon non-owners, they have a much lower moral priority than basic civil liberties. Moreover, a contraction of rights in one area is envisaged only as a result of expansion of rights in other dimensions, on the assumption that the net effect will be beneficial. Any harmful effects which participation may pose for economic efficiency can be minimised by gradualism. Competition from firms which are organised on capitalist lines could be used to constrain any tendency to stagnation which might result from democratisation. Indeed, some modern Marxians accept that it is desirable for some capitalist institutions to be preserved, so as to allow choice to those who prefer wage labour because their own self-development lies outside the range of both politics and economics.[113] The main weakness of this strategy lies in its reformism, which assumes – as did revisionist theorists in the era of the Second International – that established state institutions can be captured and transformed peacefully. Perhaps they can if popular support is strong. The revolutions of 1989 in Eastern Europe suggest that this is not a vain hope if the crisis in the established order is sufficiently deep, while the violent revolutions of the past offer no obviously superior alternative.[114]

In any event, it is evident that modern Marxists have sought to preserve the strength of scientific socialism, while at the same time recognising the great limitations inherent in the original formulation of Marx and Engels. In the process the conception of post-capitalist society has undergone dramatic changes, and anti-socialist critics can claim important intellectual victories. But a responsiveness to valid criticism is inevitable in any project that seeks to theorise a feasible socialism. To retreat into fundamentalism is futile because there is at present neither the economic basis for socialism as classical Marxists imagined it nor any agency which might try to realise it. Whether market socialism would be the last stage of human history, or simply part of a protracted transition to a future 'free association of producers' on original Marxian lines, remains an open question.

Notes

1. The phrase 'actually existing socialism' is Rudolf Bahro's and designates the social formations in the (then) non-capitalist countries of Eastern Europe. See Bahro, *The Alternative in Eastern Europe* (London: Verso, 1977).
2. B. Gwertzman and M.T. Kaufman (eds), *The Collapse of Communism* (New York: Random House, 1990); F. Halliday, 'The Ends of the Cold War', *New Left Review*, 180, 1990, pp. 5–23.
3. See, for example, R.N. Berki, 'On Marxian Thought and the Problem of International Relations', *World Politics*, 24, 1971, pp. 80–105.
4. M.C. Howard and J.E. King, *The Political Economy of Marx* (Harlow: Longman, 1985), 2nd edn, Chs, 1 and 2.
5. A. Heller, *The Theory of Need in Marx* (London: Allison & Busby, 1976).
6. Marx sometimes talked of 'abundance'. Critics like A. Nove, *The Economics of Feasible Socialism* (London: Allen & Unwin, 1983), have attacked this idea as utopian. However, Nove probably misinterprets Marx's meaning; see P. Chattopadhyay, 'Socialism: Utopian and Feasible', *Monthly Review*, 37, 1986, pp. 40–52; J.E. Elliott, 'Marx and Engels on Communism, Scarcity and the Division of Labor', *Economic Inquiry*, 18, 1980, pp. 275–92; and Heller, *Theory of Need.*
7. This phrase comes from R. Nozick, *Anarchy, State and Utopia* (New York: Basic Books, 1974).

8. See section V below, and Howard and King, *Political Economy*, p. 24.
9. J. Elster and K.O. Moene (eds), *Alternatives to Capitalism* (Cambridge: Cambridge University Press, 1989), pp. 1–35, provides a good discussion of how far the history of 'actually existing socialism' is relevant for modern socialist aspirations. See also J.E. Elliott, 'Marx and Contemporary Models of Socialist Economy', *History of Political Economy*, 8, 1976, pp. 151–84.
10. For an outline of socialist ideas before Marx, see E.K. Hunt, *Property and Prophets* (New York: Harper & Row, 6th edn, 1990), pp. 50–67.
11. K. Marx, *Critique of the Gotha Programme* (New York: International Publishers, 1966). Marx's and Engels's most important comments on the nature of future society are collected together in T.B. Bottomore and M. Rubel (eds), *Karl Marx: Selected Writings on Sociology and Social Philosphy* (Harmondsworth: Penguin, 1961), Part 5, and R. Freedman (ed.), *Marx on Economics* (Harmondsworth: Penguin, 1961), Part 3.
12. J.E. Elliott, 'Continuity and Change in the Evolution of Marx's Theory of Alienation: From the *Manuscripts* through the *Grundrisse* to *Capital*', in G.E. Panichas (ed.), *Marx Analysed* (New York: University Press of America, 1985), pp. 51–102. See also B. Ollman, 'Marx's Vision of Communism: A Reconstruction', *Critique*, 8, 1977, pp. 4–41, and D. McLellan, 'Marx's View of Unalienated Society', *Review of Politics*, 31, 1969, pp. 459–65.
13. J. Pressler, 'Marx and Disequilibrium in Market Socialist Relations of Production', *Economics and Philosophy*, 3, 1987, pp. 23–48.
14. Howard and King, *Political Economy*, Chs. 1 and 2; J.E. Elliott, 'Marx's *Grundrisse*: Visions of Capitalism's Creative Destruction', *Journal of Post–Keynesians, Economics* 1, 1978–9, pp. 148–69.
15. Howard and King, *Political Economy*, pp. 145–6, 198, 243; P. Auerbach, M. Desai and A. Shamsavari, 'The Transition from Actually Existing Capitalism', *New Left Review*, 170, 1988, pp. 61–78. Some non–Marxian socialists held to the same view as Marx; see E. Bellamy, *Looking Backward* (New York: Modern Library, 1951; first published in 1887), p. 41.
16. K. Marx, *Critique of Political Economy* (London: Lawrence & Wishart, 1971), p. 21.
17. When Marx and Engels did attempt to be very specific, they did so under the impact of particular historical events, and were not always consistent. This caused problems for later Marxists; see N. Harding, *Lenin's Political Thought, Volume II* (London: Macmillan, 1981), Ch. 9, and R. Selucky, *Marxism, Socialism, Freedom* (London: Macmillan, 1979).
18. See P. Anderson, *Arguments Within English Marxism* (London: New Left Books, 1980) for a critique of E.P. Thompson in this vein.
19. Lenin emphasised this in 1920; see *Collected Works* (Moscow: Progress Publishers, 1960–70), volume XXXI, p. 24. See also Pressler, 'Marx and Disequilibrium' and Chs 9, 10 and 15 of volume I of this book.
20. Auerbach, Desai and Shamsavari, 'The Transition'; S. Lash and J. Urry, *The End of Organised Capitalism* (Cambridge: Polity Press, 1987).
21. Howard and King, *Political Economy*, Ch. 2.
22. Lenin, *Collected Works*, volume V, pp. 349–520.
23. A. Przeworski, *Capitalism and Social Democracy* (Cambridge: Cambridge University Press, 1985) examines the historical consequences of following Kautsky's strategy.
24. D. Geary, *Karl Kautsky* (Manchester: Manchester University Press, 1987).
25. V.I. Lenin, *Against Liquidationism* (Moscow: Foreign Languages Publishing House, n.d); Harding, *Lenin's Political Thought*, volume I, pp. 267–8.
26. K. Kautsky, *The Social Revolution* (Chicago: Charles H. Kerr, 1902), p. 105.

27. Marx, *Critique of the Gotha Programme*, p. 8ff.
28. Kautsky, *Social Revolution*, p. 129; K. Kautsky, *Selected Political Writings* (London: Macmillan, 1983), pp. 131–8.
29. K. Kautsky, *Die Agrarfrage* (Stuttgart: Dietz, 1899); see Ch. 10 of volume I of this book.
30. R. Hilferding, *Finance Capital* (London: Routledge & Kegan Paul, 1980).
31. Ibid, pp. 367–8.
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53. For example, Lange assumed 'one–man management' of production units, but his ideas could be adapted to accommodate workers' self–management; see section VII below.
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55. M.H. Dobb, *On Economic Theory and Socialism* (London: Routledge & Kegan Paul, 1955), pp. 34–54, 239–46, in which Dobb's major articles on the calculation debate from the 1930s are reprinted.
56. M.H. Dobb, *Russian Economic Development Since the Revolution* (London: George Routledge & Sons, 1928); see also Ch. 2 above.
57. Joan Robinson held a similar view; see W.B. Brus and T. Kowalik, 'Socialism and Development', *Cambridge Journal of Economics*, 7, 1983, pp. 243–55.
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Conclusion

In part I of the first volume of this book, we described the emergence of orthodox Marxism in the Germany of the 1890s and the defence of the Erfurt Programme, in which its principal tenets were embodied, against revisionist critics. The central pillars of this orthodoxy were threefold. First, capital was being concentrated into larger units and also becoming centralised, as ever more powerful monopolies and cartels replaced the relatively free competition of an earlier stage of capitalist development. This would lead inexorably to a rising rate of exploitation and to the relative (if not absolute) immiseration of a rapidly increasing and class-conscious proletariat. Second, economic crises were inescapable under capitalism and would tend to become more severe. Crises were the inevitable result of the disproportionalities produced by the anarchy of the market; of the underconsumption induced by relative immiseration; and (in a minority of accounts) of the growing organic composition of capital, which lowered the rate of profit. In their wake came unemployment, and with it a working class driven into the socialist ranks by the insecurity of its members' physical existence. Third, and as a consequence of all this, capitalism itself was ripe for replacement, in the dual sense that it was now a fetter on the development of human productive abilities and that the means for its transcendence were at hand. The proletariat had only to seize the six big Berlin banks – as Hilferding put it – to establish its power over the commanding heights of the national economy and secure the basis for post-capitalist society. There was a rider to this third proposition, which was critically important but seldom discussed: socialism offered a viable, and in every way preferable, alternative to the capitalist mode of production.

There was much more to Marxian political economy than this, but these three sets of propositions were at the heart of the orthodox view at the turn of the century. In later decades two further claims were advanced. Hilferding's, Luxemburg's and Lenin's theories of imperialism asserted that the struggle for economic territory was the fundamental impulse behind the political and military rivalries of the various capitalist states. Under the prevailing conditions of uneven economic development, the international proletariat was offered a stark choice: revolution or war, socialism or barbarism. This, which had by 1918 become the fourth central tenet of Marxian political economy, was supplemented by a fifth after the Second World War. Uneven development entailed the underdevelopment of backward and dependent regions and not (as Marx had maintained) their rapid assimilation as more or less equal partners in the world system. Capitalism and development were now inconsistent, it was claimed. In the Third World, socialist revolution was a precondition for industrialisation rather than its culmination.

Thus expressed, the economic theory of Marxism has had a very chequered past. Although there has been no reason to doubt the growing concentration and centralisation of capital, within individual nation-states if not on a global scale, the connection between these apparently deep-rooted tendencies and the anticipated rise in the rate of surplus value has been less easy to establish. In the absence of a satisfactory Marxian theory of wages, and of a generally agreed definition of productive and unproductive labour, both the measurement and the interpretation of movements in the rate of exploitation have proved inconclusive or contentious. And the recent growth in international competition, and decline in the economic role of the state, has cast serious doubt on the continued relevance of the concepts of 'monopoly capitalism', 'organised capitalism' and 'state capitalism' which had earlier seemed to be a logical extrapolation of the orthodox position.

The second pillar of orthodoxy, the increasing severity of economic crises, has looked much stronger in some periods than in others. It was, not surprisingly, more credible during the Great Depression or in the 1970s than it was in the late 1890s, during the 'long boom' after 1945 or in the course of the upswing which began in 1982. Indeed, the 'Reagan boom' has yet to be convincingly explained in terms of Marxian crisis theory except, somewhat tenuously, as evidence of a new stage of militarily-driven accumulation.[1] This points to a serious analytical weakness. There remains no single, generally accepted theory of economic crisis, and hence no satisfactory method of accounting for its absence. Marxian economists may suspect that a new Golden Age is unlikely; they may believe that the rate of profit will – for whatever reason – eventually fall; but at present they lack the theoretical tools which might give their predictions of impending economic doom a sharper cutting edge.

As for the third tenet of orthodoxy, it is hardly necessary to repeat that in Western Europe and North America capitalism has proved to be much more resilient than the Marxian theorists had expected, and the proletariat much less easy to interest in its destruction. These phenomena are, of course, connected. For the most part the capitalist mode of production has continued to deliver the goods. In the very long term, living standards have risen substantially, and unemployment has failed to increase continuously in the anticipated manner. In the advanced countries, even relative immiseration has proved hard to find. When compared with the only visible alternative – the Soviet mode of production – capitalism has looked by far the better option, even (for most workers) in the depths of the Great Depression. Claims concerning the irrelevance of Stalinism to the socialist project, however accurate they might be, have failed to convince, and the recent and continuing disintegration of the centrally planned economies has merely reinforced the already prevalent view that 'communism will never work'. Without a plausible model of a socialist economy, Marxians have been left with nothing more to the contrary than unconfirmed statements of optimistic belief.

For a long time the fourth basic principle of orthodox Marxian political economy appeared much less vulnerable to criticism than the previous three. It was also, in a very real sense, more telling: if the only long-run alternative to world socialism was global carnage, the inevitable imperfections of the new society would carry less weight. The First and – even more transparently – the Second World War could be presented as frightening examples of imperialist conflicts in the Hilferding-Lenin mould, with new and aggressive capitalist states attacking their more established rivals in a lethal struggle for economic territory. After 1945, however, the economic and especially the military predominance of the United States made any notion of renewed inter-capitalist warfare implausible in the extreme, and destroyed the credibility of the Leninist theory of imperialism. As we saw in part III above, the concept of imperialism itself degenerated into a component of the ideology of Third World nationalism, losing most of its coherence and clarity in the process.

In the second half of the twentieth century it was, indeed, in the Third World that Marxian political economy found its principal audience, attracted by the theories of dependency and underdevelopment set out so forcefully by Baran, Frank and Wallerstein. Here, too, however, the pillars of orthodoxy have begun to crumble. The Stalinist model of development has failed repeatedly, in the Soviet Union, Eastern Europe, Africa, Asia and Latin America, to live up to its promises, while the untidy, inequitable but nevertheless very rapid growth of several previously backward nations – the so-called Newly Industrialising Countries – has confirmed the ability of capitalism to assimilate at least some parts of the Third World into a dynamic and prosperous world system.

In terms of its capacity to explain the course of world history over the twentieth century as a whole, Marxian political economy has thus performed rather poorly. Yet this was the very ambitious task which Marx and his orthodox followers set themselves and would have been willing to be judged by. Even at the more narrowly analytical level, however, Marxian economics has frequently fared little better. In particular the (quantitative) labour theory of value has proved unable to bear the theoretical burdens placed upon it, and can be defended – if at all – only in the attenuated von Neumann–Morishima version of the Fundamental Marxian Theorem involving the minimum-labour values outlined in Chapters 13–15 above. Nor, as we saw in Chapters 7 and 16, has Marx's volume III theory of the falling rate of profit survived at all well. Undoubtedly some elements of the Marxian critique of capitalism are unscathed (the theories of alienation and fetishism, for example), but rather little remains of the comprehensive integrated science of society which Kautsky preached with such confidence less than a century ago.

It is only to be expected, in the face of these massive deficiencies, that the critics of Marxism are eager to announce its demise. It is sufficient to cite two such obituaries, both composed well before the Eastern European revolutions of 1989. For the historian of economic thought, Mark Blaug, Marx:

> bequeathed to his followers a system of ideas that was so complex and convoluted that few understood its formal structure, in consequence of which it was almost immediately bowdlerised. When the predictions of the system turned sour, his disciples retreated to purely verbal incantations about value and surplus value. Capitalism was seen as willy-nilly torn by inner contradictions and every passing year saw further encrustations on an already top-heavy structure to account for the unbelievable survival of the capitalist system. The Marxian research programme degenerated and every attempt to put a stop to the rot only encouraged further degenerations. At some point, a degenerating scientific research programme either fades away and loses all of its adherents or else takes on the characteristics of a religion that maintains its hold by precluding the very possibility of further empirical refutations. It is clear that it is the latter which has proved to be the fate of Marxism.[2]

The philosopher Leszek Kolakowski subtitled his three-volume history of Marxism, 'Its Origin, Growth, and Dissolution'; the subtitle of the concluding volume is simply 'The Breakdown'. In his 'Epilogue' Kolakowski also attempts to explain the process of intellectual decay in Marxism more generally:

> Almost all the prophecies of Marx and his followers have already proved to be false, but this does not disturb the spiritual certainty of the faithful, any more than it did in the case of chiliastic sects: for it is a certainty not based on any empirical premises or supposed 'historical laws', but simply on the psychological need for certainty. In this sense Marxism performs the function of a religion, and its efficacy is of a religious character . . .
>
> Marxism has been frozen and immobilized for decades as the ideological superstructure of a totalitarian political movement, and in conse-

> quence has lost touch with intellectual developments and social realities. The hope that it could be revived and made fruitful once again soon proved to be an illusion. As an explanatory 'system' it is dead, nor does it offer any 'method' that can be effectively used to interpret modern life, to foresee the future, or cultivate utopian projections. Contemporary Marxist literature, although plentiful in quantity, has a depressing air of sterility and helplessness, in so far as it is not purely historical . . . At present Marxism neither interprets the world nor changes it; it is merely a repertoire of slogans serving to organize various interests, most of them completely remote from those with which Marxism originally identified itself. A century after the collapse of the First International, the prospect of a new International capable of defending the interests of oppressed humanity throughout the world is less likely than it has ever been.[3]

These criticisms are associated with the school of scientific methodology made famous by Karl Popper and Imre Lakatos.[4] They can be summarised in three propositions. First, Marxian political economy has become a dogma, more and more remote from any connection with social reality. Second, to the extent that its practitioners have derived from it testable predictions about the real world, these predictions have failed. Third, where the dogma has in fact been amended in the face of criticism, it has been in the form of illegitimate *ad hoc* revisions.[5] Whether viewed as part of a state ideology, or seen as an element of a new pseudo-religion, Marxian economics has degenerated to the point where it now adds – and for a very long time has added – nothing to the growth of knowledge.

These are very serious charges, and as we have indicated there is considerable substance in each of them. But they do fail to come to grips with the evolving nature of Marxian political economy as a whole. Marxism can be regarded as a single, unified dogma only at the expense of ignoring its increasingly polycentric nature. As the many-faceted controversies reviewed in the first volume of this book serve to confirm, there have always been Marxian critics of orthodoxy, and important variations in the way in which orthodox views were qualified. And since 1929 there has been no single Marxian orthodoxy on questions of economics. Stalinism did for many years offer one such orthodoxy, and indeed imposed it at gunpoint over a large portion of the world's surface. In the West, however, there has never been such a uniformity of analysis or belief. From the Old Left to the New Left; from Trotskyists to world system theorists; from neo-Stalinists to the Frankfurt School; and within all these loose groupings, variety and discord were (and remain) the order of the day.

Nor is the predictive record of Marxian economists one of unmitigated failure. In terms of comprehending 'middle range' phenomena at various stages of capitalist development they have done considerably better than in fulfilling the grandiose project of understanding the global capitalist economy as a totality over the very long run. We have pointed in previous paragraphs to some of the original successes of early orthodoxy. The concentration and centralisation of capital has increased over the last century; there have been major international crises; and imperialist wars have twice shaken the planet. It is clear that, on these issues, bourgeois economics has not been more productive, in the sense of generating more accurate predictions which corroborate its analytical core. (Blaug himself has been a trenchant critic of neoclassical theory on precisely this score.)[6] There is in fact still something to be said for Oskar Lange's celebrated conclusion:

> Clearly the relative merits of Marxian economics and of modern 'bourgeois' economic theory belong to different 'ranges'. Marxian economics can work the economic evolution of capitalist society into a consistent theory from which its necessity is deduced, while 'bourgeois' economists get no further than mere historical description. On the other hand, 'bourgeois' economics is able to grasp the phenomena of the everyday life of a capitalist economy in a manner that is far superior to anything the Marxists can produce. Further, the anticipations which can be deduced from the two types of economic theory refer to a different range of time. If people want to anticipate the development of Capitalism over a long period a knowledge of Marx is a much more effective starting point than a knowledge of Wieser, Böhm-Bawerk, Pareto or even Marshall (though the last-named is in this respect much superior). But Marxian economics would be a poor basis for running a central bank or anticipating the effects of a change in the rate of discount.[7]

As 'economic sociology', or as a basis for the comprehensive analysis of different types of economic system, Marxian political economy has no serious rivals. This is evidenced, for example, in the analysis of 'late starters' by Plekhanov and Tugan-Baranovsky; by Lenin's account of the different roads to capitalist modernisation; by Trotsky's theory of uneven and combined development; by Brenner's treatment of the transition to capitalism in the West and of the conservatism of pre-capitalist modes of production; and by Cohen's rigorous reformulation of historical materialism.[8] The impressive work of Gerschenkron on European industrialisation, of Barrington Moore on the different paths to modernity, and of Theda Skocpol on the contradictions that lie behind social revolutions, although not strictly Marxian, nevertheless show the very great influence of Marxian conceptions of the historical process, and use its tools of analysis to great effect.[9] Marxian economists have been virtually alone in attempting to formulate theories of systems dominated by concentrated economic power, and the work of non-Marxists in this area – like that of J.K. Galbraith – has been heavily influenced by their ideas. Mainstream theorists have excelled in rigour only by limiting attention to problems which are considerably more tractable but, all too frequently, have but a tenuous relation to issues of real significance. When their results on the operation of economic systems have proved important – for example, on the dynamic instabilities that might accompany competitive pricing processes – these results have been ignored by most practitioners of neoclassical economics.[10]

Even the collapse of the Soviet mode of production can be interpreted as a vindication of the materialist conception of history, these relations of production having become a fetter on the development of the productive forces, as many Marxists have maintained for some time. Indeed, as early as the inter-war years both Bukharin and Trotsky argued that the inefficiencies of command planning would ultimately engender an immense crisis in the Stalinist system. And, until very recently (anti-Stalinist) Marxists were virtually alone in treating the Soviet Union as a contradictory mode of production, where the domination of politics and ideology was only apparent and concealed the more enduring socio-economic determinants of historical development. But, with the abject failure of the 'totalitarian model' which has long dominated Western sovietology, and the challenge posed by the 'revisionist school' in Soviet historiography during the last two decades, it has become widely accepted that the Marxian approach is the more accurate.[11] Furthermore, it is at least arguable that some aspects of Marxian economics will grow in relevance as the century draws to a close. The decline of US economic hegemony, for example, and the corresponding rise of Europe and Japan suggest that the theory of imperialist rivalry may once more come to the fore.[12] And, unless Ronald Reagan's restoration of 'the magic of the market' really has abolished the trade cycle, there will soon again be scope for the employment of Marxian theories of economic crises.

Against the third element in the Blaug–Kolakowski critique it can be claimed that 'revision' of Marxian economics is inherent in its own, historically and socially specific, methodology; and that the far-reaching changes since 1918 amount to a critical renewal rather than a dogmatic degeneration. Very many Marxians have proved willing to abandon untenable positions, whether they relate to the quantitative labour theory of value or to the falling rate of profit, and to rethink the philosophical foundations of their political economy. Compare, for example, the generally very economistic analyses of the Great Depression, which were discussed in Chapter 1 above, with the much more open and flexible accounts of the 1970s crisis surveyed in Chapter 16; or contrast the rigorous treatment of the theory of value in the 1970s and 1980s with the state of Marxian theory a century earlier. Marxian economists have even recognised the strengths of neoclassical theory, as can be seen in recent work on economic backwardness, the rise of rational choice Marxism, and the very widespread acceptance that, if socialism is to be feasible, it must involve the use of markets on an extensive scale.[13] And a wide range of new problems have engaged

Marxian economists over the last 50 years, rendering it much less of a sterile religious orthodoxy than either Blaug or Kolakowski is prepared to admit. Labour market segmentation, the social determinants of labour productivity, the economic functions of the education system and the family, the determinants of discrimination against ethnic minorities and women, are just a few examples.[14]

Analytical *glasnost* does have a price, however, as we saw most clearly in Chapter 17 where we discussed the 'imperialist' tendencies of neoclassical methodological individualism and its infiltration into 'rational choice Marxism'. This raises another question which might threaten Marxian political economy from a different direction. Without the labour theory of value, economic determinism, surplus value and the falling rate of profit, what is left of Marxian economics that deserves the name? What is there (if anything) to prevent it from subsiding into a minor, relatively egalitarian, sociologically inclined and historically aware sub-branch of neoclassical theory? What, to use a Lakatosian term, is the residual 'hard core' of Marxian political economy?

There are, we suggest, four essential components of a twenty-first century Marxian economics, 'essential' not because they could serve as the foundations for a new orthodoxy but rather since they provide a clear line of demarcation between the Marxian and non-Marxian approaches to economic phenomena. The first is the inescapable reality of the *class* nature of capitalist society, and the unavoidable (if often latent) class conflict which this entails. Second is the clutch of problems relating to the *reproduction* of this society, which ranges from the ideological issues considered in Chapters 4 and 16 to the much narrower, technical questions, first raised by Marx in volume II of *Capital*, which have never ceased to be of analytical interest. The third differentiating characteristic of modern Marxian economics is its emphasis on the *contradictions* in the processes of reproduction, and especially in the multifarious threats posed to the profitability of the system by class stratification and its many ramifications. Finally, there is the concept of *uneven development*, fertile if elusive, which describes how the evolution of capitalism as a world system cannot proceed in a smooth and harmonious way. These four elements will constrain Marxian economics from losing its identity and from ceasing to be a vibrant and – in the Lakatosian meaning of the term – a progressive programme for social research in the near future.

One last question remains: what is the relationship between Marxian political economy and other dissident schools of thought? As we have seen in several chapters above, there have been many attempts to combine with Marxism elements of other theoretical traditions. To what extent, then, is a coherent synthesis possible of Marxian, Sraffian, post-Keynesian, modern institutionalist[15] and (perhaps) some neoclassical insights into the capitalist economy and its prospects? Can the four distinctive features of Marxian economics described above survive the contact over the long run? If they are anywhere near as important as Marxian economists have always considered them to be, it will be other types of economics which will have to be revised in the direction of Marx. Only if they prove to be of rapidly declining significance is it likely that Marxian political economy will 'wither away'.

Notes

1. J. Lovering, 'The Atlantic Arms Economy: Towards a Military Regime of Accumulation?', *Capital and Class*, 33, 1987, pp. 129–55.
2. M. Blaug, *A Methodological Appraisal of Marxian Economics* (Amsterdam: North-Holland, 1980), pp. 69–70.
3. L. Kolakowski, *Main Currents of Marxism, Volume III. The Breakdown* (Oxford: Clarendon Press, 1978), pp. 526, 529, 530.
4. K. Popper, *Conjectures and Refutations: The Growth of Scientific Knowledge* (London: Routledge & Kegan Paul, 1965); I. Lakatos, *The Methodology of Scientific Research Programmes* (Cambridge: Cambridge University Press, 1978).
5. Ibid, pp. 31–3.
6. M. Blaug, *The Methodology of Economics: Or, How Economists Explain* (Cambridge: Cambridge University Press, 1980).
7. O. Lange, 'Marxian Economics and Modern Economic Theory', *Review of Economic Studies*, 2, 1935, pp. 191–2.
8. See Part II of volume I of this book, and Ch. 11 above.
9. A Gerschenkron *Economic Backwardness in Historical Perspective* (Cambridge, Mass.: Harvard University Press, 1966); B. Moore, *Social Origins of Dictatorship and Democracy* (Harmondsworth: Penguin, 1966); T. Skocpol, *States and Social Revolutions* (Cambridge: Cambridge University Press, 1979).
10. See, for example, F. Hahn, 'The Winter of Our Discontent', *Economica*, 40, 1973, pp. 322–30.
11. See notes 11, 87 and 93 of Ch. 2 above.
12. E. Mandel, *Europe vs. America: Contradictions of Imperialism* (New York: Monthly Review Press, 1970).
13. See Chs 11, 13, 15, 17 and 18 above.
14. D.M. Gordon, R. Edwards and M. Reich, *Segmented Work, Divided Workers: the Historical Transformation of Labor in The United States* (Cambridge: Cambridge University Press, 1982); S. Bowles, 'The Production Process in a Competitive Economy', *American Economic Review*, 75, 1985, pp. 16–36; S. Bowles and H. Gintis, 'The Problem with Human Capital Theory – a Marxian Critique', *American Economic Review*, 65, 1975, pp. 74–82; V. Beechey, *Unequal Work* (London: Verso, 1987); J.E. Roemer, 'Divide and Conquer: Microfoundations of a Marxian Theory of Wage Discrimination', *Bell Journal of Economics*, 10, 1979, pp. 695–705; M. Reich, *Racial Inequality: A Political-Economic Analysis* (Princeton, NJ: Princeton University Press, 1981).
15. See G. Hodgson, *Economics and Institutions: A Manifesto for A Modern Institutional Economics* (Cambridge: Polity, 1988).