# **Economic Brief**

# **TARGET2: Symptom, Not Cause, of Eurozone Woes**

By Thomas A. Lubik and Karl Rhodes

In recent years, large positive and negative balances have arisen in TARGET2, the interbank settlement and payments system of the Eurozone. These balances show that the Deutsche Bundesbank, the central bank of Germany, has become a large net creditor to the European Central Bank (ECB). Conversely, they show that central banks in the periphery nations of Portugal, Ireland, Italy, Greece, and Spain have become significant net debtors to the ECB. Critics of the Eurosystem have portrayed these balances as a "stealth bailout" of the periphery nations, but TARGET2 merely reflects persistent imbalances in current accounts and capital accounts. It does not cause them.

TARGET2 is the interbank settlement and payments system of the European Monetary Union (EMU). The EMU established TARGET2 in 2007 to replace TARGET, a system that debuted in the 1990s. The acronym stands for Trans-European Automated Real-time Gross settlement Express Transfer.

In an accounting sense, TARGET2 is the ECB. It facilitates and records the flow of funds among the Eurozone's 17 member nations. TARGET2 clears payments between banks in different Eurozone countries via the ECB and each country's national central bank (NCB). Commercial banks in the system maintain accounts at their respective NCBs. When a Greek bank transfers money to a German bank, for example, TARGET2 debits the Greek bank's account at the Bank of Greece and credits the German bank's account at the Deutsche Bundesbank. The Bundesbank incurs a new liability (the deposit from the German bank) that is offset by a new asset (a claim against the ECB.) Since the advent of the Eurosystem, similar transactions have caused funds to flow both ways, but in the past five years, the Bundesbank has become a large net positive claimant, and the periphery nations have become significant net negative claimants. In principle, there is no limit to such balances, and it is important to note that TARGET2 claims do not represent bilateral loans between individual NCBs. The claims are between the NCBs and the ECB, which is the only true central bank in the Eurosystem. For the purposes of TARGET2 accounting, the NCBs can be thought of as branch offices of the ECB, an arrangement that is somewhat similar to the relationship between the Federal Reserve and the 12 semi-autonomous regional Reserve Banks in the United States. (The ECB has its own balance sheet, however, while the Federal Reserve's balance sheet is merely a consolidation of the individual balance sheets of the regional Reserve Banks.)

## **Large Balances Emerge**

Figure 1 shows the evolution of selected countries' net claims under TARGET and TARGET2

Germany 600 Ireland Greece 400 Billions of Euros Spain 200 Italy Portugal 0 -200 -400 Apr-04 Apr-05 Apr-06 Apr-07 Apr-08 Apr-09 Apr-10 Apr-11 Apr-12

Figure 1: Selected Net TARGET and TARGET2 Balances within the Eurosystem

Sources: Institute of Empirical Economic Research - Universität Osnabrück, Individual Central Banks, and International Financial Statistics

from April 2004 through April 2012. For the first decade under the common currency, net claims were relatively small and constant. Beginning in late 2008, however, large negative balances began to appear, first at the Central Bank of Ireland, then at central banks in Greece, Spain, and Portugal. By April 2012, central banks in the periphery nations were carrying combined negative balances of 851 billion Euros, while the Bundesbank was carrying positive net claims of 644 billion Euros.

The periphery nations ran current account deficits throughout the 2000s. But before the European debt crisis, those deficits were financed by capital inflows in the form of foreign direct investment and portfolio investment. For example, transfers of Euros from Greece to Germany to buy tractors or other equipment were offset indirectly by transfers of Euros from Germany to Greece to purchase Greek bonds. As long as such payments were roughly equal in the aggregate, persistent current account deficits did not create large TARGET2 balances.

Leading up to the European debt crisis, however, foreign direct investment and portfolio investment in the periphery nations began to dry up. Widespread capital flight from the banking systems of the periphery nations compounded this problem.

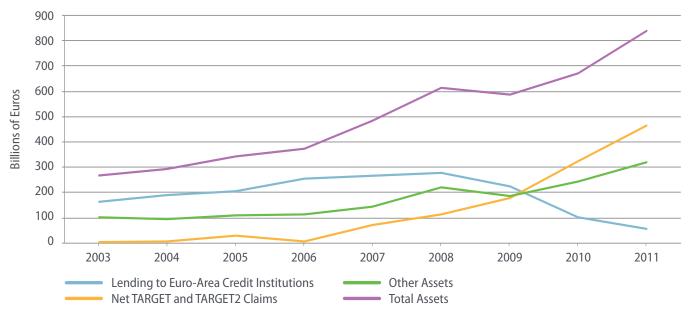
When commercial banks in the periphery nations could no longer accommodate withdrawals from demand deposits, their banking systems faced collapse. To prevent systemic bank failures and the economic turmoil that would have ensued, the ECB and the respective NCBs engaged in various forms of emergency lending during the European debt crisis. In this sense, the ECB has financed deterioration in capital accounts caused by capital flight, but TARGET2 simply keeps track of those transactions. It does not cause them.

### A Stealth Bailout?

Some critics of the EMU, most notably Hans-Werner Sinn, president of the Ifo Institute at the University of Munich, have argued that TARGET2 has perpetrated a stealth bailout of periphery nations. They claim that TARGET2 has distorted capital flows in Europe, allowing the periphery nations to live beyond their means while crowding out money and credit in Germany and other creditor nations.

Other economists, such as Karl Whelan at University College Dublin, have countered that there is a huge difference between the Bundesbank holding TAR-GET2 claims against the ECB and the Bundesbank lending money directly to the Bank of Greece.<sup>2</sup> Holding claims against the ECB is much safer because the

Figure 2: Assets of the Deutsche Bundesbank



Sources: Annual Reports of the Deutsche Bundesbank

ECB is far less likely to default. Even if the ECB needed to be recapitalized at some point, the Bundesbank would be required to underwrite only 27 percent of the cost, a portion based on the Bundesbank's original capital share in the ECB. (The Banque de France is the second largest "shareholder" with a 20 percent stake.) Even if Greece exited from the EMU and defaulted on all its obligations to the ECB, the Bundesbank's exposure would increase only slightly. The Bank of Greece's stake in the ECB (less than 3 percent) would be divvied up proportionately among the remaining members of the EMU, pushing the Bundesbank's potential exposure closer to 28 percent.

Even if the ECB had to be recapitalized following a hypothetical Greek default, TARGET2 would not be the cause. It is merely a scorecard that reflects the long-term outcomes of the lending and collateral policies of the ECB. Those policies (such as accepting Greek sovereign bonds as collateral) may indeed represent a bailout, but TARGET2 does not obscure those actions. Quite the opposite, TARGET2 keeps a running account of positive and negative claims against the ECB.

Another argument made by Sinn is that the Bundesbank's burgeoning claims against the ECB are crowd-

ing out loans to commercial banks in Germany. Figure 2 seems to support this view. Beginning in 2007, the Bundesbank's claims against the ECB increased dramatically, while its loans to financial institutions increased slightly for two years and then fell sharply. It appears that the Bundesbank has been substituting "bad" assets (TARGET2 claims associated with weak collateral from periphery nations) for "good" assets (loans to German banks).3

This impression is misleading. There is a link between TARGET2 balances and the distribution of reserves across NCBs, but this link has no adverse effect on German liquidity.<sup>4</sup> In fact, the net claims position of the Bundesbank indicates that German banks are receiving large amounts of cross-border payments from banks in other countries. This is one of the main reasons why German banks have required less funding from the Bundesbank in recent years. Moreover, all commercial banks in Germany with acceptable collateral have been able to borrow adequate funds throughout the European debt crisis.

#### Parallels to the Fed

Sinn also suggests that the ECB should limit TARGET2 balances or settle them periodically as the Federal Reserve does with interdistrict settlement account (ISA) balances among the 12 regional Reserve Banks.

400 300 200 **3illions of Dollars** 100 0 -100 -200 -300 Apr-03 Apr-04 Apr-05 Apr-06 Apr-07 Apr-08 Apr-09 Apr-10 Apr-12 Apr-11 Fifth District (Richmond) Second District (New York)

Figure 3: Interdistrict Settlement Account Balances at the Richmond Fed and the New York Fed

**Note:** Interdistrict settlement account balances at other Reserve Banks also moved farther from zero, but balances at the Richmond Fed and the New York Fed were by far the most volatile. **Source:** Board of Governors of the Federal Reserve

In April of each year, the Board of Governors and the New York Fed calculate the average daily balance (positive or negative) of each Reserve Bank's ISA during the preceding year. The New York Fed then increases or decreases each Reserve Bank's ISA by the amount of its average daily balance in exchange for an offsetting decrease or increase in each Reserve Bank's securities holdings in the System Open Market Account. This annual rebalancing generally pushes each Reserve Bank's ISA closer to zero, but it does not reset the accounts to zero because the accounting exercise uses an average daily balance instead of the balance on settlement day in April.

In the years leading up to the financial crisis of 2008, ISAs at all 12 Reserve Banks stayed relatively close to zero. The New York Fed account occasionally strayed into negative territory, but the April rebalancing procedures brought it back in line. (See Figure 3.) Beginning in fall 2008, however, ISA balances at the Richmond Fed and the New York Fed diverged quickly and sharply from zero as the Federal Reserve System engaged in foreign currency swaps and other liquidity operations to help stimulate and stabilize domestic and international financial markets. Those actions had a disproportionate effect on the New

York Fed because it carries out transactions for the entire system. In addition, the international operations had a disproportionate effect on the New York Fed and the Richmond Fed because the resulting foreign currency denominated assets were allocated to Reserve Banks based on their member banks' paidin capital. New York and Richmond rank first and second, respectively, in that category. Rebalancing in April 2009 and April 2010 moved both banks' ISAs closer to zero, but then the New York account soared to positive \$368 billion and the Richmond account plunged to negative \$149 billion by early 2012, mainly due to large-scale asset purchases in 2010 and 2011. (ISAs at other Reserve Banks also moved farther from zero, but Richmond and New York were by far the most volatile.)

In the context of the TARGET2 debate, these unusual fluctuations prompted some economists to speculate that the Federal Reserve had suspended its April rebalancing procedures in response to the financial crisis.<sup>5</sup> But that was not the case. Rebalancing in April 2012 brought the accounts at the Richmond Fed and the New York Fed close to zero (briefly), but the fact remains that in early 2012, the Richmond Fed was "borrowing" \$149 billion from the Federal Reserve

System, and the New York Fed was "lending" \$368 billion to the System. These large positive and negative balances did not represent a "stealth bailout" of the Richmond Fed and its member banks in the Fifth District, nor did they impede the New York Fed's ability to lend money to financial institutions in its district.

#### Conclusion

There are fundamental differences, of course, between the Federal Reserve System and the Eurosystem. Most notably, Reserve Banks are owned by their member banks, and they serve one country with one national economy and fiscal policy. The NCBs of the Eurozone are owned by their respective countries, each with its own national economy and fiscal policy.

These differences create difficult challenges for the ECB, but TARGET2 does not cause those problems. It merely reflects the long-term lending and collateral policies of the ECB and the relative strength of national economies within the Eurosystem. Placing arbitrary limits on TARGET2 balances at this stage would not solve anything. To the contrary, TARGET2 restrictions would unnecessarily constrain cross-border transactions and ultimately defeat the purpose of the EMU.

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#### **Endnotes**

- <sup>1</sup> Hans-Werner Sinn, "The ECB's Stealth Bailout," VoxEU, June 1, 2011.
- <sup>2</sup> Karl Whelan, "Professor Sinn Misses the Target," VoxEU, June 9, 2011.
- <sup>3</sup> In another analysis of this trend, Aaron Tornell of the University of California, Los Angeles and Frank Westermann of Universität Osnabrück in Germany conclude that the Bundesbank has nearly reached its capacity to absorb TARGET2 claims against the ECB. See "Eurozone Crisis, Act Two: Has the Bundesbank Reached Its Limit?" VoxEU, December 6, 2011.
- <sup>4</sup> For a detailed explanation, see Ulrich Bindseil and Philipp Johann König, "The Economics of TARGET2 Balances," June 14, 2011, SFB 649 Discussion Paper 2011-035.
- Michiel Bijlsma and Jasper Lukkezen, "Target2 of the ECB vs. Interdistrict Settlement Account of the Federal Reserve," Bruegel, March 6, 2012.

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