II.2. Capital flows into vulnerable countries: official and private funding trends

Introduction

With regard to the macroeconomic performance of the euro area since the beginning of the economic and financial crisis, two remarkably different perspectives are notable. On the one hand, the euro area has shown relative stability in terms of the euro's external value and its aggregate current account balance with the rest of the world. (29) On the other hand, numerous Member States witnessed major falls in economic output and employment during this period, as well as suffering large rises in sovereign financing rates on the back of a near-ubiquitous fiscal deterioration across the euro area.

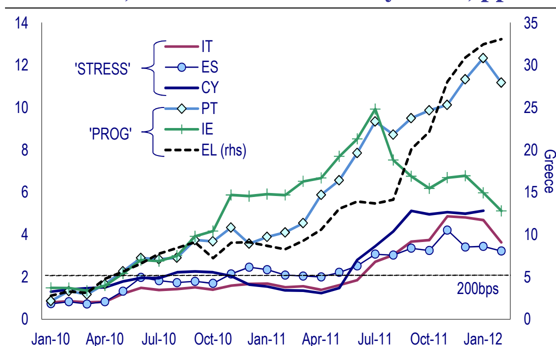
Against this background of the euro area's relative external stability in times of such macroeconomic upheaval, this section investigates current account and financial investment flows in the euro area since the start of the crisis. It aims to answer two main questions: Given the current account imbalances and their nascent correction in the euro area, what have been the financial counterparts to these current account flows? And what role have institutional arrangements in the euro area played in supporting current account positions and preventing their disorderly unwinding?

Widening of country risk premia

After years of relatively steady (though divergent) growth across euro area Member States, the crisis has brought both cyclical and structural differences between Member States to the fore. A clear reflection of such differences is also found in financial markets' pricing of sovereign credit risk, following years of near-indiscriminate credit risk valuation for advanced economies. Graph II.2.1 illustrates this reappraisal using sovereign yield spreads over 10-year Bunds, showing a remarkable dispersing of implied credit risk over a relatively short period of time. The depicted risk premia also signify a wider country risk divergence that goes well beyond the general government sector, as fiscal positions, banking sector health, and growth prospects became increasingly interdependent during the crisis.

Grouping euro-area Member States according to their average sovereign yield spreads since between January 2010 and February 2012, three main risk groupings are apparent. While corresponding to low, medium and high risk categories, these are labelled 'core', 'stress' and 'programme'. (30) The 'stress' group is so named due to the acute market stress that affected Italy, Spain and Cyprus in the summer of 2011 and that has exerted lasting upward pressure on yield spreads. These groupings will serve throughout the section as focussing concepts for the analysis of capital flows, which one can hypothesise to be related to macroeconomic (including sovereign) risk factors. On occasion a fourth category for new euro-area members (Estonia, Slovakia, Slovenia, Malta) will be added for illustration.

Graph II.2.1: **Sovereign yield spreads over 10y Bunds, 2010 - Feb '12 monthly mean, pps.**



Source: EcoWin

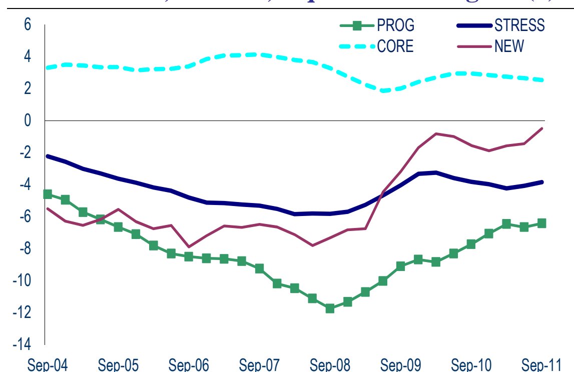
Current accounts showed limited change

Current account imbalances across Member States are one of the principal manifestations of macroeconomic heterogeneity within the euro area, in particular of the differences in saving and investment patterns. Graph II.2.2 shows the development of current account balances across the four aforementioned groups.

(29) Between September 2008 and February 2012, the euro consistently remained within a ±12% fluctuation band from its 10-year average (nominal effective basis, 12 partner countries), and during the crisis period was on average 3% above this long-term average. The quarterly current account for the EA-17 fluctuated between +0.7% of GDP and -1.8% between 2008 Q4 and 2011 Q3, with a lower standard deviation than over the 1999-2008 Q3 period.

(30) Dividing lines between the three categories are drawn at average 10y yield spreads of 200 bps and 500bps respectively during the 2010-12 period. 'Core' countries with low average yield spreads are Austria, Belgium, Germany, Finland, France, Luxembourg and the Netherlands. The medium-risk 'stress' group is so named due to the acute bond market stress that affected Italy, Spain and Cyprus in the summer of 2011 and that has exerted lasting upward pressure on yield spreads. It should not come as a surprise that the 'high risk' group (Greece, Ireland, Portugal) is identical with those countries under EU/IMF financial assistance programmes. The remaining EA-17 Members (Estonia, Slovakia, Slovenia, Malta) are treated as a separate category.

Graph II.2.2: **Current account balances in euro area, % GDP, 4 quarter moving av. (1)**



(1) weighted by national GDP; PROG = (EL, PT, IE); STRESS = (CY, ES, IT); CORE = (AT, BE, DE, FI, FR, LU, NL) NEW = (EE, SK, SI, MT)
Source: Eurostat

A clear deteriorating trend is evident for both 'programme' and, to a lesser degree, 'stress' countries between 2004 and the outbreak of the crisis in late 2008. This was driven by sharp declines in real interest rates and capital costs which made borrowing and investment relatively attractive and led to significant inflows of foreign capital to these countries. New euro-area Members (accession of whom was not certain for much of the pre-crisis period, however) show only a limited deficit widening over the period. While generally the appearance of (transitory) current account deficits is consistent with convergence processes at work that channel foreign investment into faster-growing economies, new Members with the greatest convergence potential nonetheless showed comparatively lower – and indeed more temporary – current account deficits. This underscores the possible misallocation of foreign capital to a number of Member States including programme countries. ([31])

The crisis marks a turning point for the three groups of deficit countries, as current accounts improved on average in all three, though much more so for new members, who also showed a more limited deterioration in the pre-crisis period. There are, however differences in the adjustment process across countries. While new Member States have adjusted significantly by bringing domestic saving and investment rates close to balance, programme and stress countries still show sizable deficits even after several years of crisis. The surplus countries of the core (barring France) recorded a steadier current account position on average. Overall, the sizeable current account deficits run by programme and stress countries to date correspond to a continuous need for net external funding inflows from other countries.

EU/IMF financial assistance and Eurosystem financing as a market surrogate

By definition, the sum of current account, capital account and financial account balance equals zero, in the absence of errors and omissions in the balance of payments. ([32]) Capital account balances are typically small for advanced economies, therefore financial account surpluses are the main counterpart to current account deficits. Up until the crisis, virtually all financial account flows in the euro area consisted of 'market-intermediated' flows while virtually no official multilateral lending and only limited transfers of central bank deposits between Eurosystem members took place. Since the Lehman collapse in September 2008, growing market concerns about solvency and liquidity – initially of banks, but increasingly of their sovereigns as implicit guarantors - left a number of euro-area Member States faced with sudden and large withdrawals of private funding and an inability to finance themselves at affordable interest rates on international capital markets.

Institutional arrangements in the euro area had to be adjusted to dampen the impact of a 'sudden stop' of foreign capital inflows that might have otherwise triggered sovereign defaults and posed a risk of contagion for the euro area as a whole. This initially included temporary facilities such as the Greek loan facility, the EFSF (European Financial Stability Facility) and the EFSM (European Financial Stability Mechanism). Greece (starting in May 2010), Ireland (January 2011) and Portugal (May 2011) have drawn external funding from these facilities. The programmes were designed by the European Commission and IMF, in liaison with the ECB, to cover financing needs and to address country-specific vulnerabilities of the Member States concerned in the structural, fiscal and financial domain. The European Stability Mechanism (ESM), the permanent rescue fund with an

([31]) External rebalancing mechanisms within the euro area are examined further in European Commission (2011), "Sectoral implications of external rebalancing", *Quarterly Report on the Euro Area*, Vol.10 No. 3.

([32]) An economy's balance of payments measures economic transactions between residents and the rest of the world, and is divided into three principal accounts: The current account, (measuring goods and services trade, investment income and current transfers), the capital account (transfers of fixed assets and debt cancellations) and the financial account (transactions in financial assets and liabilities).

effective lending volume of €500bn, will be operational in mid-2012. ([33])

Moreover, banking sectors in the euro area have benefited from the liquidity-providing operations by the Eurosystem. Euro-area membership implies that banking sectors in Member States can obtain funding via national central banks at the current ECB refinancing rate. During the crisis, the provision of liquidity was expanded by the ECB through a number of operative measures in order for monetary policy objectives to be achieved in the challenging economic and financial environment. For instance, full allotment at the policy rate was offered under main as well as long-term refinancing operations. Requirements for participating in the Eurosystem's collateralised operations were lowered, while at the same time certain safeguards such as larger collateral margins were applied to protect the ECB's balance sheet. In addition, some National Central Banks (NCBs) had to provide emergency liquidity assistance. As a result, euro-area banks could cover a larger share of their financing needs through refinancing operations with the Eurosystem, instead of market funding.

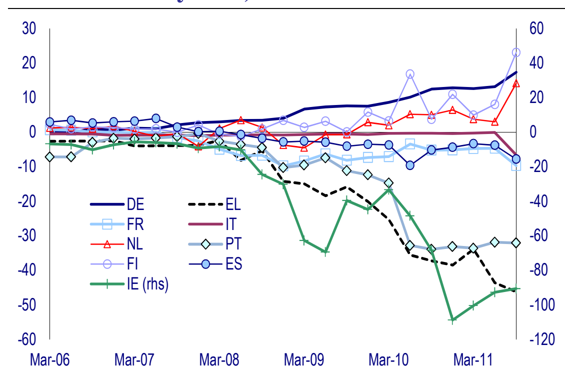
These institutional adjustments to the economic policy arrangements in the euro area allowed the public sector to offset a large part of private foreign funding outflows and thereby also allowed for the continued financing of trade flows within the euro area. Graph II.2.4 illustrates this for the three programme countries, where current account deficits were among the highest in the euro area and the crisis has had the largest impact on external financing flows.

In all three countries current account deficits were in the pre-crisis period almost exclusively covered through 'private' financial flows, without involving major multilateral lending or creating significant net asset or liability positions of NCB's vis-à-vis the Eurosystem. When the first ripples of financial turmoil originating in the US began affecting European banks in early 2008, an outflow of private funding set in that accelerated until 2010. Liquidity provided by the Eurosystem was transferred through the so-called 'TARGET2' payments system to offset these outflows of private funding.([34]) The continued net external financing need represented by the current account deficits of the three countries was therefore initially also largely covered by such transfers of central bank liquidity. By contrast, official lending related to EU/IMF financial assistance programmes only became effective at a later stage, although as of the third quarter of 2011 it has now become the (near-)dominant source of external financing for the programme countries.

TARGET2 balances as an indicator of severe funding strains

Prior to the crisis the net TARGET2 balance of any given NCB vis-à-vis the Eurosystem was relatively small, as depicted in Graph II.2.3. Since 2008 these balances have risen very sharply, in the case of Germany, Netherlands and Finland amounting to some €700bn at end-2011.

Graph II.2.3: **Net TARGET2 Balances in Eurosystem, % of national GDP**



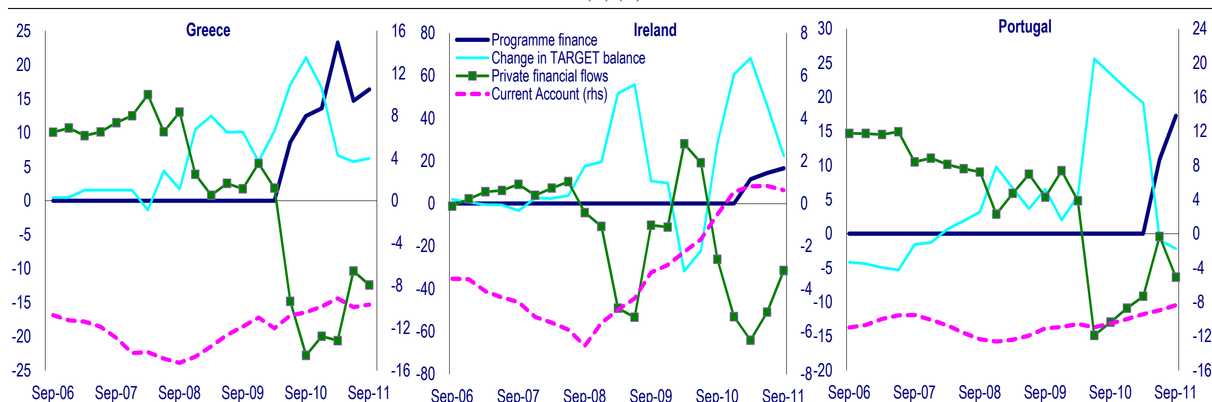
(1) Positive figures indicate a net asset position vis-à-vis the Eurosystem. TARGET2 balances proxied by monetary authorities' international investment positions (IIP) in the 'loans and deposits' division of Other Investment, see also note (2) of Graph II.2.4.
Source: Commission services

The counterpart to these large absolute net asset positions is a large combined net liability position

([33]) From a balance of payments perspective, EU-IMF financial assistance programmes are loans from non-residents to national governments (even if the government uses it to support domestic banks), which appear in the financial account of the BoP as a liability under 'other investment', which comprises foreign loans and deposits.

([34]) The Eurosystem's 'TARGET2' system is an integrated payment platform that records and manages all cross-border transfers of Central Bank liquidity between two countries in the Eurosystem. Any cross-border payment between banks in two euro area MS through the TARGET2 system thus automatically generates balancing credit claims between the national central bank and the ECB. If a national central bank is a net claimant from these payments, the claim appears as an asset on its own balance sheet under the entry “other claims within the Eurosystem”. If a NCB has made net outgoing payments to another NCB, it shows up as a liability on its balance sheet under the entry “other liabilities within the Eurosystem”. The accumulated claims and liabilities impact on the International Investment Position, their (transactional) changes are recorded in the balance of payment in the category "other investment". An increase in a Member State's net liabilities to the Eurosystem is therefore recorded as a net inflow of capital.

Graph II.2.4: **Balance-of-payments developments in Programme countries, 4 quarter moving av., % GDP (1)(2)**



(1) Positive figures signify net inflows of capital for all categories except the current account, where a positive figure denotes a current account surplus. The three components of "programme financing", "change in TARGET balances" and "private financial flows" do not always sum to the current account balance due to errors and omissions in the balance of payments, which can be large.
(2) The variable "change in TARGET balances" is defined as the annual change in a country's net position in the International investment position (IIP) for "other investment position in loans and deposits of the monetary authority". While this category almost exclusively captures positions in the TARGET2 system vis-à-vis the Eurosystem, it is a slightly wider definition than the TARGET balances alone that have been quoted in the associated public debate. Using the aforementioned official IIP category ensures that other non-TARGET liquidity transfers are also captured and ensures data consistency across countries. "Private financial flows" are defined as a residual in the following way: Financial account + capital account – Programme finance – change in TARGET balance = private financial flows. It includes some transactions that can be considered as official and/or multilateral financing flows, such as EU funds and budget contributions. Such transactions are typically stable and relatively small compared to programme and TARGET funding since the crisis.
Source: Commission services

of the programme countries and of Italy and Spain. Relative to these countries' economic output, net TARGET liabilities have been very large only in the case of the programme countries, in Ireland even reaching 100% of GDP at end-2010. Germany's total TARGET assets equate to a more moderate – though undoubtedly significant – 17% of GDP at Q3 2011, with Finland and the Netherlands showing similar net asset positions.

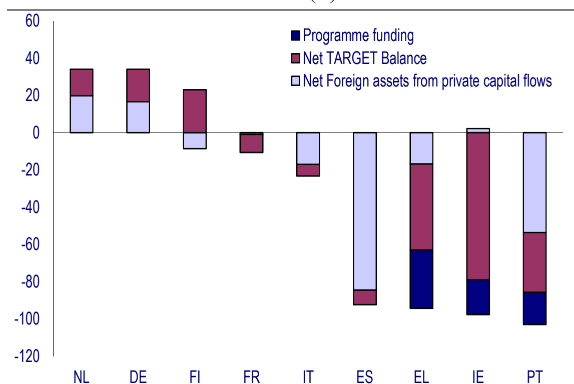
TARGET balances were low prior to the crisis because private financing for, say, import-related payments was on aggregate provided by non-resident investors generating mutually-offsetting liquidity flows within the system. ([35]) However, the massive withdrawal of such foreign funding during the crisis period resulted in largely one-way flows through the TARGET system, meaning that growing net TARGET liabilities are accumulated by the NCBs of countries experiencing severe financial market tensions. This underscores the inextricable links between the financial systems of Eurosystem Member States that euro-area membership entails, and that can absorb the potentially severe macroeconomic consequences associated with sudden capital flow reversals.

Sudden withdrawal of private funding reverses years of strong inflows

Graph II.2.5 illustrates the impact of these three types of funding flows on Member States' net international investment position by approximating net foreign assets based on private funding flows as all those net external financial assets that result neither from: a) changes in monetary authority's net international investment position in other investments (largely driven by TARGET2 balances), nor b) from official programme-related lending. It reveals that a sizeable part of the net foreign liability positions of the programme countries is now represented by net liabilities of their monetary authorities and official programme-related borrowing by governments. Shares vary between countries, from around half of net external liabilities to the entirety of Ireland's net foreign debt stock. Though arguably vulnerable in other respects, Spain and Italy remain predominantly market-financed in net terms. The net foreign creditors Germany and the Netherlands hold sizeable net TARGET assets, although private assets are still dominant.

([35]) In TARGET2, the cross-border payment for e.g. a foreign car purchase by an Italian resident from a German manufacturer would lead to a claim of the German Bundesbank on the Banca d'Italia, which would then be transferred onto the Eurosystem's books and generate an asset for the Bundesbank vis-à-vis the Eurosystem. A corresponding loan of a German bank (or any other foreign entity) to the Italian buyer would involve a transfer sent the other way, thus creating a claim of the Italian CB on the BB, and so on to the Eurosystem.

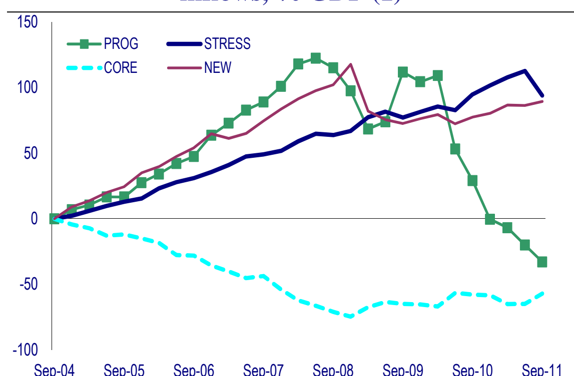
Graph II.2.5: **Net foreign asset position: breakdown by type of funding, end-Q3 2011, % GDP (1)**



(1) Positive values indicate a net asset position vis-à-vis the rest of the world. Programme lending only includes completed disbursements up to 30 September 2011. Programme funding only shown for recipient countries, as large parts of programme lending are funded via the EFSF/EFSM, which represents a contingent liability for creditor Member States. Net TARGET Balances as defined in note (2) of Graph II.2.4.
Source: Commission services

The sudden and sharp reversal of private capital flows to programme countries that was offset by an increase in public sector liabilities represents a sharp reversal of previous trends. Graph II.2.6 shows cumulative private capital flows by group of country, indicating that pre-crisis inflows were strongest in relative terms for programme countries and new members, although only in the former group the flows reversed significantly. Some slowing of private capital flows trends is evident for the stress group, while *core* countries are beginning to repatriate private capital in net terms.

Graph II.2.6: **Cumulative net private capital inflows, % GDP (1)**



(1) Weighted by national GDP; 2004 Q3 as starting point. For definitions of country groupings see notes to Graph 2.
Source: Commission services

Components of capital flight

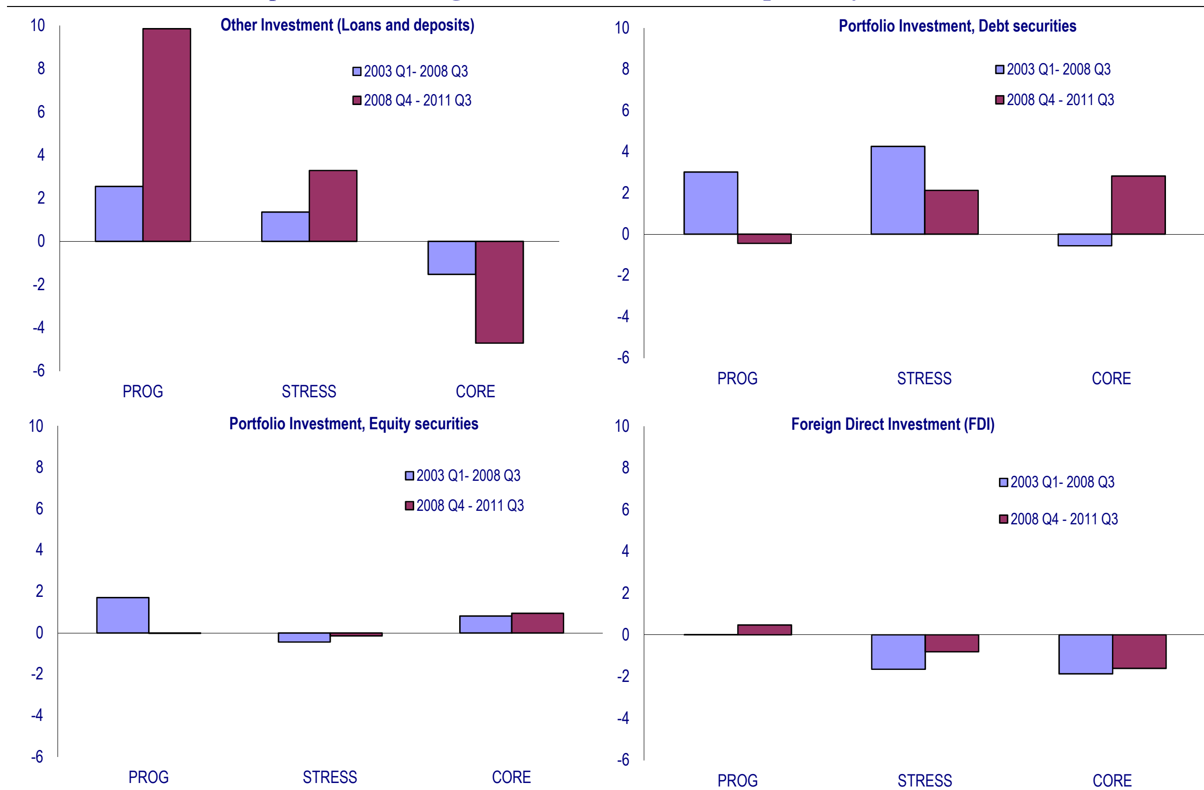
Further insights into the nature of this private capital flight from vulnerable countries can be gained by looking at a breakdown of the major financial account categories, which are 'other investment', 'portfolio investment' (split into debt and equity instruments), and foreign direct investment (FDI). Graph II.2.7 presents financial account flows before and since the crisis according to these categories.

Ireland is excluded from the group of programme countries, as its financial account flows in 2010 Q4 were majorly distorted by large transactions of IFSC banks to a euro-area government-sponsored special purpose vehicle as part of its EU/IMF adjustment programme. This quasi-debt-equity swap contributed to a fall of Irish banks' foreign loan and deposit liabilities of €160bn (107% GDP) over the quarter, partly counterbalanced by a rise in portfolio equity liabilities of € 111bn (75% GDP).

From an economic point of view the exclusion of Ireland for this reason does not detract from overall dynamics in the programme countries, as Ireland's total *net* financial flows in the particular quarter were affected much less by the aforementioned swap, and because all three programme countries show broadly similar external financing trends otherwise. More generally, financial account flows show a changing risk appreciation between the various country groups in all sub-components, to an almost surprising degree.

Other investment comprises loans and deposit liabilities and assets of both public and private sector entities. Although typically a private-sector-dominated asset class, both TARGET2 balances and EU/IMF programme-related lending are captured in this category. Given the aforementioned crisis developments, other investment represents the most dynamic of asset classes since the start of the crisis. Previously, both programme and stress countries were net recipients of other investment to a moderate extent, but since then net inflows of other investment have massively risen, due mainly to a combination of growing TARGET2 balances and official programme-related government funding. By contrast, core countries increased their net financial outflows through other investment, again due to these two factors.

Graph II.2.7: **Average financial account flows, quarterly, % of GDP**



(1) Weighted by national GDP; for country groupings see notes to Graph II.2.2; N.B: PROG group excludes Ireland.
Source: Eurostat

Overall, closer inspection of non-public sector loan and deposit holdings shows comparatively limited movements, notably in banks' foreign loan and deposit liabilities. This suggests that gross reductions in foreign liabilities (caused e.g. by the foreign counterparty selling the asset) were not systematically large, in particular not for programme countries. (36) Instead, the rise in 'other investment' financing has allowed portfolio investment into programme countries to fall from significantly positive territory prior to the crisis to near-zero since then.

Debt securities represent the second-largest item in net financial account flows, and here too a significant shift in financing trends is apparent that differs according to levels of country risk. While in the pre-crisis period programme and stress countries were externally financed predominantly through net issuance of debt securities, net inflows have entirely dried up for programme countries and have halved for the stress group. (37) By contrast, the large and stable security markets in the core group acted as a safe haven and attracted far stronger portfolio debt inflows than before the crisis, especially into France.

Equity securities funding from abroad shows some shifts since the crisis, though only in programme countries, where net foreign acquisitions of shares are now around zero. Compared to the pre-crisis period, this reflects a considerable drop, which is likely to be linked to the impact of a weak growth outlook and large macroeconomic risks on corporate profitability.

Finally, **FDI flows** have shown a rather more limited response to crisis developments, with programme countries showing only a minor increase in net FDI receipts, from pre-crisis net flows of zero on average. Economies in the core and stress groups have still acted as a source of FDI into other countries since the crisis, as is to be expected on the basis of their higher relative income levels.

(36) Only CY and IE (not shown) recorded major movements in foreign bank deposits, and in these cases intra-company financing (CY) and a major debt/equity swap via an SPV (IE) played a role, rather than lending dynamics with third parties.

(37) For programme countries *sovereign* debt held by foreigners has indeed fallen outright, as programme funding has mainly financed the redemption of maturing sovereign bonds. Continued investment by foreigners in *private sector* debt instruments has partly offset the net contraction in external sovereign debt.

Conclusion

Following the introduction of the euro, external borrowing by several euro area Member States increased sharply, forming the counterpart to large current account deficits and a rapid deterioration in these countries net external indebtedness. The boom in foreign capital inflows was then sharply disrupted by the current crisis as investment capital sought a safe haven in the 'core' euro area countries. This reversal of cross-border financing flows can be observed in all asset categories, it is however particularly pronounced for other as well as portfolio investment.

Given the size of the private funding withdrawal from peripheral euro-area Member states, the current account adjustment has so far been rather limited in most cases: funding through loans related to EU-IMF assistance programmes together with expansion of liquidity-providing-operations conducted by the Eurosystem acted as a stop-gap and prevented a disorderly adjustment in the current account. This allowed for consumption and investment in several Member States to be sustained at levels that would not have been feasible otherwise. In the absence of crisis-related measures taken by EU and euro-area institutions, several euro-area Member States would have likely faced a very disruptive adjustment, including widespread defaults on their external liabilities.

Nevertheless, external rebalancing remains an important policy aim so as to ensure external debt sustainability. The return of the current account to balance will involve structural reforms and a real effective depreciation, which is reflected in the policy conditionality attached to official financial assistance programmes. Without such an adjustment, macroeconomic imbalances and the vulnerability to capital withdrawal will ultimately persist.