



November 2011

WORKING PAPER SERIES

2011-ECO-08

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The enormous loans of the Deutsche Bundesbank to distressed European countries' central banks

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November 14, 2011

Abstract

As of October 2011, in the context of the TARGET2 payment system, the Bundesbank had accumulated a total claim of 465 billions € on the rest of the Eurosystem, that is on the other National Central Banks of the euro zone and the ECB. The growing claims of the Bundesbank and, to a lesser extent, the National Central Banks of Luxembourg, the Netherlands and Finland, are the counterpart of growing liabilities of the distressed peripheral countries of the euro area. Since the beginning of these crises the rising claims of the Bundesbank correspond to rising liabilities of the National Central Banks of Ireland, Greece and Portugal, and recently Italy and Spain.

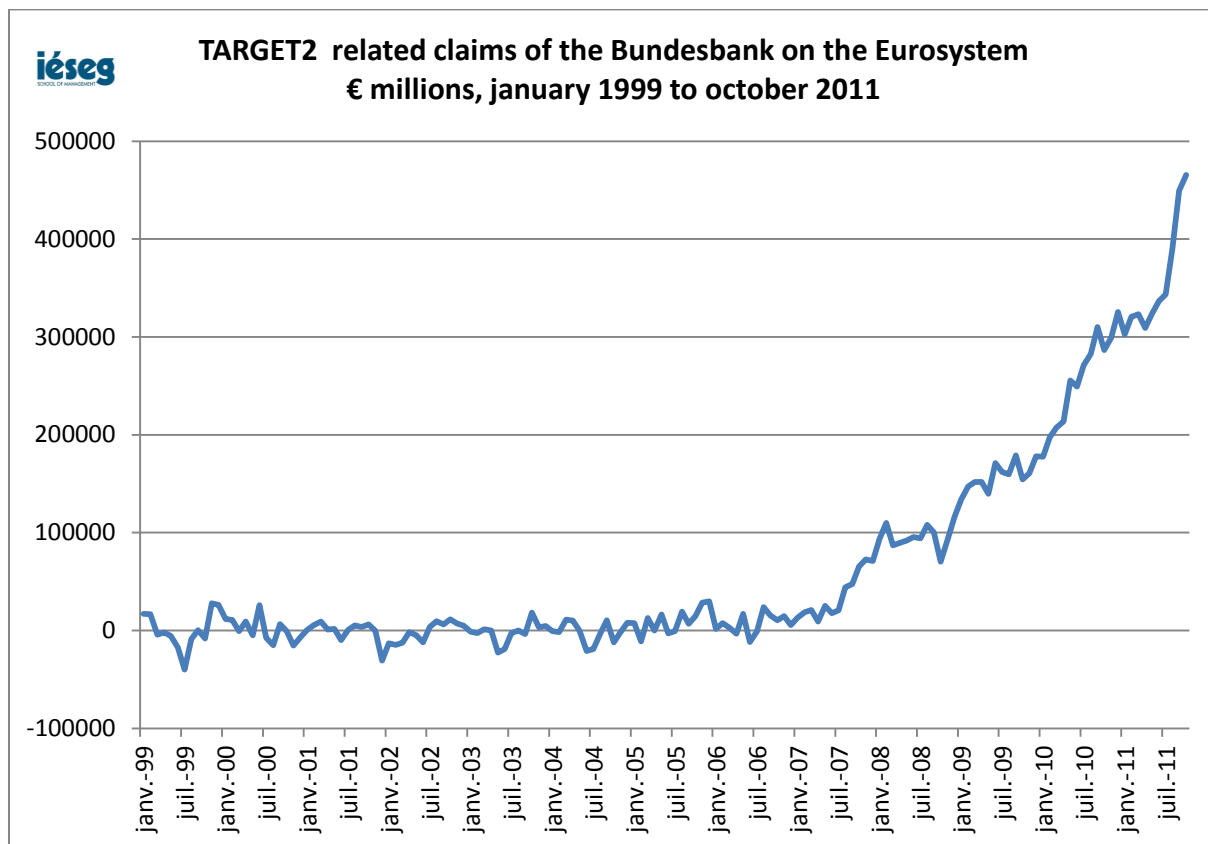
The central bank of the Eurozone is in fact a set of several institutions known as the Eurosystem. It is composed of the European Central Bank and all the 17 National Central Banks of the member countries. Cross border payments between banks of different countries of the euro area are conducted through a system known as TARGET2. Through this payments system banks can transfer to each other claims on the National Central Banks, known as "central bank money" or "reserves". Through TARGET2, each cross border transaction between countries belonging to the Euro area gives rise to a gross claim of a National Central Bank on another National Central Bank. Indeed the National Central Bank of the country of the "paying" bank needs to borrow claims on the National Central Bank of the country of the "receiving" bank, in order to transfer these claims to this bank. The National Central Bank of the country of the "paying" bank has thus to borrow reserves from the National Central Bank of the country of the "receiving" bank, before transferring the property of these reserves to this "receiving" bank. At the end of each day, the claims or liabilities of National Central Banks on or to each other are netted and replaced by a net claim or a net liability of each National Central Bank on or to the Eurosystem. These daily net claims or liabilities are added to the cumulated TARGET2 balances of each National Central Bank built up since the launch of the euro.

Until 2007, the current account deficits of the peripheral countries of the Euro area were compensated by net capital inflows. Since 2008 however, the banks of Germany and other core countries are reluctant to lend to the banks of the peripheral countries, which also experience huge capital outflows. The growing imbalances of TARGET2 accounts are caused by a sustained reversal of capital flows. Net capital outflows now add to the structural imbalance of the current account of peripheral countries, due to a lack of competitiveness. The balance of payments imbalances of the distressed countries benefit from a kind of monetary funding by the Bundesbank.

If the euro zone broke up, the Deutsche Bundesbank could incur enormous losses on its TARGET2 related claims on the Eurosystem. In such a scenario, the Bundesbank should be recapitalized by the German government, at the expense of the German taxpayer. Even without a breakup of EMU, the Bundesbank should bear 30% of the potential losses of the distressed countries' National Central Banks loans to their banks which lack good quality assets to provide as collateral.

A picture of the problem

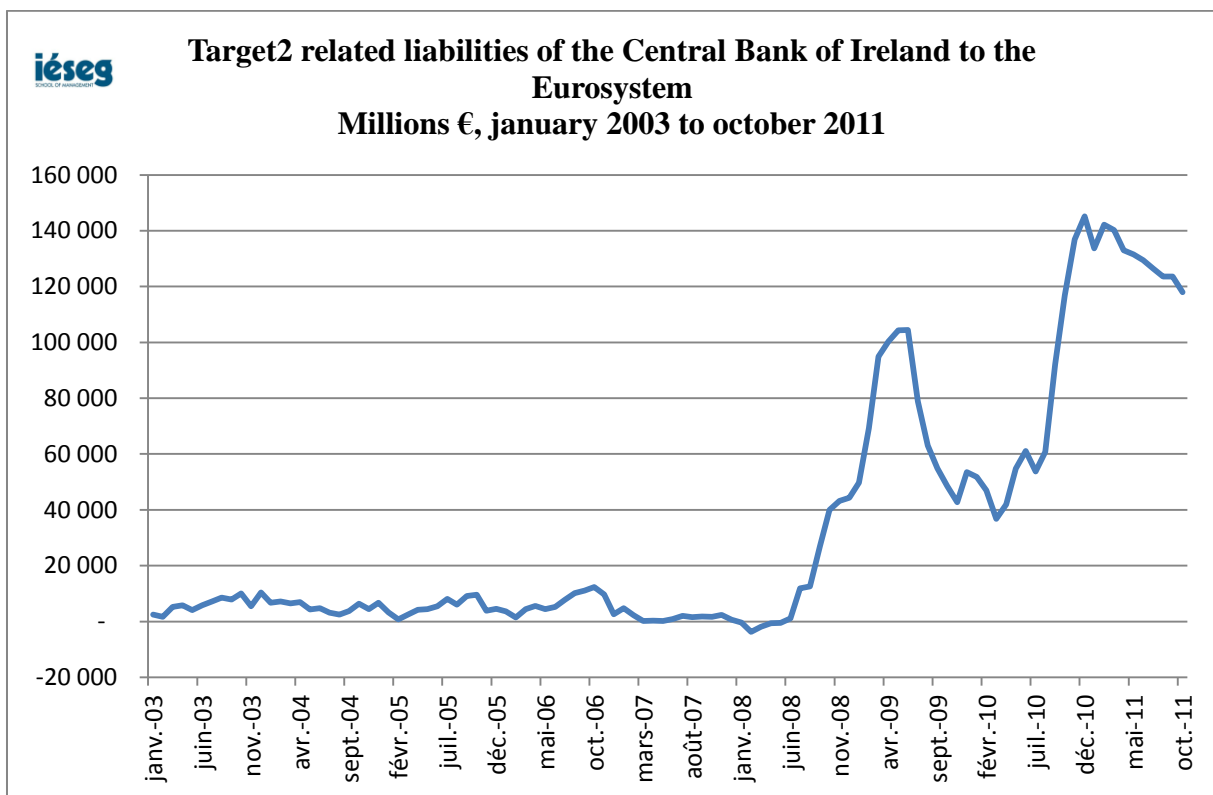
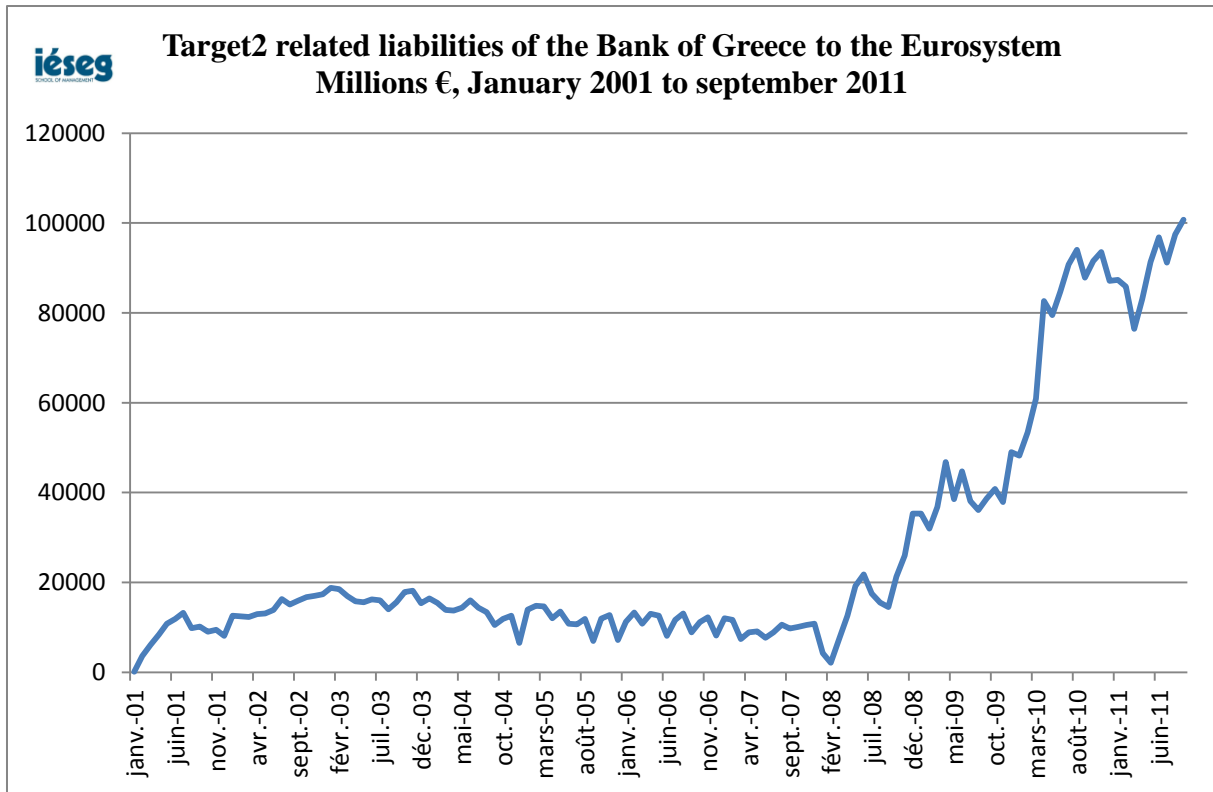
If anything was still necessary to show that there is something wrong with the Eurosystem for several years, the following graph would certainly be much convincing.

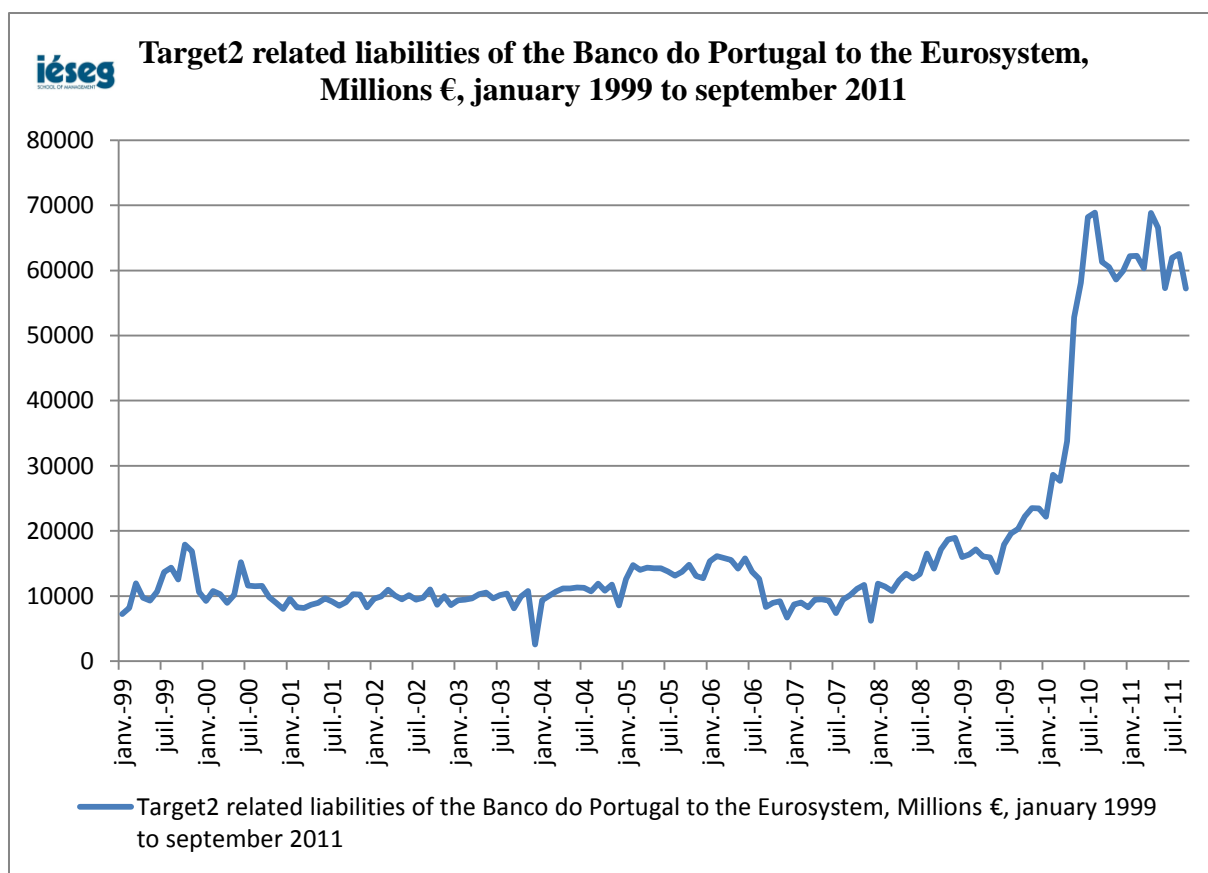


As of October 2011, in the context of the TARGET2 payment system, the Bundesbank had accumulated a total claim of 465 billions € on the rest of the Eurosystem, that is on the other National Central Banks of the euro zone and the ECB.

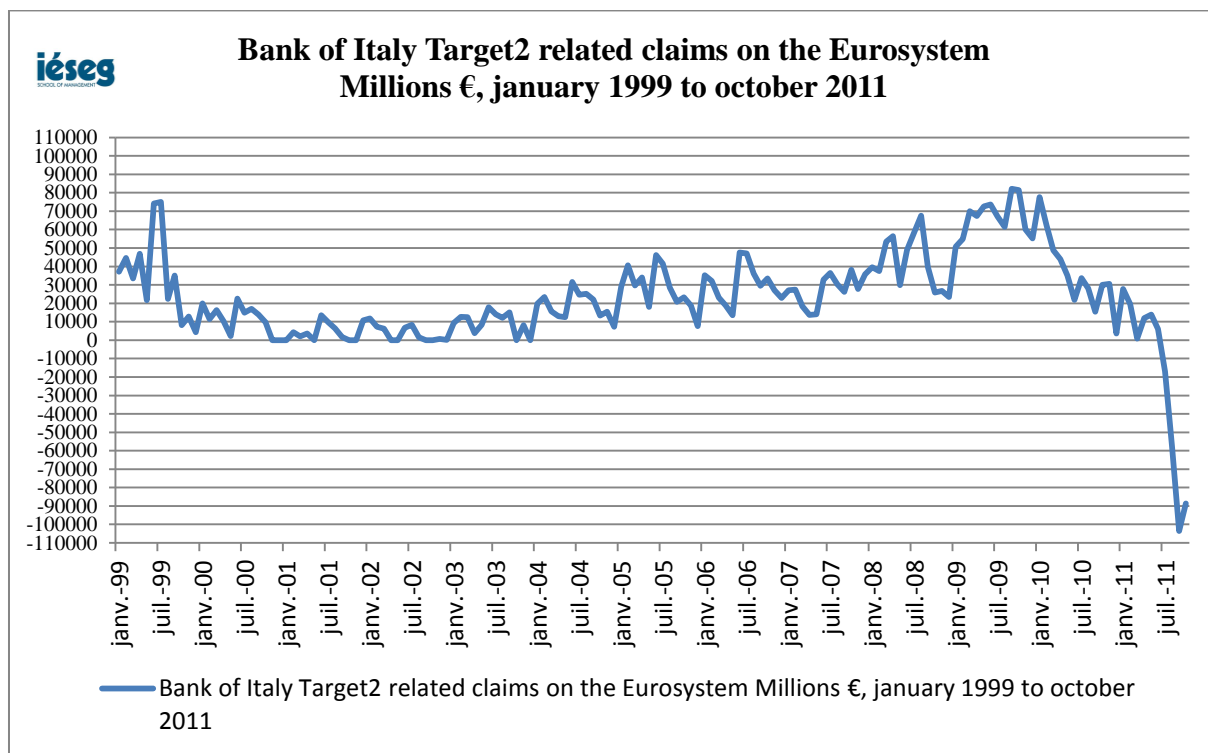
The National Central Banks of the distressed countries are the borrowers

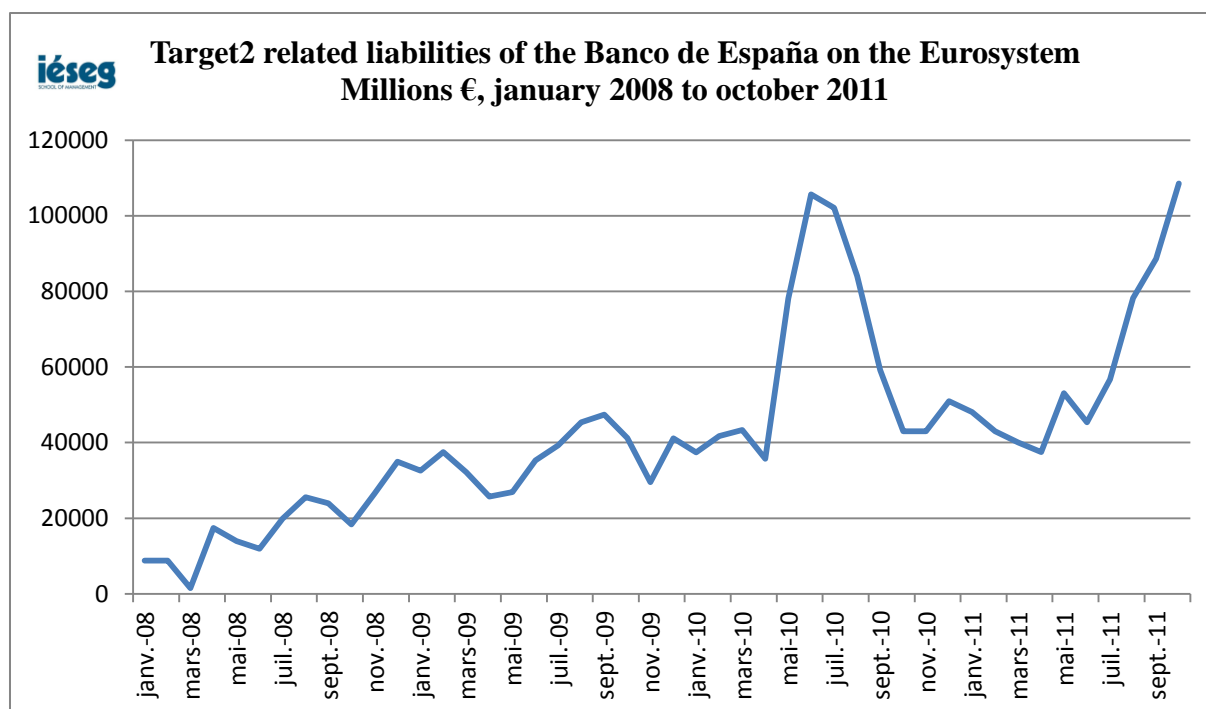
The growing claims of the Bundesbank and, to a lesser extent, the National Central Banks of Luxembourg, the Netherlands and Finland, are the counterpart of growing liabilities of the distressed peripheral countries of the euro area. Since the beginning of these crises the rising claims of the Bundesbank correspond to rising liabilities of the national central Banks of Ireland, Greece and Portugal.





However the crisis has quickly spread to Italy and Spain. The Bank of Italy, which was structurally a creditor, has recently become a debtor. This perspective is terrifying in view of the size of this economy.





The current large imbalances in the TARGET2 accounts split the Eurosystem into a very small group of creditor countries and the others.

**National Central Banks claims on, or liabilities to the rest of the Eurosystem
October 2011**

	Claims	Liabilities	
Bundesbank	465	118	Central Bank of Ireland
Central Bank of Luxembourg	85	108	Banco de España
Nederlandsche Bank	89	101	Bank of Greece
Bank of Finland	33	89	Banca d'Italia
		57	Banco do Portugal
		42	National Bank of Belgium
		35	Bank of France
		29	Oesterreichische Nationalbank
		9	Central Bank of Cyprus
		11	National Bank of Slovakia
		2	Bank of Slovenia
		1	Central Bank of Malta
		-	Bank of Estonia
		70	European Central Bank and errors
Total	672	672	

Source: National Central Banks statistics and own estimates

The extreme anomaly of this situation can be well perceived when comparing it with what continuously prevailed before the crisis, for example as of December 2005.

**National Central Banks claims on, or liabilities to the rest of the Eurosystem
December 2005**

	Claims	Liabilities	
Bundesbank	30	35	National Bank of Belgium
Bank of Spain	13	16	Oesterreichische Nationalbank
Bank of France	11	13	Banco do Portugal
Central Bank of Luxembourg	8	7	Bank of Greece
Bank of Italy	8	5	Bank of Ireland
Bank of Finland	1	1	Nederlandsche Bank
European Central Bank	5		
error	1		
Total	77	77	

Source: National Central Banks statistics, ECB

What do these loans represent?

The central bank of the Eurozone is in fact a set of several institutions known as the Eurosystem. It is composed of the European Central Bank and all the 17 National Central Banks of the member countries. A common policy is determined at the ECB for the whole euro area, but euro banknotes are issued by the National Central Banks and the refinancing operations are also decentralized: liquidity is provided by each National Central Bank to the banks of its country. The banks hold their reserves at the National Central Bank of the country where they are located. They borrow liquidity from the National Central Bank of the country where they are located.

Cross border payments between banks of different countries of the euro area are conducted through a system known as TARGET2. Through this payments system banks can transfer to each other claims on the National Central Banks, known as “central bank money” or “reserves”. For example, if a Greek bank transfers money to a German bank through TARGET2, the net claim of the Greek bank on the National Central Bank of Greece decreases and the net claim of the German bank to the National Central Bank of Germany increases. In this example a claim of a Greek bank on the Bank of Greece has vanished to become a claim of a German bank on the Bundesbank.

Through TARGET2, each cross border transaction between countries belonging to the Euro area gives rise to a gross claim of a National Central Bank on another National Central Bank. Indeed the National Central Bank of the country of the “paying” bank needs to borrow claims on the National Central Bank of the country of the “receiving” bank, in order to transfer these

claims to this bank. The National Central Bank of the country of the “paying” bank has thus to borrow reserves from the National Central Bank of the country of the “receiving” bank, before transferring the property of these reserves to this “receiving” bank¹.

At the end of each day, the claims or liabilities of National Central Banks on or to each other are netted and replaced by a net claim or a net liability of each National Central Bank on or to the Eurosystem. These daily net claims or liabilities are added to the cumulated TARGET2 balances of each National Central Bank built up since the launch of the euro.

The transactions through TARGET2 can be financial as well as commercial. Growing TARGET2-related claims on the Eurosystem thus reflect accumulated balance of payments surplus. Rocketing TARGET2-related liabilities of the distressed countries reflect accumulated balance of payments deficits.

Until 2007, the current account deficits of the peripheral countries of the Euro area were compensated by net capital inflows. Since 2008 however, the banks of Germany and other core countries are reluctant to lend to the banks of the peripheral countries, which also experience huge capital outflows.

How are these imbalances caused by capital outflows?

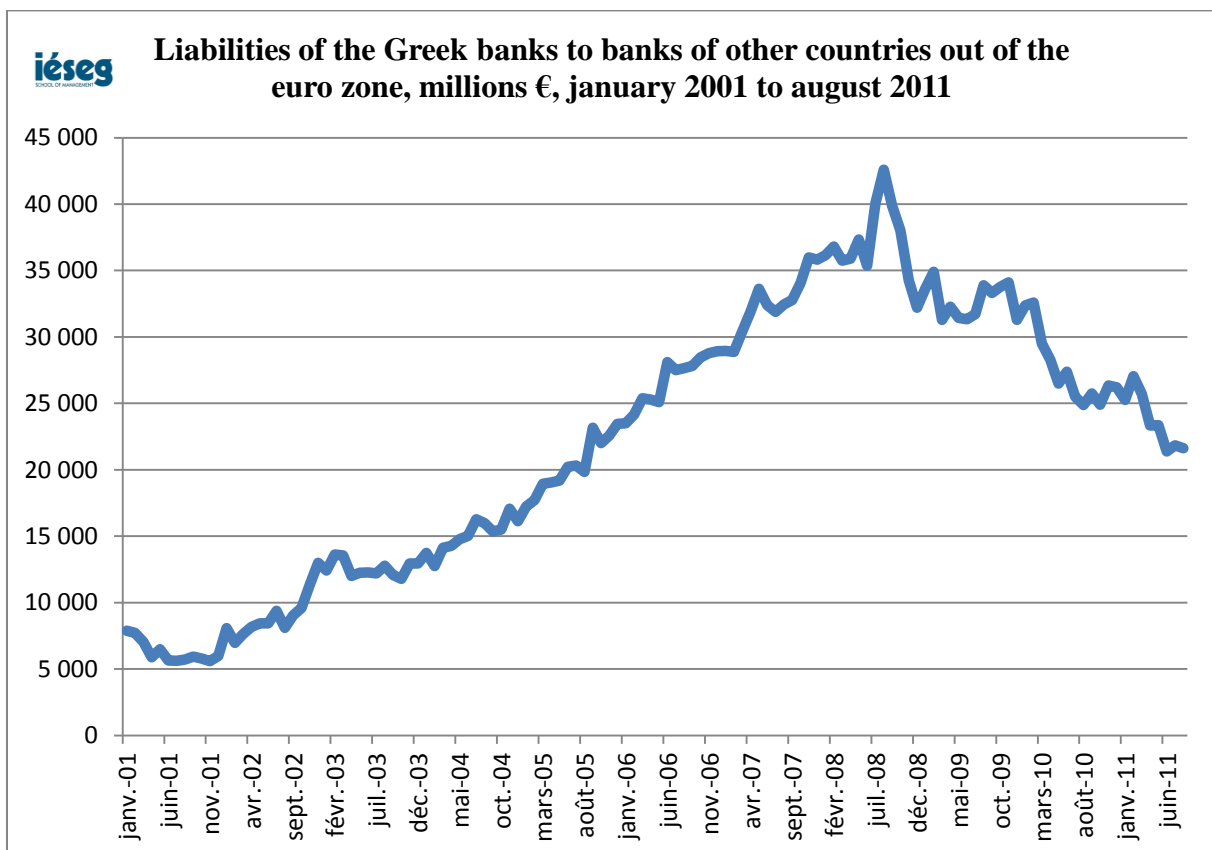
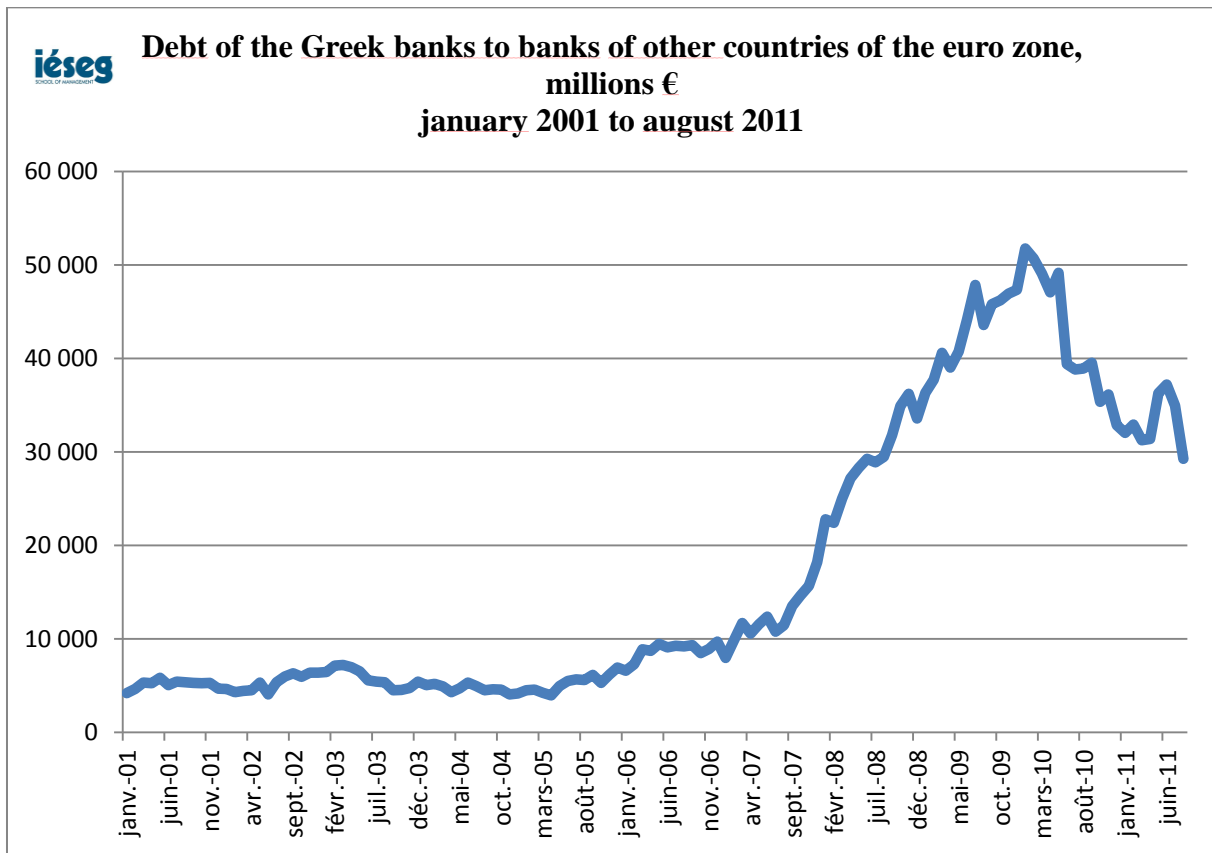
As mentioned above, the growing imbalances of TARGET2 accounts are caused by a sustained reversal of capital flows. Net capital outflows now add to the structural imbalance of the current account of peripheral countries, due to a lack of competitiveness. Investors and banks of core euro area countries are reluctant to renew their exposure to the economy of the peripheral countries. The governments of the peripheral countries have lost access to the international market. Banks of the distressed countries have also lost access to the interbank market.

¹ For example if a deposit in a Greek bank is transferred by the client to a German bank, the sequence of events can be described as follows

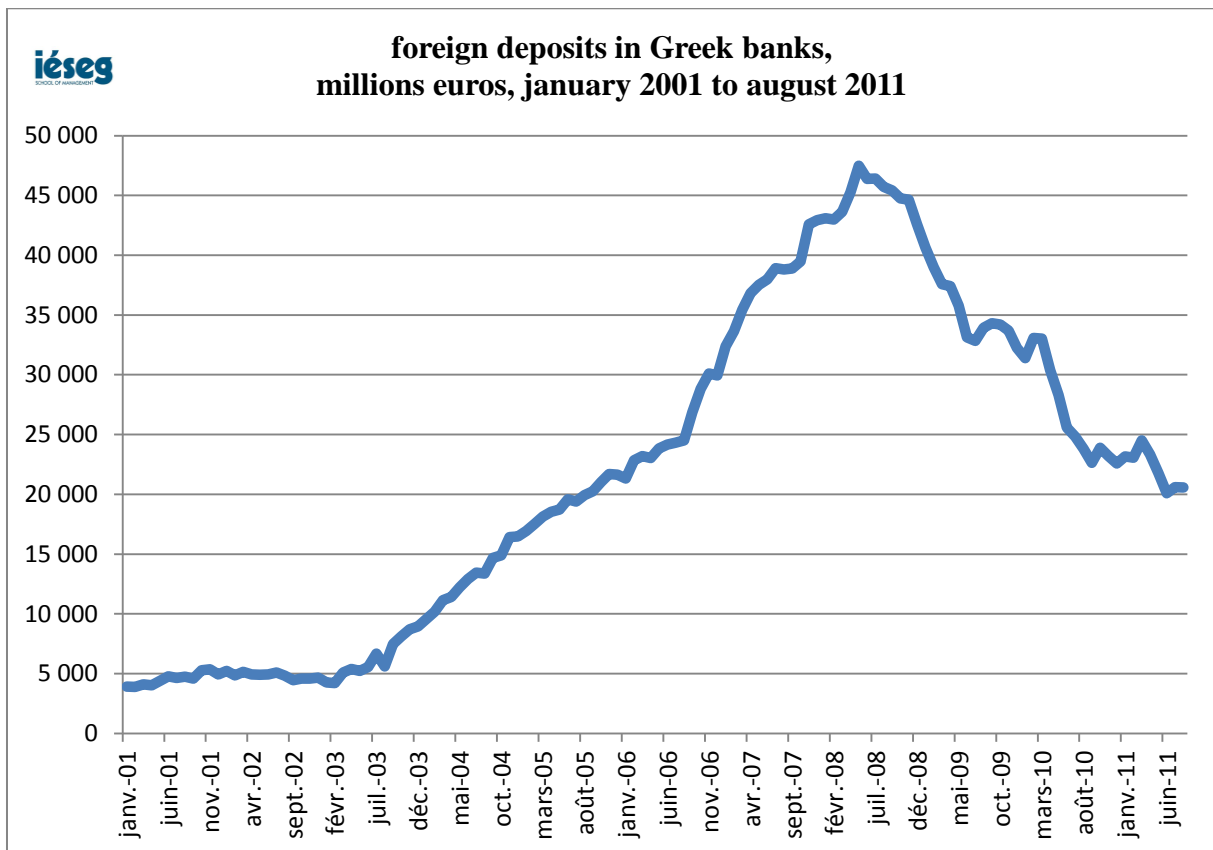
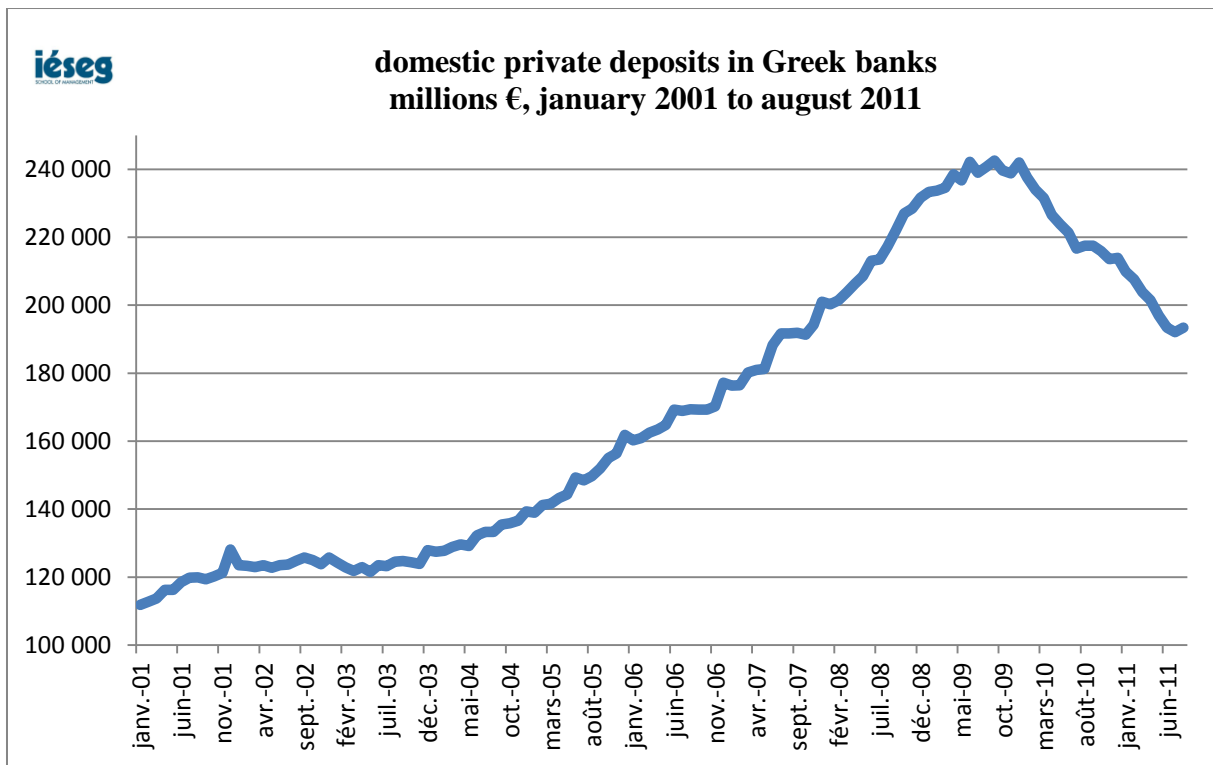
- The Greek bank borrows the necessary liquidity to the National Central Bank of Greece (the Bank of Greece), which credits the reserve account of this bank.
- The Greek Bank instructs the National Central Bank of Greece (the Bank of Greece) to transfer this liquidity to the German Bank, in order to credit the deposit account of the client in this bank.
- The National Central Bank of Greece thus needs reserves at the National Central Bank of Germany, to transfer them to the German bank. The National Central Bank of Greece borrows these reserves from the National Central Bank of Germany. The National Central Bank of Germany thus credits the daily temporary account of the National Central Bank of Greece (the Bank of Greece). In counterpart the National Central Bank of Greece (the Bank of Greece) credits the daily temporary account of the National Central Bank of Germany (the Bundesbank).
- The National Central Bank of Greece (the Bank of Greece) then debits the reserve account of the Greek bank
- The German National Central Bank (Bundesbank) debits the account of the Greek National Central Bank and credit the reserve account of the German bank, which credits the deposit account of the client

As a result the net liabilities of the National Central Bank of Greece (the Bank of Greece) to the German National Central Bank (the Bundesbank) increase

For example the data for Greece show the reversal of the funding of Greek banks by the other banks of the euro zone and the rest of the world:



The Greek data also show a large deposit flight out of the country:



A key aspect of a currency union is that a deposit in a bank of a member country must have the same value as a deposit of the same amount in a bank of another member country.

What the growing imbalances in TARGET2 accounts reveal is that the markets do not believe that euro deposits in different countries of the euro zone have equal value.

Consequences for Germany

Losses if the Euro area breaks up

If the euro zone broke up, the Deutsche Bundesbank could incur enormous losses on its TARGET2 related claims on the Eurosystem. In such a scenario, the Bundesbank should be recapitalized by the German government, at the expense of the German taxpayer.

If distressed countries leave the euro, their new national currencies will quickly depreciate with respect to the euro. They will not be able to reimburse their previously accumulated TARGET2 related debt of the departing countries that will still be denominated in euro's and will dramatically raise when expressed in the new national currencies. The National Central Banks of the remaining countries of the Eurosystem will thus incur huge losses.

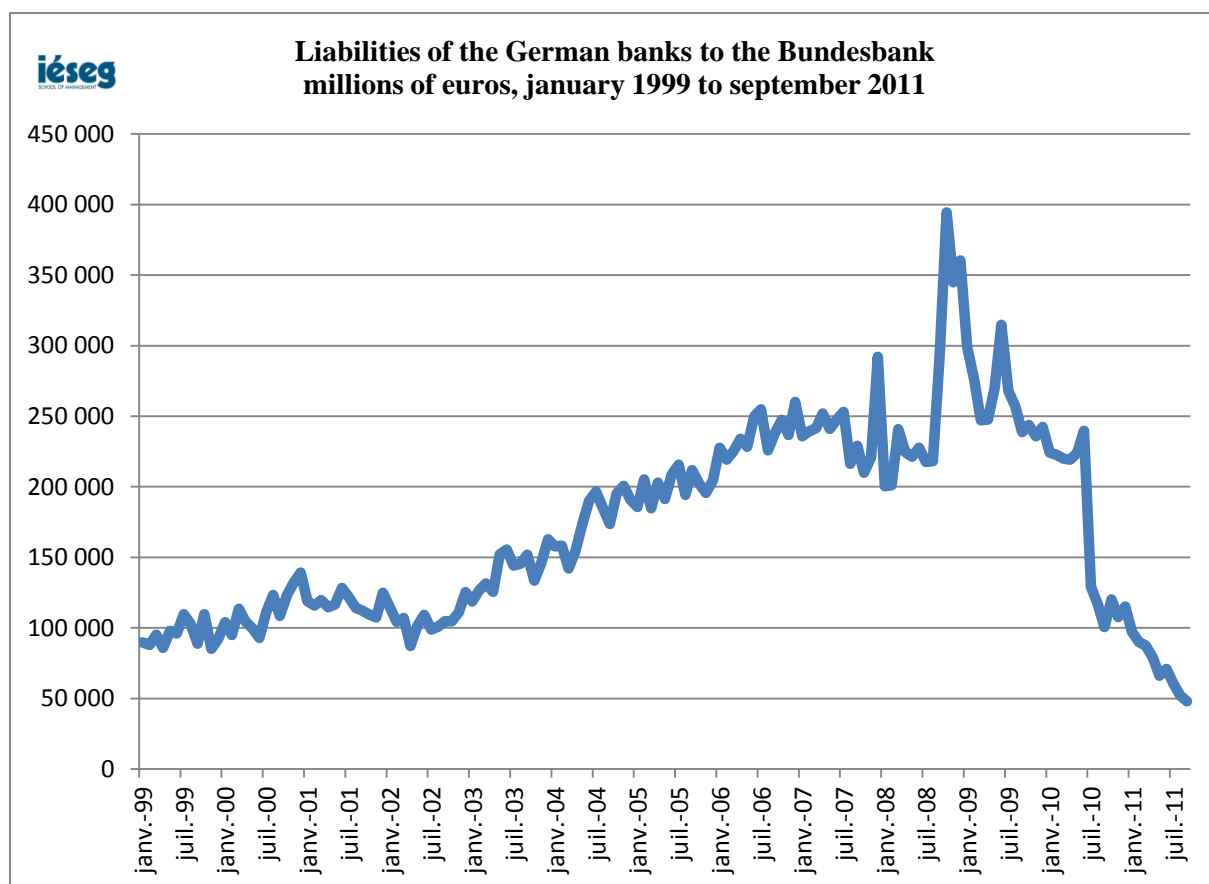
If the departing countries attempt to convert these TARGET2 related debts into their new currencies, despite legal obstacles, the depreciation of these currencies will also cause huge losses to the remaining National Central Banks of the Eurosystem.

Potential losses on the regular refinancing operations of the Eurosystem

As shown above, the growing claims of the Bundesbank and a few other NCB's on the Eurosystem are accompanied by rising loans of the distressed countries' National Central Banks to their commercial banks. In view of the fragility of these banks, and their lack of good quality assets to propose as collateral, the risks of losses have strongly increased for the Eurosystem. The ECB has even been compelled to lower the quality requirements on the assets accepted as collateral from the banks of the distressed countries for the regular refinancing operations of the Eurosystem. The losses on regular refinancing loans to the banks are bear by the whole Eurosystem, independently of which national central bank did provide the loan. Such losses should normally be shared among the different National Central banks according to their share in the part of the capital of the ECB which is held by Eurozone countries. The Bundesbank should thus bear 30% of the losses, and should probably be recapitalized by the German government.

Monetary policy is going to be distorted

In view of the net inflow of liquidities from the rest of the Euro zone, the German banks do not need to borrow liquidities from the Deutsche Bundesbank. To use the excess liquidity flowing in Germany through the TARGET related loans of the Bundesbank to other National Central banks, they even reimburse their net debt to the central bank. This is well described by the recent evolution of the liabilities of German banks to the Bundesbank.



When they will have reimbursed their whole net debt to their National Central Banks, the banks of Germany, Luxembourg, Netherlands and Finland will be in a structural excess of liquidity as long as the imbalances in TARGET2 accounts last. Monetary policy in the Eurosystem will thus have to become asymmetric. The National Central Banks of the “debtor” countries will normally provide liquidities to their banks, but those of the few “creditor” countries will have to absorb liquidities.

How Germany is trapped

Potential unlimited loans of National Central Banks to each other are absolutely necessary for the existence of a currency union. These potentially unlimited loans guarantee that euro balances in the banks of a given country can always be transformed into euro balances of the same value in the banks of another country of the zone. In front of the current capital outflows and breakup of confidence, the Bundesbank and a few other national central banks are mechanically compelled to grant growing loans to peripheral countries. It means that the balance of payments imbalances of the distressed countries benefit from a kind of monetary funding by the Bundesbank.

References

Abad, J., A. Löffler and H. Zemanek, 2011, TARGET2 Unlimited: Monetary Policy Implications of Asymmetric Liquidity Management within the Euro Area, July.

Bindseil, U. and P. Johann König, 2011, The economics of TARGET2 balances, Humboldt-Universität zu Berlin, Discussion Paper 35.

Buiter, Rahbari and Michels, 2011, The implications of intra-euro area imbalances in credit flows, Citigroup and CEPR, 57.

Bundesbank, 2011, The dynamics of the Bundesbank's TARGET2 balance, Monthly Bulletin, March, p 34-35.

Garber, P., 2010, The Mechanics of Intra Euro Capital Flight, Special report, Deutsche Bank Global Market Research.

Sinn, H. W. and T. Wollmershäuser, 2011, Target Loans, Current Account Balances and the ECB's Rescue Facility, CESifo Working Paper.

Whittaker, J., 2011, Intra-eurosystem debts, working paper, Lancaster University Management School, March.