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Systemic implications of capital controls in EMU

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The eurogroup has reached a political agreement on a new bailout for Cyprus. The deal focuses on the resolution of Laiki Bank, with losses to be borne by shareholders and all creditors (including bondholders), except depositors with less than EUR100k, which will be transferred to Bank of Cyprus. The Bank of Cyprus will also be restructured with shareholders, bondholders and depositors above EUR100k also exposed, but depositors below EUR100k protected, which is the main difference compared to last week. The other main difference is that the measures on banks only apply to the two main banks while no levy or restructuring will take place in the other banks. Details of the bailout are still coming through at the time of writing and will be followed in due course.

But with no details available possibly for another two weeks on the final losses to be borne by creditors, especially in the case of the Bank of Cyprus, depositor anxiety is likely to remain very high over coming weeks with the risks of bank runs also likely to stay high.

In this context, the eurogroup confirmed that capital controls will indeed be put into place: "The Eurogroup takes note of the authorities' decision to introduce administrative measures, appropriate in view of the present unique and exceptional situation of Cyprus' financial sector and to allow for a swift reopening of the banks. The Eurogroup stresses that these administrative measures will be temporary, proportionate and non-discriminatory, and subject to strict monitoring in terms of scope and duration in line with the Treaty".

In this note we offer: (i) a review of the legal framework in Europe around capital controls; (ii) a review of the capital controls that could be imposed in Cyprus; and (iii) a review of past experience, including lessons learnt from the US in 1933, Argentina in 2001 and Austria in 1931. We also (iv) take a look at whether the imposition of controls have an impact on the intrinsic value of Cypriot euros and conclude that a partial break-up of the monetary union would occur if restrictions were imposed on the convertibility of deposits into deposits abroad. In (v) we look at the countries most vulnerable to contagion by looking at the ratio of non-European deposits to total deposits and find that Malta and Estonia rank high on the exposure list, but that Luxemburg, Netherlands and Finland are also potential candidates.

Introduction

The imposition of quantitative controls on deposits in Cyprus is a first since the creation of monetary union (EMU) and the European Union (EU). The legislative framework inside the EU and the EMU is designed to enhance the freedom of movement of capital and is typically built around the notion that capital controls should be avoided in most circumstances. The decision to impose quantitative restrictions on deposits in Cyprus sets an important precedent in this crisis and could have major implications not only for the fate of Cyprus, but also for other countries inside the EMU that rely on a disproportionally large non-European deposit base (see section 5 for countries most exposed). Fearing a similar fate as those with deposits in

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Cyprus, there is a serious risk that these depositors decide to reduce their exposure, putting other countries under stress.

Having rebuilt some confidence in the system via the open market transactions (OMT) announcement, this latest failure of coordination among European policymakers and politicians is testimony to the fact that euro area institutions are still not fit for crisis management, let alone for crisis resolution. Events in Cyprus send a very stark reminder as well, that ECB President Draghi alone does not hold the fate of the monetary union, as some have increasingly been led to believe, but which we have always disputed. Indeed, in our view, the euro may be irreversible but its membership clearly is not. One might be in the hand of a central banker but the other is in the hands of the people or the politicians that represent them.

1: The legal framework of capital controls in the European Union

The principles of free movement of capital and payments is defined in Article 63 TFEU, which states that "...all restrictions on the movement of capital [and payments] between Member States and between Member States and third countries shall be prohibited." The wording of the Treaty provision makes it clear that these restrictions are related to cross-border transactions either with an outside third party or with another member state.

However due to other articles in the treaty and based on case law from the European Court of Justice, there are exceptions.¹

There are two relevant exceptions in the case of Cyprus, the first being one of public security. Article 65(1b) TFEU stipulates that: "The provisions of Article 63 shall be without prejudice to the right of Member States... to take measures which are justified on grounds of public policy or public security".

Furthermore, Article 66 TFEU states that "in exceptional circumstances, [where] movements of capital to or from third countries cause, or threaten to cause, serious difficulties for the operation of economic and monetary union, the Council, on a proposal from the Commission and after consulting the European Central Bank, may take safeguard measures with regard to third countries for a period not exceeding six months if such measures are strictly necessary."

2: Restrictions on deposits akin to capital controls

On Friday night the Cypriot parliament approved nine crisis-related bills, including a capital control bill.² The capital control law gives powers to the finance minister or the central bank governor to impose any of the following restrictions:

- 1) Restrict cash withdrawals
- 2) Ban premature termination of time deposits
- 3) Compulsory reprogramme maturing time deposits
- 4) Ban or restrict opening new accounts
- 5) Convert current accounts into time deposits
- 6) Ban or restrict non-cash transactions
- 7) Restrict use of credit, debit or prepaid cards
- 8) Ban or restrict cashing cheques
- 9) Restrict interbank transactions, or transactions within the same bank
- 10) Restrict transactions between public and credit institutions

¹ For a more detailed discussion see:

http://ec.europa.eu/internal_market/capital/framework/treaty/index_en.htm

See here in Greek: http://www.philenews.com/afieromata/phil_banners/2013/synallages.pdf

- 11) Restrict movement of capital, payments and transfers
- 12) Any other control measure that the minister or governor deems necessary under the circumstances for reasons of public order and safety.

The measures do not apply to the government or the central bank. Finally, any decision can only be taken after consultation with at least the IMF and EC at a minimum, or with the ECB, EBA and the foreign regulators of the relevant banks as well.

These controls seem primarily designed to control capital domestically, focusing on reasons of public safety and order as the legal basis of such actions (i.e., in line with Article 65 (1b) of TFEU).

The bill, as such, does not specify cross-border restrictions to third countries or member states e.g. outflows to Russia, Greece. However, its scope is wide enough to block such movements if required. As we demonstrate later (in section 4), this could make the difference between a full or partial breakup of the EMU.

It is worth noting that the banks in Cyprus have imposed some limits on their ATM withdrawal limits, to EUR120 a day at Bank of Cyprus and EUR100 a day at Laiki Bank machines, while payment instructions and the settling of transactions inside and outside Cyprus including intra-bank transactions have reportedly been blocked temporarily. That said some of the other restrictions already been applied *de facto* given that the banks have been closed for a whole week and are set to remain so as tomorrow is another public holiday. However, other restrictions such as the usage of cards have so far not been used.

While the eurogroup took note of the fact that the Cypriot authorities will put in place some capital controls over coming weeks, no details are available yet regarding the nature of the controls and in particular whether they will only affect the two large banks which are now at the heart of the bailout, while other banks are left untouched. The rest of the banks account for around 60% of deposits and, in our opinion, will likely require some quantitative restrictions, at least in the beginning.

3: Past experiences of quantitative restrictions on deposits

While the legal framework allows for the temporary imposition of capital controls inside the monetary union, we believe that they will be very difficult to implement and capital flight will likely be unavoidable as loopholes are exploited.

In a recent piece (see *Cyprus bailout - Systemic implications*, 18 March 2013) we highlighted some important historical episodes when levies and or losses were imposed on depositors. We then analyzed (see *Bank holidays and "the phantom of fear"*, 19 March 2013) the history of bank holidays and of restrictions on deposits and found that they are a rare occurrence in history. Below we reproduce the table from that piece (please note that the date of Creditanstalt was wrong in our initial report and we have now added the bank holiday in Germany in 1931).

Fig. 1: Previous instances of bank holidays and deposit restrictions

Location	Dates	Bank holidays	Nber of days	Deposit restrictions
Austria	May-31	Credit Anstalt	2	na
Germany	Apr-Jul-1931	Darmstadter Bank closes	na	na
US	Q4 1932	Individual banks or State levels	Varied	number of months
US	Feb-33	13 States	Varied	na
US	01-Mar-33	5 States	Varied	na
US	02-Mar-33	13 States	Varied	na
US	03-Mar-33	9 States	Varied	na
US	04-Mar-33	19 States	Varied	na
US	06-Mar-33	Across the US	4	na
Argentina	01-Jan-89	8 bank hols during first 1/2 of year	4	36
Argentina	31-Dec-01		5	120
Ecuador	03-Aug-99		5	12
Uruguay	2002		5	6
Brazil	1990			29
Latvia	Dec-08			on a single bank

Source: IMF Systemic banking crises database, NBER Historical Paper 52, IMF Country report 13/30, NBER WP 9522, and Nomura Global Economics

We believe that the current situation is most comparable to that in the US in 1933. Indeed, at that time public confidence in the banking sector was running low and bank runs were followed by quantitative restrictions on deposits. Of particular note is that these events were happening within the same currency zones..

Key lessons from the US in 1933

It is important to return to the **US 1933 episode** as we believe it is very informative about the immense challenges now facing euro area policymakers.

First, before the week long Federal Bank Holiday, a period of three months preceded where bank holidays and restrictions on deposits were imposed on a case-by-case basis. But clearly, contagion played a very important role behind the proliferation of bank runs and thereafter of quantitative controls. Indeed, as historians have reported many times, the bank holiday in the state of Michigan on 14 February 1933 was an event that precipitated a bank run nationwide: "The fallout from that decision [the bank holiday in Michigan] gave a new meaning to the law of unintended consequences. Instead of preventing a panic, the Michigan bank holiday precipitated one. The suspension confirmed the public's worst fears - that the banks were unsafe - and sparked a nationwide rush for cash" (FRBNY Economic policy review, July 2009, p21). While we could not find data on Michigan GDP going back to the 1930s, a census in 1930 shows that the State of Michigan accounted for around 4% of the US population. In 1963, the first year we could find state GDP data, Michigan accounted for around 4.8% of US GDP. This suggests clearly that size is far from the relevant metric here. Rather, it is the ability of policymakers to maintain (or not) confidence elsewhere, which will determine if this event in Cyprus proliferates in other countries (see last section for countries most exposed). Euro area policymakers might believe that Cyprus is not systemic. History shows that it is exactly the opposite when depositors are involved.

Second, the US bank holiday is also instructive in as far as it suggests that it was equivalent to "suspending the convertibility of deposits into currencies". But to respond to the potential liquidity crunch, the Emergency Banking Act gave the Fed the power to issue an "emergency currency" called "federal Bank Notes". The latter is credited by historians as the game changer of the 1933 crisis as it "created the expectation that the government would guarantee all depositors against loss without limit" (FRBNY, op cit.). The only policy measure that could be akin to the creation of an emergency currency would be for the ECB to be prepared to meet any amount of deposit withdrawal in the form of cash. However, it is very hard to see how this could happen given the current restrictions on the availability and eligibility of collateral.

Third, dissenting voices at this stage can be devastating. Indeed, with confidence at stake, Awalt (1969) states that "it was no time for any conservative head of the Federal Reserve Bank to exercise his conservatism, should demand be made for currency" (FRBNY op cit). Here again we find it almost impossible to see a united front from European policymakers to reassure depositors unconditionally across Europe that their deposits are completely safe.

There are many other episodes of capital controls (quantitative or price controls on international transactions), especially those applied with a view to protect a potential depletion in international reserves, but we do not believe much can be of use in the current context.

Argentina's corralito is often mentioned as well in that context. The lesson from Argentina seems to be that the deposit freeze needs to be selective, excluding deposits (checking and basic savings) needed for everyday transactions. The original deposit freeze (the corralito) impacted all deposits, and led to a liquidity crunch. The better policy, implemented later, was a selective freeze, only impacting term deposits. The lesson is that controls should only be put in place for large deposits and term deposits. Meanwhile, the ECB should be ready to fully fund the run on smaller deposits to avoid a liquidity crunch and economic depression (and collapse in system) as also suggested by the US 1933 experience. Unfortunately, we believe it is very difficult, if not impossible at this stage, for the ECB to underwrite all deposits in the euro area under EUR100k.

Finally, **Creditanstalt** in 1931 is another example where a run on deposits led to the closure of the bank and a bank holiday. But this did not prevent other failures and bank runs in the rest of Europe in the weeks and months that followed.

4: Impact of restrictions on the intrinsic value of Cypriot euros and the notion of euro membership

A common currency, by definition, means that a euro in country A is equivalent to a euro in country B. In a functioning currency union, financial market participants and retail users of euros should not care about whether they hold a euro from Germany or a Cypriot euro. If the currency is common, all euros across the 17 member countries are borne equal and are expected to be worth the same value for as long as they have a legal tender.

But since banks have already been closed for a week in Cyprus, the "commonness" of the currency is already being questioned. It seems fairly clear to say that a euro held in a bank in Cyprus is no longer worth exactly the same as a euro held in a German bank. It might be worth the same at some point in the future, but right now, we believe it uncontroversial to argue that a deposit in Cyprus is not worth the same as a deposit in Germany. One could argue that this is just a temporary situation until we know what will happen to the banks and to the deposits, but since various capital controls

are under consideration, the current situation could morph into a much more permanent state of affairs.

To try and assess the impact of quantitative restrictions imposed on depositors in Cyprus, we believe it is worth distinguishing two types of restrictions:

(i) Restrictions on the convertibility of deposits into cash

This is akin to the 1933 US bank holiday. In this context, the restrictions are addressing a banking sector stability problem rather than a currency problem. Here policymakers are trying to prevent a run on deposits to prevent a banking sector collapse. The attempt to prevent deposits flowing out of the banks is also aimed at keeping all creditors eligible for haircuts. Depositors understandably feel it is rational to withdraw their deposits, but are unlikely to fear for the value of the notes once they have taken them out of the banking system. This is a sort of "run on banks to under the mattress" type situation and not a direct challenge to the commonness of the monetary union.

In type 2 controls, the ELA is allowed to increase, but Target 2 balances are expected to remain stable.

(ii) Restrictions on the convertibility of Cypriot deposits or Cypriot notes into deposits outside Cyprus

This is more of the type of capital control that tends to take place in cases of balance of payments crises, sudden stops and international reserves depletion. Up until now, the sudden stops that have plagued the euro area, and Spain and Italy in particular, have been met by unlimited central bank liquidity (there is a quantitative limit imposed through the availability of collateral so a sudden stop in the euro area is not necessarily met by ECB liquidity in all circumstances).

Most, if not all, of the restrictions voted by the Cypriot parliament seem to be of our first restriction, with a view to addressing bank failures rather than cross-border movements.

But clearly, with a very large proportion of foreign deposits in Cypriot banks, the pressure on those deposits to leave the country will be very high, which could push the Cypriot authorities to impose type 2 controls.

In type 2 controls, the ELA increases but pressure on the Target 2 balances would lead to cross-border quantitative restrictions by potentially imposing a physical cap on Target 2.

Any quantitative restrictions on Target 2 would be akin to a partial break-up of the monetary union, in our view.

The restricted Cypriot euros in Cypriot banks would have an intrinsic value below that of other euros in the rest of the euro area. Given the capital restrictions, it may be hard to observe the value of these inferior restricted euros. But if a secondary market developed for such deposit balances (as we have seen happen in the past), we would expect them to trade at a discount to unrestricted ones. The discount would be determined by supply and demand, and the market clearing price for such balances would surely be below parity.

Since some euros in Cyprus would potentially remain unrestricted, we would view this as only a partial break-up of monetary union. For example, we would expect physical notes and coins to remain unaffected by the restrictions, although they would probably be facing a negative stigma (remember that the country of origin of euro notes can be distinguished by the letter code on each note).

In addition, some deposits (such as smaller denomination deposits) would potentially also remain unrestricted. Hence, it would be a type of hybrid dual-currency system. The ECB would remain in control of liquidity provision as it pertains to unrestricted euros. The Central Bank of Cyprus and the Finance Ministry in Cyprus would determine the parameters around the restricted euros..

A partial break-up is also possible in the context of type 1 restrictions if the liquidity crunch leads to the need for other means of payments to appear to ensure the minimal functioning of the exchange of goods and services in the economy. Here again history is full of examples where parallel currency systems appear out of cash shortages in the form of promissory notes, either backed by local Treasury authorities or by business communities.

5: The countries most at risk from deposit flight

In this section we focus on the countries most exposed to contagion from Cyprus.

Greece is economically close to Cyprus and its interconnectedness with Cyprus makes it a prime candidate, but we believe there are many other countries that may be exposed to a destabilization in their foreign deposits -- in the context of Cyprus, foreign depositors are likely to face the largest losses during the restructuring of the banking sector. Foreign depositors in other countries might want to reduce their exposure in anticipation of future potential levies or haircuts imposed-on them.

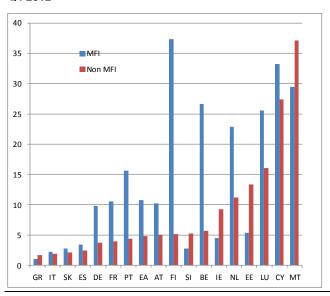
We have thus calculated the **share of foreign deposits in total banking sector deposits** to try and identify which countries might be particularly exposed to a run on deposits from foreign depositors.

We assume that foreign depositors resident in the euro area are unlikely to be destabilizing and thus focus on the share of deposits in euro area countries made by non euro area European depositors and non-European depositors. We also distinguish between MFI deposits and non-MFI deposits.

Figure 2 shows that when looking at non-MFI deposits by non-European depositors (essentially households and companies), that the countries most exposed are **Malta, Luxemburg and Estonia**, where the share of non-European deposits is way above the euro area average. When considering deposits from MFIs, then the countries most exposed are **Finland, Malta, Belgium, Luxemburg and Netherlands**. Portugal also has above-average deposits from non-European MFIs into its banking sector, but the level (15%) is well below that of the other countries we listed (see Figure 2 again).

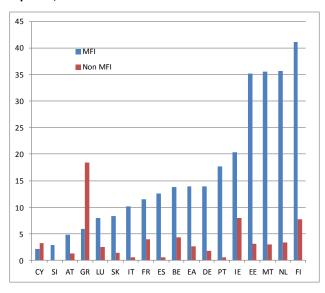
Figure 3 looks at European deposits excluding euro area residents. The outliers are mostly from MFIs rather than non-MFIs. Indeed, looking at MFIs we find that in the case of **Malta**, **Estonia**, **Netherlands and Finland**, more than 35% of the deposits in their banking sector comes from European MFIs outside the euro area. Only Greece stands out in ranking of non-MFI deposits, with a share of close to 20%.

Fig. 2: Share of non-European deposits, % of total deposits Q4 2012



Source: ECB, Nomura Global Economics

Fig. 3: Share of European ex euro area deposits, % of total deposits, as of Q4 2012



Source: ECB, Nomura Global Economics

Disclosure Appendix A-1

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