TARGET BALANCES AND MONETARY POLICY OPERATIONS

Large cross-border payment flows between banks are a normal feature of a financially integrated area. The settlement of cross-border payment flows in the euro area in central bank money creates balances for each national central bank (NCB): the TARGET[1] balances. These balances also reflect the decentralised distribution of central bank liquidity within the Eurosystem. Banking communities in countries facing net payment outflows need more central bank liquidity than those in countries where commercial bank money is flowing in. The decentralised distribution of central bank liquidity within the Eurosystem provides stability, because it allows financially sound banks, including those in countries under financial stress, to cover their liquidity needs, thereby contributing to the effective transmission of the European Central Bank's interest rate decisions to the wider euro area economy, and facilitating the aim of maintaining price stability in the euro area over the medium term.

In mid-2012, the total of TARGET claims (or equivalent liabilities) on the balance sheets of the euro area NCBs reached €1 trillion, before declining on the back of improving conditions and declining fragmentation in the euro area financial markets.

This article explains how, in a context of dysfunctional bank funding markets, large TARGET claims emerged when the Governing Council of the European Central Bank (ECB), in order to maintain price stability over the medium term, decided to accommodate the liquidity needs of solvent banks. The article also shows that figures relating to "cross-border" payments are to be interpreted with caution, as such payments also reflect transactions among multi-country banking groups. It further emphasises that any risk is attached to the Eurosystem operations themselves in the context of the monetary union, and not to the TARGET balances per se. Overall, the TARGET balances are a manifestation of underlying tensions in the Economic and Monetary Union (EMU), highlighting the need for macroeconomic imbalances to be addressed, trust in banking systems to be re-established, and the institutional foundations of EMU to be strengthened.

1 INTRODUCTION

TARGET balances are positions on the balance sheets of the central banks in the euro area.[2] These positions, which were relatively small and stable before the financial and sovereign debt crisis, are large and negative in the euro area countries most under strain and large and positive in the more resilient euro area countries (see Chart 1). Large TARGET balances are essentially the result of the implementation of monetary policy in the euro area in the specific context of the crisis. Given the integrity of the monetary union, TARGET balances do not represent financial risk beyond that inherent in the Eurosystem operations underlying the balances. Such risk is mitigated, in particular through collateral policies.

Making sense of TARGET balances is essential in order to understand the discussion on the potential risk associated with rising TARGET claims. Shedding light on the dynamics of

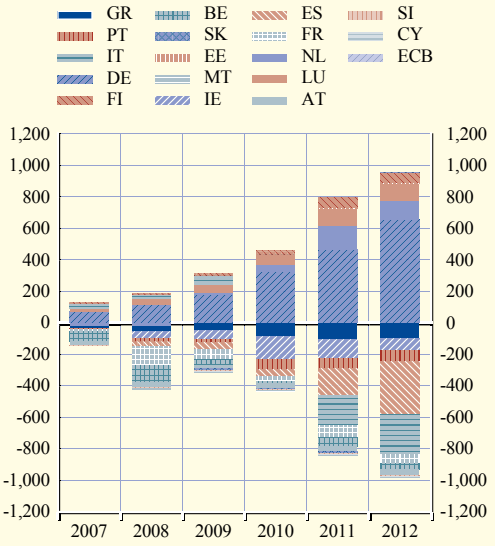
1 TARGET is the "Trans-European Automated Real-time Gross settlement Express Transfer" system. It was replaced by TARGET2 in November 2007, with a transition period lasting until May 2008, by which time all national platforms were replaced by a single platform. For convenience, and except in Box 1, in this article both TARGET and TARGET2 are referred to as "TARGET". For more information on TARGET, see also the "TARGET Annual Report 2011" of the ECB, May 2012, in the quarterly annex to the Monthly Bulletin (last published in March 2013).

2 See also the box entitled "TARGET2 balances of national central banks in the euro area", *Monthly Bulletin*, ECB, October 2011 and the references therein, as well as the box entitled "TARGET2 balances in the Eurosystem in a context of impaired money markets", *Annual Report*, ECB, 2011.

the crisis in the euro area is also helpful.[3] TARGET balances emerge as a result of imbalanced cross-border payment flows between banks in the euro area and the Eurosystem's accommodation, in its operations, of the ensuing liquidity needs of solvent banks, against adequate collateral. TARGET balances reflect funding stress in the banking systems of certain countries. Nevertheless, the notion of "cross-border" itself is blurred in a financially integrated area, such as in the case of transactions within a banking group. This article analyses the TARGET balances in conjunction with the ECB's monetary policy operations. After presenting a number of key facts on the TARGET payment system and describing how TARGET balances emerge from cross-border payments (Section 2), it takes a look at TARGET balances in the light of bank funding stress and Eurosystem operations (Section 3). The article concludes with the economic and policy relevance of TARGET balances (Section 4).

Chart 1 TARGET balances of euro area central banks

(EUR billions)



Source: NCBs and ECB.
Note: The claims or liabilities that relate to TARGET are published regularly by all euro area NCBs as part of their balance sheets.

2 TARGET BALANCES AND CROSS-BORDER PAYMENT FLOWS

2.1 TARGET, THE PAYMENT AND SETTLEMENT SYSTEM

TARGET – "Trans-European Automated Real-time Gross settlement Express Transfer" – is the Eurosystem's real-time gross settlement system, which operates in central bank money. The processing and settlement of euro-denominated payments takes place on an individual basis on the participants' accounts at NCBs connected to TARGET. The transactions are settled in real time with immediate finality, thus enabling the beneficiary bank to reuse the liquidity to make other payments on that day. The system was developed with state-of-the-art technology and thus offers the highest standards of reliability and resilience to its users. Overall, TARGET provides settlement services to approximately 1,000 participants via the 24 central banks that are connected to the system, comprising all euro area NCBs, the ECB, and other NCBs in the European Union (EU) that decided to join TARGET on a voluntary basis.[4]

The payments settled via TARGET relate mainly to transactions between credit institutions and settlements of transactions stemming from other financial market infrastructures; operations with the central bank only account for a relatively small share of the transactions. TARGET settles both interbank and commercial payments without any upper or lower value limit for the transactions.

3 See, for instance, Bindseil, U. and König, P.J., "TARGET and the European sovereign debt crisis", *Kredit und Kapital*, February 2012; Bindseil, U. and Winkler, A., "Dual liquidity crises under alternative monetary policy frameworks: a financial accounts perspective", *Working Paper Series*, No 1478, ECB, 2012; and Cour-Thimann, P., "TARGET balances and the crisis in the euro area", CESifo Forum 14, Special Issue, April 2013.

4 These are the NCBs of Bulgaria, Denmark, Latvia, Lithuania, Poland and Romania.

In providing payment services to its customers, TARGET plays a key role in ensuring the smooth conduct of monetary policy, the correct functioning of financial markets, and banking and financial stability in the euro area, by substantially reducing systemic risk. The settlement of cross-border payments between participants in TARGET results in intra-Eurosystem balances – that is, positions on the balance sheets of the respective central banks that reflect claims/liabilities on/to the Eurosystem. They are reported on the NCBs' balance sheets as TARGET claims – if positive – or TARGET liabilities – if negative (vis-à-vis the ECB as the central counterparty).

2.2 MECHANISM LEADING TO THE EMERGENCE OF BALANCES

TARGET balances occur in the course of the normal business of banks and the cross-border flow of capital. Prior to the onset of the financial crisis, such claims and liabilities of the various NCBs already existed but fluctuated at significantly lower levels. When a bank makes a payment to another bank through TARGET, the current account of the payer at its NCB is debited and the current account of the recipient bank at its NCB is credited. If the transaction is domestic, it has no impact on the aggregate current account of banks at that NCB and thus it does not lead to any change in the NCB's balance in TARGET. If the transaction is cross-border – that is, if it involves banks that are connected to TARGET from two different countries – it affects the aggregate current accounts of banks at the NCBs. The NCB of the payee sees a reduction in its current account and the NCB of the recipient bank sees an increase in its current account.

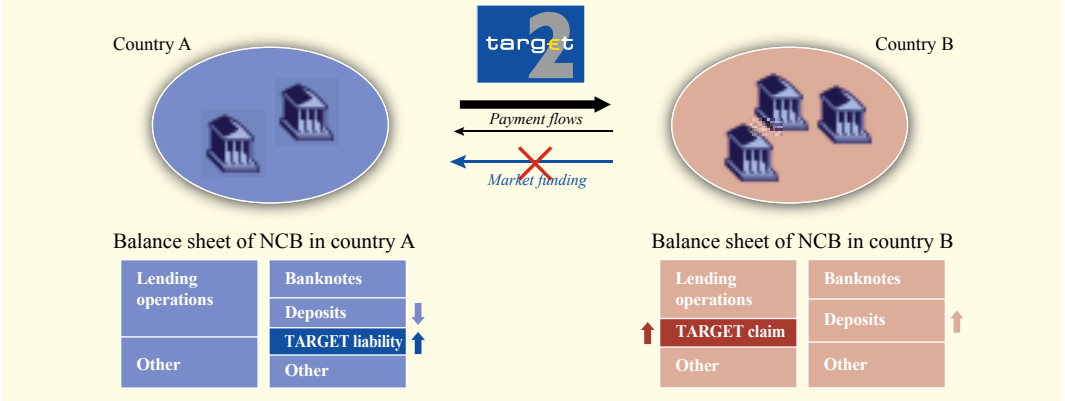
At the end of each day, the central banks' balance sheets are adjusted by assigning to the central banks with a reduction in their current accounts a corresponding liability in TARGET, and to those with an increase in their current accounts a corresponding claim in TARGET. The constellation of bilateral flows between the Eurosystem central banks is then aggregated and netted out, so that each NCB remains with a single net position vis-à-vis the ECB.[5] As a result of this, some NCBs have a TARGET claim and others a TARGET liability vis-à-vis the ECB. The net sum of all cross-border payments from and to banks in other euro area countries that have been settled at an individual NCB on a given day results in a daily change in the TARGET balance of that NCB, as illustrated below:

$$\Delta\text{TARGET balance} = \text{TARGET inflows} - \text{TARGET outflows}$$

An example of the mechanism behind the emergence of TARGET claims and liabilities is illustrated in Chart 2. It considers a transfer of funds between banks in two different euro area countries (from country A to country B) – for example, related to a payment for imports of goods and services or the acquisition of a foreign asset – which is conducted through TARGET, where it is settled in central bank money. As an immediate effect, the transfer of funds implies a reduction in the deposits on the current account of the paying commercial bank at its NCB (NCB A) and an increase in those on the current account of the recipient commercial bank at its NCB (NCB B). At the end of the day, the bank facing a reduction in its deposits would either seek funding in the market or borrow from the Eurosystem. In this simple two-country example, unless the bank in country A compensates for the

5 In order to reduce the size of bilateral imbalances built up quite rapidly in all NCB/ECB intra-system positions, the Governing Council of the ECB decided in 1999 that the TARGET balances, i.e. all TARGET-related claims and liabilities between ESCB NCBs and the ECB, should be netted out daily at close of business by "novation", i.e. by the substitution of all NCB obligations by ECB obligations, leaving each NCB with a single net bilateral position vis-à-vis the ECB only. Such an arrangement was considered to be in line with the principle of an integrated euro area. It came into effect on 30 November 2000.

Chart 2 How TARGET balances emerge



Source: ECB.

initial transfer of funds with fresh money from banks in country B (for example, through borrowing on the interbank market), at the end of the day, NCB A displays a negative TARGET balance and NCB B a positive balance, each vis-à-vis the ECB as the central counterparty.

The mechanism described above operates on a large scale between national banking systems in the euro area. In fact, around one-third of TARGET traffic is made up of cross-border payments. TARGET balances thus reflect the imbalances in payment flows between national banking systems. Banks that have a TARGET account at a given NCB essentially fall under the sector of monetary financial institutions (MFIs) in that country. However, the TARGET balance of the "host" central bank can also be affected by transactions initiated by banking entities that are not part of the MFI sector in that country. For example, any bank established in a European Economic Area (EEA) country with an NCB not connected to TARGET may access TARGET via the NCB of another country, one that is connected to TARGET. Likewise, banks established outside the EEA, which are not eligible to have an account in TARGET, can access the system via a subsidiary in one of the countries connected to TARGET. Additional distortions may also be attributed to banking services in euro which rely on TARGET and are conducted by TARGET participants on behalf of a non-EEA bank.

Another "geographical" feature that may arise in the TARGET balances relates to the centralisation of liquidity management in multi-country banking groups. That is, TARGET allows multi-country banks to carry out their payment activities and manage their euro liquidity from one single account, irrespective of the number of countries in which these groups are active. Typically the single TARGET account is opened at the NCB of the head office, and the other branches or subsidiaries within the banking group channel their payments via the head office (indirect participation). This centralisation gives rise to cross-border flows which would not exist if the group managed its liquidity in a decentralised manner.

3 TARGET BALANCES, BANK FUNDING STRAINS AND EUROSYSTEM OPERATIONS

This section explains how sizeable TARGET balances built up on the NCBs' balance sheets as the financial and sovereign debt crises unfolded, as a result of the high demand for liquidity provided via the Eurosystem's operations at certain NCBs. These large balances reflect the funding strains in some countries and the capital flows into other more resilient countries that arise when the Eurosystem, in its operations, accommodates the liquidity needs of solvent banks, against adequate collateral.

3.1 TARGET BALANCES AND THE IMPLEMENTATION OF MONETARY POLICY

The Eurosystem implements its monetary policy in a decentralised manner, in particular in its monetary policy tender operations. In this context, the 17 NCBs collect bids for central bank liquidity from counterparties and manage the collateral submitted by those counterparties. The ECB receives aggregated information from each NCB and decides on the overall amount to be provided to the counterparties. NCBs inform their counterparties of the results and settle the transactions. Normally the aggregate amount provided to counterparties via all 17 NCBs is equal to the liquidity needs[6] of the euro area banking sector as a whole. Private flows of capital redistribute liquidity between banks with a need and banks with a surplus mainly through the interbank market.

Following the US subprime crisis and the subsequent bankruptcy of Lehman Brothers in September 2008, however, the interbank lending markets ceased to function properly. Secured and unsecured markets became increasingly fragmented[7] and the cross-border flow of private capital became impaired (see Box 1). In order to support the smooth transmission of its interest rate decisions to the wider economy, the ECB decided to accommodate the liquidity needs of banks that could not be satisfied in the financial market. Thus, since October 2008 the Eurosystem has been conducting most of its liquidity-providing tenders with a fixed-rate, full allotment procedure. This means that all bids received from counterparties are fully satisfied, against adequate collateral. In the context of a dysfunctional interbank market, banks could thus turn to the Eurosystem for liquidity. This enabled them to build up buffers to meet future liquidity needs while access to interbank funding was uncertain. As a consequence the Eurosystem provided more liquidity than needed on aggregate by the banking sector, at the same time taking on an intermediation function. This prevented a disorderly deleveraging process and ensuing adverse consequences for the euro area economy and price stability.

As the sovereign debt crisis emerged in some euro area countries, starting in spring 2010, the segmentation in funding markets for banks became more marked along national borders. The central bank intermediation allowed the banking systems in those countries to withstand the withdrawal of private capital and the reversal of cross-border capital flows. The recourse to central bank funding is therefore closely linked to the emergence of significant TARGET liabilities for countries most affected by the crisis and, on aggregate, at the euro area level, as illustrated in Chart 3.[8] The sovereign debt crisis and resulting bank funding market segmentation also led to a flow of capital into the more

6 The liquidity needs of the banking system correspond to the sum of the reserve requirements and the autonomous factors. Autonomous factors essentially include government deposits with the central bank, banknotes, net foreign assets and net assets denominated in euro.

7 See, for instance, "Indicators of market segmentation – media request following the ECB press conference on 2 August 2012" (available at http://www.ecb.europa.eu), and "Financial integration in Europe", ECB, April 2012.

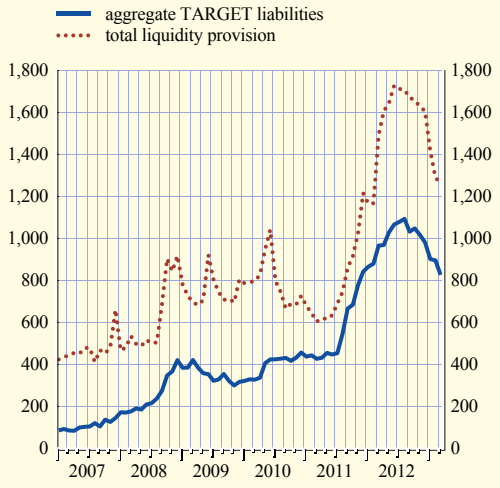
8 Chart 3 represents the sum of the TARGET liabilities of euro area NCBs vis-à-vis the ECB. In the consolidated balance sheet of the Eurosystem, intra-Eurosystem balances (such as those related to TARGET) are not reflected since their sum is zero.

resilient countries, resulting in significant amounts being directed towards the central banks' liquidity-absorbing facilities, for example via use of the deposit facility or via counterparties accruing amounts in excess of their reserve requirements in their current accounts at the central bank.[9] In particular, the repatriation of previous investments and the lack of renewed lending to banks in crisis-hit countries led to significant net payment inflows, a concurrent increase in the TARGET claims of the NCBs in the more resilient countries and an increase in liquidity in the banking systems of those countries. Chart 4 shows the resulting increased liquidity absorption in the form of excess liquidity at the euro area level, the pattern of which is broadly mirrored in the evolution of the overall TARGET claims.

In the second half of 2011 and the first half of 2012 the sharp increase in TARGET liabilities and claims was also due to concerns about the integrity of the monetary union. A number of banks from resilient countries had decided to replace head office funding for subsidiaries in financially stressed jurisdictions with local funding. This meant that borrowing from the Eurosystem replaced inter-group funding from resilient countries. This behaviour was in some cases encouraged by national banking regulators aiming to safeguard their domestic banking system. As will be explained in Section 3.2, the ECB's actions to address concerns about the integrity of the monetary union led to a decline in TARGET balances.

Chart 3 Aggregate TARGET liabilities and total liquidity provision of the Eurosystem

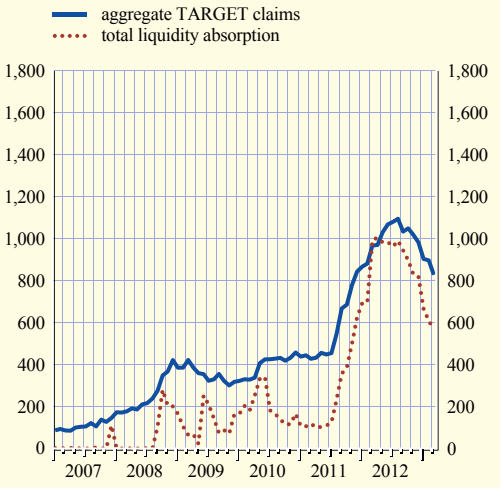
(EUR billions)



Source: ECB.
Note: Total liquidity provision includes main refinancing operations, long-term refinancing operations, the marginal lending facility, outright portfolios (the covered bond purchase programmes and the Securities Markets Programme) and other items (which include Emergency Liquidity Assistance).

Chart 4 Aggregate TARGET claims and total liquidity absorption in the Eurosystem

(EUR billions)



Source: ECB.
Notes: Liquidity absorption includes recourse to the deposit facility, liquidity-absorbing fine-tuning operations and current account holdings in excess of the reserve requirements.

9 These excess holdings have become particularly large as the interest paid on the deposit facility was reduced to 0%, providing no relative advantage in using this facility.

Box 1

USING TARGET2 PAYMENT DATA TO ANALYSE MONEY MARKET CONDITIONS

Interbank money markets are essential for the stability and efficiency of the financial system, and for the distribution of central bank liquidity. Money market rates such as EONIA and EURIBOR are important benchmarks that serve, among other things, as a basis for the pricing of fixed income securities throughout the economy. Well-functioning money markets allow banks to smooth out liquidity imbalances and thus avoid costly asset sales. These markets also play an important monitoring and disciplinary role, as banks constantly assess the quality of their counterparties.[1]

Despite their fundamental importance, relatively little is known about actual transactions in interbank markets since, for the most part, banks trade short-term debt over the counter. Hence, information about the functioning of euro interbank markets currently relies on limited data from electronic trading platforms, or on surveys.[2]

Academics, and central bank researchers in particular, have, however, employed an indirect method of obtaining detailed and comprehensive data on unsecured overnight interbank loan transactions. They have used data from payment systems to reconstruct the unsecured overnight interbank loans that are responsible for the observed payments.[3] For example, an overnight loan of €1 million at 1% interest from bank A to bank B, agreed over the counter, involves two transactions that will be visible in the payment system: a transfer from bank A to bank B of €1 million and, on the following day, a transfer from bank B to bank A of €1,000,027.78.[4] When banks trade liquidity in central bank money, the comprehensive data from payment systems that settle in central bank money can be used to identify overnight interbank transactions. While there is some analysis of interbank markets in the United States (using Fedwire Funds) and in some European countries, reliable and complete information for the entire unsecured euro area interbank money market has only recently been obtained from TARGET2 data.[5]

1 See Rochet, J. C. and Tirole, J., "Interbank Lending and Systemic Risk", *Journal of Money, Credit and Banking,* Vol. 28, No 4, 1996.

2 See, for example, Brunetti, C., di Filippo, M. and Harris, J., "Effects of Central Bank Intervention on the Interbank Market During the Sub-Prime Crisis", *Review of Financial Studies*, Vol. 24, No 6, 2011, which uses data from the Italian e-MID platform. For an example of a survey, see *Euro Money Market Survey*, ECB, Frankfurt am Main, September 2012. Money market rates such as EONIA, EURIBOR or LIBOR and associated volumes, if available, are also survey-based.

3 This method was first published in Furfine, C., "Banks as Monitors of Other Banks: Evidence from the Overnight Federal Funds Market", *Journal of Business*, Vol. 74, No 1, January 2001.

4 Note that the interest is per annum but accrues only for one day. The method usually requires banks to charge some interest, although 1 cent is enough. In practice, matters are more complicated: not all payments relate to interbank transactions (for example, it is not known whether transactions are on behalf of banks' clients); overnight transactions could also involve spot/next and tomorrow/next trades; payments could relate to different transactions at different rates and maturities, making it difficult to extend the method beyond overnight loans (see, however, the references in the next footnote); multiple matches can occur; and holidays and weekends etc. need to be taken into account. Note also that secured transactions using TARGET2 regularly involve simultaneous settlement via central clearing, settlement and security repositories and are therefore easily screened out.

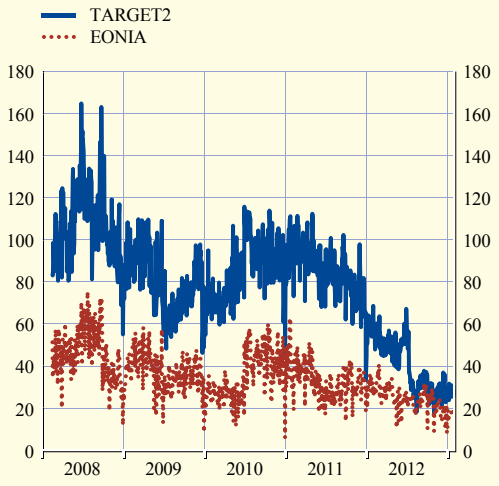
5 See Arciero, L., Heijmans, R., Heuver, R., Massarenti, M., Picillo, C. and Vacirca, F., "How to measure the unsecured money market? The Eurosystem's implementation and validation using TARGET2 data", *DNB Working Paper*, No 369, De Nederlandsche Bank, January 2013. The paper uses payment data to reconstruct overnight as well as longer-term loans, and thus uses an implementation of the Furfine method that differs from the one used for the results presented in this box. For applying the Furfine method to longer maturities, see Kuo, D., Skeie, D., Vickery, J. and Youle, T., "Identifying Term Interbank Loans from Fedwire Payments Data", *Staff Report*, No 603, Federal Reserve Bank of New York, March 2013. For analysis confined to individual countries, see: Afonso, G., Kovner, A. and Schoar, A., "Stressed, Not Frozen: The Federal Funds Market in the Financial Crisis", *The Journal of Finance*, Vol. 66, No 4, August 2011 (United States); Acharya, V. and Merrouche, O., "Precautionary Hoarding of Liquidity and Interbank Markets: Evidence from the Subprime Crisis", *Review of Finance*, forthcoming (United Kingdom); Akram, F. and Christophersen, C., "Norwegian Overnight Interbank Interest Rates", *Computational Economics*, Vol. 41, No 1, January 2013 (Norway); and Guggenheim, B., Kraenzlin, S. and Schumacher, S., "Exploring an uncharted market: Evidence on the unsecured Swiss franc money market", *Swiss National Bank Working Paper*, No 2011-5, Swiss National Bank (Switzerland).

Examining the TARGET2 payment data in their entirety makes monitoring euro area-wide developments possible. Chart A shows one of the benefits of assessing the unsecured overnight euro area interbank market as a whole. The red line represents the value in euro of unsecured overnight interbank lending reported daily by the banks on the EONIA panel.[6] The blue line represents the value in euro of unsecured interbank activity according to the TARGET2 payment data. EONIA panel banks account for about half of the total activity. Prior to the Lehman Brothers bankruptcy in September 2008, banks on the EONIA panel reported unsecured overnight lending with a value of approximately €60 billion. At the same point in time, the value constructed from TARGET2 payment data, which consist of the trading activities of several hundred banks, was around €120 billion. While the EONIA data provide reliable information about trends – note the reduction in value after the Lehman Brothers bankruptcy and after 2010 as the sovereign debt crisis worsened – these trends are more pronounced in the TARGET2 data. This is consistent with larger banks, such as those on the EONIA panel, being more resistant to adverse market developments. In particular, the drop in TARGET2 values since 2011 indicates an imperfect functioning of the unsecured overnight money market.

Chart B shows another benefit of monitoring money markets using payment data. Since the underlying information is at the level of individual transactions, it can be aggregated at different levels to examine specific questions. Chart B, for example, plots cross-border unsecured overnight interbank activity as a percentage of total unsecured overnight interbank activity. This cannot be done with the EONIA data, which are aggregated at the level of the lending bank and then reported publicly as an overall aggregate number.

Chart A Unsecured overnight interbank activity: a comparison between EONIA and TARGET2 data

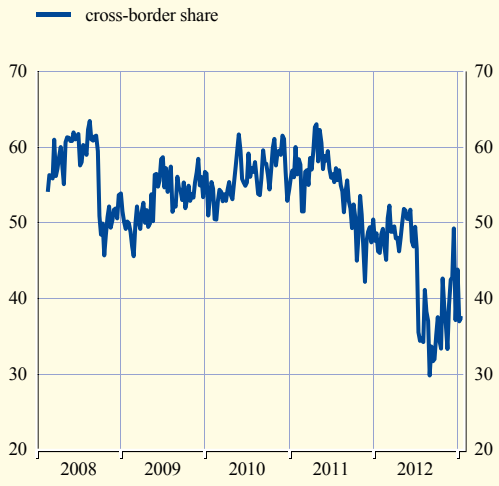
(EUR billions)



Source: ECB.
Note: Data exclude intra-banking group transactions.

Chart B Cross-border unsecured overnight interbank activity

(as a percentage of total unsecured overnight interbank activity)



Source: ECB.
Note: Data exclude intra-banking group transactions.

6 The EONIA panel consists of banks with the highest volume of business in the euro area money markets (see http://www.euribor-ebf.eu). The composition of the panel changes over time. It currently consists of 39 banks. Note that EONIA volumes do not necessarily reflect transactions settled in central bank money. Hence, there is no perfect correspondence between EONIA and TARGET2 volumes even for the set of EONIA panel banks.

The share of cross-border unsecured overnight interbank activity declined after the Lehman Brothers bankruptcy in September 2008. It then recovered gradually before declining markedly during the intensification of the sovereign debt crisis. This suggests that not only has the unsecured overnight euro area money market shrunk (see Chart A), it has also fragmented.[7]

Using payment data to reconstruct interbank loans offers significant advantages, despite being an indirect method. The information is based on actual transactions, is highly granular and is available in real time. First developed for research, this methodology, when complemented with other, more standard, information sources (e.g. surveys or private sector analysis), allows policy-makers to better understand money market developments.

7 For an assessment of developments in euro area money markets, see Cœuré, B., "The importance of money markets", speech, June 2012, available on the ECB's website (http://www.ecb.europa.eu).

3.2 TARGET BALANCES AND FINANCIAL RISK

TARGET balances arise in conjunction with the implementation of monetary policy by the Eurosystem. Thus, they do not represent financial risk beyond that inherent in the Eurosystem operations. This risk is mitigated through a protective risk control framework by virtue of which only financially sound counterparties can receive funding from Eurosystem credit operations, and always against adequate collateral. Any specific risk mitigation measures for TARGET balances would be redundant.

All Eurosystem credit is given to counterparties only against eligible collateral, to protect the central bank against losses arising from the potential default of a counterparty. In principle, the list of eligible collateral is uniform throughout the euro area and encompasses a wide range of assets. The value of collateral posted by counterparties is calculated daily and haircuts are applied to safeguard against possible liquidation losses should a counterparty default. These measures are important elements of the Eurosystem's risk control framework.

In the event of a counterparty's default on an obligation arising from Eurosystem credit operations, the collateral is seized and sold in the market to mitigate potential losses. In general, if the anticipated cash receipts linked to the collateral are insufficient to cover the counterparty's obligation, then at the time of the default each euro area NCB records a provision equal to its share in the total amount of that expected loss. This share is determined according to the capital key prevailing at the time of the default. These provisions are reviewed and adjusted accordingly at the end of each financial year by the Governing Council of the ECB.

An exception to the Eurosystem risk-sharing practice is the framework for Emergency Liquidity Assistance (ELA). The use of ELA by counterparties[10] is subject to comprehensive and regular evaluation by the Governing Council of the ECB and is only available for solvent institutions. In the case of ELA, the risk is borne by the NCB granting it and is not shared by the Eurosystem; however, it is still always backed by adequate collateral. Additionally, the cost of ELA is substantially higher than that of Eurosystem facilities, thereby reducing the incentive for counterparties and compensating NCBs to take on the additional risk. In relation to the TARGET

10 On 31 December 2012 the balance sheet item "Other claims on euro area credit institutions denominated in euro" (which includes ELA) amounted to 13% of the liquidity provided by the Eurosystem, as defined by the aggregate described in Chart 3.

balances, refinancing provided under ELA can also be used to offset a decline in cross-border funding and would increase TARGET liabilities if used to repay maturing cross-border liabilities.

In order to ensure that solvent banks are not liquidity-constrained, with associated implications for the funding of the euro area economy and for price stability, the Eurosystem has taken a variety of measures to extend the availability of collateral. This has included allowing for a wider range of non-marketable assets (additional credit claims[11]), lowering the rating threshold and allowing assets denominated in pounds sterling, US dollars and Japanese yen. In addition to its efforts to broaden collateral availability, the Eurosystem continually monitors and revises its risk control framework, for example with regard to eligibility criteria and applicable haircuts and limits, with the aim of maintaining the Eurosystem's risk exposure at appropriate levels.

The presence of TARGET claims and liabilities is natural given the decentralised structure of the Eurosystem. Internal positions also exist among the 12 Reserve Banks of the US Federal Reserve System (see Box 2). However, the current high levels of TARGET balances reflect the supportive role played by the Eurosystem in relation to the banking system and its intermediation role on the money markets during the ongoing financial market tensions. To some extent, TARGET balances thus constitute a substitute provided by the public (central bank) sector for what would normally be private claims among commercial banks, with associated implications in terms of risk shifting from the private sector to the balance sheet of the Eurosystem. Nevertheless, the size of the TARGET balances does not pose additional risk to the Eurosystem or the NCBs given the irreversibility of the euro and the integrity of the Eurosystem. Any measures designed to contain the size of TARGET balances would imply the introduction of other policy objectives alongside the Eurosystem's primary objective of price stability.

As illustrated above, the presence of TARGET imbalances is in fact strongly connected to the non-standard measures taken by the Eurosystem (fixed-rate, full allotment procedures, an expanded collateral framework, long-term refinancing operations) and, just as these measures are by design temporary, the concurrent TARGET imbalances can be expected to decline to levels more consistent with historical norms as financial market conditions normalise.

As can be seen in Charts 3 and 4, a marked decline already took place after the summer of 2012, reversing the increase observed in the previous months. At that time, fears about the reversibility of the euro had been adding to bank funding stress and capital flight from countries such as Spain and Italy. The ECB President's declaration on 26 July 2012 that "within its mandate, the ECB is ready to do whatever it takes to preserve the euro" showed the ECB's commitment to preventing such fears from materialising. The subsequent decision by the Governing Council of the ECB to introduce Outright Monetary Transactions as a "fully effective backstop to prevent destructive scenarios from materialising", the modalities of which were announced on 6 September 2012, was followed by a return of capital flows to countries under stress and in turn a decline in TARGET balances. The early repayments in the context of the three-year longer-term refinancing operations as from January 2013 also led to a further decline in the outstanding amount of Eurosystem liquidity provided to banks in the euro area and a commensurate decline in TARGET balances.

11 Decisions on the risk control measures applied to additional credit claims are taken by the NCBs accepting this collateral. The NCBs also assume the risk associated with the acceptance of this collateral.

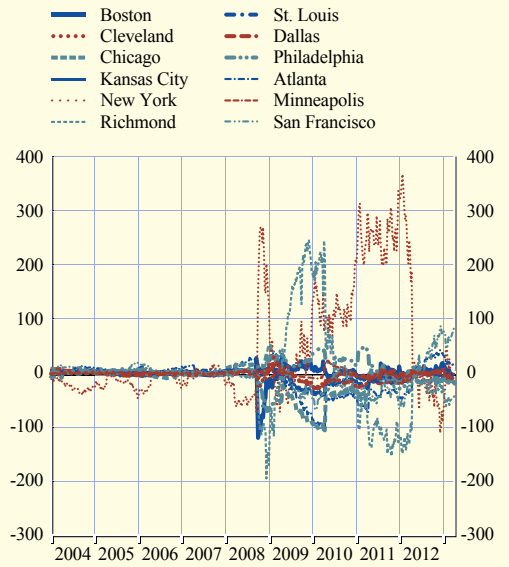
Box 2

INTERNAL POSITIONS AMONG THE RESERVE BANKS OF THE US FEDERAL RESERVE SYSTEM

The US Federal Reserve System, like the Eurosystem, has a decentralised structure. The 12 district Reserve Banks used to have relatively small and stable interdistrict positions, but these grew during the financial crisis (see Chart). The Reserve Banks have either positive or negative positions, called interdistrict settlement accounts, which can be seen as being similar to the intra-Eurosystem balances in the euro area. During the crisis, sizeable balances also arose in the Federal Reserve System as a result of imbalanced payment flows between banks across the US districts.

Interdistrict settlement accounts of the US Federal Reserve System

(USD billions)



Source: Archival Federal Reserve Economic Data.
Notes: Last observation: 24 April 2013. The sum of the balances amounts to zero.

During the crisis, the Federal Reserve also increased its provision of central bank liquidity, largely through asset purchases conducted by one Reserve Bank (the Federal Reserve Bank of New York) on behalf of the whole system. Even if this differs from liquidity provision in the Eurosystem, which takes place, essentially, through lending operations, the result is similar and internal positions are generated among Reserve Banks. Central bank liquidity flows into the bank accounts of the asset sellers at the various Reserve Banks. Thus, like in the euro area, it was the difference in cross-district payment flows, combined with the distribution of central bank liquidity throughout the US districts, that generated balances among the Reserve Banks.

In contrast to the Eurosystem, the internal balances in the Federal Reserve System are settled once a year against the assets held by the system as a whole. This means that the balances are brought back to more neutral positions once a year.[1] As a result of this process, the Reserve Banks with negative internal balances receive a smaller share of the asset holdings, and thus a smaller share of profits, than the Reserve Banks with positive internal balances.

However, this settlement process, has no practical consequences for the individual Reserve Banks, or for cross-district payment flows. It is, rather, an accounting exercise within a politically integrated area. The districts do not correspond to geographical borders of political entities in the United States – they do not even correspond to the borders of the states – and the net profits of the Reserve Banks eventually go to the Federal Government.

1 The positions are not brought back to zero given that the average position aver the preceding 12 months is considered for settlement.

In the euro area, a requirement to settle TARGET balances against assets could not be implemented in practice, as a commensurate pool of homogenous assets is not available to the NCBs. If such a requirement were to translate into creating disincentives to cross-border payment outflows or discouraging access to the Eurosystem operations at certain NCBs, this would imply a renationalisation of monetary policy, which is incompatible with an integrated currency area.[2]

2 Cour-Thimann, P., "TARGET balances and the crisis in the euro area", CESifo Forum 14, Special Issue, April 2013.

4 CONCLUSION

Large TARGET balances are a manifestation of underlying tensions in EMU in terms of banks' access to market funding across the euro area. At the same time, they reflect the increased intermediation of the Eurosystem in bank funding, which resulted from the decisions taken by the Governing Council of the ECB during the crisis in the interests of maintaining price stability over the medium term in the euro area.

TARGET balances emerged as a result of the measures taken by the Eurosystem to repair the transmission mechanism for monetary policy so as to ensure price stability. The increased liquidity provision by the Eurosystem prevented the disorderly deleveraging of banks within the euro area, despite the sudden halt in private financial flows, meaning that solvent banks in crisis-hit countries could remain liquid.

The possibility for internal positions to emerge between central banks is at the core of the functioning of a currency union. Discouraging TARGET balances would imply the imposition of objectives other than price stability on monetary policy. In addition, it would imply the discouragement of certain cross-border capital flows and of access to Eurosystem operations by certain NCBs, which would be at odds with a single monetary policy for an integrated area.

TARGET balances do not represent any financial risk beyond that inherent in the Eurosystem operations against the background of a cohesive monetary union. The way to obtain a durable reduction in the reliance of banking systems on central bank liquidity and thereby in TARGET balances is to address the root causes of the crisis. This means improving fiscal and economic policies, particularly in the countries under strain; re-establishing trust in the banking systems and overcoming financial market segmentation in the euro area; and strengthening the institutional foundations of EMU. In particular, an integrated bank supervision and resolution scheme at the euro area level would contribute to breaking the adverse link between sovereigns and banks, as well as to overcoming market segmentation along national borders.