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Target Balances: The Greek Example*

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Abstract

This article looks at the evolution of the Target balance of the Greek central bank. It is shown that in the first 18 months "after Lehman", lending policy has been relatively lax, contributing to the increase of Target deficits. However, from spring 2010 onwards, there has been a slow-burning bank run. Greek depositors converted their deposits into cash or transferred them to core countries such as Germany. Without the help of the Eurosystem, such a massive withdrawal would have led to the immediate failure of Greek banks and economic standstill in Greece. In this situation, the Eurosystem has performed its role as lender of last resort, as it should.

JEL-Classification: E50, E58, E63, F32, F34

Keywords: Currency union, Balance of payments, Bailout, Eurosystem, Target

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1. Hans-Werner Sinn on Target balances

Hans-Werner Sinn was the first to provide a systematic analysis of the rising Target balances that have emerged within the Eurosystem since 2008. He has published a number of papers and even a book.[1]

Target balances are claims and liabilities of individual Euro area central banks vis-à-vis the ECB. In the aggregate, these positions sum up to zero. However, individual balances which were fairly small during the first years of EMU have become quite large. For instance, in the case of Germany, the July 2013 Target balance amounted to EUR 576b.[2] There has been a lively debate about Target balances and it does not seem warranted to explain, yet again, the working of Target (Target2 to be precise) and the factors that will cause positive or negative Target balances of individual Eurozone central banks.[3]

According to Sinn, these balances are not mere accounting items but may entail substantial risks for countries with positive balances, like Germany. To be sure, as claims against the ECB, these balances do not seem to be particularly risky. But if the Eurozone should break up or if deficit countries should exit, it is not clear what the status of these claims would be. As Sinn and Wollmershäuser (2012, 474) correctly point out:

"…the Bundesbank and the other NCBs [National Central Banks] with a positive Target balance would have claims against a system that no longer exists."

There has been a debate to what extent the actual balance measures the risk correctly.[4] However, this question will not be taken up here. Rather, the present paper looks at the underlying causes of the large build-up of Target balances.

Sinn and Wollmershäuser argue that the accumulation of large Target balances has been due to expansionary lending in the periphery countries. They criticize the Eurosystem for having tolerated such a policy.

"To finance the balance-of-payments deficits, the European Central Bank (ECB) tolerated and actively supported voluminous money creation and lending by the NCBs of the periphery at the expense of money creation and lending in the core of the Eurozone." (Sinn and Wollmershäuser 2012, 468-9)

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[1] See, for instance, Sinn (2012), Sinn and Wollmershäuser (2011) and (2012).

[2] The ifo Institute publishes its estimates of Target balances under http://www.cesifo-group.de/de/dms/ifodoc/docs/politikdebatte/C_Haftungspegel/Target-countries/Target-countries-2013-08-29.xls (accessed Sep. 2, 2013).

[3] Apart from Sinn (quoted above) see, for instance, Bindseil and König (2011), Deutsche Bundesbank (2011), Homburg (2011), Cecchetti et al (2012) or Cour-Thimann (2013). A compilation of contributions can be found in a special issue of the ifo Schnelldienst (volume 16, 2011) (all contributions in German).

[4] See, for instance, Buiter and Rahbari (2012) and De Grauwe and Ji (2012).

In a nutshell, the Sinn-argument implies that an expansionary lending policy of NCBs in GIIPS countries has allowed economic agents in these countries to spend more than otherwise would have been the case. This came at the expense of lending in the core countries.

Below, the example of Greece will be used to explore whether there indeed was an expansionary lending policy and whether this came at the expense of core countries.

2. Crisis - what crisis?

It sounds improbable that Greek banks should continue on an expansionary path after the outbreak of the crisis, making new loans, creating new deposits and generally expanding their balance sheets. After all, the Lehmann bankruptcy had changed everything and the banks of the world were trying to preserve their capital. However, a look at the evolution of Greek banks' balance sheets shows that just that happened (see Fig. 1). Balance sheets that had been growing at an impressive rate since the introduction of the Euro in Greece kept growing, albeit at a lower rate. This contrasts markedly with Germany. Not only has the balance sheet growth of German banks been much more modest, they also started to shrink their balance sheets immediately after Lehman. Thus, Sinn and Wollmershäuser have a point. Central bank credit seems to have been too forthcoming. So, in the initial phase of the crisis when all eyes were fixed on the US real estate market and the potential involvement of banks throughout the world in real estate and fancy financial products, the Greek market received a positive verdict of the Greek central bank and continued to lend. This even happened in spite of the growing yield spread of Greek government debt vis-à-vis German bunds (see Fig. 2).

In this period, there seems to have been a certain complacency with the state of affairs. Thus, in its annual report of 2009, the Greek Central Bank stressed the relative soundness of the Greek banking system:

At end-2008, banks' profitability and capital adequacy ratios were lower than at the end of 2007, but still stood higher than those of banks in the EU as a whole. In addition, there was a small decline in the quality of banks' portfolios and in liquidity ratios during 2008. However, the relevant ratios remain at satisfactory levels, above the regulatory minimums, while the tightening of banks' credit standards and the intensive supervisory controls by the Bank of Greece have helped maintain the soundness of the key aggregates of the Greek banking system. (Bank of Greece 2009, 33).

It also may have been important that the yield spreads were slowly coming down in early 2009 (see Fig. 2). This seems to have encouraged the Greek financial system to continue "business as usual". To be sure, there was a growing dependence on Bank of Greece credit. But seen by itself, this was not specific to Greece. In many countries, the interbank markets ceased to function properly and money market transactions moved onto central banks' balance sheets. However, in the case of Greece, there was more to it. Greek banks lost reserves to banks in other Euro area countries. This became visible in the growing Target-deficits of the Greek Central bank. This should have been an obvious warning that such a situation was unsustainable. But the falling spreads and a continuing inflow of private foreign funds into the Greek banking system until autumn 2009 seem to have given a false feeling of security. Overall, when looking at Fig. 1, one gets the impression that in 2008/09, there was a crisis in Germany but not in Greece.

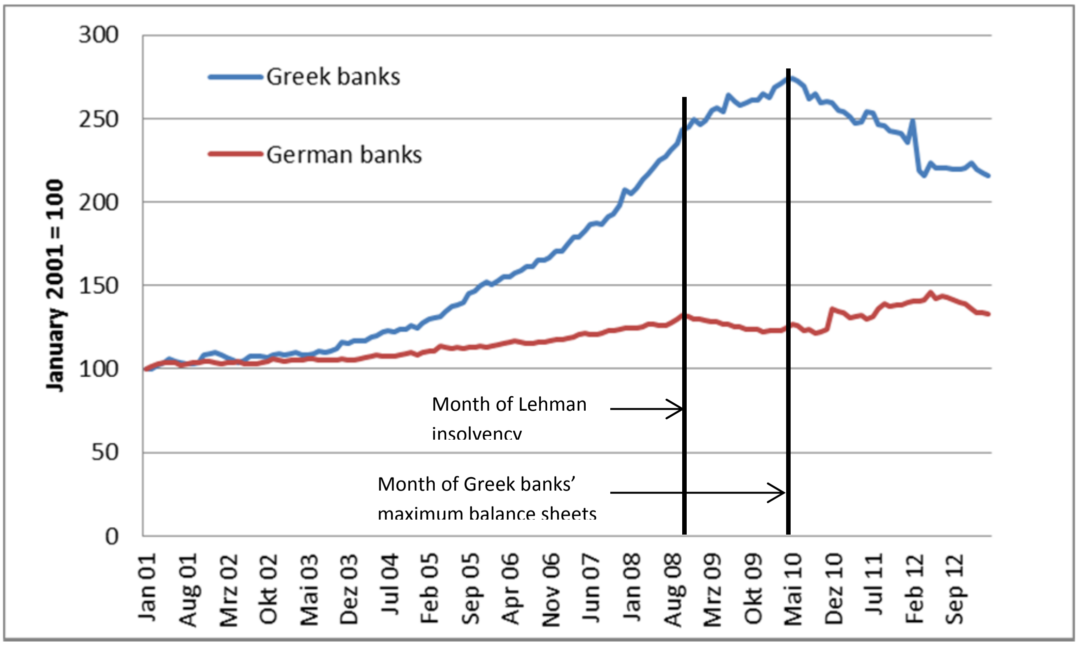

Fig. 1 The aggregated balance sheets of Greek and German banks9

Greek banks: Liabilities adjusted for accounting changes that took place in June 2010.[5] Lehman: Month of Lehman default (September 2008); Maximum GR: Month of maximum size of Greek banks' balance sheets (May 2010). Source: Bank of Greece, Deutsche Bundesbank and own calculations.

Consequently, it seems fair to say that this initial period is described very well by the analysis of Sinn and Wollmershäuser. The Greek banks were expanding while the rest of the world was contracting - and the Eurosystem allowed this to happen. However, this is only the first part of the story. In spring 2010, the crisis definitely reached Greek shores. Confidence into the Greek government and the

[5] In the Greek banking statistics, as of June 2010, securitized assets are no longer omitted from the balance sheet of Greek banks that have adopted the International Accounting Standards. The counterpart of these assets (securitization liabilities to Special Purpose Vehicles) is recorded on the liabilities side as deposit liabilities to non-euro area residents. This position has been omitted in the data presented in Figure 1.

Greek financial system collapsed and the Bank of Greece was struggling to keep the banks afloat. The evolution of Target-balances in this latter period has to be viewed with different eyes.[6]

3. A bank run by any other name

You don't trust your bank? You don't trust the others either? You do not think that your government has the power to sustain local banks? You do not trust other countries to help out? What do you do? You take your money out of the bank – in cash. When a lot of people do this, this is called a "bank run". Bank runs can have disastrous effects. That is why central banks usually act as lender of last resort and try to provide whatever amount of liquidity is needed by the commercial banks. So, in a bank run or already in the run-up to a potential bank run, banks will receive generous loans by central banks and will hold ample liquid reserves. So, if the numbers of customers wishing to withdraw cash are rising, banks will hopefully be able to pay out whatever cash is required.

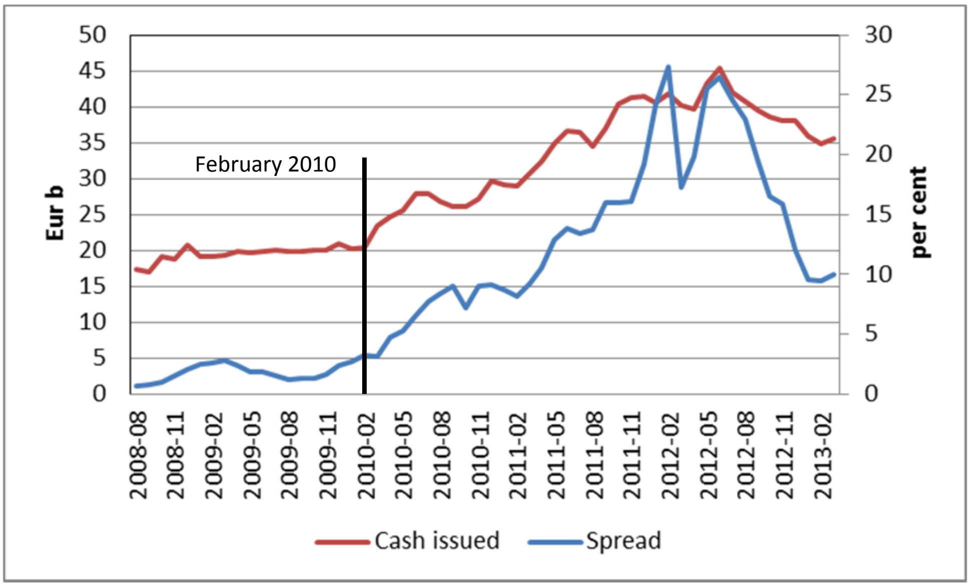

Fig. 2 Lack of confidence leads to rising cash demand

Cash issued: banknotes issued by the Bank of Greece; Spread: Difference between the "Harmonised long-term interest rates for convergence assessment purposes" (with a maturity close to ten years) of Germany and Greece. Source: ECB, Bank of Greece and own calculations.

But from the point of view of bank customers holding large amounts of cash is not convenient and involves opportunity costs in the form of interest forgone. Moreover, there is a substantial risk of theft. Thus deposits are to be preferred. So, imagine you are a Greek bank customer and you answer all of the above questions in the affirmative. In this case, you do not have to take out your money in cash. You simply open an account in another country and transfer your money there. Of course, you

[6] This latter period corresponds to the third and fourth period in Cour-Thimann (2013, 10-11).

could also first take out the money in cash and move it over the border. But why bother? Thus, the modern bank run in a monetary union must not necessarily see queues in front of banks with desperate people trying to get their hands on cash. Rather there is a "silent" flow of money over the border (also referred to as "capital flight").[7] Greece has actually witnessed both components of a bank run. Since the larger part consisted of the "cashless" type involving money transfers to foreign banks, it was not as visible as the "classical" bank run. But a look at the financial statements of the Bank of Greece as well as at the aggregated balance sheet statistics of Greek banks clearly shows that cash withdrawals and deposit withdrawals both were substantive (see Fig. 2 and 3).[8]

After February 2010, deposits of non-banks melted away.[9] Similarly, foreign banks that had been increasing deposits in Greek banks up to January 2010 reduced their positions.[10] As a consequence, non-banks deposits fell from EUR 273b in February 2010 to a minimum of EUR 176b in June 2012 - a reduction of over 35%. Loans of foreign banks to Greek banks declined from EUR 96b in January 2010 to EUR 31b in December 2012.[11] Since the summer of 2012, the situation has stabilized

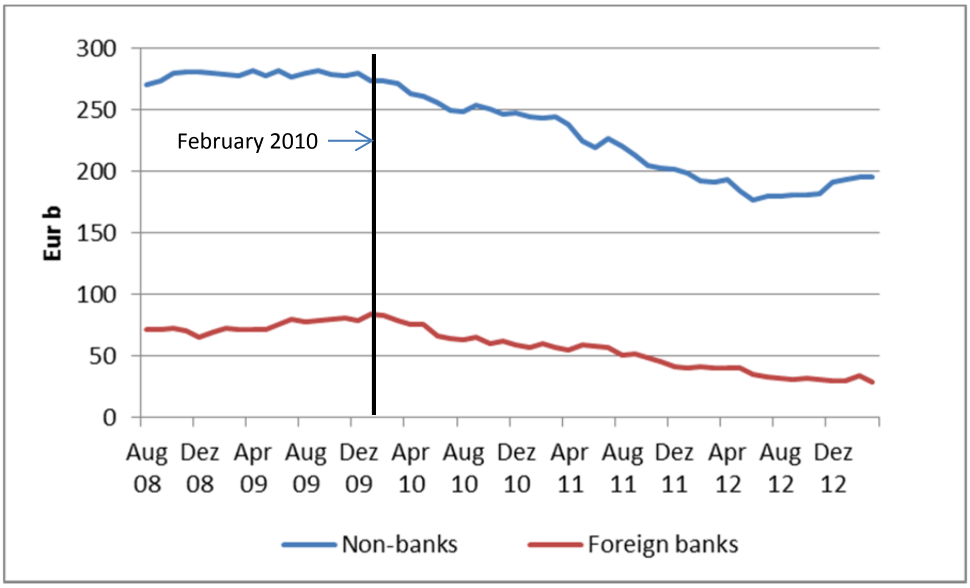

Fig 3 Greek banks' liabilities vis-à-vis non-banks and foreign banks

Source: Bank of Greece and own calculations.

[7] Bindseil and König (2011, 20-23) also stress the importance of capital flows as determinants of Target balances. They do not make the distinction, however, between the periods before and after February 2010. See also Homburg (2011, 48.)

[8] Thus, at least in the case of Greece, the statement of Cour-Thimann (2013, 19) that "*there was no widespread phenomenon of households and firms in crisis-hit countries shifting their bank deposits abroad (or preferring to hold banknotes)*" cannot be confirmed.

[9] Bindseil and König (2011, 6) use the term "deposit shift shock".

[10] The significance of transactions of foreign banks is particularly stressed by Cecchetti et al (2012).

[11] Thus, the claim of DeGrauwe and Li (2012) that shifts out of GIIPs' deposits have been a "relatively marginal phenomenon" is not correct. At least in the case of Greece this shifts have been dramatic.

Overall, there was a massive outflow of funds from the Greek banking system. This outflow did not come in a rush. Rather it was a "slow burner". But the cumulative effect has been impressive. Without help from the Bank of Greece, the Greek banks would have been unable to meet the demands of their customers. They would all have become bankrupt. Moreover, banks in other countries would almost surely have been affected. A failure of Greek banks would have had disastrous effects for the Greek economy. Without a functioning banking system, it would almost be impossible to carry out payments and the economic life of the country would have come to a standstill. In such a situation, the Bank of Greece did what other central banks do, it performed its role as a lender of last resort. [12] The ECB has tolerated this. And that is what a central banking system should do in a liquidity crisis.[13]

Indeed, the efficient working of the payment system is one of the tasks of the Eurosystem. Article 127 of the Treaty on the Functioning of the European Union rules that one of the "*basic tasks to be carried out through the ESCB*" shall be "t*o promote the smooth operation of payment systems*". A similar provision can be found in Article 3 of the Statute of the European System of Central Banks and of the European Central Bank. The Bundesbank Act, as well, contains a similar provision. Article 3 states that the Deutsche Bundesbank „*shall arrange for the execution of domestic and international payments*".

Thus, it can be argued that the policy of providing credit to Greek banks is in line with the basic tasks the Eurosystem is obliged to perform.[14] The lender of last resort operations of the Bank of Greece replenished the reserves that Greek banks were losing because their customers withdrew cash from their bank accounts and because they transferred deposits to banks in other countries. The latter formed the basis for the rising Target deficits the Bank of Greece was witnessing after February 2010. Foreigners repatriating funds were another cause for rising Target deficits.

[12] Locus classicus for the lender of last resort function is Bagehot (1973). The standard model of contagious bank runs is Diamond and Dybvig (1983).

[13] Sinn and Wollmershäuser (2012, 487) argue that the ECB "organized a capital outflow from the core that went contrary to market capital flows." However, such "contrarianism" is typical for situations where a central bank performs the role of lender of last resort.

[14] Although it is commonly understood that the lender of last resort function is one of the basic tasks of a central bank it is not explicitly mentioned in the European legal texts - neither in the Treaty nor in the Statute.

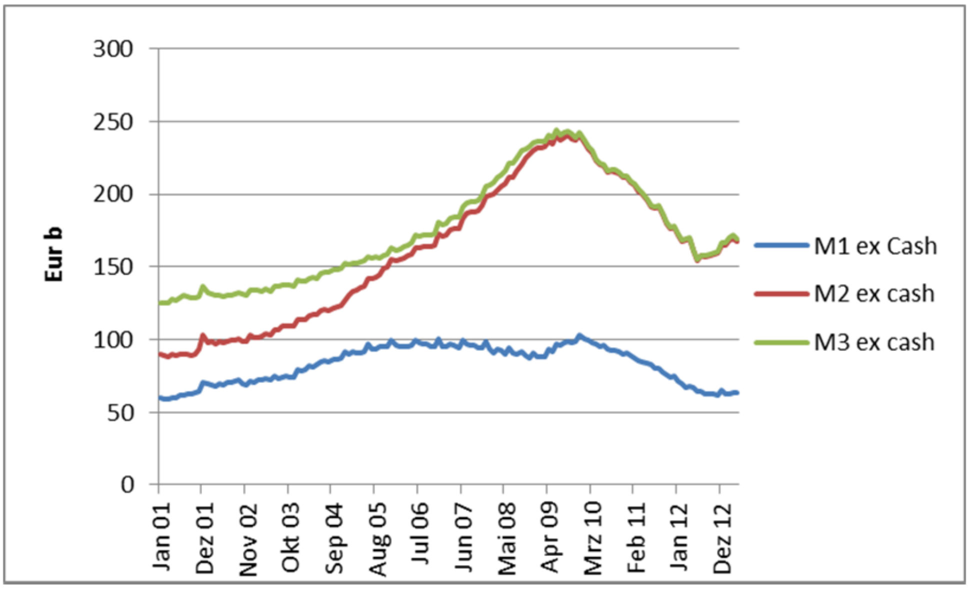

Fig. 4 Greek monetary aggregates

Source: Bank of Greece and own calculations.

The fact, that it is difficult to describe monetary policy in Greece in this period as "expansionary" also becomes evident when looking at monetary aggregates after the decline of confidence into the Greek economy. Admittedly, in a formal way, the results of Sinn and Wollmershäuser (2012) can also be applied to this period. The Bank of Greece provided additional loans at low interest rates to Greek banks which helped Greek bank customers to buy foreign goods and assets. However, for this period it is difficult to describe the policy of the Bank of Greece as "*voluminous money creation*". From September 2009 to June 2012 M3 (excluding cash) fell from EUR 244b to EUR 155b (see Fig. 4). Thus, there was no such creation of additional money balances. Rather, the Bank of Greece was struggling desperately to slow down the process of money destruction that went hand in hand with the decline in bank deposits.[15] It makes a difference whether a central bank increases its loans to banks in order to prevent a bank-run or whether it increases its loans in order to allow banks to increase the size of their balance sheets.

The evolution of Greek monetary aggregates also shows that it is not correct to state that Hume is "on hold" – i.e. that the price/specie-flow mechanism does not work (Burda 2012).[16] To be correct, there is no large expansion of money in the surplus countries, but as the Greek figures show, the

[15] Sinn and Wollmershäuser (2012, 478-9) estimate the amount of base money circulating in GIIPS countries and find that this has been roughly stable. However, this "stability" masks the underlying substitution out of deposits and into cash.

[16] See also Kohler (2011, 14-15) and Sinn and Wollmershäuser (2012, 482 and 500) who compare EMU with the system of Bretton Woods. These authors fail to notice, however, that US monetary policy was indeed expansionary whereas the Greek figures suggest otherwise for GIIPS countries.

quantity of money is severely contracting in deficit countries. Sooner or later this should affect prices.[17]

4. Foreign aid and the Greek current account in the crisis

Sinn and Wollmershäuser repeatedly stress that Target credits have been the main source of finance for current account deficits in the GIIPS countries:

“*by replacing stalling capital imports and outright capital flight, Target credit financed substantial portions, if not most, of the current account deficits of Greece and Portugal during the first three years of the crisis*” (Sinn and Wollmershäuser 2012, 469)

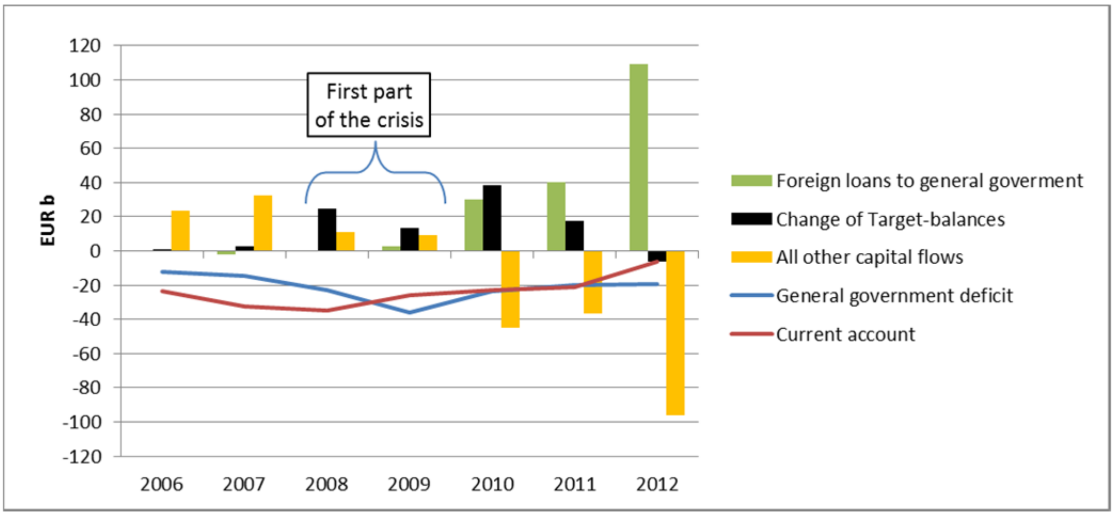

Fig. 5 Target, international assistance and the Greek balance of payments

Foreign loans to general government: Almost entirely disbursements from the ESFS and the IMF; All other capital flows: Private capital flows and debt repayments plus debt buy backs of the Greek government. Source: Bank of Greece, Balance of Payments statistics, cesifo-group, Eurostat, European Commission and own calculations

Indeed, the evolution of accumulated current account deficits and accumulated Target liabilities seems to provide strong support for this claim (Sinn and Wollmershäuser 2012, 490). However, this view neglects the importance of assistance flows coming from the EU and the IMF. Sinn and Wollmershäuser (2012, 486-488) are providing a general analysis of these assistance flows, however they do not discuss the significance of these flows for the balance of payments.

At least, in the case of Greece, it can be argued that Target was important in 2008 and 2009 but assistance flows were the main source of finance for the current account deficits from 2010 on and

[17] As the evolution of the current account shows (see Figure 5), adjustment is already under way in Greece.

also became increasingly important for financing the large outflows of capital. When analyzing the Greek balance of payments since 2008 it is useful to divide capital flows in three components:

- capital flows via Target
- international assistance for the Greek government
- “other capital flows" (or “normal” capital flows)

As Fig. 5 shows, in the years 2006 to 2012, Greece always recorded a current account deficit and a general government deficit. Initially, this was made possible by “normal” net capital inflows from other countries (“other capital”). However, in the years 2008 and 2009 these capital inflows were falling. Although, somewhat surprisingly, Greece remained a net recipient of “normal” foreign capital, the large current account deficit was only made possible by the availability of Target loans. Thus, once again, the analysis of Sinn and Wollmershäuser applies very well to the first two years of the crisis. However, as discussed above, things changed dramatically in 2010. This becomes immediately obvious when looking at the “other capital flows”. In 2010, there was an outflow of EUR 45b. At the same time, the current account was still in deficit (EUR 23b). This “twin deficit” was matched by the inflow via Target of EUR 38b and official assistance of EUR 30b.

In 2011, there was a roughly similar situation with still higher assistance payments (EUR 40b) and lower inflows via Target (EUR 17b). In 2012, the current account deficit came down substantially. There was a small outflow via Target and there were huge assistance payments and capital outflows. The huge size of both these flows reflects the debt buy-back operations of the Greek government that were funded with the help of disbursements under the second adjustment program.

So, since 2010, there have been large inflows of funds via Target and via official assistance payments. Taken together, these flows allowed Greece to run a current account deficit and buy foreign assets or buy-back own debt. Official aid allowed the Greek government to continue running a budget deficit.

As Fig. 5 makes clear, since the outset of the crisis in 2008, the budget deficit has been the main driver of the current account deficit. Thus, it may be inferred that in 2008 and 2009 Target has indeed contributed to financing the current account deficit – alongside with “other capital” inflows. But since 2010, the current account deficit was mainly financed by official assistance payments. In this period, the Target balances reflect the outflow of capital analyzed above.

Kohler (2012, 5) argues that it is not possible to relate Target balances to certain types of expenditure. *“If I take out a loan when purchasing a new car, does the loan finance the front wheels or the rear wheels of my car? And if at the same time I buy shares, perhaps it wasn’t for the car at all,* *but the shares?"* However, if he (Kohler) receives a loan from his great aunt and buys a VW Golf and I (Krueger) use an overdraft with Bank A to repay a loan received in the past from Bank B, it seems straight forward to connect a source of finance with a type of expenditure. Similarly, it can be said, that Greek banks used Bank of Greece loans to finance the loss of deposits (causing Target balances) and that the Greek government used the assistance payments to finance both, a budget deficit and repayment of debt (incl. buy backs). In this sense, it can be said, that the large increases in Target balances after February 2010 were mainly driven by the "bank run" described in section 3.

5. Conclusion

Sinn and Wollmershäuser (2011) conclude that the Eurosystem probably did the right thing in the initial phase of the crisis and that this policy became increasingly problematic.

"The ECB acted correctly when the crisis began, the parliaments had no time to react, and the collapse of various economies had to be averted. But this nonetheless was de facto a massive bailout, a fiscal measure that does not constitute monetary policy. There has by now been ample time to hand the issue over to the parliaments of Europe." (Sinn and Wollmershäuser 2011, 3)

In a way, the analysis presented in this paper suggests that the initial leniency of the Bank of Greece and the Eurosystem as a whole was mistaken. The Greek authorities apparently thought that there could be "business as usual" in spite of the international outbreak of the financial crisis. In this manner, about a year and a half was lost that could have been used for adjustment.

Once the crisis of confidence hit Greece, the Eurosystem did not really have an alternative option. When large amounts of capital fled the country it had to prevent the melt-down of the Greek banking system. [18]

However, the question may be raised whether it is the task of the Eurosystem to provide assistance on such a scale over a period of many years. If the underlying problem stems from solvency rather than liquidity it would be time for other institutions to step in. If it is just a question of liquidity, Target balances and the huge volume of Eurosystem financing for Greek banks will eventually disappear once the money market starts to function again.

[18] The only way to stop this would have been an immediate decision to provide large scale official assistance by EU governments and/or capital controls (as in the case of Cyprus). The decision on such measures would have been in the hands of governments – not the Eurosystem.

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