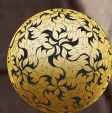


APRIL 13

# Q2

**Central Bank** Quarterly Bulletin



Banc Ceannais na hÉireann  
Central Bank of Ireland

Eurosystem







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# Notes

1. The permission of the Government has been obtained for the use in this Bulletin of certain material compiled by the Central Statistics Office and Government Departments. The Bulletin also contains material which has been made available by the courtesy of licensed banks and other financial institutions.
2. Unless otherwise stated, statistics refer to the State, i.e., Ireland exclusive of Northern Ireland.
3. In some cases, owing to the rounding of figures, components do not add to the totals shown.
4. The method of seasonal adjustment used in the Bank is that of the US Bureau of the Census X-11 variant.
5. Annual rates of change are annual extrapolations of specific period-to-period percentage changes.
6. The following symbols are used:

e estimated	n.a. not available
p provisional	. . no figure to be expected
r revised	– nil or negligible
q quarter	f forecast
7. As far as possible, data available at end-February 2013 are included in the Statistical Appendix (Section 3).
8. Updates of selected Tables from the Statistical Appendix, concerning monetary and financial market developments, are provided in *Money and Banking Statistics*. Data on euro exchange rates are available on our website at [www.centralbank.ie](http://www.centralbank.ie) and by telephone at 353 1 2246380.

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## Forecast Summary Table

	2010	2011	2012	2013 <sup>f</sup>	2014 <sup>f</sup>
<b>Real Economic Activity</b>					
(% change)					
Personal consumer expenditure	1.0	-2.4	-0.9	-0.2	0.4
Public consumption	-6.5	-4.3	-3.7	-1.6	-3.3
Gross fixed capital formation	-22.6	-12.6	1.2	3.5	5.9
<i>of which:</i> Building and construction	-30.1	-15.8	-5.6	0.0	4.6
Machinery and equipment	-8.4	-8.3	9.6	7.0	7.0
Exports of goods and services	6.2	5.1	2.9	2.5	5.0
Imports of goods and services	3.6	-0.3	0.3	1.8	3.9
Gross Domestic Product (GDP)	-0.8	1.4	0.9	1.2	2.5
Gross National Product (GNP)	0.9	-2.5	3.4	0.6	1.6
<b>External Trade and Payments</b>					
Balance-of-Payments Current Account (€ million)	1,782	1,785	8,090	8,878	10,612
Current Account (% of GNP)	1.4	1.4	6.1	6.5	7.6
<b>Prices, Costs and Competitiveness</b>					
(% change)					
Harmonised Index of Consumer Prices (HICP)	-1.6	1.1	2.0	1.5	1.2
<i>of which:</i> Goods	-2.4	1.5	2.0	1.3	0.6
Services	-0.7	0.8	1.9	1.8	1.7
HICP excluding energy	-2.7	0.0	0.9	1.4	1.5
Consumer Price Index (CPI)	-1.0	2.6	1.7	1.4	1.1
Nominal Harmonised Competitiveness Indicator (Nominal HCI)	-4.2	0.9	-4.3	n.a.	n.a.
Compensation per Employee	-2.8	0.7	0.8	1.0	1.2
<b>Labour Market</b>					
(% change year-on-year)					
Total employment	-4.0	-1.8	-0.6	0.3	1.2
Labour force	-2.0	-0.9	-0.6	-0.1	0.5
Unemployment rate (ILO)	13.9	14.6	14.7	14.5	13.9
<b>Technical Assumptions<sup>a</sup></b>					
(Annual average)					
EUR/USD exchange rate	1.33	1.39	1.29	1.30	1.30
EUR/GBP exchange rate	0.86	0.87	0.81	0.86	0.86
Oil price (\$ per barrel)	79.61	111.26	111.74	114.11	106.83
Interbank market – Euribor <sup>b</sup> (3-month fixed)	0.81	1.39	0.57	0.31	0.44

<sup>a</sup> The technical assumption made is that exchange rates remain unchanged at their average levels in early-March. Oil prices and interest rates are assumed to move in line with the futures market.

<sup>b</sup> Euribor is the rate at which euro interbank term deposits are offered by one prime bank to another, within the euro area. Daily data from 30 December 1998 are available from [www.euribor.org](http://www.euribor.org).



## Comment

Combined with survey data suggesting that aggregate employment grew, albeit slowly, on an annual basis for the first time since 2008, the latest Quarterly National Accounts data suggest that the gradual recovery of the Irish economy is continuing. Preliminary GDP data for 2012 point to a second consecutive year of positive growth, though at a slightly lower level than in 2011. This performance occurred despite the more challenging external environment, with the second half of 2012 witnessing a slowdown in growth at the broader international level and, particularly so, in Ireland's main trading partners. While weaker global demand has slowed export growth, the increase in export volumes has remained sufficiently strong to more than offset the impact of the continued decline in domestic demand. Of note has been the strength of services exports in 2012, which contrasts with a decline in goods exports, and has underpinned the resilience of the overall export performance. On the domestic side, while demand has continued to contract there has been a notable easing in the pace of decline. Both consumption and investment spending expanded modestly over the second half of 2012 and, allied to a marginal rise in employment, suggest that the fall in domestic demand may, finally, be nearing an end. With import demand remaining weak, the current account surplus reached new heights, with a preliminary outturn of 6.1 per cent of GNP, the highest on record. This is part and parcel of the necessary deleveraging of the economy and strengthening of balance sheets.

Looking ahead, with growth in trading partner countries expected to slow a little more than previously assumed, weaker external demand is set to dampen Irish export growth in 2013 as compared to the previous forecast. However, some offset to this is projected to be provided by a small upward revision to domestic demand. Taking account of these changes, the Bank's new forecasts for GDP growth for 2013 and 2014 are marginally lower than those published in the previous Bulletin. Having grown by 0.9 per cent in 2012, GDP growth of 1.2 per cent is now projected for this year, with growth of 2.5 per cent forecast for 2014, representing a small downward revision of 0.1 per cent to the previous forecast for 2013 and no change to the projection for next year. The 2014 projection is based on consensus assumptions from the main international institutions, which forecast a recovery in external demand back towards its long run trend. Uncertainty attaches to these forecasts, however, and they remain very sensitive to developments in the international and European economy.

Adherence to EU/IMF Programme targets remains strong and further progress on the main policy challenges continues to be made. In the financial sector, slow progress by banks in dealing with non-performing loans has prolonged the uncertainty persisting about bank asset quality and profitability prospects and has also inhibited the durable resolution of the problems of distressed borrowers. To ensure that substantial progress will be made on these issues in the coming years, the Bank has introduced a new prudential regulatory framework to accelerate the resolution of cases where mortgages are in arrears. The framework covers all residential mortgages and the main mortgage lenders prudentially supervised by the Central Bank. The framework sets quantitative targets, which become progressively more demanding over time, and requires that institutions offer and conclude sustainable solutions for distressed borrowers.

In addition, the Bank is also proposing changes to the Code of Conduct on Mortgage Arrears that, while continuing to provide protection for borrowers – and even improving this protection in certain respects – will facilitate the effective and timely resolution of arrears cases. Resolving the problem of non-performing loans at a reasonable cost while, at the same time, addressing the distress of households will help to strengthen the prospects for recovery.

Turning to the public finances, while figures have yet to be finalised, the latest indications are that the General Government Deficit outturn for 2012 was significantly below target. However, while the favourable outturn for 2012 improves the prospects for 2013, full implementation of the announced budget measures remains essential to preserve market confidence and to keep a buffer against negative shocks. Recent months have seen progress on some important issues which help with the task of returning the public finances to a sustainable position. Among these has been the liquidation of IBRC and the replacement of the promissory notes with a portfolio of longer-term non-amortising Irish Government bonds. As outlays in relation to the ending of the Eligible Liabilities Guarantee scheme largely offset lower interest payments

this year, the transaction is relatively deficit neutral in 2013. However, it is expected to have a positive impact on the General Government Balance from 2014 onwards. Another significant recent development is the proposed new Public Service Agreement 2013-2016, which aims to produce savings of €1bn in the public service pay and pensions bill by 2015.

Competitiveness improvements remain a key factor in returning the economy to steady growth. While measures of national competitiveness have moved in the right direction in recent years, the decline in relatively labour-intensive sectors, such as construction, means these overall measures overstate the improvement that has been made. In the past, competitiveness in the manufacturing sector has been a critical factor in determining Ireland's overall competitiveness, however, reflecting the changed nature of the economy, a broader sense of competitiveness now seems more relevant – particularly one that encompasses the characteristics of the increasingly important services sectors. While progress has been made in regaining some of the competitiveness that was lost during the boom, further improvements are required in order to maximise the prospects for a return to more solid growth.

# The Domestic Economy

## Overview

- Preliminary National Accounts data for 2012 point to positive but moderating output growth in 2012 - real GDP increased by 0.9 per cent while GNP expanded by 3.4 per cent. There was a marked slowdown in export growth last year reflecting a significant deceleration in external demand. However, exports continued to make a positive contribution to overall GDP growth which was sufficient to offset a continued, albeit moderating decline in domestic demand.
- The forecasts for output growth in 2013 and 2014 are similar to those published in the previous Bulletin, but with a slight downward revision to 2013 to take account of a less positive outlook for external demand and a consequent downward revision to projected export growth. The outlook for domestic demand growth has been revised up for both years reflecting some upward revisions to personal consumption and investment. Overall GDP growth is projected to accelerate over the forecast horizon to about 1.2 per cent in 2013 and 2.5 per cent in 2014.
- The performance of Irish exports has proved quite resilient to a significant slowdown in external demand over the last year reflecting the benefits of an improvement in competitiveness and a strong performance from services exports. Nevertheless, the progressive deterioration in the outlook for demand in Ireland's main trading partners has necessitated a corresponding downgrade in projected export growth, which has been further downgraded in the current projection. A recovery in exports in 2014 is predicated on a corresponding pick-up in external demand from the second half of 2013. The prospects for such a recovery must be treated with some caution, however, given the high degree of uncertainty regarding the near-term outlook for world demand, particularly in advanced economies.
- Following four consecutive years of contraction, the latest data provide evidence that the decline in domestic demand may be nearing an end. Although down in real terms for the year as a whole, both consumption and investment expanded, albeit modestly, during the second half of 2012. The projections envisage a marginal increase overall in domestic demand this year reflecting a marginal decline in the volume of private consumption and a modest recovery in investment. For 2014, a small projected increase in domestic demand reflects the expectation of modest growth in private demand (consumption and investment) partly offset by continued but moderating fiscal consolidation.
- The pace of employment decline in 2012 eased to its slowest rate since 2008 amid signs of stabilisation in the labour market. Private sector employment has grown modestly over recent quarters and we expect this trend to continue in 2013 giving rise to a small increase in overall employment this year. The unemployment rate is projected to fall gradually towards 14 per cent by the end of the forecast period.
- The annual rate of HICP inflation for 2012 was 2 per cent. Higher energy prices were a significant driver of inflation in 2012. For 2013, Ireland is expected to import less energy inflation although domestically generated inflation should remain relatively steady. Therefore, inflation should weaken to 1.5 per cent in 2013.
- Competitiveness developments should continue to provide some support to exporters this year, although the less favourable external demand environment places extra emphasis on the continued need for competitiveness improvements. A continued improvement in cost competitiveness along with broader competitiveness gains will enhance the resilience of the exporting sectors in the face of a more challenging external environment.



**Table 1: Expenditure on Gross National Product 2012<sup>e</sup>, 2013<sup>f</sup>, 2014<sup>f</sup>**

	2012 <sup>e</sup> Percentage change in			2013 <sup>f</sup> Percentage change in			2014 <sup>f</sup>
	EUR volume millions	price		EUR volume millions	price		EUR millions
Personal Consumption Expenditure	81,984	-0.2	1.5	83,059	0.4	1.2	84,415
Public Consumption	24,679	-1.6	1.2	24,571	-3.3	0.6	23,899
Gross Domestic Fixed Capital Formation	16,463	3.5	0.2	17,066	5.9	0.5	18,161
<i>Building and Construction</i>	8,279	0.0	-0.7	8,222	4.6	0.0	8,603
<i>Machinery and Equipment</i>	8,184	7.0	1.0	8,844	7.0	1.0	9,558
Value of Physical Changes in Stocks	-79			0			0
Statistical Discrepancy	1,049			1,049			1,049
<b>GROSS DOMESTIC EXPENDITURE</b>	124,096	0.1	1.2	125,745	0.2	1.0	127,524
Exports of Goods & Services	177,134	2.5	1.2	183,553	5.0	1.2	195,100
<b>FINAL DEMAND</b>	301,230	1.5	1.2	309,298	3.1	1.1	32,262
Imports of Goods & Services	-137,635	1.8	1.1	-141,760	3.9	1.2	-149,071
<b>GROSS DOMESTIC PRODUCT</b>	163,595	1.2	1.2	167,538	2.5	1.0	173,553
Net Factor Income from Rest of the World	-30,192			-31,748			-34,219
<b>GROSS NATIONAL PRODUCT</b>	133,403	0.6	1.2	135,790	1.6	1.0	139,334

continued investment in some non-government sectors suggest that a pick-up in activity is likely. Overall, building and construction investment is projected to stabilise this year, before increasing by 4.6 per cent in 2014. It should be noted that the large declines of previous years means that investment spending is coming from a very low base. As a consequence, a slight increase in activity may result in a substantial percentage increase. However, the contribution to overall economic growth, given the low base, is probably limited.

On the machinery and equipment side, the latest data point to strong growth last year, partly accounted for by significant investment expenditure in aircraft and other transport equipment. The underlying component, however, was also relatively robust – up 7.7 per cent for the year. For this year and next, given some positive FDI prospects machinery and equipment investment is forecast to increase by 7 per cent in both years. Taken together with the building and construction forecasts, these forecasts imply an increase in investment

of approximately 3.5 per cent and 5.9 per cent in 2013 and 2014, with the latter subject to a greater degree of uncertainty.

### **Stock Changes**

According to preliminary QNA, changes to inventories made a small negative contribution to overall GDP growth of -0.1 per cent last year. The projections assume a broadly neutral contribution from stock building to output growth in 2013 and 2014.

### **Government Consumption**

Government consumption declined in real terms by 3.7 per cent in 2012. Taking account of measures announced in detail in Budget 2013 and outlined in general terms for next year, the real level of government consumption is projected to decline by 1.6 per cent and 3.3 per cent, respectively in 2013 and 2014.

**Box A: Assessing the Usefulness of Soft Data in Projecting Irish GDP***By Joëlle Liebermann<sup>1</sup>*

When monitoring and assessing the state of the economy in real time, policymakers face the problem that Gross Domestic Product (GDP) is released with a lag. For example, the Central Statistics Office releases its first estimate of quarterly GDP between ten to eleven weeks after the end of the reference quarter. In the interim period, monthly conjunctural indicators become available which provide within-quarter information that can be used to give a more timely assessment of the current state of the economy and allow one to construct an early estimate of GDP ahead of its official release.

One type of data widely commented on in the financial press are qualitative data or so-called soft data. Although these surveys only provide qualitative assessments reflecting sentiment and/or expectations they have the advantage of being much more timely than direct measures of economic activity such as industrial production or unemployment. For example, soft data such as Markit's Purchasing Managers Indices for a reference month are released at the end of the reference month or the beginning of the next month, whereas the hard data are only released with a one or two month publication lag. In this box, we examine the informational content of the soft data for projecting GDP by running a pseudo real-time nowcasting and forecasting exercise, i.e., replicating the publication lags faced by a forecaster in real time. We produce a sequence of three estimates of GDP for the current quarter and up to four quarters ahead based on an increasing amount of monthly soft data.

To illustrate this, suppose that the reference quarter is the fourth quarter of 2012. At the end of October, with the soft data for October available, we compute a model-based estimate for GDP for the current quarter (which is called a nowcast) as well as for the first to fourth quarters of 2013 when soft data for November becomes available, we re-compute our estimate of GDP for the current and subsequent four quarters ahead. We repeat this exercise every month up to the second month of the next subsequent quarter (as GDP for a reference quarter is only released in the third month of the next quarter).

The model-based estimates of GDP are computed using a mixed frequency vector autoregression<sup>2</sup> (VAR) which can deal with the issue that GDP is available at a quarterly frequency whereas the soft data are available monthly. To evaluate the (marginal) informational content of the soft data for GDP, we compare nowcasts and forecasts of GDP using soft data and GDP as predictors relative to a univariate autoregressive model which only uses past values of GDP. Our measure of soft data is Markit's Purchasing Managers Index. The evaluation period runs from Q1:2005 to Q3:2012.

Figure 1 shows the relative forecasting performance<sup>3</sup> of the model including soft data compared to the univariate model. A value below unity in the graph indicates that on average the inclusion of soft data improves the predictive power for GDP above and beyond what is contained in GDP's own lags. As is clear from the figure, the inclusion of the PMI improves predictions over all forecast horizons but this predictive content is decreasing with the forecast

<sup>1</sup> The author is an Economist in the Irish Economic Analysis Division.

<sup>2</sup> For technical details see Mariano and Murasawa (2003) : "A new coincident index of business cycles based on monthly and quarterly series", *Journal of Applied Econometrics*, 18, pp. 427-448.

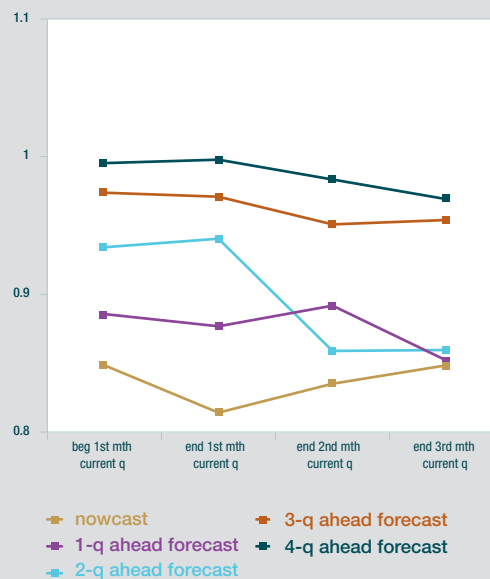
<sup>3</sup> The relative performance is measured by the relative root mean squared forecast errors statistic.

**Box A: Assessing the Usefulness of Soft Data in Projecting Irish GDP**

*By Joëlle Liebermann<sup>1</sup>*

horizon. Moreover, the existing literature suggests that it is timeliness of the information rather than its informational content that helps soft data to improve the forecasts. Indeed studies which use both hard and soft data as monthly conjunctural indicators find that the soft data are mostly useful at the beginning of the forecasting cycle, when no hard data for the reference quarter is available.

**Box A Figure 1: Relative Forecasting Performance**



**External Demand and the Balance of Payments**

**Merchandise Trade**

As 2012 progressed, evidence emerged showing weakness in the performance of merchandise exports. The latest Quarterly National Accounts (QNA) for 2012 Q4, record a 3.8 per cent fall in the volume of goods exports in the fourth quarter, following year-on-year declines in each of the previous two quarters. A number of factors are likely to have contributed to the disappointing performance of merchandise exports during 2012. In particular, with UK and euro area GDP growth coming to a standstill in 2012, external demand was weaker than in 2011 and this was transmitted directly into lower merchandise exports.

A major contributor to the weakness of goods exports in 2012, however, was the impact of

patent expiry on chemical sector exports, a sector which accounts for close to 60 per cent of total merchandise exports. Monthly data on the composition of merchandise trade on a value basis, indicate a decline in the value of exports from the broad chemicals sector on a year-on-year basis during the first two quarters of the year. Following a sharp rise in the value of chemicals exports in August, the year-on-year change in exports of chemicals and related products averaged -10.5 per cent over the five months since August 2012. The decline in exports from the chemicals sector was partially offset by increases in other sectors such as food.

In contrast to the poor performance of goods exports during 2012, the latest data from the Manufacturing Purchasing Managers Index (PMI) suggest continued expansion in output and new export orders during the early months of 2013. The headline PMI improved to 51.5 in

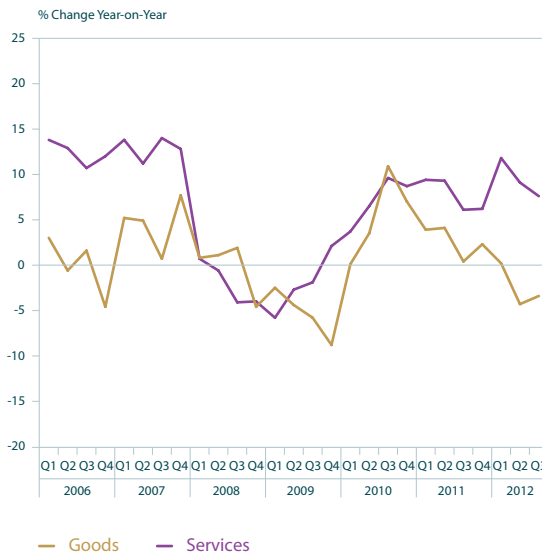
**Table 2: Merchandise Trade (Adjusted) 2012, 2013<sup>f</sup>, 2014<sup>f</sup>**

	2012			2013 <sup>f</sup>			2014 <sup>f</sup>		
	EUR millions	Percentage change in volume	price	EUR millions	Percentage change in volume	price	EUR millions	Percentage change in volume	price
Merchandise Exports	86,401	-2.5	1.0	85,109	1.1	1.0	86,799		
Merchandise Imports	-50,017	-1.1	1.0	-49,973	1.6	1.0	-51,264		
Merchandise Trade Balance (Adjusted)	36,384			35,136			35,535		
%GNP	27.3			25.9			25.5		

February, indicating expansion in the sector while new orders made a return to growth after sliding into negative territory for the first time in 12 months in January. New export orders also rose, albeit marginally, for a fifth successive month, with improved demand from the UK market cited as a reason for the latest increase. Given the divergence between the relatively strong PMI readings in 2012 and the weak outturn for goods exports, it remains to be seen whether the recent positive PMI figures are reflected in an improved merchandise trade outturn over the coming months.

The sluggish external demand conditions which acted as a drag on the performance of merchandise exports in 2012 are likely to persist in 2013. The outlook for goods exports also looks set to be negatively impacted by the appreciation of the euro against the pound sterling which has taken place since the beginning of 2012. On the basis of the latest available data, a further decline in merchandise exports is expected in 2013. Assuming that the projected recovery in the world economy in 2014 materialises, a return to positive merchandise export growth in 2014 is achievable.

Merchandise imports declined by 2.6 per cent in 2012 having also contracted in the previous year. As Irish exports are particularly import intensive, some of the weakness in goods imports could be attributed to the decline in merchandise exports in 2012. After five years of contraction, consumption and investment are expected to grow in 2013 and this gradual pick-up in domestic demand is expected to result in a return to positive export growth both this year and next.

**Chart 2: Volume of Exports**

Source: CSO Quarterly National Accounts.

### Services, Factor Incomes and International Transfers

Services exports accounted for 21 per cent of all exports in 2000, but as of Q4 2012 are estimated to amount to 51 per cent of the total. The latest data from the QNA show that the volume of services exports expanded by 9 per cent in 2012 while goods exports declined by 2.9 with the result that the growth in overall exports in 2012 was driven entirely by the services sector.

Data from the *Balance of Payments* statistics provide information on the composition of services trade. The computer services and business services sectors combined account for over two thirds of total services exports and both of these sectors performed strongly in



**Table 3: Balance of Payments 2012, 2013<sup>f</sup>, 2014<sup>f</sup>**

<b>Current Account</b>	<b>2012</b>	<b>2013<sup>f</sup></b>	<b>2014<sup>f</sup></b>
Merchandise Trade Balance (Adjusted)	36,384	35,136	35,535
Services	2,961	6,476	10,282
Net Factor Income from Rest of the World	-30,038	-31,594	-34,065
Current International Transfers	-1,217	-1,140	-1,140
<b>Balance on Current Account</b>	<b>8,090</b>	<b>8,878</b>	<b>10,612</b>
(% of GNP)	6.1	6.5	7.6

2012. Computer services exports grew at an average rate of 16 per cent in 2012 while the value of business services exports was 4 per cent higher. Tourism exports increased by 6 per cent.

The latest (February) NCB Services PMI data shows that Irish service providers recorded another increase in business activity during February, albeit at the slowest pace of growth since August 2012. While the headline Business Activity (53.6) index reading is below the 5 year high recorded in January, it nonetheless represents a seventh successive month of expansion for the sector. Furthermore, unadjusted data show that all four sectors represented in the index recorded growth during February. Within the data, new business remains in expansionary territory, with firms reporting growth in demand from both existing clients and new customers. Despite the recent strength of the services PMI readings, the overall index remains well below the level recorded in 2007.

With merchandise exports expected to contract in 2013, our forecasts imply that services exports will continue to be the mainstay of growth in overall exports over the coming years. Given the robust performance of services trade in 2012, in an environment of weak external demand, a return to growth in Ireland's key trading partners should facilitate further growth in services exports over the forecast horizon.

Driven by strong double-digit growth in imports of royalties and licences, the volume of services imports expanded by 1.9 per cent in 2012 having also increased in 2011. With

services exports projected to grow over the forecast horizon, an acceleration in the pace of services import growth is expected. A return to positive consumption growth and a recovery in investment is also likely to give rise to higher services imports in 2014.

The vigorous performance of services exports was reflected in some notable developments in the Balance of Payments statistics during 2012. In 2009, the services trade deficit stood at close to €7 billion; this narrowed rapidly during 2011 and in the first quarter of 2012, a small positive services balance was recorded for the first time in the history of the quarterly series. Data for 2012 as a whole show that a sizable services surplus of almost €3 billion was recorded last year. On the merchandise side, the trade balance expanded to €36.4 billion in 2012. The emergence of a positive services balance, combined with the already large merchandise surplus, contributed to a sharp widening of the overall trade balance in goods and services during 2012. The forecasts for 2013 and 2014 envisage faster growth in volume exports than in imports with the result that further increases in the overall trade balance are expected both this year and next.

Turning to overall current account developments, the positive trade balance will be partially offset by larger expected net factor income outflows over the forecast horizon. Profit repatriations by foreign multinationals located in Ireland and higher national debt interest payments abroad are the main ingredients of factor outflows. A larger trade balance in goods and services is expected to give rise to a significant increase in the overall surplus on the current account of the balance

of payments to over 7 per cent of GNP by 2014. While this is the best estimate based on the latest data and reflecting the projections for exports and imports, the precise scale and timing of net factor income inflows remain highly uncertain and could impact projections for the current account balance over the coming years. Given the scale of factor income flows, small changes - either positive or negative - in outflows or inflows could have a significant impact on balance of payments projections in this *Bulletin*.

Nevertheless, the underlying momentum in the current account since 2008 is indicative of a clear trend towards a growing balance of payments surplus. This development is symptomatic of wider structural changes taking place in the banking system, the domestic economy and the tradable sector.

## Supply

### **Industry and Services Output**

Irish industrial production, encompassing both the modern and traditional sectors, is continuing to impact negatively on economic growth, having declined by 5.2 per cent per quarter at the end of 2012<sup>4</sup>. This was largely due to the significant contraction in modern sector output growth, mainly in the computers and optical equipment sub-sector, as a result of weak global demand for high-tech exports. Given the uncertain global economic environment and the likely impact of the pharmaceutical patent cliff<sup>5</sup>, it is expected that production in this sector will remain subdued over the forecast horizon. While the traditional sector had followed a negative output growth profile in 2012 due in large part to the weakness of the UK economy and the depreciation of sterling, its growth path appears to be stabilising as the rate of deceleration moderated in the third quarter of

2012 before turning positive in the last quarter. In comparison, the NCB Manufacturing PMI gives a more optimistic outlook for the manufacturing sector citing slightly improved operating conditions and increased employment growth.

Preliminary 2012 National Accounts data show a slightly different picture for the industrial sector, where output growth increased by 0.3 per cent in 2012. This reflected stronger growth in the first half of the year followed by a decline in activity in the second half of the year. In the construction sector, the rate of decline has slowed somewhat, from a peak of -27.6 per cent per annum in 2009 to -7.4 per cent last year. Overall, in light of recent developments and expected weak global demand for exports in addition to the expiry of pharmaceutical patents, industrial production is forecast to decline by 1.6 per cent in 2013 before increasing to 1.2 per cent in 2014.

Turning to the services sector, preliminary 2012 data point to growth in the private sector but significant contraction in the public sector. Distribution, transport, software and communications sector and the other services sector increased by 3.1 per cent and 0.2 per cent, respectively while public administration and defence declined by 4.2 per cent in real terms.

The most recent services Purchasing Managers Indices (PMIs) for January and February 2013 indicate broadly based expansion in the services sector in the first quarter of 2013, albeit, in February at the slowest pace since August 2012. Moderation in the pace of exports growth was a contributing factor in February's outturn. However, higher new orders from the UK and Middle East were recorded. An encouraging development to note is the continuing increase in employment levels since the fourth quarter

<sup>4</sup> Because the CSO Industrial Production data is quite volatile examining the quarterly profile of the index gives a better indication of key developments.

<sup>5</sup> Patents in a number of pharmaceutical products have recently expired or are due to expire in 2013.

**Table 4: Industry and Manufacturing Output, Annual Percentage Change**

	Modern	Traditional	Manufacturing	Total Industry
2010	10.7	2.5	8.3	7.7
2011	-0.2	0.3	0.4	0.0
2012	-0.4	-4.0	-1.5	-1.6
2013f	-1.3	-0.8	-1.7	-1.6
2014f	1.3	0.9	1.0	1.2
Average 2010-2012	3.4	-0.4	2.5	2.1

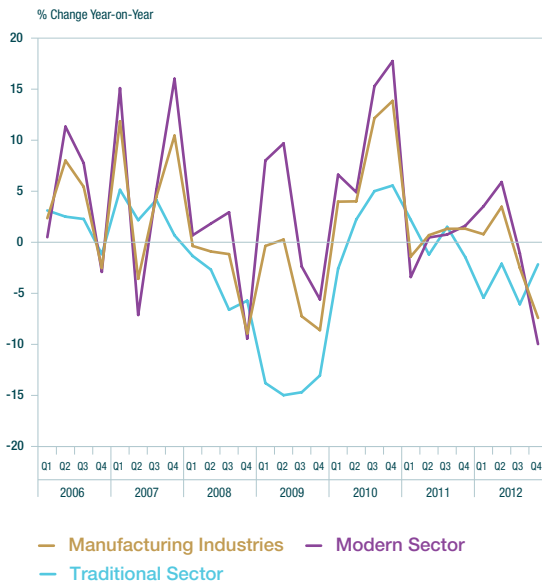
**Note:** Industrial production indices are produced by the CSO and report output volumes excluding the effect of price changes. To remove the impact of prices Wholesale Price Indices (WPIs) are used as deflators. These WPIs were updated in June 2010 and have resulted in revisions to the series back to 2006. Overall these changes served to dampen output growth relative to what was published in Bulletins prior to Q4 2010 (particularly relating to the Modern sector).

of last year. While profitability has been negatively affected by higher input prices, business sentiment remains optimistic for the year ahead.

**Agricultural Output**

CSO Output, Input and Income in Agriculture estimates point to a significant decline in farm incomes of 12.3 per cent in 2012 as a result of poor summer weather conditions and increased feed usage on grassland enterprises. Milk and lamb prices fell while cereal yields declined sharply. Preliminary data from the National Accounts, which are not directly comparable, nevertheless provide further evidence of a negative outturn, and show a volume decline of 10 per cent in the Agriculture, Forestry and Fishing sector in 2012. Assuming more normal weather conditions, farm incomes should improve this year and in 2014. Milk prices are forecast to increase by 5 per cent per annum while sheep and cattle prices are expected to stay stable. Budget 2013 implies reduced subsidies for suckler and sheep farmers but there should be a reduction in feed usage compared to 2012 which would contribute to an improvement in overall net margins. It remains to be seen how current negotiations on direct payments to farmers will affect average farm incomes over the forecast horizon.

**Chart 3: Volume of Industrial Production**



Source: CSO.

**Table 5: Summary of Agricultural Output and Income 2012<sup>a</sup>, 2013<sup>f</sup>, 2014<sup>f</sup>**

	2012 <sup>a</sup>		% change in			2013 <sup>f</sup>		% change in			2014 <sup>f</sup>
	€ million	Value	Volume	Price	€ million	Value	Volume	Price	€ million		
Goods Output at Producer Prices <sup>a</sup>	6,615	4.9	-0.8	5.7	6,810	3.0	1.1	1.9	6,959		
Intermediate Consumption	5,293	9.0	4.1	4.7	5,317	0.4	0.8	-0.3	5,552		
Net Subsidies plus Services Output less Expenses	1,626	-10.4			1,545	-5.0			1,537		
Operating Surplus	2,135	-12.3			2,263	6.0			2,342		

**a** Including the value of stock changes.

**b** CSO estimates.

### The Labour Market

The recent Quarterly National Household Survey (QNHS) for Q4 provides evidence of a gradual stabilisation in labour market conditions over the course of 2012. Following five consecutive years of falling employment from 2008, the pace of job loss eased over the first half of 2012 with modest employment growth re-emerging in the second six months of the year.

The unemployment rate averaged 14.7 per cent in 2012, marginally higher than the average rate in 2011. As the year progressed, unemployment increased at a slower pace and in the three months from July to September, the number unemployed declined on an annual basis for the first time since 2005. This trend is consistent with more timely monthly data from the *Live Register*. These data provide evidence of a gradual reduction in unemployment beginning at the start of the third quarter of 2012. In February 2013, the number unemployed declined for the eighth consecutive month. A reduction in the size of the labour force was the main reason for the decline in unemployment during the latter half of 2012.

By the end of 2012, the labour force had shrunk by over 117,000 compared to the last quarter of 2007. Some of this decline is explained by falling labour force participation and also outward migration. The participation rate peaked in Q4 2007 but fell continuously until mid-2011. Since then it has stabilised at around 60 per cent. Around two-thirds of the decline in the labour during 2012 was due to net outward migration. This represents a change on the position in 2010 and 2011 when falling participation explained most of the decline in the labour force. The reduction in the labour force due to this negative demographic effect (outward migration) is concentrated almost entirely in the 20-24 and 25-34 age groups. The Population and Migration Estimates from the CSO indicate that just over 34,000 people emigrated in the twelve months to April 2012.

**Box B: Unemployment by education, age group and duration***By Thomas Conefrey<sup>6</sup>*

Trends in the overall unemployment rate mask considerable variation in the characteristics of the unemployed. Previous research on the labour market demonstrates that the probability of an unemployed worker regaining employment is critically affected by factors such as the person's level of education and their length of stay in unemployment. This box assesses the current unemployment problem across these dimensions and also considers the issue of youth unemployment. Understanding the nature and composition of unemployment in Ireland is important for a number of reasons. First, it can inform the design of appropriate policy responses to tackle high unemployment and secondly, it can provide insights into the important question of how quickly the unemployment rate might fall in a recovery.

**1. Unemployment by education**

Studies have shown that unemployed persons with higher levels of education have a better prospect of returning to work following a spell in unemployment compared to those with lower levels of education. Table B1 shows the number unemployed and the unemployment rate by level of education as of Q4 2012 using data from the Quarterly National Household Survey (QNHS).

**Table B1:** Unemployment by educational attainment

Education level	Unemployed (000)	Unemployment rate (%)
Primary or below	28.4	26.7
Lower secondary	57.6	24.1
Higher secondary	81.4	15.3
Post leaving certificate	54	18.8
Third level non-honours degree	30.2	9.4
Third level honours degree or above	36.2	6.4
Other	6.2	15
<b>Total</b>	<b>293.9</b>	<b>14</b>

The data in Table B1 show that around one-quarter of those currently unemployed are in each of the two lowest educational categories while over 40 per cent of those out of work have a post leaving certificate qualification or higher. The divergence in unemployment rates by educational attainment is also evident. The unemployment rates for those with the lowest levels of education are around four times higher than the rates for those with third level qualifications. It is interesting to note that, although the rates of unemployment are higher for those with lower levels of education, in terms of absolute numbers, the majority of the unemployed are in the higher educational brackets.

<sup>6</sup> The author is an Economist in the Irish Economic Analysis Division.



**Box B: Unemployment by education, age group and duration**

By Thomas Conefrey<sup>6</sup>

**3. Unemployment by duration**

As well as the level of educational attainment, another key determinant of the probability of regaining unemployment is the length of stay in unemployment. As long-term unemployment can lead to de-skilling and result in persons becoming detached from the labour market, avoiding long-term structural unemployment is important in ensuring that reductions in the unemployment rate can be achieved.

**Figure B2: Unemployment by Duration**

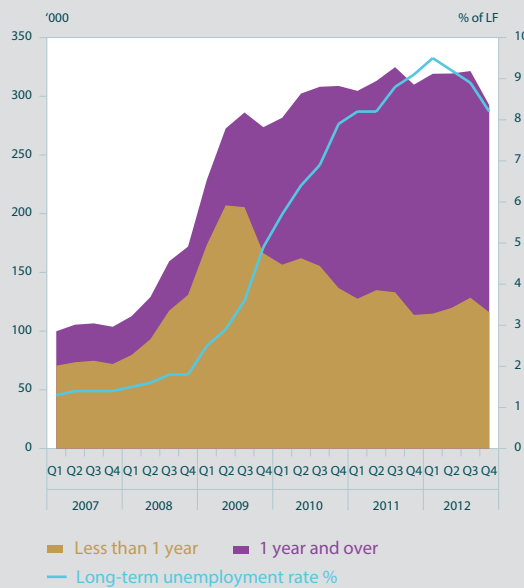


Figure B2 shows total number unemployed broken down by persons unemployed for up to one year and those out of work for a year or more (defined as long-term unemployed). As of Q4 2012, the number classified as long-term unemployed accounted for around 60 per cent of the total. The long-term unemployment rate (left-hand side axis) peaked in the first quarter of 2012 at 9.5 per cent but declined to around 8 per cent by the end of the year.

A key domestic policy challenge is to ensure that the current high rate of unemployment can be reduced within a reasonable timeframe. Apart from the obvious social consequences, avoiding persistently high unemployment is important for financial stability and in order to minimise the damage to the economy's long-run potential growth rate. The analysis here illustrates that although a significant number of the unemployed have relatively high levels of education, around one third have leaving cert or below. This highlights the importance of focussing labour market policy on those currently unemployed with the greatest educational disadvantage, as well as those in long-term unemployment, in order to bring about an improvement in labour market conditions as the economy recovers.

**Table 6: Employment, Labour Force and Unemployment 2011, 2012, 2013<sup>f</sup> and 2014<sup>f</sup>**

	2011	2012	2013 <sup>f</sup>	2014 <sup>f</sup>
Agriculture	83	86	86	87
Industry (including construction)	348	336	335	339
Services	1,418	1,414	1,419	1,435
Total Employment	<b>1,849</b>	<b>1,838</b>	<b>1,841</b>	<b>1,862</b>
Unemployment	317	316	311	300
Labour Force	2,166	2,154	2,152	2,163
Unemployment Rate (%)	<b>14.6</b>	<b>14.7</b>	<b>14.5</b>	<b>13.9</b>

**Note:** Figures may not sum due to rounding.

Recent Bulletins have drawn attention to two dimensions of the unemployment problem, the high rate of youth unemployment and the level of long-term unemployment. The latest figures show that the unemployment rate for those aged 15-19 is 33 per cent; for those aged 20-24, the rate is 26 per cent. The long-term unemployment rate, classified as those out of work for a year or more, is 8.2 per cent. Despite marginal improvements on both fronts in 2012, the elevated rates of youth and long-term unemployment are of particular concern. Labour market research shows that the probability of regaining employment diminishes with the duration of unemployment. This poses a risk that, even with a return to increasing employment, the high rate of long-term unemployment could prove difficult to reduce.

The rate of unemployment is expected to fall slightly again in 2013 reflecting a combination of a small increase in employment and a further reduction in the size of the labour force. A return to more balanced growth in 2014, with domestic demand rising, should see some further inroads being made into reducing the current high rate of unemployment.

### Pay

Economy-wide compensation per employee recorded a small rise of 0.7 per cent in 2011. Data from the CSO's Earnings, Hours and Employment Costs Survey (EHECS) show a continuation of this upward trend in earnings during 2012, although the pace of overall wage growth remains subdued. Earnings

data indicate that the pace of wage growth moderated as the year progressed. For 2012 as a whole, economy-wide average weekly earnings recorded a slight increase of 0.6 per cent compared to 2011.

The data show that overall economy-wide earnings have been broadly stable since the economy went into decline in 2008. Despite the large fall in GDP in 2008 and 2009 and the rise in unemployment, private sector hourly earnings have been flat in recent years with a small increase recorded in 2012. Public sector hourly earnings declined by 3.7 per cent in 2010 but registered small increases in both 2011 and 2012.

Increases in average weekly earnings took effect across both the public and private sector during 2012. Weekly earnings in the public sector increased by 1.6 per cent while a slightly smaller rise was recorded in the private sector. Turning to the composition of the increase in average weekly earnings, the data indicate that the increases in public sector earnings reflected a rise in hours worked while, in the private sector, higher hourly pay was the main driver of the rise in earnings.

At a sectoral level, average hourly earnings rose in eight of the thirteen economic sectors annually in 2012, with the largest percentage increases recorded in *information and communication* and *professional, scientific and technical* activities. Annual declines in hourly earnings were recorded in *administration and support services*, *education* and *health*.



**Table 7: Inflation Measures – Annual Averages, Per Cent**

Measure	HICP	HICP excluding Energy	Services <sup>a</sup>	Goods <sup>a</sup>	CPI
2010	-1.6	-2.7	-0.7	-2.4	-1.0
2011	1.1	0.0	0.8	1.5	2.6
2012	2.0	0.9	1.9	2.0	1.7
2013 <sup>f</sup>	1.5	1.4	1.8	1.3	1.4
2014 <sup>f</sup>	1.2	1.5	1.7	0.6	1.1

<sup>a</sup> Goods and services inflation refers to the HICP goods and services components.

Looking ahead, the conditions which would support a broad-based sustained recovery in earnings look unlikely to materialise over the forecast horizon. Domestic demand is expected to contract again this year with a modest expansion pencilled in for 2014, while the unemployment rate is forecast to decline only gradually. In this environment, wage pressures are projected to remain muted. In the public sector, the payment of annual salary increments has led to an increase in compensation per public sector employee in 2012. Although public sector employment is projected to decline in 2013 in line with government announcements, compensation per employee in the public sector is expected to rise modestly in 2013. Following a small increase in 2012, private sector compensation is projected to grow again both this year and next. Reflecting the solid performance of the tradable sector of the economy, private sector earnings have been stable or trending upwards over recent quarters. The forecasts envisage a small increase in output and exports in 2013 which should support a modest rise in private sector earnings this year. Falling unemployment and a return to stronger economic growth should result in some additional upward movement in wage rates in 2014. Annual growth in economy-wide compensation per employee is expected to average 0.8 per cent in 2012 and 1 per cent in 2013. Improved labour market conditions should support marginally stronger wage growth in 2014.

## Inflation

Inflation in Ireland can be separated into domestically generated inflation and imported

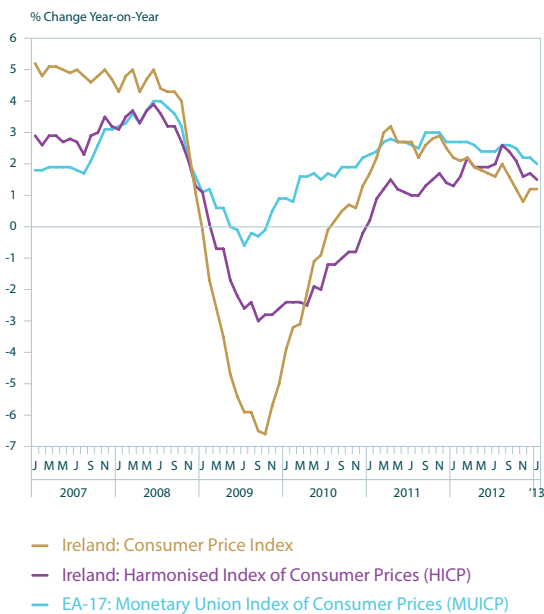
inflation. The HICP inflation rate averaged 2 per cent in Ireland last year. This could be considered relatively high given the weakness in the domestic economy but higher energy prices, particularly in the first half of the year, made a significant contribution to overall inflation. Excluding food and energy prices, the inflation rate in 2012 was just 0.7 per cent. This shows that domestically generated inflation made a relatively weak contribution to overall inflation. Nonetheless, domestic inflation was higher in 2012 relative to 2011, with services inflation increasing from 0.8 per cent to 1.9 per cent.

Inflation is expected to ease somewhat in 2013 relative to 2012. With the outlook for oil prices and exchange rates suggesting that less energy price inflation will be imported in 2013, one of the main drivers of inflation from last year will be weaker. Domestic inflation, as measured by services inflation, is projected to remain fairly stable relative to last year as the domestic economy begins to stabilise. These factors lead to a forecast of 1.5 per cent for HICP inflation in 2013. This includes the impact of measures taken in Budget 2013. Indeed, alcohol and tobacco prices have already increased since the announced increase in excise duties.

Turning to the CPI, Table 7 shows that it was lower than the HICP in 2012 and this was due to the impact of lower mortgage interest repayments. These repayments depend on both mortgage interest rates and house prices. The gap between the HICP and CPI inflation rates is likely to narrow this year, as the downward pressure on mortgage interest repayments eases relative to 2012. Although

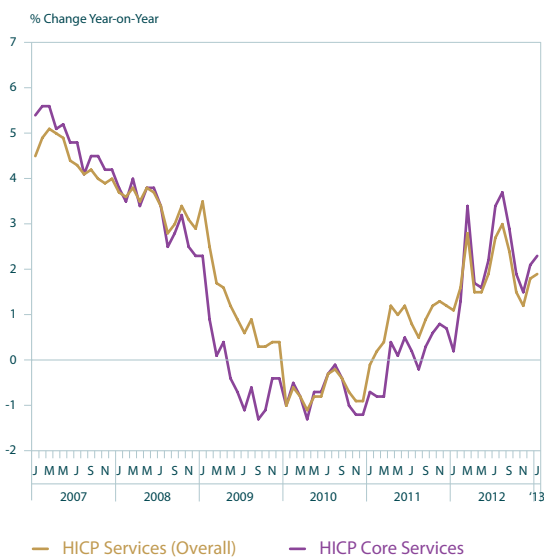
the forecast for 2014 HICP inflation is 1.2 per cent, this further reduction in inflation relative to 2013 is driven by technical assumptions regarding energy prices, which are extremely uncertain over such a long horizon. Excluding energy prices, inflation is expected to increase fractionally from 1.4 per cent in 2013 per cent to 1.5 per cent in 2014.

**Chart 4: Consumer Prices**



Source: CSO.

**Chart 5: Services Sector Inflation**



Note: Core Market Services equals HICP services excluding telecommunications, alcohol and administered services.

Source: CSO.

**Property Prices**

The CSO's Residential Property Price Index, available to January 2013 at the time of writing, suggests that some segments of the property market may be in a phase of stabilisation following 5 years of decline. Chart 6 illustrates that the year-on-year rate of decline in property prices moderated to 3.3 per cent in January 2013. House prices in Dublin registered their first year-on-year increase in over 5 years in January 2013, while prices outside the capital, where oversupply is more prevalent, continue to decline. There is increasing evidence that a shortage in the supply of family homes in some parts of Dublin is resulting in upward price pressure in some local markets. Pent-up demand is reflected in the rental market – with rents up almost 7 per cent since their low at end-2010. In terms of a cumulative fall from peak, national property prices are almost 50 per cent below their peak, although considerable differences exist depending on location and type.

**Chart 6: Residential Property Price Indices**

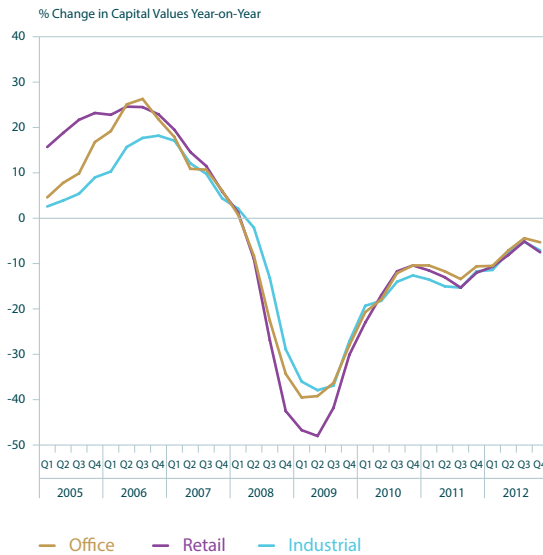


Source: CSO.

Prices in Dublin have fallen further than the rest of the country, with house prices down 54.2 per cent and apartment prices down 61.1 per cent; house prices outside of Dublin have fallen by a lesser 46.6 per cent. It remains to

be seen whether the impact of the ending of mortgage interest rate relief at end-2012 feeds through to activity and prices in the months ahead. Over-supply, tight credit conditions, and expectations of falling prices are likely to continue to result in some further declines in the overall level of house prices, although with differences in performance across different segments of the market. The shortage, however, of well-located family homes in parts of Dublin has likely put an end to the large scale price decreases of the recent past.

**Chart 7: SCS/IPD Irish Commercial Property Index**



Source: SCS/IPD.

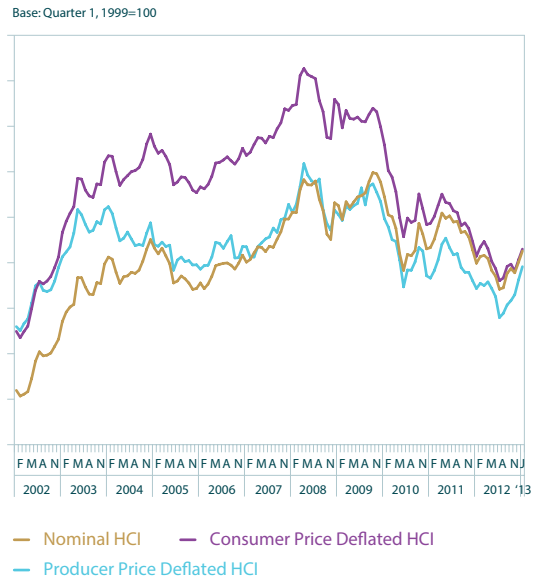
On the commercial side, the latest available indices indicate that capital values continued to fall in the fourth quarter of 2012, although at a moderate rate, with some semblance of stabilisation reported by some sectors in prime rents and yields. The Society of Chartered Surveyors/Investment Property Databank's Commercial Property Index reported a 1.5 per cent quarter-on-quarter capital value decrease in Q3 2012 (Chart 7). This is corroborated by the Jones Lang LaSalle index for Q4 2012, which recorded a slightly larger decrease of 1.8 per cent in capital values for the fourth quarter of 2012. This index also reported some weakness in rental values, reporting a quarterly decline of 1 per cent in the fourth quarter.

## Competitiveness

### Exchange Rate Developments

The euro continued to strengthen against both sterling and the dollar in the latter stages of last year and opening months of this year, as markets reacted positively at efforts to stabilise and separate the European sovereign and banking crises. This is reflected as a negative development from a competitiveness viewpoint in Chart 8, which maps movements in the Harmonised Competitiveness Index (HCI – an increase in the index indicates a reduction in competitiveness). Since February, however, the euro has experienced sustained weakness (down almost 5 per cent) against the dollar. This brings the consumer deflated measure of the HCI back to the level which pertained in 2003. With inflation differentials with respect to the rest of the euro area and the US narrowing as the global slowdown takes root, movements in competitiveness indicators are more likely to reflect movements in exchange rates in the period ahead.

**Chart 8: Harmonised Competitiveness Indicators**



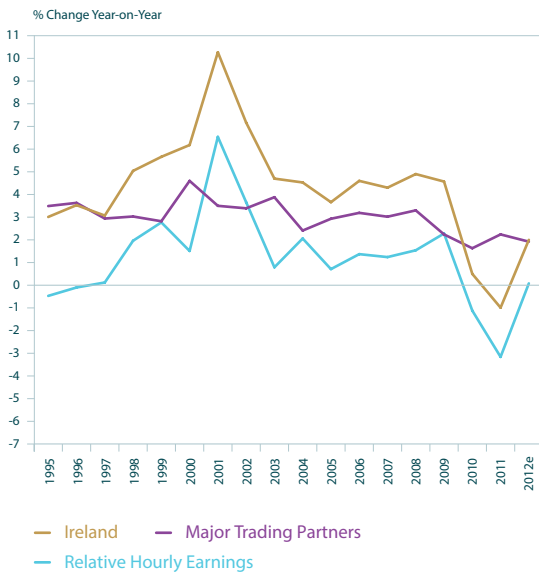
Source: Central Bank of Ireland and ECB.

**Productivity and Cost Competitiveness**

The substantial improvements in productivity and unit labour costs posted in the aftermath of the crisis, largely in the 2009 to 2011 period, are unlikely to be a feature of the economy in the years ahead as most of the adjustment in employment and salaries has already occurred. Chart 9 illustrates the evolution of hourly earnings in manufacturing relative to our main trading partners, pointing to a closing of the relative wage growth gap in 2012. Following estimated productivity growth of 1.7 per cent last year, and in light of the overall economic and labour market outlook set out above, average annual productivity growth of 0.9 per cent on a GDP basis is projected for this year, before increasing to 1.1 per cent in 2014. In the wake of unit labour cost declines of 0.8 per cent (on a GDP basis) last year, absolute unit labour costs are projected to remain largely flat over the projected horizon. The improvement in productivity is offset by projected increases on the compensation side. According to European Commission projections, labour cost competitiveness in Ireland relative to the euro area is set to improve this year and next.

While competitiveness in the manufacturing sector has been a critical factor in Ireland's overall competitiveness in the past, a broader sense of competitiveness is now more relevant – particularly one that encompasses the characteristics of the increasingly important services sectors. Moreover, with international labour mobility on the rise, the cost of living is a salient factor – one where Ireland needs to improve on a number of fronts. On-going work of the National Competitiveness Council (NCC) highlights areas of concern with regard to our competitiveness. The 2012 Competitiveness Scorecard benchmarks our international performance on a broad range of indicators and highlights a number of areas that require further structural reforms. In addition to structural commitments under the EU/IMF programmes, the NCC recommend and stress the need for improvement in: investment in next generation broadband, reduced dependency on imported energy and increased investment in the renewables sector, more tax credits for R&D, continued extension of Ireland's tax treaty network and a restoration of bank lending. They also stress the importance of competitiveness improvements in sheltered sectors such as healthcare and legal services where these costs compare unfavourably with international competitors.

**Chart 9: Hourly Earnings in Manufacturing (in Local Currency)**



Source: Central Bank of Ireland calculations.

**Chart 10: Irish Unit Wage Costs Relative to Main Trading Partners (in Common Currency)**



Note: The series in the chart are influenced by compositional effects. For a more detailed discussion, see Box A: Compositional Effects in Recent Trends in Irish Unit Labour Costs, Quarterly Bulletin 1 2011.

Source: Central Bank of Ireland, European Central Bank and AMECO.

## The Public Finances

### Overview

Following continued improvement in 2012, when the general government deficit is estimated to have comfortably outperformed its ECOFIN target, there have been further positive developments in the public finances at the start of this year. Exchequer returns data reveal a decline in the exchequer deficit in the year to February, while, having introduced €3.5 billion in consolidation measures in December's Budget, the Government has made progress on a number of important issues which will support the return to a sustainable fiscal position. Looking ahead there is still significant work to be done to achieve this, however, and it is vital that budget targets continue to be met in this and the coming years.

The Exchequer ran a deficit of €936 million in the first two months of 2013, an improvement of €1.1 billion from the corresponding period last year (see Table 8). The stronger outturn primarily reflected the Government's sale of its contingent capital bond in Bank of Ireland, excluding which lower expenditure just outweighed a decline in revenue inflows.

Taking a closer look at the revenue side, the economy experienced a modest 1.3 per cent annual decline in tax revenues. There were contrasting developments in the 'big four' tax heads; VAT and excise expanded on a year-on-year basis, but income tax remained broadly unchanged and corporation tax recorded a sharp decline. With regard to the latter two, annual comparisons are complicated by special factors which artificially boosted inflows in the corresponding period of 2012. Income tax was increased by the reclassification of a portion of PRSI, while corporation tax benefited from the receipt of delayed payments at the

beginning of last year. Excluding the above and other one-off issues – such as timing factors supporting growth in stamp duty receipts – tax revenues would have increased by around 3.5 per cent, broadly in line with the overall target for the year. Non-tax revenue was also lower than in 2012, a trend that is expected to continue throughout this year against the backdrop of lower bank guarantee fees – following the Government's decision to end the Eligible Liabilities Guarantee (ELG) scheme for all new liabilities from the 28th March 2013 – and lower interest on contingent capital notes. Just over €1 billion of these were sold in January, resulting in a corresponding increase in capital receipts. Factoring in all of the above developments total revenue and receipts recorded an annual increase of €890 million from the same period in 2012.

On the spending side, total net voted expenditure was 2.8 per cent lower, with current and capital spending making broadly similar contributions of around €100 million to this decline. The biggest year-on-year contractions occurred in the social protection, education and transport vote groups, while expenditure was also lower in health. While it is still very early in the year, developments in the former and latter are significant given that these were the vote groups that drove the above target spending that occurred in 2012. Non-voted expenditure was also lower in the first two months of the year, albeit relatively modestly, as an increase in non-voted current expenditure was outweighed by weaker non-voted capital spending. The most notable developments were costs relating to servicing the national debt remaining broadly unchanged year-on-year at €880 million and loans to the Insurance Compensation Fund declining. Taking account of all of these developments total expenditure recorded an annual contraction of €245 million from the same period in 2012.

**Table 8: Summary of Exchequer Returns, February 2013**

	Feb 2012 €m	Feb 2013 €m	% Annual Change
<b>Current Revenue</b>			
– Tax revenue	5,893	5,815	
– Non-tax revenue	394	311	
<b>Total</b>	<b>6,286</b>	<b>6,127</b>	<b>-2.5</b>
<b>Current Expenditure</b>			
– Voted expenditure	7,159	7,049	
– Non-voted expenditure	1,346	1,404	
<b>Total</b>	<b>8,505</b>	<b>8,453</b>	<b>-0.6</b>
<b>Current Budget Balance</b>	<b>-2,218</b>	<b>-2,326</b>	
<b>Capital Budget Balance</b>	<b>146</b>	<b>1,390</b>	
<b>Exchequer Balance</b>	<b>-2,072</b>	<b>-936</b>	
<b>Source and Application of Funds</b>			
– Total Borrowing/Repayments	-7,442	-31,229	
– Bonds issued to CBI on Liquidation of IBRC <sup>a</sup>	0	25,034	
– Total Increase in Exchequer Deposits	5,370	5,259	
<i>Exchequer Balance</i>	<b>-2,072</b>	<b>-936</b>	

a These bonds replace the promissory notes previously issued to IBRC.

The Exchequer returns also show that the Government borrowed €31.2 billion in the first two months of the year. The overwhelming majority of this, however, reflects the €25 billion of bonds issued to the Central Bank to replace the promissory note (discussed in more detail below), a figure that will not impact on general government debt. Taking account of this, and the need to finance the Exchequer deficit, there was an increase of €5.2 billion in Exchequer cash balances over the period.

### Other Developments

In recent months the Government has made progress on key issues which will provide significant support to the goals of restoring full market-based funding from 2014 and returning the public finances to a sustainable position. The most notable of these is the liquidation of the Irish Bank Resolution Corporation (IBRC) and replacement of the promissory notes

with a portfolio of longer term non-amortising Irish Government bonds (discussed in a box in the Financing Developments chapter). Given the lower interest payments involved, this is expected to have a positive impact on the general government balance from 2014 onwards, with the overall size of the gains depending on the final valuation of the IBRC loan book which has been acquired by NAMA. It will also have a favourable impact on the debt position in gross terms, and support the return to full market based funding. Proposals have also been finalised on a new Public Service Agreement which would produce further savings of €1 billion in the public service pay and pensions bill by 2015 (€300 million this year and €700 million in the remaining years). The implementation of these measures, added to the carry-over effect of savings from the Budget 2013 measures<sup>7</sup> and the commitment to introduce water metering in 2015, would mean that around 40 per cent

<sup>7</sup> In many cases the full year effect of the measures introduced in Budget 2013 is greater than the yield expected to be generated in 2013. The local property tax, for example, is expected to yield €250 million per annum this year but €500 million in a full year from 2014 onwards, generating a carry-over effect of €250 million.

of the €5.1 billion in consolidation required for the period 2014 and 2015 would be already identified, reducing uncertainty for households and businesses. Recent months have also seen the Government sell Irish Life for €1.3 billion and, as noted above, its contingent capital bond in Bank of Ireland for €1 billion. While these sales will have only a marginal impact on the general government deficit<sup>8</sup>, they will improve the debt outturn and also the country's funding requirements by reducing the Exchequer borrowing requirement this year.

Finally, the National Treasury Management Agency (NTMA) issued its first 10-year government bond for over three years in early March, raising a higher than expected €5 billion, at a yield of 4.15 per cent. Having already raised €2.5 billion via a syndicated tap of its existing 2017 Treasury Bond, in January, the NTMA noted that they are now well-placed to have 12-15 months funding in place when the programme concludes at the end of 2013.

<sup>8</sup> Having submitted the data to Eurostat at end-March as part of the Maastricht Returns process the first official estimate of the general government balance for 2012, and an updated forecast by the Department of Finance for 2013 is expected to be published by the Central Statistics Office in April.





## An Timpeallacht Gheilleagrach

I dteannta le sonraí ó shuirbhéanna lena dtugtar le fios gur tháinig fás ar an bhfostaíocht chomhiomlán ar bhonn bliantúil don chéad uair ó 2008, bíodh gur fás mall a bhí ann, tugtar le fios leis na Cuntais Náisiúnta Ráithiúla is déanaí go bhfuil ag leanúint leis an téarnamh céimseach ar gheilleagar na hÉireann. Tugtar le tuiscint le réamhshonraí OTI do 2012 go raibh dhá bhliain fáis as a chéile ann, cé gurbh ísle an leibhéal fáis sin in 2012 ná 2011. Baineadh an fheidhmíocht seo amach in ainneoin na timpeallachta seachtraí dúshlánaí ina bhfacthas moilliú ar fhás ar leibhéal ní ba leithne idirnáisiúnta sa dara leath de 2012, go háirithe i bpríomh-chomhpháirtithe trádála na hÉireann. Cé go bhfuil moilliú tagtha ar fhás onnmhairí mar thoradh ar éileamh domhanda níos laige, tá an méadú ar mhéideanna onnmhairíochta sách láidir i gcónaí chun iarmhairt an laghdaithe leanúnaigh ar éileamh intíre a fhritháireamh. Is díol suntais é neart onnmhairíocht seirbhísí in 2012 atá i gcodarsnacht leis an laghdú ar onnmhairíocht earraí, ar neart é atá mar thaca faoi stóinseacht fheidhmíocht iomlán onnmhairíocht. Ó thaobh cúrsaí intíre, cé gur lean an t-éileamh de bheith ag crapadh, tugtar faoi deara go bhfuil maolú anois ar luas an mheathlaithe. Leis an leathnú measartha ar thomhaltas agus ar chaiteachas infheistíochta le linn an dara leath de 2012 mar aon le méadú imeallach ar fhostaíocht, tugtar le tuiscint gur cosúil go bhfuil an laghdú ar an éileamh intíre ag teacht chun deiridh. I bhfianaise go bhfuil an t-éileamh ar allmhairí fós lag, baineadh buaicphointe nua amach leis an mbarrachas i gcuntas reatha Chomhardú na nÍocaíochtaí agus ba é 6.1 faoin gcéad den OTI an réamhthoradh, an ceann is airde ar taifead. Is gné lárnach é seo de dhíghiaráil riachtanach an gheilleagair agus de neartú na gclár comhardaithe.

Ag féachaint romhainn, meastar go maolóidh an fás ar onnmhairí na hÉireann in 2013 i gcomparáid leis na meastacháin roimhe seo de thoradh an éilimh sheachtraigh níos laige agus toisc go meastar go moilleoidh an fás sna príomh-chomhpháirtithe trádála. Ar a shon sin, meastar go ndéanfar an méid sin a fhritháireamh go pointe le hathbhreithniú beag aníos ar an éileamh intíre. Agus na hathruithe sin á gcur i gcuntas, tá na réamhaisnéisí nua ón mBanc maidir le fás OTI do 2013 agus 2014 beagáinín níos ísle ná na cinn a foilsíodh san Fheasachán deireanach. Tháinig méadú 0.9 faoin gcéad ar fhás OTI in 2012. Meastar gurb é 1.2 faoin gcéad an fás OTI i mbliana agus tuartar gurb é 2.3 faoin gcéad an fás OTI in 2014; is ionann é sin agus athbhreithniú beag anuas de 0.1 faoin gcéad agus 0.2 faoin gcéad faoi seach ón réamhaisnéis deiridh. Tá an meastachán do 2014 bunaithe ar thiomhdí comhdhearcaidh ó na príomh-

institiúidí eacnamaíocha go mbeidh téarnamh ar an éileamh seachtrach i dtreo a threochta fadtréimhsí. Baineann éiginnteacht leis na réamhaisnéisí seo, áfach, agus beidh tionchar mór ag forbairt sa gheilleagar Eorpach agus sa gheilleagar idirnáisiúnta ar an toradh.

Leantar de bheith ag cloí go dlúth le spriocanna Chlár AE/CAI agus leantar le dul chun cinn breise ar na príomhdhúshláin beartais. San earnáil airgeadais, ba é an dul chun cinn mall a bhí á dhéanamh ag na bainc chun déileáil le hiasachtaí neamhthuillmheacha ba chionsiocair le fad a chur leis an éiginnteacht leanúnach a bhain le cáilíocht sócmhainní na mbanc agus leis na hionchais maidir le brabúsacht agus bhí sé ina bhac ar bhuanréiteach na bhfadbhanna atá ag iasachtaithe anásta. Chun a áirithiú go ndéanfar dul chun cinn suntasach maidir leis na saincheisteanna seo sna blianta atá

le teacht, tá creat rialála stuamachta nua tugtha isteach ag an mBanc chun luas a chur le réiteach cásanna ina bhfuil riaráistí ar mhorgáistí. Cuimsítear sa chreat seo, na morgáistí cónaitheacha go léir agus na príomhiasachtóirí mórgáiste a ndéanann an Banc Ceannais maoirseacht stuamachta orthu. Leis an gcreat seo, leagtar síos spriocanna cainníochtúla a éireoidh níos déine de réir a chéile agus ceanglaítear ar institiúidí réitigh inbhuanaithe a thairiscint d'iasachtaithe anásta agus na réitigh sin a thabhairt chun críche.

Ina theannta sin, tá athruithe ar an gCód Iompair um Riaráistí Morgáiste á moladh ag an mBanc lena n-éascófar réiteach éifeachtach, tráthúil ar chásanna riaráistí fad a leanfar de chosaintí a chur ar fáil d'iasachtaithe - agus den chosaint seo a fheabhsú ar bhealaí áirithe. Cuidíofar leis na hionchais téarnaimh a neartú trí fhadhb na n-iasachtaí neamhthuillmheacha a réiteach ar chostas réasúnta agus, ag an am céanna, trí dhul in ngleic le hanacair teaghlach.

Ó thaobh an airgeadais phoiblí, cé nach bhfuil na figiúirí go léir ar fáil go fóill, tá comharthaí ann go raibh an tEasnamh Rialtais Ghinearálta do 2012 go mór faoi bhun na sprice. Ar a shon sin, cé go bhfuil feabhas ar na hionchais do 2013 i bhfianaise an toraidh fhabhraigh do 2012, tá sé rithábhachtach go ndéanfar na bearta a fógraíodh sa Cháinainéis a chur chun feidhme ina n-iomláine chun go gcaomhnófar muinín an mhargaidh agus chun maolán a chur ar fáil i leith turraingí diúltacha. Le míonna beaga anuas, chonacthas dul chun cinn maidir le saincheisteanna tábhachtacha, rud a chuidíonn leis an gcúram chun an t-airgeadas poiblí a chur ar chonair inbhuanaithe arís. Ar na saincheisteanna sin, áirítear IBRC a

leachtú agus bannaí fadreacha neamhamúchta Rialtas na hÉireann a chur in ionad na nótaí gealltanais. Ó tharla go bhfritháireofar íocaíochtaí níos ísle úis i mbliana le heisíocaíochtaí i ndáil le deireadh a chur leis an Scéim Ráthaíochta Dliteanas Incháilithe, is idirbheart neodrach é ó thaobh easnaimh in 2013. Táthar ag súil, áfach, go mbeidh tionchar dearfach aige ar an Iarmhéid Rialtais Ghinearálta ó 2014 ar aghaidh. Forbairt shuntasach eile a rinneadh le déanaí is ea Comhaontú na Seirbhíse Poiblí 2013-2016 lena bhféachtar le coigiltis €1bn a bhaint amach i dtuarastail agus i bpinsin na seirbhíse poiblí faoi 2015.

Tá feabhsúcháin ar iomaíochas rithábhachtach chun go bhféadfaidh an geilleagar fillleadh ar fhás cothrom. Cé go bhfuil bearta maidir leis an iomaíochas náisiúnta ag gluaiseacht sa treo ceart le blianta beaga anuas, leagann na bearta sin róbhéim ar an bhfeabhas atá déanta toisc go bhfuil laghdú tagtha ar earnálacha dlúthshaothair amháil earnáil na foirgníochta. Roimhe seo, ba ghné rithábhachtach é an t-iomaíochas san earnáil déantúsaíochta i dtéarmaí iomaíochas foriomlán na hÉireann a chinneadh, ach i bhfianaise nádúr athraithe an gheilleagair, is cosúil anois go mbaineann níos mó tábhachta le brí níos leithne iomaíochais - go háirithe brí a chuireadh saintréithe na n-earnálacha tábhachtacha seirbhísí. Cé go ndearnadh dul chun cinn áirithe chun an t-iomaíochas a cailleadh le linn am an bhorrtha a athghabháil, tá gá le tuilleadh feabhsúchán chun go n-uasmhéadófar na hionchais maidir le fillleadh ar fhás níos láidre.

# Financing Developments in the Irish Economy

## Overview

Financing conditions for both the Irish sovereign and Irish-owned banks continue to improve as the implementation of both fiscal and financial sector reforms under the EU/IMF programme has been maintained. The improved sentiment towards Ireland has manifested itself in lower yields on sovereign debt, as well as lower interest rates being required to attract deposits by banks operating in Ireland. Important domestic policy measures have been taken, such as the swap of the non-standard promissory notes issued in recapitalising IBRC with longer-dated government bonds, and the announced ending of the Eligible Liabilities Guarantee (ELG) scheme. Both these events improved the overall funding profile of the Irish Government, which successfully re-entered the long-term bond market, during March 2013, after three years without issuance. The wind-down of the ELG scheme also provides evidence of the gradual return to normality in the funding environment for Irish banks, which have also seen some positive developments in terms of deposit-based funding recently. This comes amid wider investor confidence and the re-emergence of a risk appetite among institutional investors for peripheral euro area debt.

The non-financial private sector in Ireland continues to deleverage, as both non-financial corporations (NFCs) and households reduced their overall debt levels in Q3 2012 and continued to reduce their borrowings from Irish resident banks in subsequent months. As the balance sheet of the NFC sector has contracted, multinationals, in particular, have become more reliant on equity-based funding. The indigenous small- and medium-sized enterprise (SME) sector continues to see its overall level of bank lending decline. However, certain sectors which exhibit relatively good repayment performance and better trading prospects (e.g. agriculture) are attracting more new lending from the resident banking system. The pricing of bank lending for SMEs remains higher in Ireland than for the euro area as a whole. That said, new business rates on all NFC loans fell in Ireland through 2012 to a greater extent than the euro area average, possibly indicating that most new lending activity reflects restructuring/renegotiation of existing facilities as opposed to new financing on which higher interest rates could be levied.

In aggregate, the net worth of the household sector increased for the first time in over four years during Q3 2012. This positive development came as households continued to reduce their overall liabilities, but was primarily driven by gains in the value of both housing and financial assets. The overall sustainability of the debt position of Irish households also improved through 2012, as debt to disposable income continued to decline. While the aggregate position for the household sector is improving, the distribution of these benefits is not homogenous. In particular, the number of households that are experiencing difficulties in servicing their mortgage repayments continues to rise. By end-2012, 11.9 per cent of all private residential mortgages for principal dwelling houses (PDH) were in arrears of over 90 days. While the quarterly increase in arrears cases over 90 days was at its lowest since the launch of the series, both the overall number and rate of increase in mortgage accounts in very long-term arrears (over 360 days) continues to be a source of concern. Insisting mortgage

providers establish robust, practicable and sustainable long-term resolution strategies for customers in difficulty is a key policy concern which continues to be monitored closely. Explicit targets, established by the Central Bank, for credit institutions to tackle this issue are being put in place. Accompanying this are initiatives including the Personal Insolvency Bill, the necessary legislative adjustments following the Dunne judgement and the revised Code of Conduct on Mortgage Arrears (CCMA).

The challenges facing the mortgage market complicates the gradual return to normality for the banking system. Interest rates on outstanding mortgages remain relatively low in Ireland due to the substantial proportion of mortgage debt that is linked to the ECB main policy rate (tracker mortgages). While banks in Ireland have been increasing their interest rates for new mortgage business in order to improve their margins and profitability, the volumes of activity remain relatively low.

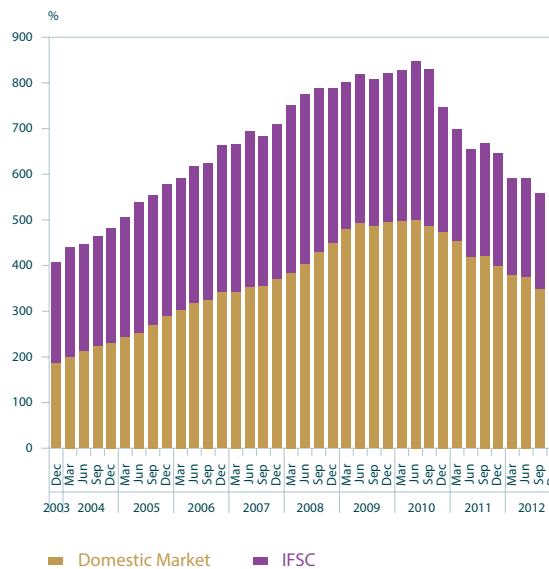
Mortgage-backed securities have been among the primary asset classes used by the banks in securing refinancing operations with the Eurosystem. During the last quarter of 2012, a number of residential mortgage-backed securities (RMBS), including some based on Irish mortgage portfolios, were unable to secure the necessary credit ratings to be eligible as collateral in Eurosystem refinancing operations, in part due to the challenged nature of the Irish mortgage market. While this has not presented an insurmountable funding issue for banks in Ireland given the overall reduction in their funding requirements, it underlines the wider need to see action on resolving the challenges in the Irish mortgage market.

## Monetary Financial Institutions

### Credit Institutions

The banking system in Ireland has continued to shrink in recent quarters. Total assets of credit institutions operating in the State were equivalent

**Chart 1: Total Assets of Irish Resident Credit Institutions as a Per Cent of Nominal GDP**



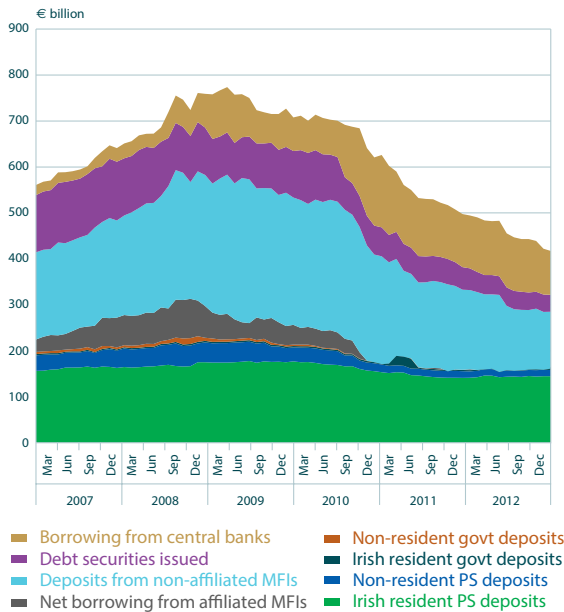
Source: Money and Banking Statistics, Central Bank of Ireland.

to 536 per cent of annual GDP at end-2012 (Chart 1), following a reduction of almost 15 per cent over the year. The Irish banking system remains large in proportion to the economy as a whole by international comparison. The total assets of the euro area banking system are 338 per cent of euro area GDP, having contracted by 2.3 per cent in 2012. Excluding internationally-focused banks in the IFSC, the domestically relevant banking system<sup>1</sup> in Ireland is approximately 335 per cent of GDP, following a reduction in total assets of 14 per cent in 2012. The reduction in the size of the IFSC banking sector was even larger during the year, at 16.5 per cent. These dynamics are in line with the overall requirements for deleveraging the Irish-owned credit institutions and the retrenchment and restructuring of foreign-owned banks (both in terms of the Irish retail market and IFSC operations) as a result of the wider correction in the European banking system.

The overall reduction of the banking system in recent quarters has been accompanied by a gradual realignment of the funding profile

<sup>1</sup> This refers to domestic market credit institutions, i.e. those institutions with a significant retail presence in Ireland in terms of business with Irish households and non-financial corporations. This includes both Irish- and foreign-owned credit institutions. A list of domestic market credit institutions is available at <http://www.centralbank.ie/polstats/stats/cmab/Documents/Credit%20Institutions%20resident%20in%20the%20Republic%20of%20Ireland.pdf>.

**Chart 2: Domestic Market Credit Institutions' Funding Profile**



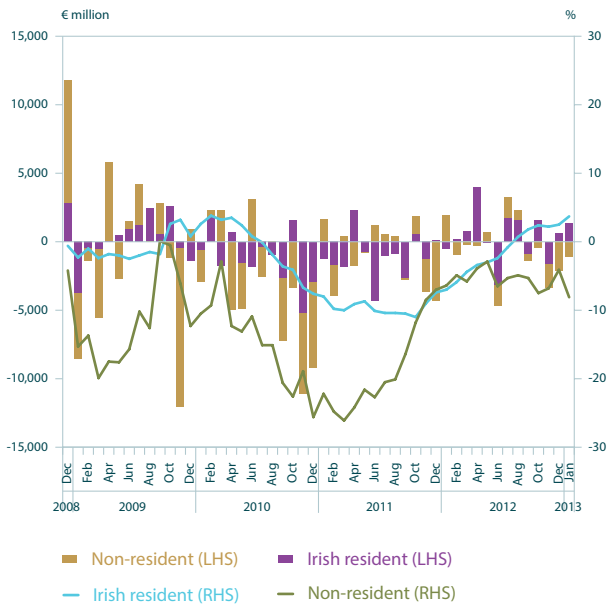
Source: Money and Banking Statistics, Central Bank of Ireland.

for domestically relevant credit institutions (Chart 2). The shift away from wholesale and market-based funding (deposits from other MFIs and debt securities issued) has for the most part been replaced by increased reliance on funding from central banks since mid-2010. Debt funding continues to decline. Despite an increase in redemptions of €3.5 billion during 2012 compared with 2011, the pace of the decline in debt funding stabilised through 2012. This averaged minus 19.5 per cent for longer-term debt issuance (over 1 year maturity), as the ability of banks in Ireland to access these funding markets at sustainable rates has improved. Funding requirements have fallen in line with the overall reduction of the banking system and, therefore, recourse to central bank borrowing has also reduced in recent months. In the year ending January 2013, domestic market credit institutions' recourse to Eurosystem refinancing operations declined by €15.6 billion (21.8 per cent). Total lending related to monetary policy implementation (euro and non-euro denominated) by the Central Bank of Ireland stood at €67.1 billion at end-January, a reduction of €27.8 billion over the twelve months up to that point.

In most recent months private-sector deposits, particularly those from Irish residents, have begun to increase and their share in overall funding for domestic market credit institutions has risen to 34.8 per cent. Private-sector deposits from Irish residents rose 3.7 per cent in the year ending January 2013, with total private-sector deposits over the same period remaining flat (Chart 3), as confidence in the Irish banking system and wider economic prospects begins to stabilise. The increase in Irish private-sector deposits has been strongest for both overnight and longer-term savings deposit categories (with agreed maturity over two years). Increases in overnight deposits have been driven by deposits from households and non-financial corporations (NFCs), which rose by 1.5 per cent and 16.5 per cent, respectively, in the year ending January 2013. The opportunity cost, in terms of interest rates on offer, of holding deposits overnight relative to short-term savings deposits eased somewhat over the second half of 2012. Coupled with the wider developments in household and NFC deposit holdings, this may suggest that a general preference for liquidity to finance consumption or investment has been a more important factor in deposit flows in recent months. Meanwhile, the rise in longer-term savings deposits has been driven by institutional investors – insurance corporations and pension funds (ICPFs) and other (non-bank) financial intermediaries (OFIs). Deposits in this category from these counterparts increased by 23.3 per cent and 86.4 per cent, respectively, in the year ending January 2013. The relatively high, albeit declining, deposit rates on offer along with the large amount of liquidity currently in the financial system may be driving these developments.

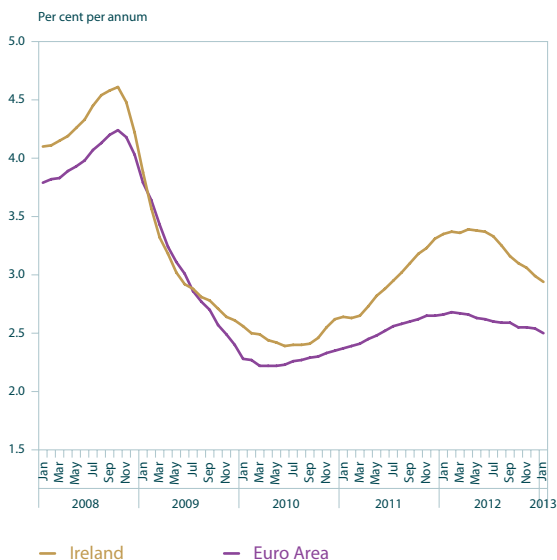
These positive deposit flows have occurred even as the cost of attracting them has eased significantly for credit institutions in Ireland. Retail interest rates on household and NFC deposits with agreed maturity fell by 45 basis points to 2.94 per cent between April 2012 (the most recent high point) and January 2013. While this rate remains higher than the euro area average rate (2.5 per cent), the spread

**Chart 3: Monthly Net Flows (LHS) and Annual Rates of Change (RHS) of Private-Sector Deposits in Irish Resident Credit Institutions**



Source: Money and Banking Statistics, Central Bank of Ireland.

**Chart 4: Interest Rates on Deposits with Agreed Maturity from Households and NFCs (Outstanding Amounts)**



Sources: Central Bank of Ireland and the ECB.

between Irish and euro area rates for savings deposits has narrowed. Meanwhile, retail interest rates on new business lending to households and NFCs have risen somewhat in the second half of 2012, which combined with the reduction in the ECB main refinancing rate in July 2012, has allowed for some improvement in net interest margins generated by credit institutions in Ireland.

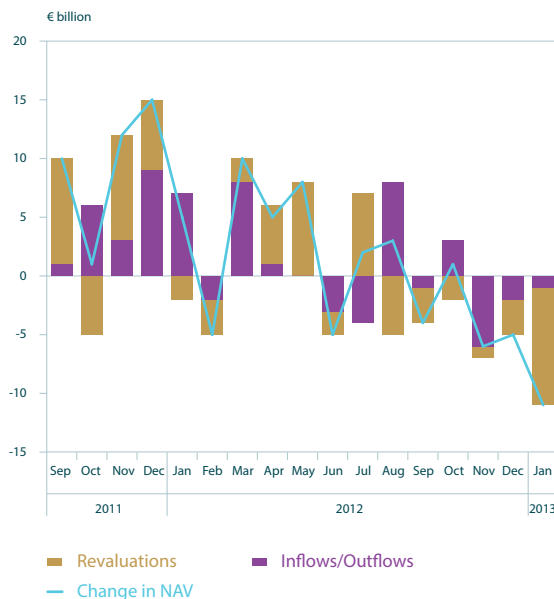
Developments on the assets side of credit institutions' balance sheets are being driven by both the need to 'right-size' their business in a sustainable manner and the wider debt dynamics faced by the Irish non-financial private and public sectors. Amidst the shrinking of credit institutions' balance sheets the only sector to see an increase in credit in the year to end-January 2013 was the Irish general government (7.9 per cent), as increased holdings of bonds issued by the National Treasury Management Agency (NTMA) more than outstripped reductions in loans over the period. Loans to the Irish private sector declined by 4.7 per cent over the year to end-January 2013, as deleveraging by the household and NFC sectors continued. Despite these reductions, the share of credit to the Irish private sector relative to the total assets of domestic market credit institutions has risen during the year to January 2013 to over 50 per cent, a level not consistently seen since 2007. This comes as retrenchment from foreign markets, particularly for Irish-owned credit institutions, has taken the majority of the impact of the deleveraging process. Credit advanced to non-residents by the domestic market credit institutions has contracted by 15 per cent in the year to end-January 2013, with credit to the non-resident private sector falling by 20.2 per cent.

### Money Market Funds<sup>2</sup>

In summary, the year 2012 could be described as one of two halves for both Irish resident and euro area money market funds (MMFs). The net asset value (NAV) of MMFs resident in Ireland increased by nearly €9.5 billion during 2012. Generally positive developments, such

<sup>2</sup> Entities are classified as MMFs in accordance with the updated (December 2010) ECB statistical classification which more closely reflects the regulatory definition of a MMF as agreed with the European Securities and Markets Authority. Under the previous ECB definition, a MMF invested at least 85 per cent of their investment portfolio in instruments with a short maturity, or bank deposits that pursue a rate of return that approached the interest rate of money. Under the new definition the main principle is to maintain the net asset value of the fund either constant or at par, or the value of the investors' initial capital plus earnings, and to invest exclusively in high quality money-market instruments and to provide liquidity through same day or next day settlement.

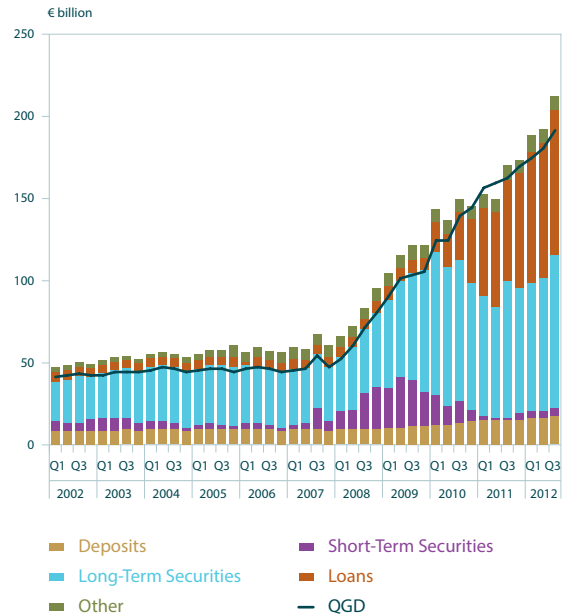
**Chart 5: Monthly Change in Money Market Funds' Net Asset Values**



Source: Central Bank of Ireland.

as net purchases of MMF shares/units and upward market revaluations were recorded in the first half of the year. However, the second half of the year saw MMFs recording negative revaluations each month since August 2012. Furthermore, there were net redemptions of MMF shares/units for most of the second half of the year, particularly in November. Euro area resident MMFs also recorded sizeable declines in their NAVs during the second half of 2012. MMFs have been operating in an environment of low interest rates making it more difficult to generate positive returns, and have not benefited from inflows as a result. MMFs resident in Ireland suffered a sizeable fall in their value during January 2013. Outflows of shares/units of €1.4 billion were accompanied by negative revaluations of €9.7 billion. While there were sizeable reclassifications in the January data, it is evident that the reduction in value was concentrated in MMFs' holdings of bonds, and in particular those issued by non-euro area resident MFIs. The decline in bond holdings reflected both a fall in the value of existing holdings, as well as sales by the MMFs, to pay for withdrawals by unit holders.

**Chart 6: Government Liabilities**



Sources: Quarterly Financial Accounts, Central Bank of Ireland; and Quarterly Government Debt, Eurostat.

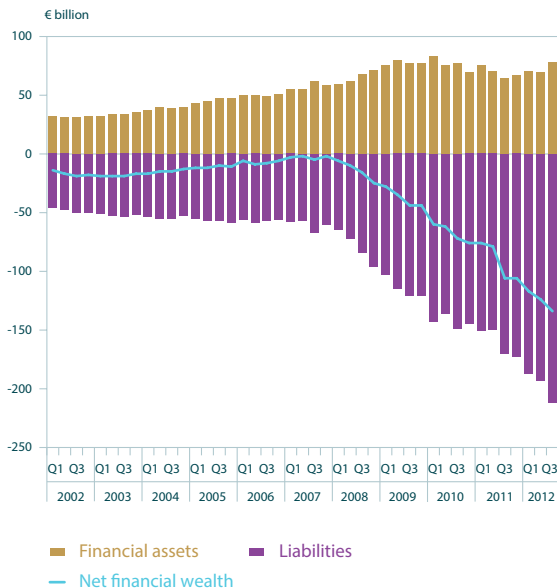
## Government

### Debt and Deficit Developments

Government liabilities increased substantially during Q3 2012 reaching €212 billion, their highest level to date. This represented an increase in liabilities of €19.3 billion or 10 per cent compared with the previous quarter (Chart 6). Quarterly Government Debt (QGD), which is the standard quarterly measure of debt consistent with Excessive Deficit Procedure (EDP) methodology<sup>3</sup>, increased by €11.2 billion over the quarter.

The increase in government liabilities during Q3 2012 reflected both a further incurrence of liabilities by the State (€10.3 billion), as well as an increase in the value of government securities (€8.7 billion). Lower bond yields during Q3 2012 resulted in an increase in the market value of government securities outstanding. The increase in liabilities incurred by the State reflected debt security issuances amounting to €4.9 billion and a further instalment of the EU/IMF programme amounting to €3.8 billion.

<sup>3</sup> Government liabilities in Quarterly Financial Accounts differ from the EDP measure of debt as they are calculated on a non-consolidated basis, and employ different coverage and valuation criteria.

**Chart 7: Government Net Financial Wealth**

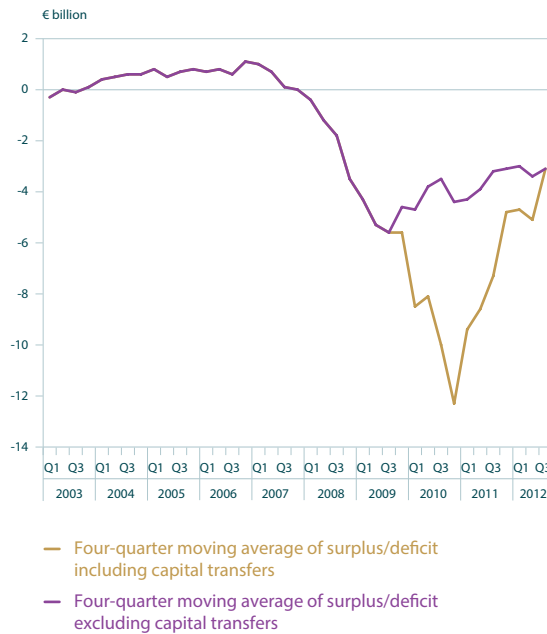
Source: Quarterly Financial Accounts, Central Bank of Ireland.

Net financial wealth, the difference between financial assets and liabilities, declined further over Q3 2012 reaching minus €134 billion (Chart 7). The decline reflected the substantial increase in liabilities of €19.3 billion, which was only partially offset by an increase in financial assets of €9.7 billion.

The government surplus/deficit, as a four-quarter moving average, is depicted in Chart 8. During Q3 2012, the deficit decreased from €5.1 billion to €3.1 billion. When capital transfers are excluded, the deficit decreased from €3.4 billion to €3.1 billion. Since 2009, the State has injected €63 billion into the banking sector, of which €42.7 billion has been treated as a deficit-increasing capital transfer. The remainder was treated as financial transactions (or investments) in government accounts and therefore do not impact the deficit.

### Sovereign Debt Market

Developments in euro area sovereign bond markets in late-Q4 2012 and into early-Q1 2013 generally reflected a mixture of negative and positive factors shaping market sentiment. Agreement in terms of the single banking

**Chart 8: The Four-Quarter Moving Average of the Surplus/Deficit**

Source: Quarterly Financial Accounts, Central Bank of Ireland.

supervisory mechanism, further clarity on the operation of Outright Monetary Transactions (OMT) and the early repayment of three-year longer-term refinancing operations (LTRO) funding by some euro area banks provided some upside. This was tempered somewhat by downward revisions to growth forecasts for the euro area for 2013 and 2014, and political uncertainty following the Italian general election. As Q1 2013 progressed, yields on AAA-rated long-term euro area government bonds increased slightly, but the movements in the benchmark yields on bonds issued by the euro area sovereigns under financial stress were mixed. In the case of Spain and Italy, these yields also increased. By contrast, the yields on long-term government bonds for Greece, Portugal and Ireland recorded declines.

In terms of Irish sovereign debt, positive sentiment was the main factor underpinning the downward movements. By early-December 2012, the yield on ten-year Irish government debt stood at just over 4.6 per cent. The yield would remain relatively stable over the course of the month and closed out the year at less than 4.7 per cent. This represented approximately a 400 basis point reduction on the same period in



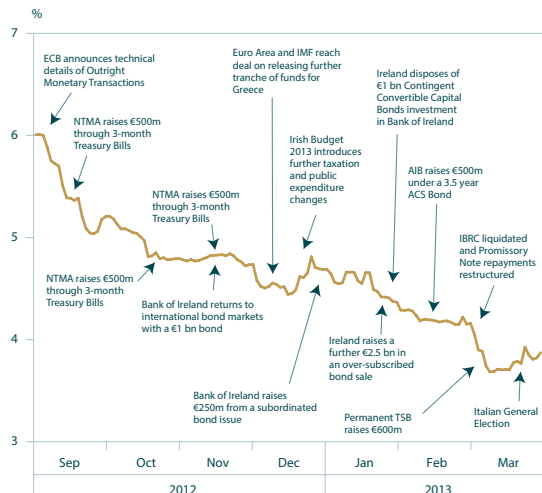
2011. The yield resumed its downward trajectory in the new year and continued to fall steadily over the course of January 2013 reflecting a number of factors. The NTMA raised €2.5 billion through a syndicated tap of the 2017 Treasury Bond which was significantly over-subscribed. This was followed by the State's sale of the entirety of its €1 billion in Contingent Convertible Capital Bonds (or Cocos) in Bank of Ireland. By early-February 2013, the yield stood at close to 4.2 per cent before falling sharply following the announcement of a deal on the restructuring of the IBRC Promissory Notes. The details of this restructure are outlined in Box 1. By mid-February, the yield on ten-year Irish government debt had fallen back to less than 3.7 per cent, a reduction of more than 100 basis points (or 21 per cent) over a six-week period. This was the lowest level for this yield since 2006. The yield climbed slightly thereafter but remained below 4 per cent by early-March (Chart 9). The NTMA subsequently issued a ten-year bond in mid-March, the first such issuance since January 2010, which was heavily over-subscribed and raised €5 billion at a rate of 4.15 per cent. This issuance covers half of the Government's non-EU/IMF Programme related borrowing requirement for 2013.

The trend, observed over previous quarters of Ireland decoupling from the other peripheral member states continued into 2013, with the yield spread on the ten-year Irish government debt declining at a faster rate than for other peripheral countries. The yield spread on ten-year Irish government debt fell by 26 per cent between late-Q4 2012 and late-Q1 2013, equivalent to approximately 90 basis points. Greece, Portugal and Spain recorded proportionately smaller falls. The yield spreads on Italian debt increased over the same period. By late-Q1 2013, the yield spreads for Ireland were lower than those pertaining to the other peripheral economies (including Greece, Portugal, Spain and Italy).

The outstanding nominal volume of existing Irish government long-term bonds in issue was €90.3 billion at end-January 2013 (up from

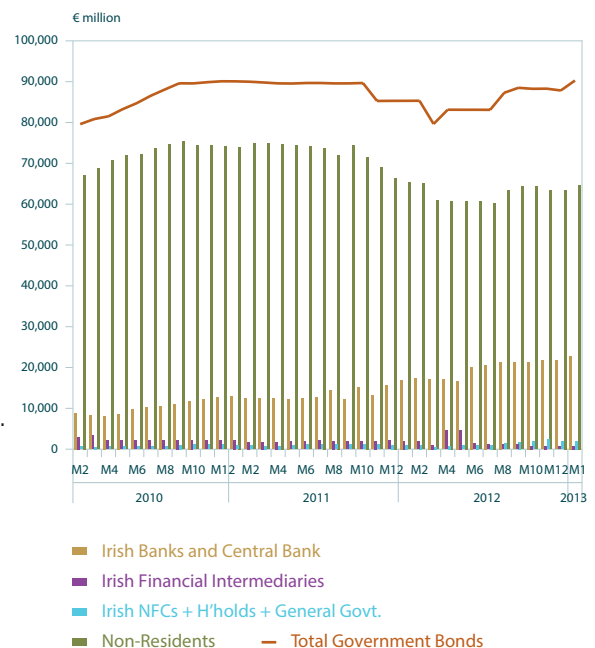
€85.3 billion for the same period in 2012). By end-January 2013, the holders of Government bonds continued to be predominantly non-resident, with 72 per cent in issue being held by foreign investors. Resident holders are predominantly banks.

Chart 9: Irish Government Ten-Year Bond Yields



Source: Thomson Reuters Datastream.

Chart 10: Holders of Irish Government Bonds



Source: Central Bank of Ireland.

**Box 1: Liquidation of IBRC and Exchange of Promissory Notes for Government Bonds<sup>4</sup>**

This Box provides a description of the transactions entered into by the Central Bank of Ireland (the Bank) following the appointment of special liquidators to Irish Bank Resolution Corporation (IBRC), including the replacement of promissory notes that had been issued by the Minister for Finance to the two entities that merged to form IBRC with long-term floating rate government bonds.<sup>5</sup>

The Irish Bank Resolution Corporation Act 2013, which was signed into law by the President of Ireland on 7 February 2013, provides for the winding up of IBRC under a special liquidation regime. Following the appointment of special liquidators to IBRC under this Act, the Bank acquired collateral that had been provided by IBRC as security for emergency liquidity assistance (ELA) of €39.45 billion, consisting of ministerial promissory notes, National Asset Management Agency (NAMA) bonds and other assets. As additional security for the ELA provided by the Bank, IBRC had created a floating charge over its assets in favour of the Bank and some of the ELA also benefitted from a guarantee from the Minister for Finance. The Government offered to exchange the ministerial promissory notes (which were non-tradable) for a portfolio of marketable Irish Government bonds, an exchange which the Bank considered to be advantageous and which it accepted. The bonds received by the Bank are floating rate bonds<sup>6</sup>, with maturity dates ranging from 2038 to 2053.<sup>7</sup> In addition, NAMA, through a newly established special purpose vehicle, acquired the ELA loans that had been secured by the floating charge over IBRC's assets and by the ministerial guarantee (along with the security for these loans) from the Bank and issued government guaranteed NAMA bonds to the Bank in exchange. As a result of these transactions, the Bank was made whole in respect of all of the ELA it had provided to IBRC. In addition, following the termination of IBRC's market repo of the 5.4% Irish 2025 bond, this bond was acquired by the Bank.

The bonds acquired by the Bank as a result of the above transactions have been placed in the Bank's trading portfolio and will be sold as soon as possible<sup>8</sup>, provided that conditions of financial stability permit. The appointment of special liquidators to IBRC also resulted in the Bank acquiring, on behalf of the Eurosystem, the collateral provided to secure standard Eurosystem borrowing by IBRC. [Box 1 Table 1 below sets out the collateral provided by IBRC to the Bank and the corresponding assets acquired following the appointment of special liquidators to IBRC.]

**Box 1 Table 1: Changes to Central Bank of Ireland Balance Sheet**

€ billion	Outstanding secured lending by the Bank to IBRC before appointment of special liquidators	Assets acquired by the Bank following appointment of special liquidators to IBRC	
	Value	Type	Value
Emergency Liquidity Assistance	39.45	Irish Government Bonds	25.03
		Nama Bonds*	13.72
Eurosystem Operations	0.33	ECB Eligible Assets	0.33
5.4% Irish 2025 Bond	-	5.4% Irish 2025 Bond	3.46

\* The value of NAMA bonds received by the Bank was less than the total amount of ELA that had been secured by the floating charge and the ministerial guarantee, which were acquired by the NAMA SPV in exchange for those bonds, due to the exercise of set-off rights by the Bank in respect of other obligations of IBRC to the Bank. The figure presented above for holdings of NAMA bonds by the Bank also includes NAMA bonds that had previously been provided to the Bank by IBRC as collateral for ELA.

4 For further information see the Department of Finance's website (Department of Finance, (2013), "Transaction Overview", <http://www.finance.gov.ie/documents/publications/presentation/2013/newjmpres.pdf>).

5 Irish Bank Resolution Corporation Limited was formed in 2011 through the merger of Anglo Irish Bank Corporation Limited (Anglo) and Irish Nationwide Building Society (INBS), both of which had previously been taken into full public ownership. Promissory notes that had been issued by the Minister for Finance to Anglo and INBS in 2010, in order to recapitalise those institutions, subsequently became assets of IBRC. The Promissory notes were debt instruments with a non-standard amortising structure and represented Irish Sovereign debt.

6 As set out in a specific agreement with the NTMA, the Bank has an option (a right but not an obligation) to exchange a portion of these floating rate bonds for fixed coupon bonds (see [www.ntma.ie](http://www.ntma.ie)).

7 Three tranches of €2 billion each maturing after 25, 28 and 30 years, three tranches of €3 billion each maturing after 32, 34 and 36 years, two tranches of €5 billion each maturing after 38 and 40 years. The bonds carry a variable interest rate that tracks six-month Euribor rates with an average additional margin of 263 basis points.

8 The Bank has undertaken that a minimum of bonds will be sold in accordance with the following schedule: to end 2014 (€0.5 billion), 2015-2018 (€0.5 billion p.a.), 2019-2023 (€1 billion p.a.), 2024 and after (€2 billion p.a.).

## Institutional Investors

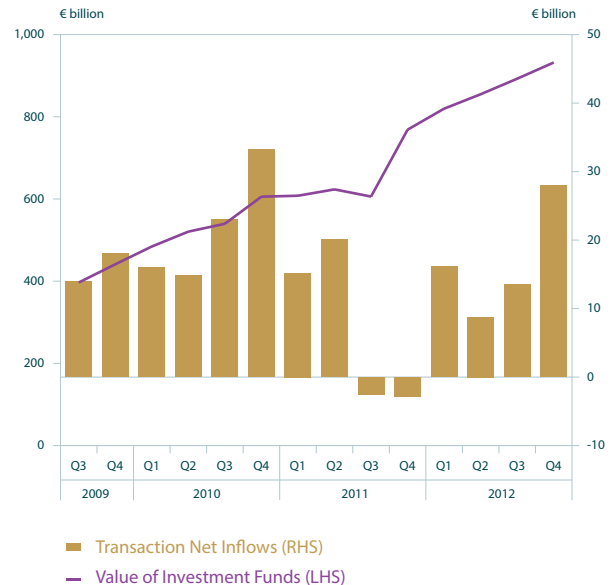
### Investment Funds

The Irish investment fund (IF) industry expanded for the fifth successive quarter in Q4 2012, recording growth of 4.4 per cent. This was driven by revaluations of €11.5 billion and net new subscriptions of €28 billion. Total shares/units in issue amounted to €932 billion by end-Q4 2012. Likewise, euro area shares/units in issue increased by 2.7 per cent, to €6,558 billion during the final quarter of 2012. Assets of Irish resident IFs are predominantly non euro area (77 per cent). Just 9 per cent are holdings vis-à-vis Ireland and 14 per cent are holdings vis-à-vis the rest of the euro area. On the liabilities side, the ownership of shares/units follows a similar pattern with 70 per cent held by non-euro area residents, 24 per cent held by other euro area residents and 6 per cent held domestically.

Irish IFs<sup>9</sup> held €171 billion of sovereign bonds and €253.4 billion of corporate bonds at end-Q4. Outflows from German, Belgian and French government bonds, and flows into Italian and Spanish sovereign holdings, seem to indicate an increase in confidence in the sovereign debt of euro area peripheral countries following the Eurosystem announcement of Outright Monetary Transactions in September. Italian and Spanish sovereign holdings increased by 23 per cent and 49 per cent, respectively, albeit from low bases, to close at €12 billion and €3.5 billion, respectively. Conversely, a slight outflow of 3 per cent from US sovereigns, which closed at €46.6 billion, may have reflected concerns over the potential fiscal cliff at year-end. For further details see Box 2.

All fund types experienced positive net transaction inflows and revaluations in Q4 2012. Bond funds, which accounted for €385.3 billion of Irish IFs by shares/units in

Chart 11: Value of Investment Funds Shares/Units



Source: Investment Funds Statistics, Central Bank of Ireland.

Please note that the movement from Q3 2011 to Q4 2011 includes €1.14 billion of MMFs that were reclassified as IFs in accordance with Regulation ECB/2001/12. Please see information release of Investment Fund Statistics, 14 March 2012, for further details.

issue, experienced inflows of €11.6 billion and positive revaluations of €1.1 billion. Equity funds, which accounted for €303 billion of IFs, saw positive net transactions inflows of €7.3 billion and positive revaluations of €5.9 billion, reflecting gains in global equity markets over the quarter. New investment by equity funds was concentrated in Asia, where investment increased by 6.2 per cent, partly driven by proposed monetary policy actions by the Bank of Japan. Hedge funds increased in value to €82.7 billion, driven largely by a net transactions inflow of €3.3 billion, equivalent to 4.2 per cent of assets, and positive revaluations of €0.7 billion. Other funds, comprising mostly mixed funds, experienced inflows of €5.8 billion, or 3.8 per cent of assets, and positive revaluations of €3.8 billion, closing at an overall position of €161.3 billion.

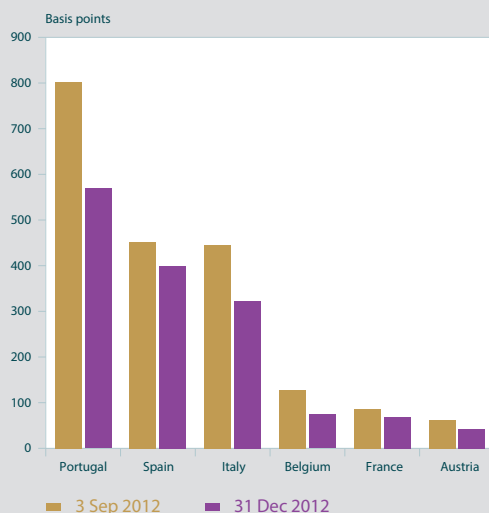
9 The figures recorded here and referred to as 'IFs' exclude Irish authorised Money Market Funds (MMFs).

**Table 1: IF Exposures to Selected Countries and Sectors by all Asset Classes<sup>10</sup>, € billion**

Country	Total	Sovereign Bonds	Monetary Financial Institutions	Non-Financial Corporations	Remaining Sectors <sup>11</sup>
US	266	47	32	140	47
UK	102	48	12	31	11
Germany	27	11	1	12	3
Ireland	27	1	1	10	15

**Box 2: Money Market and Investment Fund Flows in Q4 2012<sup>12</sup>***By Brian Godfrey*

The fourth quarter of 2012 saw some return of market confidence in euro area assets and, in particular, euro area peripheral sovereign debt. This confidence was seen in a number of areas, with euro area equity markets moving higher in the quarter compared with the US, and, more significantly a tightening in the spreads of euro area peripheral sovereign debt vis-à-vis German government bonds. These developments followed the ECB's announcement of the technical features of Outright Monetary Transactions (OMT) in early September (under which the ECB would purchase unlimited amounts of short-term sovereign debt of countries fulfilling policy conditions), along with further progress towards a euro area banking union. Within Irish resident money market and investment funds, this led to significant portfolio shifts across the various fund types reflecting varying investment strategies.

**Box 2 Chart 1: Euro Area Ten-Year Yield Spreads over Germany**

Source: Bloomberg.

<sup>12</sup> Periphery excludes Irish flows as these are dominated by inflows and outflows with IFSC entities.<sup>10</sup> 'All asset classes' includes bonds, equity and derivatives, except for Sovereign, which relates solely to Bonds.<sup>11</sup> 'Remaining Sectors' includes Other Financial Institutions, Insurance and Pension Funds, and Households.

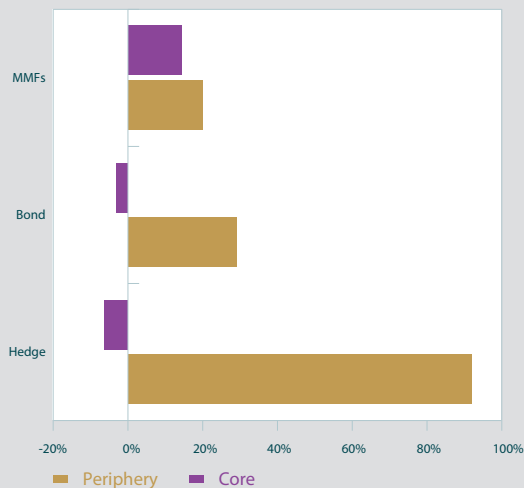
**Box 2: Money Market and Investment Fund Flows in Q4 2012**

By Brian Godfrey

Irish money market funds (MMFs) saw significant net inflows into euro area assets as a whole, benefitting both the core and the periphery. Italian and German sovereigns were two of the main beneficiaries with their holdings increasing by some 23 per cent and 18 per cent, respectively, although Italian holdings rose from a lower base. Nevertheless, there was some rebalancing of assets between euro area countries, with MMFs reducing holdings of Belgian sovereign and bank bonds as well as Dutch bank bonds. Finally, MMFs sold over half of their holdings of Cypriot debt as of end-Q4 2012, amid uncertainty surrounding the terms of a financial package for the country.

MMFs shifted portfolios quite markedly into euro area sovereigns in comparison to developments in UK and US assets, suggesting that the ECB announcement of OMT had a particular effect. In the euro area, this shift was mainly seen through substantial outflows from non-financial corporation (NFC) debt and into government bonds for both Italy and Germany. In France, there was also a substantial flow from NFCs, which was channelled into French banks. Despite market speculation regarding a credit rating downgrade from AAA for French sovereign debt, there were small inflows into French government securities. These flows were not replicated in the UK or the US, where movements were into NFC debt which may reflect a search for higher yielding debt securities. In the UK, there was a large outflow from sovereign to NFC debt, while in the US there was a small flow out of treasuries, and significant flows from US banks to NFC debt.

**Box 2 Chart 2: Core and Periphery Flows for Certain Fund Types, Q4 2012**



Source: Investment Funds Statistics, Central Bank of Ireland.

Bond funds concentrated on rebalancing portfolios within the euro area, reflecting the fact that these funds tend to have a more stable geographical profile than MMFs. Holdings of Spanish and Italian debt increased by 61 and 14 per cent, respectively, while Portuguese debt holdings increased by 48 per cent, but from a low base. At the same time, there was a significant outflow from French debt securities, amounting to 7 per cent of total holdings. German sovereign bond holdings were relatively flat in the quarter, despite their very low yields, suggesting that bond funds remained cautious. Similarly to MMFs, bond funds experienced large flows into UK and US NFC debt. In the UK, these large flows were at the expense of bank debt. UK sovereign debt also saw a small inflow, while in the US there were flows out of both bank and sovereign debt into NFC and other financial intermediaries (OFIs).

**Box 2: Money Market and Investment Fund Flows in Q4 2012***By Brian Godfrey*

Hedge funds moved relatively aggressively into peripheral euro area sovereign bonds, substantially unwinding their holdings of core euro area sovereign debt in order to do so. Italy and Spain experienced strong net inflows into sovereign debt, increasing their holdings by 86 and 34 per cent, respectively, with Spanish debt issued by non-bank financial institutions also receiving substantial net inflows. These inflows were countered by some flows out of Belgian, Austrian, and German government bonds, with a marginal outflow from French sovereign holdings. Despite these movements, net inflows to euro area debt amounted to 7 per cent of holdings. This suggests that hedge funds were rebalancing their euro area assets, having concentrated in core euro area sovereigns during the period of deteriorating confidence in the peripheral regions. In contrast to MMFs and bond funds, hedge funds channelled small net transaction inflows into UK and US sovereign debt; however, these movements were very minor relative to intra-euro area flows. Finally, a small number of hedge funds built up positions in Cypriot debt securities in Q4 2012, reflecting a relatively unconstrained investment strategy.

Equity funds benefitted from improved confidence in euro area equity indices over the quarter, which outperformed those of the US. Flows in this fund category were not as large as in other fund types. Nevertheless, there were significant net transactions inflows into equity assets for certain euro area countries, with the largest inflows channelled into Austria, Spain and Italy, which increased by 8, 6 and 5 per cent, respectively.

Overall, data suggests that measures to ease the euro area debt crisis had a significant impact on flows of investment funds within the euro area and on flows into the euro area for MMFs. The sovereign debt of peripheral euro area economies was the main beneficiary. Looking ahead, this data provides some tentative additional indicators supporting cautious optimism. Nevertheless, flows between quarters can be very volatile and the re-emergence of renewed political tensions in the euro area could see these flows quickly reverse.

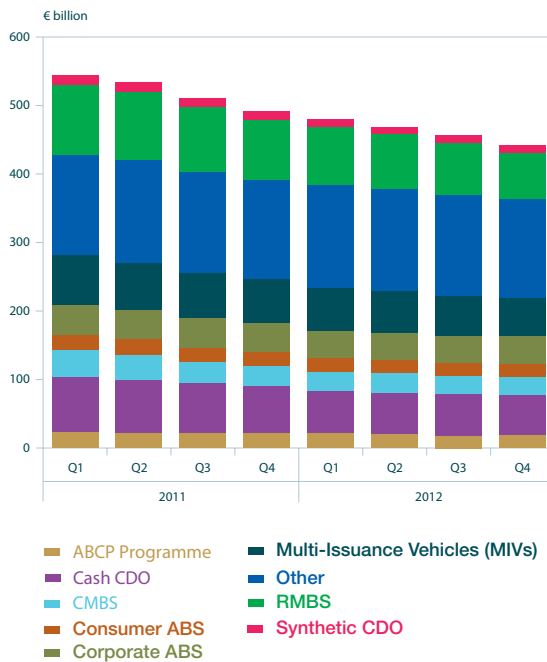
**Financial Vehicle Corporations**

Assets of financial vehicle corporations (FVCs) resident in Ireland declined by €18 billion to €441.9 billion in Q4 2012, continuing a trend seen since Q1 2011. This decline was mainly attributable to large negative transactions in securitised loans, other assets<sup>13</sup> (mainly derivatives) and securities other than shares, of €7.8 billion, €4 billion and €3.1 billion, respectively. The key drivers appear to be impairments in mortgage loans and uncertainty surrounding future potential losses in these loans. Residential Mortgage-Backed Securities (RMBS) vehicles recorded the largest decline, of €8 billion. This was driven by the reversal of a number of securitised loan transactions involving euro area banks, including some banks resident in Ireland. These loan tranches

were unable to obtain a credit rating from more than one credit rating agency; a requirement to access ECB liquidity. Multi Issuance Vehicles (MIVs) and Commercial Mortgage-Backed Securities (CMBS) also recorded substantial declines in total assets, of €2.2 billion and €2 billion, respectively. Within MIVs this decline was driven by the disposal of investments and, within CMBS, by impairments in loan assets. As debt securities issued by FVCs mature and are not rolled over, derivative positions linked to these positions unwind and securities other than shares are sold to raise finance for repayments. A number of other vehicle types reported marginal gains in assets, most noticeably Consumer Asset-Backed Securities, which increased by €1 billion, indicating some appetite among investors for higher yielding debt securities.

<sup>13</sup> 'Other Assets' comprise financial derivatives, fixed and remaining assets.

**Chart 12: Total Assets of Irish Resident FVCs per Vehicle Type**

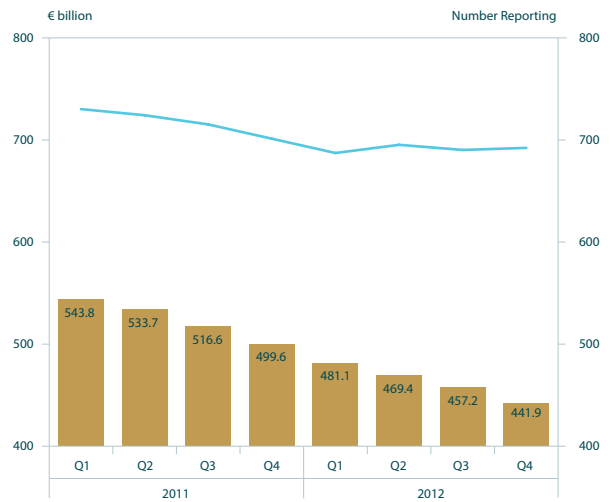


Source: Financial Vehicle Corporation Statistics, Central Bank of Ireland.

On the liability side, the main counterpart to securitised loans and derivatives are debt securities issued, and these declined by €12.5 billion to €312.5 billion in Q4 2012. Debt securities with an original maturity of greater than two years declined by €10.5 billion, reflecting uncertainty over underlying mortgage loans. These securities tend to be repaid rather than rolled over upon maturity, a trend evident since Q4 2010. Loans and deposits liabilities reported negative transactions of €2.8 billion mainly due to repayments of loan assets.

Developments in Irish resident FVCs broadly followed trends for the euro area as a whole throughout 2012, though there was some divergence in Q4. While Irish outflows rose to €18 billion in Q4 from €13.7 billion in Q3 2012, outflows for the euro area as a whole fell, from €80.6 billion to €39.9 billion over the same period. This may reflect the particular mix of vehicle types in Ireland and, in particular, the weight of mortgage backed securitisation in Ireland. As this breakdown is not available for the euro area, it is not possible to be definitive,

**Chart 13: Number of Reporting Irish Resident FVCs and Total Assets**



Source: Financial Vehicle Corporation Statistics, Central Bank of Ireland.

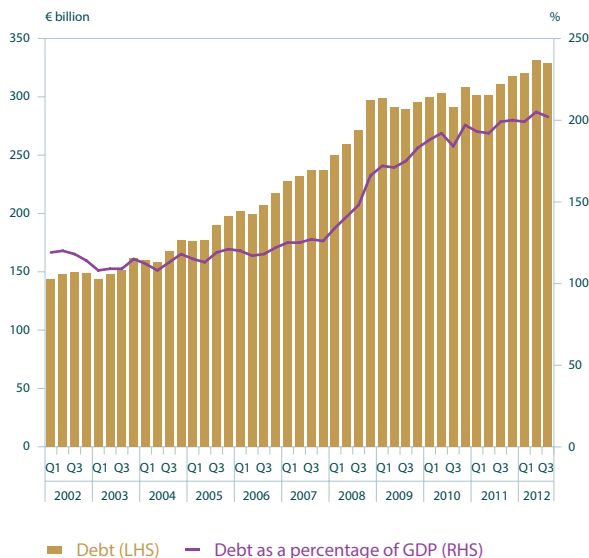
however. Over the year as a whole, Irish and euro area developments followed similar patterns of large negative transactions combined with positive revaluations in each quarter.

## Non-Financial Corporations

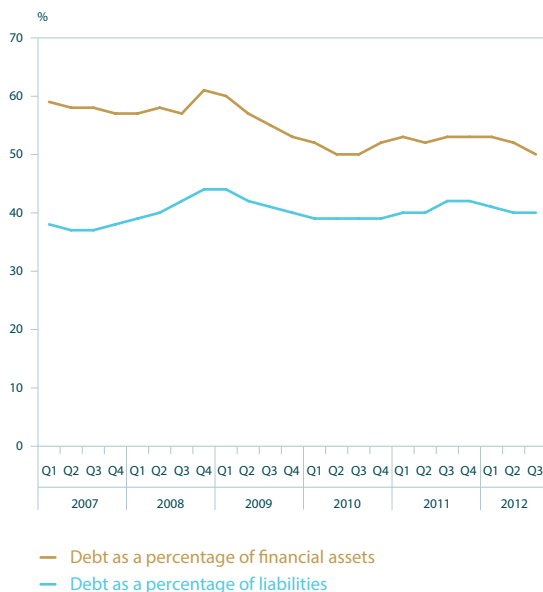
Non-financial corporation (NFC) debt<sup>14</sup> decreased during Q3 2012, to €329 billion, or 202 per cent of GDP, as seen in Chart 14. This represented a decline of €2.1 billion, or 3 per cent of GDP, compared with the previous quarter.

Two approaches to analysing NFC debt are presented in Chart 15: NFC debt as a percentage of financial assets and NFC debt as a percentage of total liabilities. The former declined by 2 per cent to 50 per cent of financial assets in Q3 2012. The ratio of NFC debt as a percentage of total liabilities recorded a smaller reduction, declining by 0.8 per cent, to 40 per cent. These figures imply that NFC funding from equity and other accounts payable is gaining in importance, compared with financing from loans and securities.

<sup>14</sup> NFC debt is defined as the sum of its 'securities other than shares' and 'loans' liabilities. The NFC sector's loan liabilities are now presented on a gross basis. This means that outstanding amounts for NFC loans include all impairment provisions recognised against the sector's loans. Debt is non-consolidated, meaning that inter-company debt is included.

**Chart 14: NFC Debt as a Percentage of GDP**

Sources: Quarterly Financial Accounts, Central Bank of Ireland; and Quarterly National Accounts, CSO.

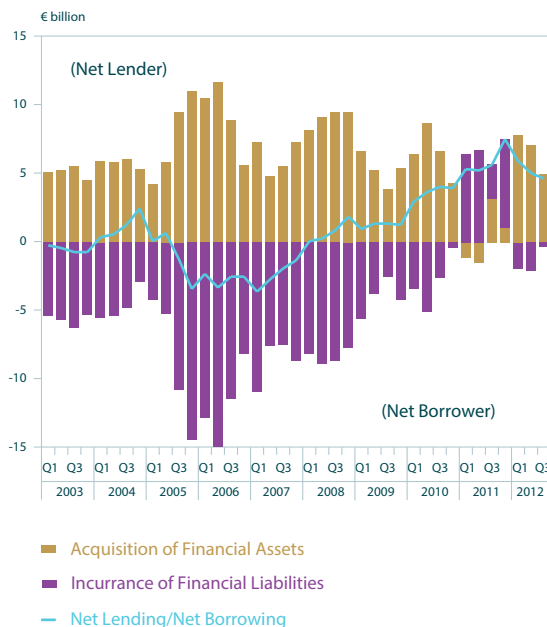
**Chart 15: NFC Debt to Financial Assets and Liabilities**

Source: Quarterly Financial Accounts, Central Bank of Ireland.

The NFC sector was a net lender during Q3 2012, as shown in Chart 16<sup>15</sup>. The chart shows that NFC net lending amounted to €4.7 billion over the quarter, a reduction of €0.4 billion from the previous quarter. NFCs invested €5 billion in financial assets and incurred liabilities of €0.3 billion.

#### **Credit Advanced to the NFC Sector by Irish Resident Credit Institutions**

Over the six months to end-January 2013, credit advanced to the resident NFC sector<sup>16</sup> has declined at an average annual rate of 3.7 per cent. In contrast, during the preceding six months, the equivalent average decline was just 2.4 per cent. This increased pace of decline reflects funding difficulties for indigenous corporations, given loans issued by resident credit institutions are a key source of finance. In particular, this is true for small- and medium-sized enterprises (SMEs), which, unlike the multinational sector, do not have recourse to alternative market-based funding or capital injections from overseas parent entities. The

**Chart 16: NFC Net Lending/Net Borrowing on a Four-Quarter Moving Average Basis**

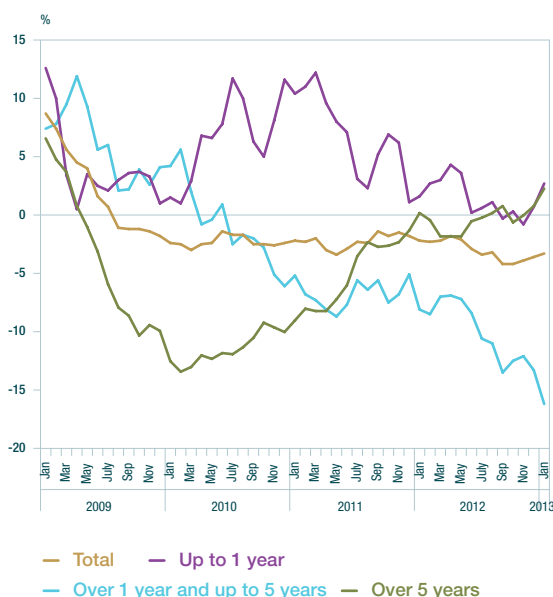
Source: Quarterly Financial Accounts, Central Bank of Ireland.

<sup>15</sup> The NFC net lending/net borrowing position is measured as a four-quarter moving average, to adjust for seasonality.

<sup>16</sup> Credit advanced to the NFC sector includes loans to NFCs as well as credit institutions' holdings of securities issued by NFCs.



**Chart 17: Loans to Irish Resident NFCs, Annual Rates of Change**



Source: Money and Banking Statistics, Central Bank of Ireland.

monthly net flow of credit to the NFC sector<sup>17</sup>, averaged minus €227 million over the six months to end-January 2013.

Developments in NFC loan categories have been varied in recent months. The average annual rate of change in loans, with an original maturity over five years, averaged just 0.2 per cent over the six-month period to December 2012. However,

loans in the same instrument category rose by 2.3 per cent in January 2013. Similarly, loans with a maturity of up to one year (which would include the use of overdraft facilities) rose sharply, rising to 2.7 per cent in January despite stagnating for several months previously. In contrast to the positive trend in short- and longer-term contracts, loans with original maturity of between one and five years have continued to fall sharply, declining 16.2 per cent in January 2013 and averaging minus 12 per cent over the previous six months.

Credit advanced to non-financial enterprises, which includes non-incorporated businesses as well as larger corporations, also continues to decline. The annual pace of contraction was 4.6 per cent at end-December 2012, with enterprises engaged in manufacturing and wholesale/retail trade experiencing the most significant decline (Table 2). By contrast, the pace of decline in lending to SMEs has eased. Credit advanced to non-financial SMEs fell by 4.1 per cent as at end-December 2012, compared with a decline of 5.4 per cent at the previous year end. The slower rate of decline was evident across almost all the main sectors of the economy, but was most notable among manufacturing and agriculture. New lending drawdowns in the agriculture sector were particularly robust during 2012, amounting to €567 million. Total gross new lending drawdowns<sup>18</sup> to non-financial SMEs amounted to almost €2.6 billion during 2012.

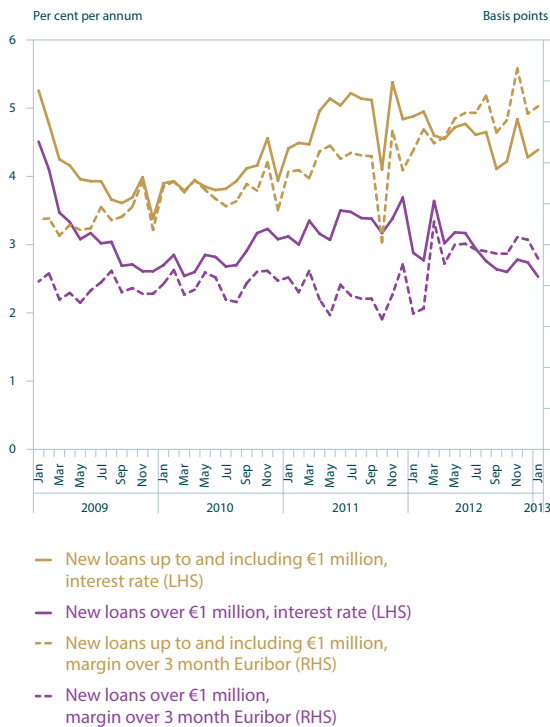
**Table 2: Credit Advanced to Non-Financial Enterprises - Annual Percentage Change**

	All Enterprises					SMEs				
	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12
Construction and Real Estate	0.6	-0.2	-2.0	-3.5	-4.1	-5.1	-3.7	-1.6	-3.5	-3.3
Agriculture	-4.5	-3.6	-3.6	-3.4	-2.9	-9.8	-7.2	-4.9	-4.4	-3.5
Manufacturing	-1.3	-5.7	-1.3	-1.8	-6.0	-5.9	-6.6	-0.4	0.6	-2.5
Wholesale/Retail Trade & Repairs	-3.4	-3.8	-2.4	-5.9	-8.2	-6.0	-6.8	-6.3	-8.0	-7.9
Hotels and Restaurants	-2.0	-2.0	-1.9	-1.0	-2.3	-4.2	-3.6	-2.8	-3.0	-3.1
Business and Administrative Services	-14.3	-8.7	-14.0	-11.6	-4.2	-10.3	-9.4	-4.8	-3.9	-5.6
Other	-15.6	-6.2	-7.5	-10.7	-6.5	-4.4	-6.4	-5.4	-5.7	-5.3
<b>Total</b>	<b>-2.6</b>	<b>-2.1</b>	<b>-3.2</b>	<b>-4.5</b>	<b>-4.6</b>	<b>-5.4</b>	<b>-4.9</b>	<b>-2.9</b>	<b>-4.1</b>	<b>-4.1</b>

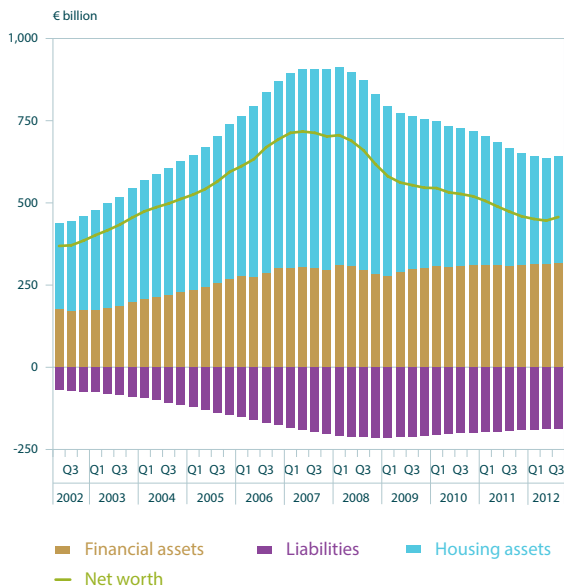
Source: Trends in Business Credit and Deposits, Central Bank of Ireland.

<sup>17</sup> The monthly net flow of credit is based on transactions only and excludes non-transaction effects such as write-downs.

<sup>18</sup> Gross new lending drawdowns refer to funds accessed by SME customers during the period which were not included in the previous period's stock of credit advanced. This excludes the value of renegotiations/restructures that takes place during the period. It is also not equivalent to sanctioning activity, nor does it cover contingent liabilities, such as letters of credit or similar guarantees.

**Chart 18: Interest Rates on New NFC Loan Agreements**

Source: Retail Interest Rate Statistics, Central Bank of Ireland.

**Chart 19: Household Net Worth**

Source: Quarterly Financial Accounts, Central Bank of Ireland.

Weighted average interest rates on outstanding loans to NFCs issued by Irish resident credit institutions have fallen significantly since July 2011, when they peaked at 3.8 per cent. Despite this decline, rates have remained broadly stable since October 2012, oscillating close to 3 per cent. The equivalent interest rates applicable to the euro area have not declined to the same extent, falling from a peak of 3.89 per cent in November 2011 to average approximately 3.36 per cent over the three months, to end-January 2013. In terms of new business, rates applicable to loans of up to €1 million, continue to be higher in Ireland when compared to the euro area. Corresponding new business rates reported by Irish institutions averaged 4.42 per cent over the last six months, compared to 3.86 per cent for the euro area.

## Households

Household net worth<sup>19</sup> increased by €11 billion or 2.5 per cent during Q3 2012, reaching €456.9 billion or €99,646 per capita. This marked the first rise in household net worth since Q1 2008 (Chart 19) and reflected increases in housing assets (€4.7 billion), financial assets (€4.4 billion), as well as to a lesser extent, a decrease in liabilities (€1.8 billion). The rise in housing assets was primarily due to an increase in value; the first increase in housing asset values since Q4 2007. The rise in financial assets largely reflected an increase in the value of insurance technical reserves and, to a lesser extent, increased investment in financial assets.

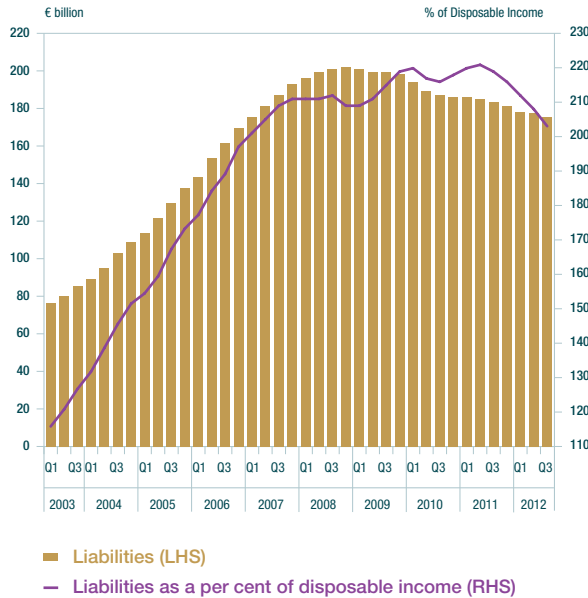
Overall, household net worth at Q3 2012 was 36.3 per cent lower than its peak at Q2 2007. The decrease in net worth has largely reflected declining housing asset values and lower transactions in housing.

Household debt<sup>20</sup> declined further during Q3 2012, falling by €1.7 billion or 0.9 per cent (Chart 20). At Q3 2012, debt stood at €176.9 billion or €38,570 per capita. In overall terms, debt has decreased by 13.2 per cent, or €26.9 billion, since its peak of €203.8 billion at Q4 2008. Household debt

<sup>19</sup> Household net worth is calculated as the sum of household housing and financial assets minus their liabilities. The Central Bank of Ireland estimate of housing assets is based on the size and value of housing stock. Data on the value of housing is obtained from the CSO's 'Residential Property Price Index' (RPPI).

<sup>20</sup> Household debt is defined as total loans.

Chart 20: Household Debt

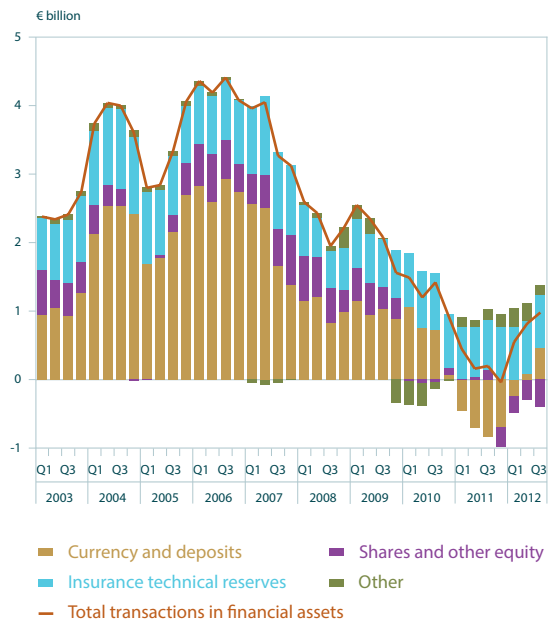


Source: Quarterly Financial Accounts, Central Bank of Ireland.

to disposable income, an indicator of debt sustainability, declined further during Q3 2012, to stand at 203.8 per cent. This marked the fifth consecutive decline in this indicator from its peak of 221.6 per cent at Q2 2011. At Q3 2012, this indicator was at its lowest level since Q1 2007. The decrease in this indicator during Q3 2012 was due to the continued decline in household debt and the further increase in household disposable income. The latter has been on an upward trend since Q4 2011.

Household investment in financial assets continued on an upward trend during Q3 2012 for the third consecutive quarter (Chart 21). The increase was largely attributable to a further recovery in household transactions in 'currency and deposits'. Household investment in 'insurance technical reserves'<sup>21</sup> remained largely unchanged over the quarter, while investment in 'shares and other equity' decreased further.

Chart 21: Household Transactions in Financial Assets, Four-Quarter Moving Average



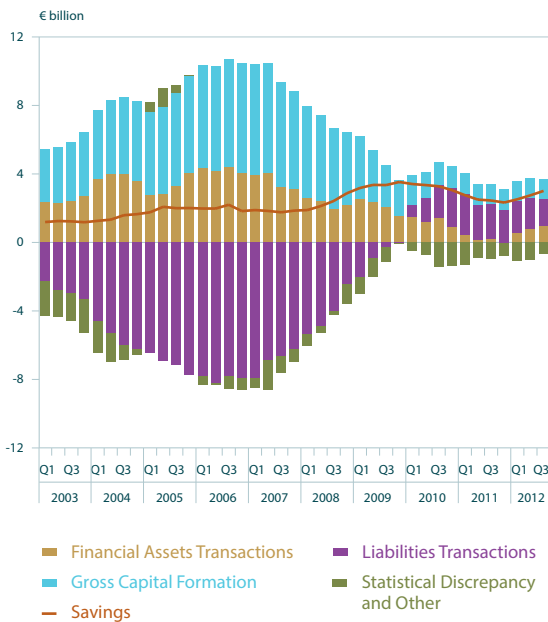
Source: Quarterly Financial Accounts, Central Bank of Ireland.

Combining household 'saving' and 'gross capital formation'<sup>22</sup> data from the CSO's non-financial accounts (i.e. the real side of the economy) with households' transactions data from Quarterly Financial Accounts allows a decomposition of how households use their savings<sup>23</sup> (Chart 22). Household savings increased slightly from €2.8 billion in Q2 2012 to €3 billion in Q3. Household savings have been relatively high since mid-2008. During Q3 2012, households used their savings to reduce liabilities (€1.6 billion), to invest in financial assets (€1 billion), and to contribute to gross capital formation (€1.1 billion).

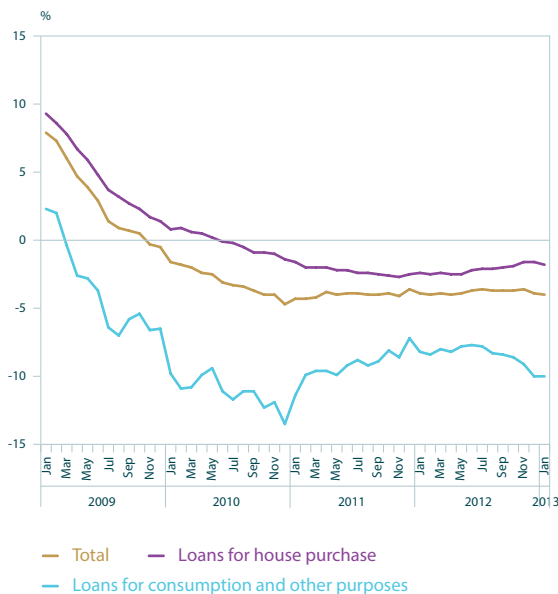
<sup>21</sup> 'Insurance technical reserves' include life assurance policies and pension funds.

<sup>22</sup> 'Gross capital formation' consists of acquisitions of fixed assets less disposals. It includes acquisitions of dwellings.

<sup>23</sup> The derivation of savings from a non-financial accounts perspective and a financial accounts perspective is elaborated upon further in Cussen, O'Leary and Smith (2012), 'The Impact of the Financial Turmoil on Households: a Cross Country Comparison', Central Bank of Ireland, Quarterly Bulletin No. 2.

**Chart 22: Household Savings Decomposed by Use, Four-Sum Moving Average**

Sources: Quarterly Financial Accounts, Central Bank of Ireland; and Quarterly Sectoral Accounts, Central Statistics Office.

**Chart 23: Loans to Irish Households, Annual Rates of Change**

Source: Money and Banking Statistics, Central Bank of Ireland.

### Lending to Households by Irish Resident Credit Institutions

Lending to Irish households continued to decline sharply in the second half of 2012, with loans advanced by Irish resident credit institutions falling by €2.6 billion, or 2.4 per cent, over the six months to end-January 2013. Approximately 70 per cent of this decline is attributable to a fall in loans for consumption purposes, which includes the use of credit cards and overdraft facilities, and loans for other purposes, such as debt consolidation, education and business loans. Meanwhile, the pace of decline in mortgage lending eased further, as loans for house purchase fell by €730 million, or just 1 per cent, in the six months to end-January 2013. The cumulative decline in mortgage lending over the last three years has been approximately €5.5 billion. This is equivalent to 6.5 per cent of the total outstanding value of mortgage loans at end-January 2013.

While mortgage lending continues to decline, the difficulties faced by existing mortgage holders increased in 2012. At end-December 2012, 11.9 per cent of all private residential mortgages for principal dwelling houses (PDH) were in arrears of over 90 days. This reflects

an increase of 2.9 percentage points in the over 90 day arrears rate reported at end-2011. Meanwhile, 18.9 per cent of mortgage accounts for buy-to-let (BTL) properties were in arrears of over 90 days at end-December 2012. The trend emerging among the longer-term arrears figures is of particular concern, as the number of PDH accounts in arrears of over 360 days rose to over 51,000 or 6.5 per cent of the total stock. Just under half of these were in arrears of more than 720 days. In addition, almost 17,000 BTL accounts were in arrears of over 360 days at end-December 2012. The outstanding balance on all mortgages with arrears of over 360 days was €15.3 billion at this time.

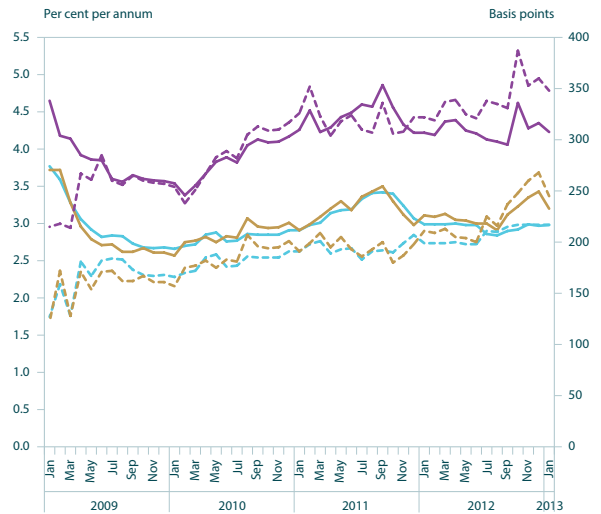
Mortgage lenders continue to tackle the arrears problem primarily through forbearance arrangements granted to borrowers. At end-December 2012, there were almost 80,000 PDH accounts classified as restructured, of which 53 per cent were not in arrears. The large number of restructured accounts not in arrears suggests that lenders are actively managing their 'pre-arrears' cases<sup>24</sup>, in an effort to arrest the transition into early arrears. These efforts have been reflected in the early arrears figures, which stabilised throughout 2012. However, of the total stock of PDH accounts in arrears

<sup>24</sup> 'Pre-arrears' refers to cases in which the account has not fallen into arrears but where the borrower anticipates future difficulty.

over 90 days at end-December 2012, only one quarter of these were classified as restructured at that time. Progress in tackling longer-term arrears cases has been limited thus far, and restructuring activity undertaken to date has for the most part been short-term in nature. Lenders have recently introduced new loan modification options with the aim of providing longer-term and more sustainable solutions for borrowers in arrears.

Irish households experienced an increase in the cost of mortgage borrowings in the second half of 2012. The weighted average interest rate on existing mortgage loans with an original maturity over five years increased by 12 basis points, to 2.98 per cent, over the six months to end-January 2013. Meanwhile, interest rates on new mortgage loans have increased more substantially. The weighted average rate on new loans with a floating rate and up to one year fixation, which account for around 85 per cent of all new mortgage loans, increased by 29 basis points to 3.2 per cent since August 2012, as a number of lenders increased their Standard Variable Rate during this period. Interest rates on existing loans for consumption purposes fell by 17 basis points to 5.62 per cent over the six months to end-January 2013, while rates on new loans fell by 4 basis points.

Chart 24: Mortgage Interest Rates to Households



- New floating rate mortgages, interest rate (LHS)
- New mortgages, fixed for over one year, interest rate (LHS)
- Outstanding mortgages, interest rate (LHS)
- - - New floating rate mortgages, margin over ECB MRO (RHS)
- - - New mortgages, fixed for over one year, margin over ECB MRO (RHS)
- - - Outstanding mortgages, margin over ECB MRO (RHS)

Source: Retail Interest Rate Statistics, Central Bank of Ireland.



# Developments in the International and Euro Area Economy

## Overview

Indications are that external economic conditions are becoming more supportive as global growth is slowly moving out of the weak phase that marked the end of 2012. This is reflected in world trade and world industrial production, which recorded more robust growth in the first quarter of this year compared with faltering previous quarters. Growth in economic activity in advanced economies is, however, expected to remain moderate, despite very accommodative monetary policy which continues to support underlying adjustment processes. In particular, sovereign debt markets in the euro area remain unsettled while a more optimistic outlook for the US remains clouded by uncertainty regarding the fiscal stance. The weakness in economic activity in the euro area towards the end of 2012 implies a lower starting point for the current year. The area as a whole is facing a delayed emergence from recession and continues to be marked by heterogeneous developments across Member States. On the contrary, stronger economic momentum in the emerging economies continues to be driven by China, where increasing levels of disposable income should provide an additional stimulus to domestic demand. Other emerging market economies, however, face both external vulnerabilities and increased domestic challenges as export markets in industrialised countries remain weak. Global headline inflation figures have been strongly influenced by commodity prices but euro area inflationary pressures are expected to remain moderate this year and next. Financial market confidence improved, on balance, in the first quarter of 2013, building on gains recorded during the second half of 2012. Market sentiment was dampened in mid-March due to the uncertainty surrounding the bailout discussions in Cyprus.

Global economic expansion is expected to strengthen moderately over the course of the year but at present growth remains below potential. This is apparent in all economic regions, albeit to different degrees. There were hopes that the relatively strong performance of the emerging markets this time last year would act as a prompt for the world economy but a further escalation in the euro area crisis together with a stronger than expected slowdown in Chinese growth caused world industrial production to almost stagnate from the second quarter of last year onwards. Recently, emerging economies, which account for a steadily growing share of global industrial output, show signs of a return to robust growth while industry in the advanced economies lags

behind. Looking forward, the global PMI composite output index confirms a continuation of sluggish global growth dynamics for the forthcoming quarter. For the longer term, the latest IMF projections for this year and next are shown in Table 1.

The economic recovery in the United States leads other advanced economies, but continues to be considerably weaker than previous recoveries. Since 2010, real GDP growth has hovered close to 2 per cent but a very weak overall GDP growth in the fourth quarter of 2012 was primarily due to negative impulses from inventories and government expenditure on defence. As 2012 drew to a close, there was considerable uncertainty

**Table 1: Changes in Forecasted Real GDP in Selected Economies**

	Percentage Change		
	2012	2013 <sup>f</sup>	2014 <sup>f</sup>
Global	3.2	3.5	4.1
United States	2.3	2.0	3.0
Euro Area	-0.4	-0.2	1.0
United Kingdom	-0.2	1.0	1.9
China	7.8	8.2	8.5
Japan	2.0	1.2	0.7

Source: IMF World Economic Outlook – January 2013 Update.

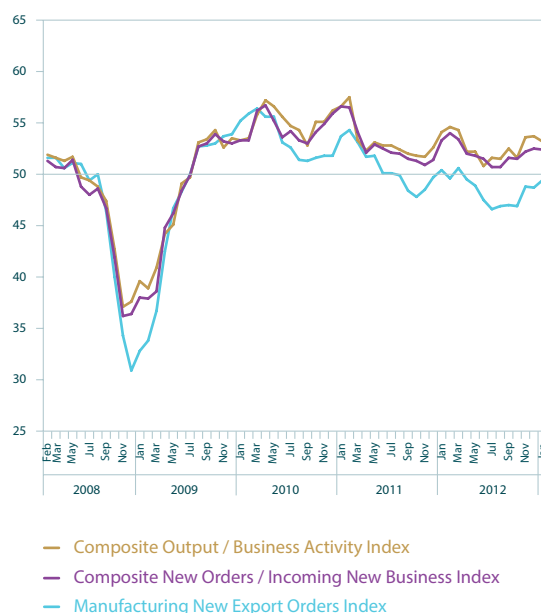
f Forecast

about the implementation and severity of the then forthcoming fiscal cliff. The labour market, however, has resumed some positive momentum causing the unemployment rate to decline to 7.7 per cent in February. Employment growth, though, remains below average in comparison to previous recoveries. A recovery in the US housing market has also helped to improve household balance sheets and should underpin firmer consumption growth in 2013. Following its Q4 GDP reading, Japan remains in recession, largely as a result of a negative trade balance and a decline in post-reconstruction investment activity. A sizeable fiscal stimulus package and further monetary easing, coupled with a weaker yen and a pickup in external demand, should provide some support for growth in the near term.

Economic developments in the euro area are characterised by a growing divide among Member States. Several periphery economies are experiencing a deep recession in addition to contractive fiscal policy and underlying structural adjustments. Core economies, including Germany, benefited from the relatively solid condition of their public and private finances as well as their comparatively high level of international competitiveness. This divergence is also reflected in developments in national labour markets which continue to be marked by increasing heterogeneity.

OECD area annual inflation was 1.7 per cent in the year to January 2012. This is its lowest level since November 2010 with annual energy price inflation down to 1.8 per cent from 2.9

per cent a month earlier, and food price inflation stable at 2.1 per cent. In its latest release of global economic expectations, the World Bank forecasts that overall inflation in 2013 will remain relatively moderate and very similar to the observed global inflation rate in 2012. In the euro area, inflation is expected to remain on a gradual downward trend during 2013.

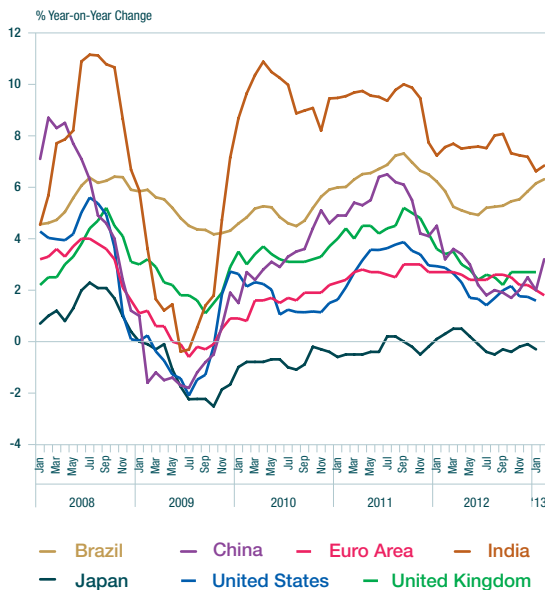
**Chart 1: Global Purchasing Managers' Index**

Source: Markit.

Note: For PMI indicators, above 50 represents expansion, below 50 represents contraction.

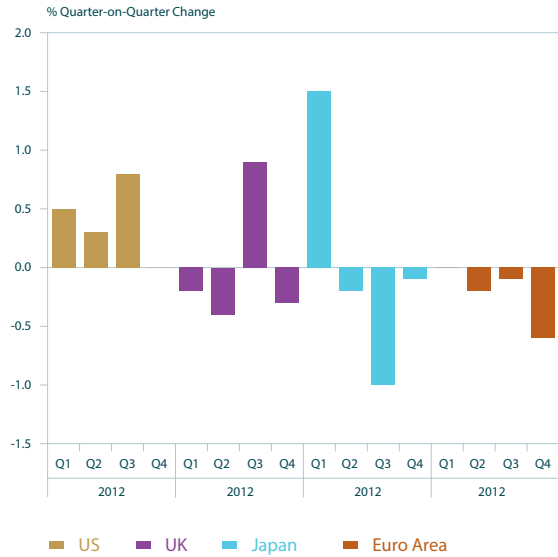


Chart 2: Selected Global Inflation Rates



Source: Thomson Reuters Datastream.

Chart 3: G4 GDP Growth Rates



Source: Thomson Reuters Datastream.

## Section 1: Euro Area

### Economic Growth – Recent Developments

The euro area recession deepened during the last quarter of last year, with GDP shrinking by 0.6 per cent according to Eurostat. The euro area contraction was stronger than anticipated and was primarily driven by developments in Germany and Italy. While Germany and France had provided support to euro area growth in Q3, all core countries experienced contractions in GDP during the final quarter of 2012, bringing the Netherlands into a technical recession. Belgium avoided a technical recession with GDP growth of zero per cent in the third quarter, followed by a decline of -0.1 in Q4 2012.

Domestic demand continues to exert a significant drag on GDP growth across the euro area. Investment has declined for the seventh consecutive quarter, reflecting in particular weak fixed capital formation in Germany, France and Spain. Private consumption contracted by 0.4 per cent in Q4 2012, a sharper decline than the preceding quarter, and has failed to contribute positively

to GDP growth for five successive quarters. The contribution from net exports to GDP growth was flat in Q4 2012, reflecting a pronounced decline in imports arising from weak domestic demand conditions, while exports faltered over the quarter due to dampened extra-euro area demand.

High frequency data confirms that domestic demand remained weak throughout the final quarter of 2012 and into 2013. Conditions in retail sales remain challenging as low levels of consumer confidence continue to weigh on the sector. Declines were recorded up to the end of 2012 across a broad range of sectors, although the latest monthly data suggest tentative improvements. Industrial production is showing some signs of stabilisation at the end of 2012, most notably in capital goods where monthly gains were recorded for both November and December.

More recent survey data point to an easing in the rate of decline in the euro area as a whole. While still below long-term average values, the EU Commission's Economic Sentiment Indicator (ESI) increased by a cumulative 3.1 percentage points during the first two

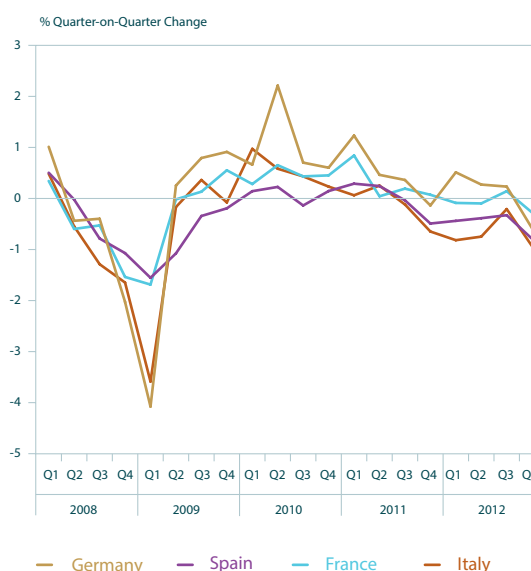
**Table 2: Contributions of Expenditure Components to Quarterly Change in Euro Area GDP**

	2012			
	Q1	Q2	Q3	Q4
<b>Consumption</b>	-0.1	-0.3	0.0	-0.2
<b>Government</b>	0.0	0.0	0.0	0.0
<b>Investment</b>	-0.3	-0.3	-0.1	-0.2
<b>Inventories</b>	-0.1	0.0	-0.3	-0.1
<b>Exports</b>	0.2	0.7	0.5	-0.4
<b>Imports</b>	0.2	-0.2	0.0	0.4
<b>GDP</b>	<b>-0.1</b>	<b>-0.2</b>	<b>-0.1</b>	<b>-0.6</b>

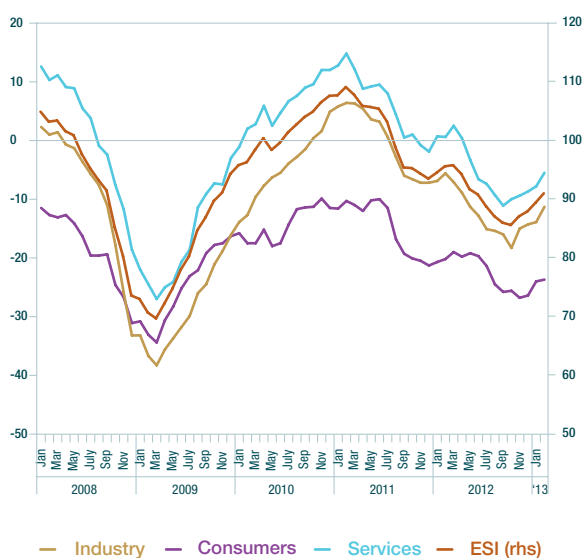
Source: Eurostat.

months of 2013. This modest improvement in sentiment was driven by improvements in its higher-weighted industry and services components. Industrial confidence has been building steadily since hitting a three-year low in October 2012. This reflects an improved outlook regarding production expectations and current levels of order books. The composite output PMI remains below the neutral 50 mark: the continuous improvement from a three-year low in October faltered in February back to 47.9 and reflects divergent trends amongst euro area countries. All PMI indicators for Germany stood above 50 in February, indicating growth in both services and manufacturing. The Netherlands and Ireland also signalled expansion in manufacturing output, contrasting with declines in other euro area countries, most notably France.

Unemployment continues to rise in the euro area as labour market conditions remain weak, reflecting recent GDP contractions. Euro area unemployment increased steadily month-on-month throughout 2012 and into 2013, standing at 11.9 per cent in January. Unemployment increased over the 12-month period to January 2013 in nearly all Member States, with marginal improvements recorded in Germany, Estonia and Ireland. Youth unemployment continued to rise over the calendar year and long-term unemployment has increased as a share of the total in the southern periphery countries. Survey data indicate that employment has fallen consistently throughout 2012 and into 2013 and employment expectations remain negative.

**Chart 4: Euro Area GDP Growth**

Source: Thomson Reuters Datastream

**Chart 5: Economic Sentiment Indicator & Selected Components**

Source: European Commission.

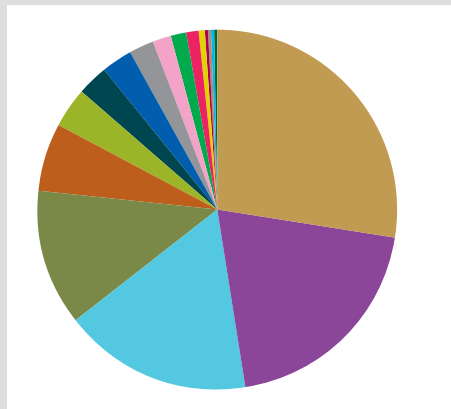
**Box A: The Euro Area House Price Index and the On-going Adjustment in Euro Area Housing Markets**  
By Bernard Kennedy<sup>1</sup>

In February, Eurostat published a euro area house price index for the first time. Regular data on house prices is essential in order to gauge the influence of housing market developments on macroeconomic activity. In this box, we outline some of the main uses of house price data, the methodology used in the Eurostat series, and the most recent results provided by the new series.

Data on residential property prices have a number of important uses, including as a measure of household financial wealth, and as a financial stability indicator. Rising house prices provide households with higher levels of nominal wealth as well as an additional potential source of funds for consumer spending through mortgage equity withdrawal. Regarding financial stability, a period of on-going declines in house prices will make banks' funding policies more challenging due to the increased uncertainty as to the fundamental value and credit worthiness of assets that are dependent on the performance of the housing market. In light of the financial imbalances and rapid changes in asset prices, including house prices, across the euro area in recent years, changes in house prices are now included as one of the twelve indicators that make up the EU macroeconomic imbalance procedure scorecard. Consequently, the euro area house price index will be closely followed in the coming years.

The euro area house price series is based on national data and is aggregated using the Laspeyre-type annual chain index. The advantage of this approach is that it allows the weights to be changed each year. The weights currently being used are based on GDP at market prices for the countries concerned and chart 1 displays the weights assigned to every country in 2011 with four countries comprising 75 per cent of the aggregate weight. Although the series is constructed using national data, a number of gaps exist in the underlying house price data. In these circumstances, missing data are estimated but not published.

**Box A Chart 1: Euro Area House Price Index Weights (2011)**



Germany (27.7)	Finland (1.7)
France (19.8)	Ireland (1.4)
Italy (16.9)	Slovakia (1.1)
Spain (12.2)	Luxembourg (0.4)
Netherlands (6.1)	Slovenia (0.4)
Belgium (3.7)	Estonia (0.3)
Austria (2.9)	Cyprus (0.3)
Greece (2.7)	Malta (0.1)
Portugal (2.2)	

Source: Eurostat.

The new euro area house price index extends back to the first quarter of 2005 and up to the third quarter of 2012 but data are only available back to the first quarter of 2005 for 8 countries: Belgium, Cyprus, Estonia, Germany, Ireland, Malta, Netherlands, and Finland. Within this subset of countries, there are no observations for Germany and Cyprus for the most recent two and four quarters respectively. In addition, data for Italy which has the third highest weight of 16.9 per cent in the calculation of the euro area index are only available from the first quarter of 2010. Given the paucity of the Italian series, it is not examined any further here.

<sup>1</sup> Monetary Policy Division.

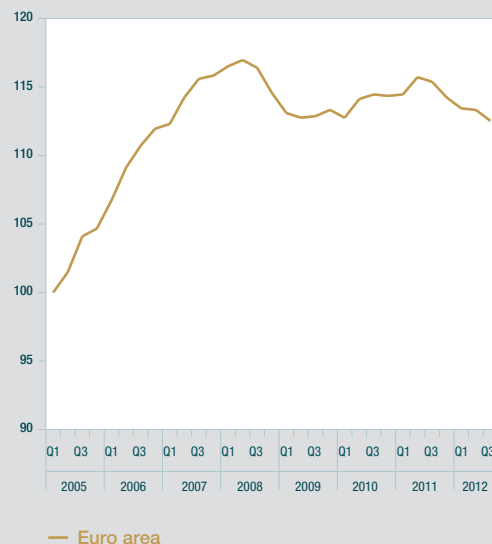
### Box A: The Euro Area House Price Index and the On-going Adjustment in Euro Area Housing Markets By Bernard Kennedy<sup>1</sup>

The main issues to be addressed in the construction of house price indices include: how to allow for improvements to dwellings, the sporadic nature of transactions, and the decomposition of land and structural components. Each national index employs at least one of the following two methods: 1) stratification, and 2) hedonic regression methods.

Stratification of transactions or mixed adjustment is a technique for reducing sample selection bias and involves separating the total sample of houses into a number of sub samples or strata. After calculating a measure of the change in each stratum, the house price index is typically constructed as a weighted average of the change in each stratum. The hedonic regression method recognises the heterogeneous nature of housing markets and attempts to use regression analysis to control for the attributes of both the structure as well as the location of the property. The series on residential property prices in Ireland produced by the Central Statistics Office that is nested within the euro area house price index makes use of the hedonic method.

Chart 2 shows developments in the aggregate euro area series since 2005. House prices increased steadily up to 2008 reflecting in part the favourable combination of economic growth and increased financial market integration<sup>2</sup>. As the financial market pressures intensified in 2008, the euro area house price index recorded its first decline in the second quarter of 2008. However, the fall in prices was contained with the series decreasing by less than 4 per cent over the following four quarters. Since then, the overall index has oscillated within a relatively small range.

**Box A Chart 2: Euro Area House Price Index  
2005 - 2012 (2005=100)**



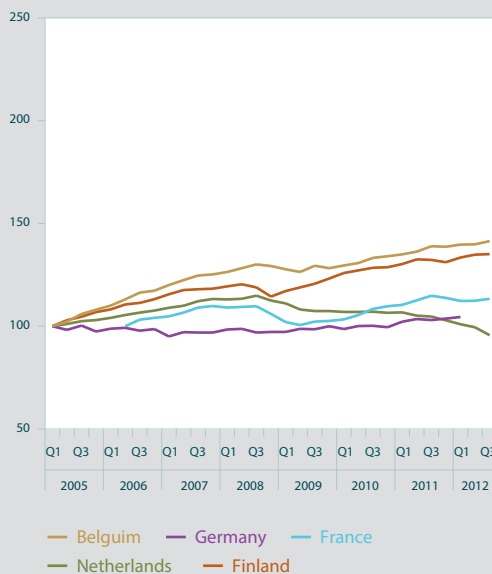
Source: Eurostat.

<sup>2</sup> One of the most obvious manifestations of financial market integration was the cross border expansion in euro area bank lending. In turn, this provided smaller euro area economies with a greatly enhanced supply of bank credit.

**Box A: The Euro Area House Price Index and the On-going Adjustment in Euro Area Housing Markets**  
By Bernard Kennedy<sup>1</sup>

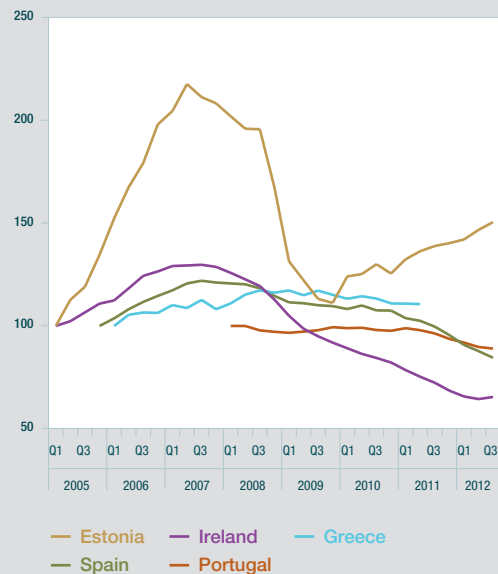
Developments in the aggregate euro area house price index since 2008 conceal substantial variation across the different countries. During the second half of 2008, house prices fell in every country in at least one quarter. Since then, a divergence in the performance of house prices has opened up between the core and peripheral economies, with the exception of the Netherlands, and this contrast is apparent in Charts 3a and 3b. House prices now exceed the peak values recorded between 2007 and 2008 in five core countries: Belgium, Germany, France, Finland and Luxembourg. In these countries, prices have steadily increased, albeit not without some interruption, since 2005. Belgium and Finland endured a mild fall in house prices between 2007 and 2008 but prices now exceed the peak values recorded during these years by the highest margin of those countries. In France, the fall in prices was slightly more pronounced between 2008 and 2009 but this decline has now been fully reversed. In Germany, prices were relatively stable between 2007 and 2009, although some upward drift in prices has emerged since 2011. In

**Box A Chart 3a: Changes in House Prices Across Euro Area Economies (2005=100)**



Source: Eurostat.

**Box A Chart 3b: Changes in House Prices Across Euro Area Economies (2005=100)**



Source: Eurostat.

The fall in prices since the start of the crisis has been greatest in the peripheral economies and this is shown in chart 3b. Initially, the fall in prices in Estonia was sharper than in any other country, with prices declining by almost 50 per cent up to 2010. However, this followed a very sharp increase over the period 2005 – 2007. Moreover, prices in Estonia have now recovered close to one third of the fall that took place between 2007 and 2009. A consequence of the recovery in prices in Estonia is that Ireland has endured the sharpest fall in house prices of any euro area economy with prices almost 50 per cent below the peak values recorded in 2007.

### **Economic Growth – Outlook**

Euro area GDP is expected to decline further in Q1 2013, albeit a milder contraction than the preceding quarter. Output may begin to stabilise in the second half of the year, as improvements in the net trade position outweigh weak domestic demand. Euro area GDP is likely to be supported by positive developments in Germany, where growth is expected to resume in late 2013.

Domestic demand is expected to exert a significant drag on euro area GDP growth during 2013, as private sector deleveraging continues. Consumption, in particular, will remain muted as high levels of unemployment, combined with low levels of confidence and on-going balance sheet adjustment in several countries negatively impact household spending capacity. Private investment is also likely to contract further during 2013: despite some abatement of uncertainty, business expectations and industrial confidence levels remain low. Fiscal consolidation across the euro area will also contribute to a slowing in growth.

Improving external trade conditions are expected to provide further support to exports during 2013: countries with high export shares of GDP will benefit in particular. While imports will remain weak with respect to domestic demand, some pick-up is likely in response to increased activity in exports with high import content. The net trade position is expected to be the primary driver of any GDP growth during 2013 and may serve to offset weak domestic demand.

In its *Winter Forecast* published in February, the European Commission revised down their forecast for euro area GDP growth for 2013 to -0.3 per cent, noting a more gradual path to recovery than previously anticipated. The ECB staff macroeconomic projections forecast a range of -0.9 to -0.1 per cent for euro area GDP growth this year and 0 to 2 per cent for 2014, indicating that domestic demand could

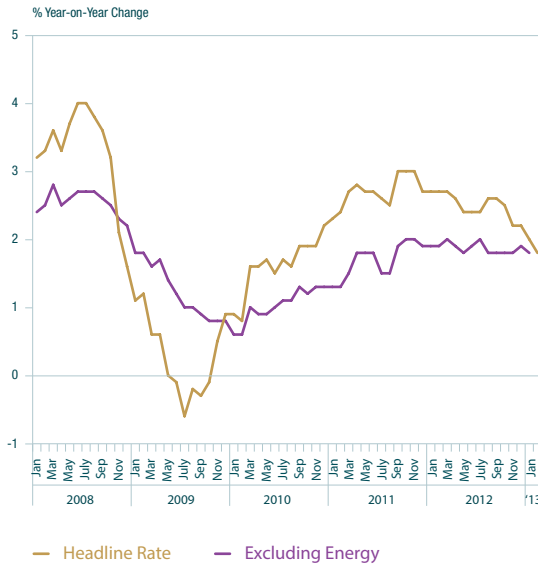
remain weaker for longer than indicated by previous forecasts. Domestic and external risks have been attached to the forecasts for the coming year. Renewed uncertainty within the euro area, in particular relating to any re-escalation of the sovereign debt crisis, may further undermine the potential for domestic demand to regain some ground toward the end of 2013, while a return to the soft global trade conditions of 2012 would jeopardise the role of net trade in providing support to the stabilising of GDP.

### **Inflation – Recent Developments**

Euro area annual HICP inflation has been on a downward trend since August 2012, falling to 1.8 per cent in February 2013, its lowest rate for over two years, primarily reflecting a reduced contribution from energy prices. Inflation averaged 2.5 per cent in 2012 as a whole, 0.2 percentage points lower than the previous year's average rate. Core inflation, meanwhile, has remained relatively steady for some time, as any downward price pressures emanating from increased economic slack have largely been offset by increased contributions from both administered prices and indirect taxes in the two components that make up core inflation, services and non-energy industrial goods. Nevertheless, a slight downward trend in the core rate is discernible, as HICP excluding food and energy averaged 1.4 per cent in the three months up to January 2013, down from an average of 1.5 and 1.6 per cent in the previous two three month periods.

Industrial producer price inflation (excluding construction) has declined gradually from an early 2011 peak of 6.8 per cent year-on-year. Following a slight rebound in August 2012, related to higher energy prices, producer prices continued their downward trend, falling to 1.9 per cent in January 2013. PMI survey measures of prices, meanwhile, indicate weak price pressures in the manufacturing sector. Manufacturing input prices declined below

**Chart 6: Euro Area Inflation**



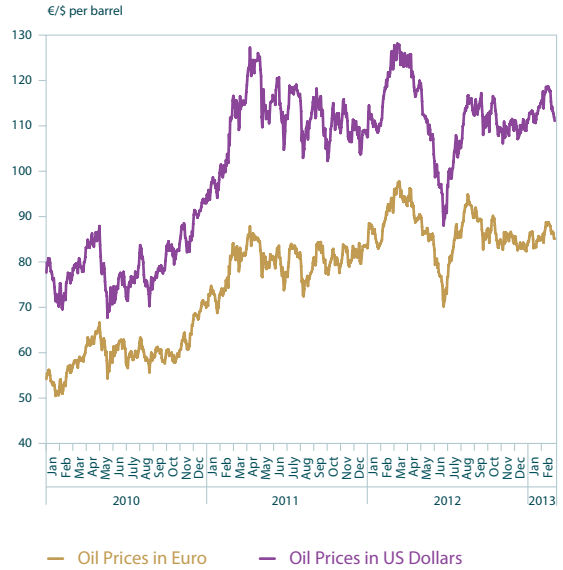
Source: Thomson Reuters Datastream.

the 50 mark that separates falling from rising prices in February. Manufacturing output prices have been below that threshold since June 2012. Finally, domestic price pressures also remain subdued, as high unemployment weighs on labour costs. Total hourly labour costs increased by 1.3 per cent year-on-year in the fourth quarter, compared with 1.8 per cent the previous quarter. Meanwhile, unit labour costs increased by 1.4 per cent in the fourth quarter, down from 1.8 per cent in the third quarter, reflecting a moderation in compensation per employee.

**Oil and Other Commodity Prices**

Brent crude oil prices gradually increased from early December 2012, peaking at \$118 per barrel in mid-February, on the back of increased risk appetite, greater demand from the US and China and geopolitical uncertainties. The market subsequently underwent a substantial correction, erasing all of the 2013 gains, reflecting, among other factors, a greater than expected increase in US inventories. Meanwhile, global food prices

**Chart 7: Oil Prices – Brent Crude**



Source: Thomson Reuters Datastream.

have remained steady, staying within a narrow range since November, according to the United Nations FAO price index.

**Inflation – Outlook**

Euro area inflation is expected to remain contained in both 2013 and 2014. According to the March 2013 Eurosystem staff macroeconomic projections for the euro area, annual HICP inflation is expected to lie between 1.2 per cent and 2.0 per cent for 2013 and between 0.6 per cent and 2.0 per cent for 2014.

**Table 3: US Contributions to GDP Growth**

	2012 Q1	2012 Q2	2012 Q3	2012 Q4
<b>Consumption</b>	1.7	1.1	1.1	1.5
<b>Government</b>	-0.6	-0.1	0.8	-1.4
<b>Fixed Investment</b>	1.2	0.6	0.1	1.4
<b>Inventories</b>	-0.4	-0.5	0.7	-1.6
<b>Exports</b>	0.6	0.7	0.3	-0.6
<b>Imports</b>	-0.5	-0.5	0.1	0.8
<b>GDP</b>	<b>2.0</b>	<b>1.3</b>	<b>3.1</b>	<b>0.1</b>

Source: Bureau of Economic Analysis (BEA)

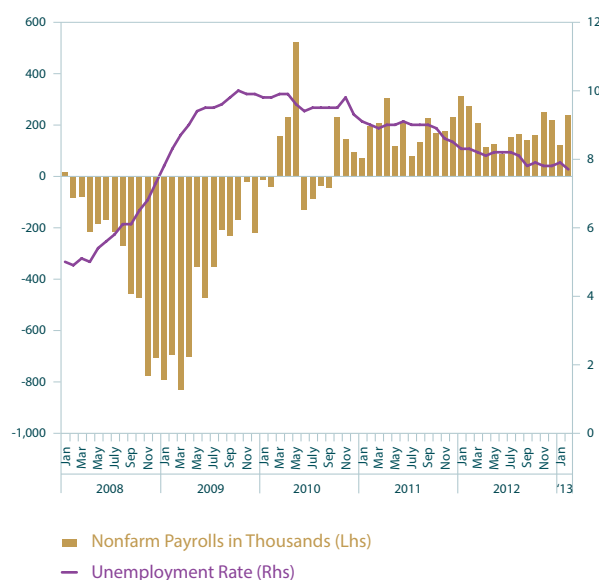
## Section 2: External Environment

### United States

The second estimate of real GDP indicated that US growth slowed sharply in the fourth quarter of 2012, with GDP expanding by just 0.1 per cent in annualised terms, down from 3.1 per cent growth in the third quarter of 2012. The much lower-than-expected estimate was mainly driven by temporary factors including a sharp decline in business inventories and government spending. The decline in government spending can be largely attributed to a sharp fall in defence spending. However, there were some encouraging signs, as both personal consumption and fixed investment picked up in the final three months of 2012 despite the fiscal uncertainty.

The more frequent hard and survey data point to a moderate expansion in overall economic activity in the first two months of this year. Hard indicators such as personal consumption expenditures (PCE) and industrial production recorded modest growth on a three month momentum basis in January, while core capital goods orders – a key indicator of future business investment – rebounded strongly, having declined in the second half of 2012.

There were further signs of recovery in the US housing market with house prices, as measured by the S&P/ Case-Shiller 20-city house price index, increasing by 6.8 per cent year-on-year in December, representing the biggest annual rise in house prices since

**Chart 8: US Labour Market**

Source: Bureau of Labor Statistics, US Department of Labor.

July 2006. Sales of new and existing homes also increased in January leading to a fall in the months' supply of both new and existing homes to 4.1 months and 4.3 months respectively, denoting a decline in the housing stock for sale relative to the monthly sales and indicating a pick-up in the turnover rate. Both measures of housing supply are now at their lowest levels since early 2005. As regards labour market developments, nonfarm payroll employment rose by 236,000 in February, which was much higher than expected although the unemployment rate remains elevated at 7.7 per cent.

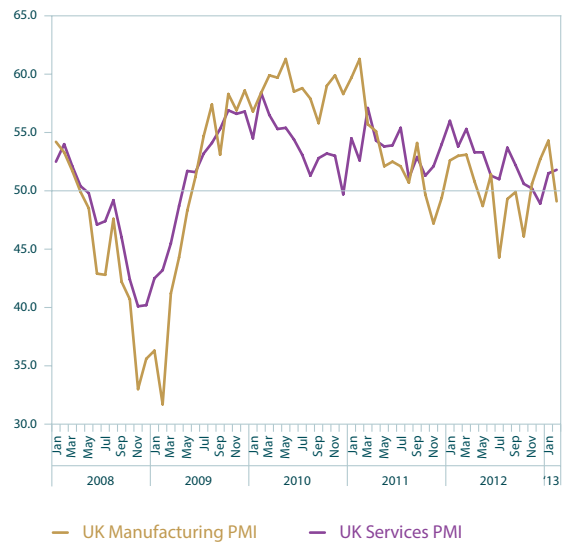


US consumer confidence indicators recovered in February having fallen sharply in late 2012, partly reflecting the uncertainty arising from the fiscal cliff. The Conference Board consumer confidence indicator increased from 58.4 in January to 69.6 in February while there was also a strong reading of the University of Michigan consumer sentiment indicator in February. Business confidence indicators have also been positive with the US composite output ISM increasing to 57.0 from 55.9 in January, with further increases registered in both the manufacturing output and services business activity components.

With respect to price developments, annual consumer price inflation (CPI) increased to 2.0 per cent in February, up from 1.6 per cent in January. The Federal Reserve's Federal Open Market Committee (FOMC) maintained the target range for the federal funds rate at the historically low level of zero to 0.25 per cent at its meeting in January. The FOMC also announced that policy rates would remain low as long as the one-to-two-year inflation projections remained below an upper tolerance threshold of 2.5 per cent, and the unemployment rate remained above 6.5 per cent.

Looking ahead, the recovery is expected to continue its moderate course, although the outlook is expected to remain clouded by the uncertainty regarding fiscal policies. According to the IMF World Economic Outlook Update published in January 2013, real GDP is expected to expand by 2.0 per cent this year on the assumption that the pace of fiscal withdrawal remains at 1.25 per cent of GDP, before picking up to 3.0 per cent in 2014. There is some uncertainty, however, regarding the effects of the pace of fiscal consolidation. The Congressional Budget Office (CBO) forecast GDP growth for 2013 at 1.4 per cent, on the assumption that the automatic spending reduction which came into force on 1 March 2013 is fully implemented.

Chart 9: PMI Indicators for the UK



Source: Markit.

Note: For PMI indicators, above 50 represents expansion, below 50 represents contraction.

### United Kingdom

According to the Office of National Statistics' second estimate, the UK economy contracted by 0.3 per cent during the fourth quarter of 2012 following an increase of 0.9 per cent during the third quarter. The decline in economic activity was reflected in lower levels of gross capital formation and net exports. At the same time, revisions to past data show that GDP expanded by 0.2 per cent during 2012. Recent data point to a further divergence in the performance of the services sector compared to manufacturing and construction during the first quarter of 2013. The PMI for services activity remains above 50 and increased further in February from 51.4 to 51.8. This is represented in Chart 9. In contrast, the PMI series for manufacturing output fell sharply from 54.2 to 49.0 with a similar decline also reported in the construction PMI.

The consumer price index of annual inflation stood at 2.7 per cent in January for the fourth successive month. Education and in particular

third level fees, recorded the sharpest increases in prices in the twelve months to January. According to the Bank of England's October Inflation Report, inflation could remain above 2 per cent out to the end of 2015.

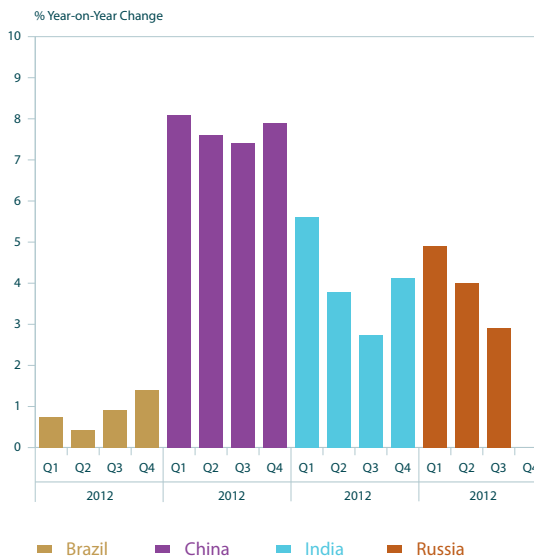
No changes have been made by the Bank of England's Monetary Policy Committee to the bank rate or to the asset purchases programme since the start of the year. New data relating to the Funding for Lending Scheme (FLS) show that the amount of funds drawn down under the scheme increased from £4.3 billion in the third quarter of 2012 to £9.5 billion during the fourth quarter of 2012. At the same time, net lending flows for the FLS participants decreased from £923 billion in the third quarter of 2012 to -£2,425 billion during the fourth quarter.

The UK economy faces a number of challenges that are likely to delay a broad based recovery and a re-balancing of economic activity. On-going weakness in the euro area, the UK's largest trading partner, and the sluggish growth in global trade more generally, suggest that there is only limited scope for export growth in the medium term. Although the UK faces lower borrowing costs than most European countries, the loss of the AAA rating on UK sovereign debt means that risks to borrowing costs lie to the upside. The fall in the unemployment rate to 7.8 per cent during the fourth quarter of 2012, has to be tempered by the weakness in labour market productivity which suggests that the capacity of the economy to supply goods and services has been impaired.

### BRIC Economies

In China, GDP increased by 7.9 per cent year-on-year in the fourth quarter of 2012, up from 7.4 per cent in the third quarter of 2012. Sentiment data point to a continuation of growth during the first quarter of 2013. While the manufacturing output PMI fell from 53 in January to 50.8 in February, it remains above the neutral 50 mark. The downward momentum in price pressures during 2012 continued into 2013 with Chinese inflation

Chart 10: BRIC GDP Growth Rates



Source: Thomson Reuters Datastream.

slowing from 2.5 per cent year-on-year in December to 2.0 per cent year-on-year in January, its lowest level since January 2010. Since the start of the year, the People's Bank of China (PBOC) has left the reserve requirements unchanged. At the same time, a number of initiatives have been announced by the Chinese authorities with regard to the domestic property market. Banks have been urged to tighten restrictions for second home purchases. In addition, local branches of the PBOC are expected to raise down-payment requirements in cities where property prices rise above the government's target.

In Brazil, GDP growth increased from 0.9 per cent year-on-year in the third quarter of 2012 to 1.4 per cent year-on-year in the fourth quarter of 2012. Inflation continues to drift upwards and reached 6.2 per cent in January. The Banco Central do Brazil's main policy rate, the selic, is unchanged since the start of the year. During 2012, a series of rate cuts brought the selic from 10.5 per cent to 7.25 per cent, a record low.

In India, GDP expanded by 4.1 per cent year-on-year during the fourth quarter of 2012, up from 2.8 per cent year-on-year in the third quarter. Inflation remains elevated

at 6.6 per cent in January. In Russia, GDP slowed in the second and third quarters of 2012. Nonetheless, the composite output PMI remained above 50 during the fourth quarter of 2012 and up to February which points to a continuation of growth. The IMF's WEO update in January projects growth of 3.7 per cent during 2013, revised down marginally from the October 2012 WEO.

### **Japan**

Japanese growth in GDP was unchanged during the fourth quarter of 2012 following the 0.9 per cent contraction during the third quarter. Private consumption and government spending increased during the fourth quarter but this was offset by changes in inventories and a further contraction in net exports with gross fixed capital formation unchanged. High frequency and survey data corresponding to the first quarter of 2013 point to a potential increase in economic activity. Industrial production for example increased by 1.0 per cent during January. During February, while the PMI indicated a slight fall in manufacturing output, the services' PMI remained above 50, which points to an expansion in business activity. Finally, the trade deficit narrowed further in January as exports of goods increased by a greater amount than imports of goods.

A reduction in deflationary pressures during 2012 was interrupted in January. Inflation registered -0.3 per cent during January on an annualised basis compared with -0.1 per cent in December. In January, the Bank of Japan (BoJ) made a number of important announcements regarding monetary policy. A price stability target of two per cent was introduced, replacing the previous inflation goal of one per cent. The "open-ended asset purchasing method" for its asset purchase programme, lifting the termination date which was previously set at end 2013, was also introduced. The BoJ announced plans to purchase about ¥13 trillion of assets each month starting in 2014 with most of these assets concentrated in shorter term government bonds. The target for the uncollateralised overnight call rate was maintained at a range of 0.0 per cent to 0.1 per cent.

Following the December elections, a ¥10.3 trillion stimulus has been unveiled to try to support the Japanese economy. The IMF's January WEO update shows that projected GDP growth for 2013 is 1.2 per cent, unchanged from the October reading, with fiscal stimulus along with expectations of further monetary easing expected to support growth.

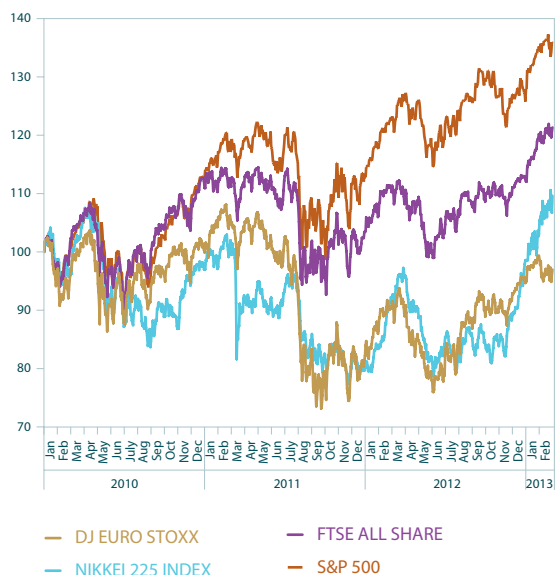
## **Section 3: Financial Markets**

### **Financial Sector Developments**

The improvement in investor sentiment during the latter half of 2012 continued, to an extent, into the first two months of 2013. Sentiment was positive in January, due to several factors including the temporary fiscal agreements in the United States, and the larger-than-expected first early repayment of the three-year longer-term refinancing operations (LTROs) conducted by the ECB. However, European sentiment was dampened in February by uncertainty surrounding the Italian parliamentary election results, and some weak economic data. Overall, euro area equities increased since the end of 2012, while sovereign bond yields were lower in the euro area periphery, mostly notably in Ireland on the back of the promissory note developments. Italian yields were higher, however, amid the election outcome uncertainty. The euro was mixed against other major currencies, gaining against sterling and the yen but declining against the broadly firmer US dollar. Meanwhile, in February, Moody's downgraded its rating on the UK sovereign from AAA to Aa1 with a stable outlook.

In March, the IMF, ECB and EU Commission agreed terms with the Cypriot authorities on a bailout plan designed to repair its ailing banking system. This plan was subsequently rejected by the Cypriot Parliament. Uncertainty surrounding this situation dampened market sentiment and caused sovereign bond yields to rise in several euro area countries. The euro also weakened against sterling and US dollar at this time.

## Equity Markets

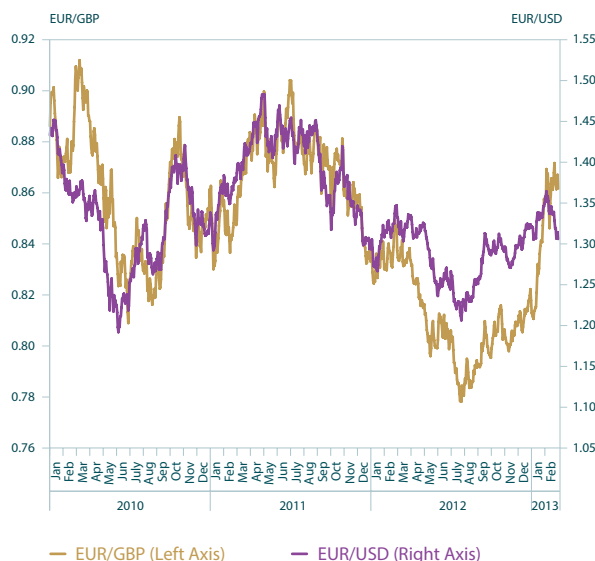
Chart 11: International Share Price Indices  
(end-December 2009 = 100)

Source: Thomson Reuters Datastream.

Euro area equity markets were higher during January and February 2013. Global equity prices increased in January, driven in part by the temporary agreement on the “fiscal cliff” and the extension of the debt ceiling in the United States and the larger-than-expected early repayment of the three-year LTROs. This latter factor was perceived as a sign of an easing of liquidity pressures in the euro area banking sector. However, in February, some of January’s gains were reversed. These losses can be attributed to several factors, including perceived political uncertainty in Italy, along with some weak economic data releases and disappointing earnings reports by some banks. In the US, equities continued the positive trends that started in mid-2012 with the S&P 500 index increasing to pre-financial crisis levels. In Japan, continued positive sentiment regarding the policies of the new government, pushed equities higher in the first two months of 2013. Meanwhile in the UK, the gains made by the FTSE 100 index in January were held through February as the possibility of further monetary easing by the Bank of England acted as a counterweight to a worsening economic outlook and Moody’s one-notch downgrade of the UK sovereign credit rating. Equity markets generally fell in March amid the uncertainty surrounding the Cypriot bailout discussions.

## Foreign Exchange Developments

Chart 12: Euro Exchange Rates



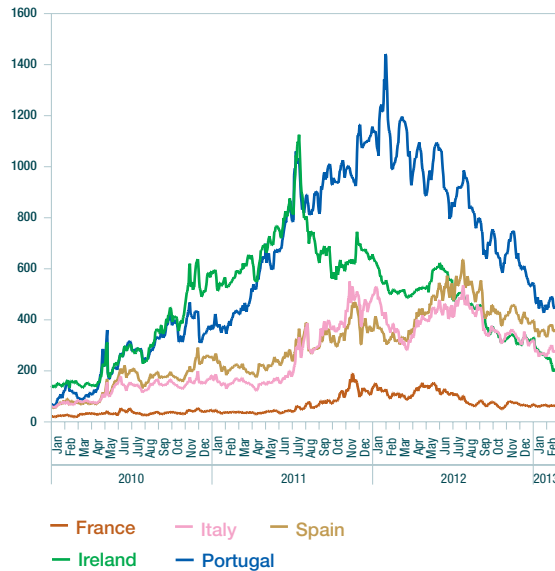
Source: Thomson Reuters Datastream.

The euro appreciated strongly against sterling and the Japanese yen while depreciating against the US dollar since the end of 2012. The euro broadly appreciated against other major currencies in January due to an improved appetite for riskier assets, as well as favourable developments with regard to interest rate differentials. Further to this, sterling remained weak vis-à-vis the euro since the start of the year due to the worsening sentiment on the UK growth outlook, the prospect of further monetary easing by the Bank of England and by Moody’s downgrade of the UK’s sovereign credit rating. The yen also remained weak against the euro primarily due to much-anticipated policy announcements made by the Bank of Japan in January. While the euro appreciated against the US dollar in January, it subsequently weakened in February due in part to the Italian political uncertainty and some poor economic data releases in the euro area.

The euro weakened against the US dollar further in March primarily due to the uncertainty surrounding the Cypriot bailout. The euro also weakened against sterling at this time.

**Sovereign Debt Markets**

**Chart 13: Selected Euro Area 10-Year Sovereign Bond Yield Spreads over Germany (bps)**



Source: Thomson Reuters Datastream

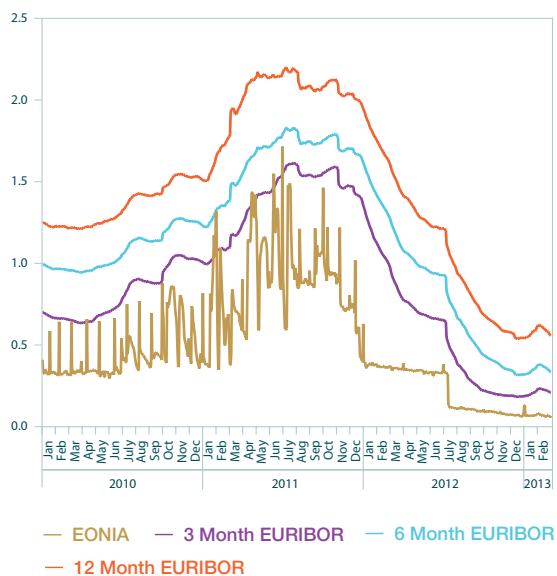
Yields on AAA-rated long-term government bonds in the euro area increased slightly during the first two months of 2013. Improved sentiment regarding a perceived easing of liquidity pressures for the euro area banking sector drove these developments in January. In February, yields on AAA-rated bonds fell due to safe haven flows following the uncertainty surrounding the Italian elections and renewed expectations that monetary policy in major economies would remain accommodative.

Yields on lower-rated euro area government bonds decreased in January and February, with the exception of Italy. The reduction of tail-risks in the euro area in the wake of the announcements relating to Outright Monetary Transactions (OMTs) in August and September 2012 continued to affect market sentiment and contributed to attracting investment flows to euro area countries. Spanish, Greek,

Portuguese and Irish bond yield spreads all decreased vis-à-vis Germany, with Ireland decreasing most, in part due to the swap of promissory notes issued by the Irish Government. This development was perceived by market participants as easing Ireland’s refinancing risks going forward. The issuance of a ten-year sovereign bond by Ireland in March was also seen in a positive light. Italian yields, in contrast, rose in February. This was driven firstly by the political uncertainty in the run-up to the Italian parliamentary elections and secondly, by the uncertainty surrounding the prospect of a prolonged political deadlock resulting from the inconclusive election results.

The proposed bailout plan for Cyprus and its rejection by the Cypriot Parliament caused bond yields to rise for several countries in March. Most notably, Greek bond yield spreads rose significantly vis-à-vis Germany while Spanish and Portuguese spreads rose to a lesser extent.

Long-term government bond yields in the United States increased over the period. The temporary agreement on the “fiscal cliff” in January, along with positive labour and housing sector data improved market sentiment. However, this was tempered by weak economic growth data for the fourth quarter of 2012. In the UK, long-term government bond yields also increased overall. Moody’s downgraded the UK government’s credit rating and the latest Bank of England Quarterly Inflation Report indicates that CPI inflation is likely to rise further and may remain above the 2 per cent target for the next two years.

**Money Markets****Chart 14:** Selected Euro Area Money Market  
Interest Rates

Source: Thomson Reuters Datastream.

Overnight money market interest rates remained stable in the first two months of 2013, while the money market yield curve steepened slightly. The larger-than-expected early repayments of the first of the ECB's three-year LTRO funds during the first week of repayments reduced excess liquidity to some extent, although this is expected to remain above threshold values associated with rising short-term money market rates for some time. The initial steepening of the money market yield curve reflected market participants' increased expectations of a scenario in which excess liquidity could decline towards these threshold values. However throughout February, this scenario was gradually perceived as more unlikely with a consequent flattening of the money market yield curve.

# EU-IMF Financial Assistance Programme – Ninth Review

## Overview

The ninth review of Ireland's European Union/ International Monetary Fund (EU/IMF) Financial Assistance Programme took place from 29 January to 7 February 2013. Progress on the three main programme fronts - fiscal, financial sector and structural reform – was discussed during the mission. All programme conditions and quantitative targets were met in the fourth quarter of 2012. Reflecting this, the External Partners<sup>1</sup> concluded that “Ireland's strong track record of programme implementation has been maintained, contributing to substantial improvements in market access and conditions for the sovereign”<sup>2</sup>. Notwithstanding this, they commented that “decisive action” is needed to support bank lending to the economy. The priority for the banks this year is to make “demonstrable progress in enhancing asset quality”, while strict implementation of Budget 2013 measures was also emphasized.

Discussions during the review focused on the following issues:

- The macroeconomic situation and outlook.
- Management of mortgage and small and medium-sized enterprises' (SMEs) loan arrears and the need for durable solutions.
- Establishment of the Personal Insolvency Service.
- Banks' future profitability, including moving banks off the Eligible Liabilities Guarantee (ELG) scheme.

- Implementation of Budget 2013 and measures to manage public spending (health and public sector reforms).
- Job creation and activation measures.
- Exit strategy – discussions commenced on how to prepare and support a durable and successful exit from external programme financing.<sup>3</sup>

## Compliance with Financial Sector Conditions

Work to progress the financial sector reform agenda continued during the fourth quarter of 2012. The main actions are set out below.

In relation to mortgage arrears, the Central Bank carried out on-site reviews, and continued to engage with the banks on their operational capability and capacity to execute their loan modification and resolution strategies (the roll out of these began in the fourth quarter). The Bank provided the External Partners with its assessment of banks' progress in implementing these strategies and the work out of their non-performing mortgages portfolios (relative to the agreed key performance indicators (KPIs)). In December, the Central Bank published, for the first time, data reported by the banks on loan modifications, and, from the second quarter of this year, will publish data on re-defaults of modified loans.

The Personal Insolvency Act was enacted in December. This provides for the introduction of

<sup>1</sup> The European Commission (EC), the European Central Bank (ECB) and the International Monetary Fund (IMF).

<sup>2</sup> <http://www.imf.org/external/np/sec/pr/2013/pr1340.htm>.

<sup>3</sup> There have been a number of positive developments in this respect since the mission, including the announcement by the Irish Authorities of a deal on the promissory note. In addition, EU Finance Ministers have agreed to “ask the Troika to come forward with a proposal for their best possible option” for the adjustment of the maturities on Ireland's and Portugal's EFSF and EFSM loans - [http://www.consilium.europa.eu/uedocs/cms\\_Data/docs/pressdata/en/ecofin/135815.pdf](http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ecofin/135815.pdf). The Eurogroup subsequently decided to adjust both countries' EFSF loans - [http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ecofin/136194.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/136194.pdf). The NTMA also sold a new 10 year benchmark Treasury Bond, the first such issuance since January 2010. The sale attracted international investors (82 per cent) and raised €5 billion at a yield of 4.15 per cent.

three essentially non-judicial new debt resolution processes: (i) the Debt Relief Notice (DRN), (ii) the Debt Settlement Arrangement (DSA), and (iii) the Personal Insolvency Arrangement (PIA). The establishment of the Insolvency Service of Ireland also proceeded during the fourth quarter, with an implementation team set up to address operational matters. Steps to be taken to enable it to begin accepting applications in the second quarter of 2013 include addressing IT issues, the appointment of specialist judges and the licensing and regulation of personal insolvency practitioners.

The Central Bank developed a set of KPIs for monitoring SME loan arrears, which will be further enhanced in 2013. The Bank also provided feedback to the banks on their strategies for addressing SME loan arrears and unsustainable debts, and gave an update to the External Partners on progress with the implementation of these strategies.

A review of actual performance to June 2012 compared to the Prudential Capital Assessment Review (PCAR) 2011 was undertaken by the Central Bank. The overall results were published in early 2013.

The Central Bank completed a credit regulatory capital review, the focus of which was on the appropriateness of Regulatory Capital (RCAP) parameters and RCAP deployment. It issued its findings, including suggested mitigating actions, to the banks in December.

An inter-agency working group developed a strategy for disengaging the banks from the Eligible Liabilities Guarantee (ELG) Scheme. State aid approval for prolongation of the scheme until June 2013 was received from the European Commission in December, though it was announced in February that the Scheme will end for all new liabilities from midnight on 28 March 2013.

The normal monitoring and reporting on banks' deleveraging, based on existing nominal

targets and the run-off of non-core assets, also continued during the fourth quarter.

The Credit Union and Co-operation with Overseas Regulators Act was enacted in December. This Act contains prudential and governance requirements and regulation-making powers that support the introduction of a strengthened regulatory framework for the credit union sector, and provides for its restructuring on a voluntary basis. As part of the restructuring process, €250 million was transferred to the Credit Union Fund for restructuring purposes in December, while the Restructuring Board (ReBo), which will lead the restructuring process, was placed on a statutory basis in January 2013.

Other actions carried out during the fourth quarter included the issuance of revised guidance by the Central Bank in relation to valuation processes - "Valuation Processes in the Banking Crisis – Lessons Learned-Guiding the Future" (2012) was published in December, replacing the 2011 version. The interpretation of the Code of Conduct on Mortgage Arrears was also clarified.

### **Future Financial Sector Commitments**

The financial sector reform actions to be advanced over the coming months, including two new structural benchmarks, are summarised below.

The first of the new structural benchmarks (end-March 2013) relates to the establishment of a public target requiring the principal mortgage banks to offer a substantial share of durable restructuring arrangements for distressed mortgages during 2013. Targets for the completion of such arrangements and for their subsequent performance will also be established in the second half of this year.

The Central Bank has begun reviewing the Code of Conduct on Mortgage Arrears. The review will include the exploration of areas such as: (i) restrictions on contacts with



borrowers, (ii) the definition of a “non-cooperative borrower”, and (iii) the interest setting mechanism in cases where lenders have offered an alternative arrangement which is advantageous to the borrower in the long-term. The four week public consultation process commenced in March, and the intention is to issue a revised Code by the end of the second quarter.

The effectiveness of statutory repossession arrangements will also be kept under review during 2013, while legislation to remedy the issues identified by the Dunne judgement will be introduced.

A review of progress in addressing mortgage arrears will be prepared for the end of June (existing structural benchmark).

By the end of June, the Central Bank intends to establish individual bank targets in order to complete a substantial share of restructuring arrangements for SME loan arrears. At the same time, it will track banks’ progress with the newly developed KPIs and will continue to undertake on-site supervisory reviews.

In the area of provisioning, the Central Bank will engage with each bank to ensure appropriately prudent treatment. In addition, it will update, where needed, the 2011 Impairment Provisioning and Disclosure Guidelines (by end-May). This is the second of the new structural benchmarks. As part of this review, the application of the existing guidelines and the provisioning methodologies and assumptions employed by the banks will be reviewed.

The Central Bank requested an assessment by the IMF of its observance against Basel Core Principles for Effective Banking Supervision (structural benchmark for end-March), ahead of schedule, in February. It is envisaged that the external assessment will be completed by the end of 2013.

The Central Bank (Supervision and Enforcement) Bill is being progressed. This will

strengthen the Central Bank’s investigation, direction and enforcement powers.

Work is also continuing to meet financial sector commitments for the latter part of 2013, including preparation for the 2013 stress tests (which includes extensive loan loss forecasting work), and efforts to set up the Central Credit Register.

### **Compliance with Fiscal Targets**

Work on the fiscal front continued in the fourth quarter of 2012. The Medium-Term Fiscal Statement was published in November, followed by Budget 2013 in December. In addition, the Fiscal Responsibility Act was signed into law. This established the Irish Fiscal Advisory Council as a statutory body, and transposed the EU Stability Treaty into national legislation.

The quantitative targets for the fourth quarter were achieved. The adjusted cumulative end-December 2012 exchequer primary deficit target was met by a significant margin, as was the target for the outstanding stock of central government debt. In addition, the continuous performance criterion on the non-accumulation of external payment arrears was achieved.

For 2012 as a whole, the general government deficit is expected to come in under 8 per cent of GDP, below the programme ceiling of 8.6 per cent of GDP. While overspending was evident in two sectors in the course of the year - health and social welfare - this was offset by better than expected tax revenues and non-interest expenditure restraint in a number of other areas.

### **Future Fiscal Targets**

It is expected that the 2013 general government deficit will come within the programme ceiling of 7.5 per cent of GDP. Budget 2013 provided details on how the consolidation effort of €3.5 billion will be achieved, including details of a property tax to

be introduced in July. Agreement has also been reached with public service unions on measures to achieve an additional €1 billion reduction in the pay and pensions bill over the coming years. Balloting is currently taking place on this. Legislation to allow for additional charging of private patients in public hospitals and to promote greater generic drug use is also being prepared. During the discussions, the External Partners stressed the importance of strictly implementing Budget 2013 and managing the health budget so as to “deliver high quality health services while achieving value-for-money more in line with other EU countries”<sup>4</sup>.

### **Compliance with Structural Reforms**

The structural reform agenda was further progressed in the final quarter of 2012.

A progress report on the sale of state assets was provided to the External Partners in the fourth quarter, along with an update of developments in strengthening competition law enforcement. In addition, updates were provided in relation to the implementation of the new water strategy, and a Water Services Bill was subsequently published in January 2013.

Investment projects in, among other things, the education system, roads and justice areas, have also been identified. Efforts are underway to develop these through public private partnerships with the European Investment Bank (EIB), the National Pension Reserve Fund (NPRF) and private investors. The 2013 Action Plan for jobs, detailing measures intended to improve the business environment and foster job creation, was published in February 2013.

Advancement of the ‘Pathways to Work’ initiative continued during the fourth quarter, with a detailed report provided to the External Partners in December. The Department of Social Protection also published a policy review of Employment Support Schemes in January 2013. Building on this, it will prepare an action

plan aimed at increasing the effectiveness of activation and training services, particularly for the long-term unemployed. Staff will continue to be re-deployed and trained to work as case managers.

Legislation to provide for the establishment of SOLAS – the Further Education and Training Bill 2013 - was published in January. The objective is to set up both the new training and further education authority and the Education and Training Boards (ETBs) by the end of June 2013.

Two surveys were undertaken in the fourth quarter of 2012 to review SMEs’ demand for credit and assess the effectiveness of the Credit Review Office (CRO). To support investment and job creation in the SME sector, a range of measures are being undertaken, including the investment that the NPRF will make in three new SME funds (as announced in January), and the ten point tax reform plan set out in Budget 2013.

### **EU/IMF Loan Disbursements to Ireland to Date**

The nominal amount of loans under the EU/IMF Programme as of 28 February 2013 amounts to €56.5 billion<sup>5</sup>. The net euro amount - which takes account of any adjustments for below par issuance, deductions of a prepaid margin, and the effect of foreign exchange transactions - was €55.9 billion. When the approval process for the ninth review of the Programme has been completed, €3.3 billion will be disbursed (€1.0 billion from the IMF, €1.6 billion from the EFSF/EFSM and €0.7 billion from EU bilateral loans). On drawdown of this tranche, total disbursements to date will amount to some €60 billion, representing just under 90% of the total external financing of €67.5 billion.

<sup>4</sup> <http://www.imf.org/external/np/sec/pr/2013/pr1340.htm>

<sup>5</sup> Note that a disbursement from the EFSF/EFSM (€0.8 billion) approved following the eighth review is not included in these figures as it is yet to be drawn down – however, it is expected to be requested shortly.

## Signed Articles

The articles in this section are in the series of signed articles on monetary and general economic topics introduced in the autumn 1969 issue of the Bank's Bulletin. Any views expressed in these articles are not necessarily those held by the Bank and are the personal responsibility of the author.

# The Usage, Cost and Pricing of Retail Payments in Ireland

Ronnie O'Toole<sup>1</sup>

## Abstract

Effective, safe and efficient payment systems are important to facilitate real and financial transactions in advanced economies, though the choice of payment channel differs widely across Europe. Ireland has the second highest usage of cheques in Europe, the highest ATM withdrawal per capita and still pays out half of all social welfare payments in cash. Cheques are a very expensive form of payment, and much less efficient than debit cards. Ireland could save up to €1bn per year by migrating to more efficient payment instruments. One impediment to a faster migration is that the pricing of payments in Ireland is not commensurate with the cost of provision. Only 46% of the costs of providing cash and cheques services are recouped by banks, with significant cross-subsidisation at the expense of electronic payments.

<sup>1</sup> The author is Programme Manager of the National Payments Plan, and works in the Payment and Security Settlements Division of the Central Bank of Ireland (email: ronnie.otoole@centralbank.ie). The views expressed in this article are those of the author only and do not necessarily reflect the views of the Central Bank of Ireland. The author would like to thank Tony Grimes, Maurice McGuire, Bernard Sheridan, David O'Riordan, Daragh Cronin, Stefan Gerlach, Peter Hopkins and Joe Doyle for helpful comments.

## 1. Introduction

Retail payments are mainly consumer payments of relatively low value. They are made by a large numbers of transactors, and relate to purchases of goods and services in both the consumer and business sectors. A retail payment can be made using a variety of payment instruments such as cash, cheques, debit and credit cards and by EFT (Electronic Funds Transfer) using credit transfer or direct debit. Effective, safe and efficient payment systems facilitate real and financial transactions in advanced economies.

Making a payment is costly. While bank charges in Ireland, particularly consumer charges, receive a lot of media and regulatory<sup>2</sup> attention, the cost to society of providing payment services do not. In the case of cash, these costs come from the printing of notes and minting of coins, the distribution of cash to users and the return of excess cash to banks, all of which requires a complex infrastructure involving security, transportation, insurance, cash depots, ATMs, etc. Cheques need to be printed, go through several stages of transportation and require a significant degree of manual processing. For non-cash payments such as debit cards or credit transfers, the cost comes from maintaining an information-processing infrastructure involving intermediaries such as banks, clearing houses and settlement system operators.

This paper examines the relative importance of different retail payments within the EU, and the cost of providing these. It then examines the bank charges faced by consumers in Ireland for the use of different payment alternatives, with particular emphasis on the cost of their provision. The paper is structured as follows; Section 2 compares the usage of payment methods within the EU, with a particular focus on Ireland; Section 3 sets out the main results of a recent ECB study of the cost of retail payments in Europe, while Section 4

discusses the role of pricing of retail payment instruments, and outlines the system of differential pricing used in Norway to drive more efficient consumer behaviour. Finally, Section 5 draws a number of conclusions.

## 2. The usage of retail payments

The relative importance of different retail payments instruments varies widely across countries. Ireland retains very high rates of use of paper-based payment instruments (i.e. cash and cheques) relative to the rest of Europe. Each of the main forms of payment is discussed below.

### 2.1 Cash

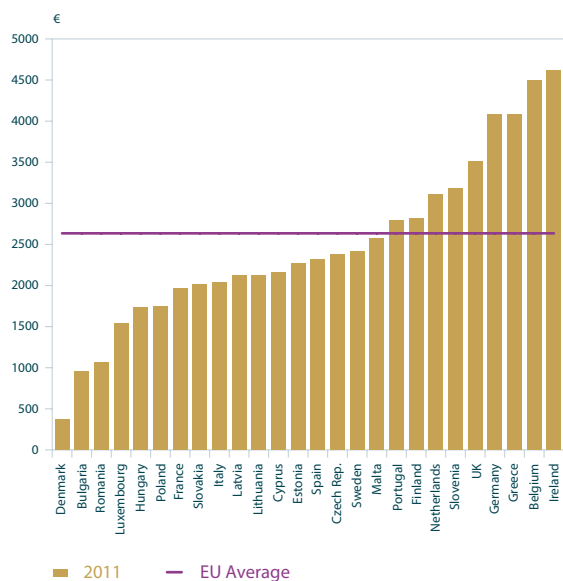
The measurement of cash transactions is difficult given their anonymous nature. However measures of the sources of cash are more readily available<sup>3</sup>, the most important of which are the ATM network and over-the-counter (OTC) withdrawals from financial institutions. Chart 1 below shows the ATM usage per capita in the EU in 2011. The chart shows that Ireland has a relatively high usage relative to other euro area countries. The Irish public withdrew €21.2 billion from ATMs in 2011, equivalent to €4,618 per capita, which is 65% higher than the EU average of €2,635 (ECB, 2012).

Tentative estimates of aggregate cash withdrawals in Ireland also exist, and are estimated at €14,000 per capita in 2010, just over double the EU12 average of €7,000 (Takala and Viren (2012)). By this estimate, non-ATM access to cash in Ireland is also far higher than on average in the EU, despite Ireland having a relatively low bank branch penetration. In part this is because over half of all social welfare payments per annum in Ireland are still paid in cash through the post office network, representing €10bn in 2011 (Department of Social Protection (2012)).

<sup>2</sup> Financial institutions operating in Ireland are subject to Section 149 of the Consumer Credit Act, which obliges them to get approval from the Central Bank of Ireland of every proposal to increase an existing charge or introduce a new charge on customers of financial services. The approval criteria laid down in legislation are the promotion of fair competition; commercial justification; and the effect on customers.

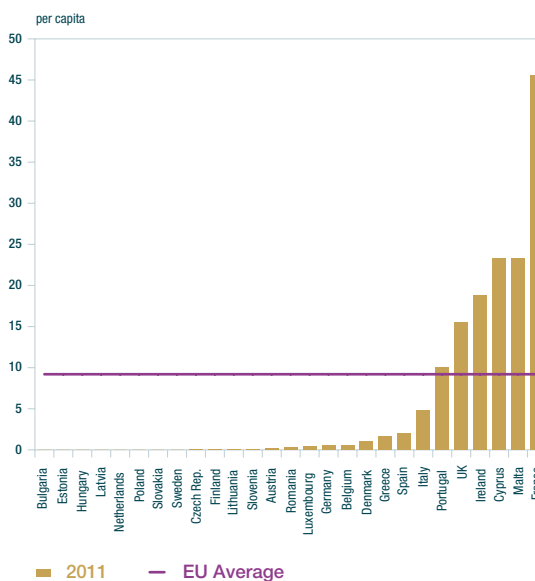
<sup>3</sup> Measuring the sources of cash raises the difficulty that cash can be used for purposes other than making payments, most notably as a store of value.

Chart 1: ATM usage per capita in the EU, 2011



Source: European Central Bank.

Chart 2: Cheque usage per capita in EU, 2011



Source: European Central Bank.

## 2.2 Cheques

Ireland is one of only six EU countries that use a significant volume of cheques. In 2011 84.2 million cheques were written in Ireland, equivalent to 18.8 cheques per capita. The average use in the EU is 9 per capita, though two out of three EU countries use on average one cheque per capita or less per annum. Cheque usage in the EU fell at a rate of 7.5% in 2011, in line with the rate of decline witnessed in Ireland (7.4%). Chart 2 shows the use of cheques by country in 2011.

Within Ireland, cheque usage is dominated by consumers and small- and medium-sized enterprises (SMEs), with 97% of all cheques written having a consumer or SME as either the payer or payee. Almost two-thirds of cheques (63%) feature consumers and/or SMEs as both payer and payee. Cheque usage among consumers is particularly prevalent among the elderly and the farming community (National Consumer Agency (2012)). Box 1 provides a breakdown of cheques users in Ireland in 2012 by issuer and beneficiary.

## 2.3 Debit and Credit Card Payments

Card usage in Ireland is extensive and growing rapidly, though relative to other Northern European countries remains low. Chart 3 shows that there were 76 card payments per capita in Ireland in 2011, which is low compared to Finland (203), the Netherlands (146) and Luxembourg (138). Most card payments in Ireland are now made using debit cards, which overtook credit cards in 2007 in terms of number of transactions; debit card use in Ireland is currently growing at an annual rate of 14%. Ireland's domestic debit card scheme ('Laser') is currently being phased out, and is being replaced mainly with Visa debit cards. In contrast to debit cards, the number of credit card payments has dropped by 14% since 2008, and is still falling. A longer-term trend of debit card payments displacing credit card payments has been evident since the inception of the Laser debit card scheme in 1996.

**Box 1: Cheque usage in Ireland 2012**

While the number and value of cheques has been measured for some time, little information about the issuers and beneficiaries of cheques was available. The first major cheque analysis of its type was undertaken in 2012 by participant banks, co-ordinated by the National Payments Plan programme office.

A total of 10,000 cheques were examined, with each of five cheque clearing banks sampling 1,000 cheques on two dates, April 18th 2012 and May 1st 2012. In each case the cheques were examined to determine the issuer, the beneficiary and the amount, with this information being categorised under a number of headings.

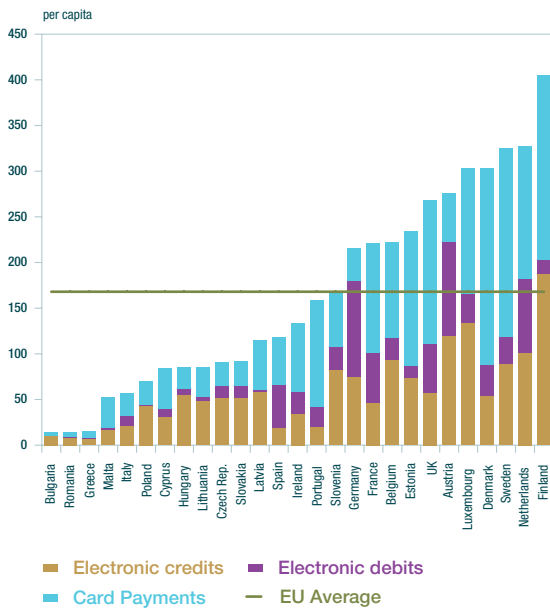
A summary of the analysis is provided in the table below, which shows the percentage of all cheques between each of the major categories of issuers and beneficiaries. For example, 16% of all cheques in the sample were written by households to SMEs (small and medium sized enterprises). This includes, for example, payments to plumbers, mechanics and doctors.

Issuer (Rows)	Beneficiary (Columns)					Total
	Personal	SME	Other Business	Public Sector	Uninc. Bodies	
Personal	12%	16%	4%	2%	2%	35%
SME	14%	21%	3%	1%	0%	40%
Other Business	3%	1%	1%	0%	0%	4%
Public sector	10%	1%	0%	0%	0%	11%
Financial Institutions	2%	1%	1%	0%	0%	4%
Unincorporated Bodies	2%	1%	0%	0%	0%	3%
Bank Drafts	1%	1%	1%	0%	0%	3%
<b>Total</b>	<b>44%</b>	<b>42%</b>	<b>8%</b>	<b>4%</b>	<b>3%</b>	<b>100%</b>

Source: Central Bank of Ireland (2013)

The main conclusions of the analysis are as follows:

- Businesses issue 44% of all cheques in Ireland (about 37 million cheques in 2011). Within the business sector cheque usage by SMEs dominates, accounting for 90% of cheques issued.
- The majority (57%) of cheques issued by businesses are payable to other businesses (21 million cheques per annum).
- Consumers account for more than one third of all cheques issued (35%), equivalent to nearly 30 million in 2011. The majority of these (56%) are payable to businesses, primarily to SMEs.
- Just over one third of all cheques issued by consumers are payable to other consumers, accounting for 12% of all cheques in the sample.
- 42% of cheques issued by consumers are for €100 or less.
- Other than the Department of Social Protection, the public sector is no longer a major issuer of cheques. Of eight million cheques issued by the public sector in 2011, six million were for social welfare payments.

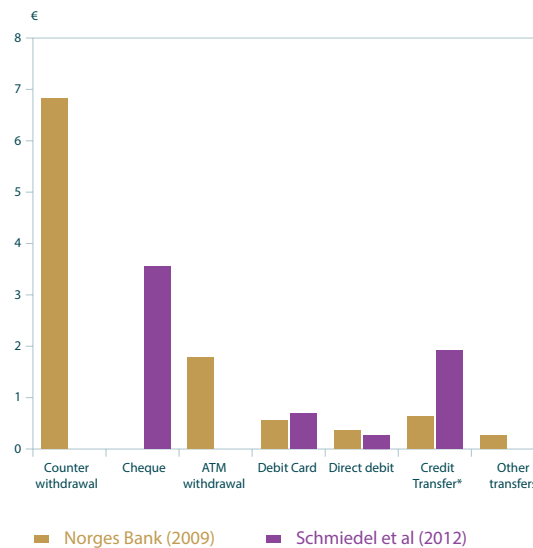
**Chart 3: Electronic payments usage in the EU, 2011**

Source: European Central Bank.

## 2.4 Electronic Funds Transfer

The term 'Electronic Funds Transfer' (EFT) captures a variety of ways of making a payment by electronic means. An electronic credit transfer is a method of sending funds directly from one bank account to another using electronic means, the transfer being initiated by the sender. An electronic credit transfer could for example be a standing order for a monthly savings account or a once-off payment to a friend or family member. In Ireland the public currently makes 34 electronic credit transfers per capita, per annum. This compares to a EU average of 50 annually.

A direct debit is a regular payment debited from a bank account on the basis of an authorisation (referred to as a 'mandate') previously given by the payer to the payee. Direct debits are typically used to make recurring payments such as for insurance premiums, utility bills or mortgage repayments. Irish bank customers currently make 24 direct debits per capita, per annum. This compares to a EU per capita average of 44 annually.

**Chart 4: Unit social costs of retail payment instruments**

## 3. The societal cost of retail payments

Payment transactions involve significant costs. The unit costs per payment for the EU and Norway are shown in Chart 4. These are based on the total social cost of retail payments to all stakeholders divided by the number of transactions per service. Reliable estimates for the cost by payment channel are not available for Ireland, and are the subject of research being initiated by the Central Bank of Ireland.

The most expensive way to execute a payment is an OTC transaction. This is twice as expensive as a cheque, which is the second most expensive form. The cost of an ATM withdrawal is about three times as expensive as debit card transactions when all societal costs are included.

An ATM withdrawal is likely to fund numerous cash transactions, so despite ATMs being relatively expensive, cash payments show the lowest costs per transaction, followed closely by debit card payments. However given the huge

4 The Schmiedel et al. (2012) study does not include household costs.



**Table 1: Costs of payments in society by instrument and by stakeholder, % of total**

	Central Banks	Banks and infrastructures	Cash-in-transit companies	Retailers/ businesses	Total
Cash	3%	20%	1%	28%	51%
Cheques	-	2%	-	1%	3%
Cards	-	17%	-	5%	22%
- Debit cards	-	8%	-	2%	10%
- Credit cards	-	8%	-	1%	9%
- Combined cards	-	-	-	2%	2%
Direct debits	-	5%	-	4%	9%
Credit transfers	-	7%	-	6%	14%
<b>Total</b>	<b>3%</b>	<b>51%</b>	<b>1%</b>	<b>46%</b>	<b>100%</b>

**Source:** Derived from Schmiedel et al. (2012).

volume of cash usage (representing 68.8% of all transactions), the costs of cash are nearly half of the total economy-wide costs associated with payments. However in more than one-third of the sample countries in Schmiedel (2012), debit card transactions have lower unit costs than cash transactions.

The low average cost for cash payments derives from its efficiency for very low-value transactions. However, while the marginal cost of a cash transaction increases with the transaction amount, the marginal cost of a debit card transaction is largely invariant to the size of the transaction. This gives rise to the so-called 'switching point', the point above which debit cards become more efficient to use than cash.

This switching point has been the subject of a number of studies. Brits and Winder (2005) estimate a switching point of €11.63 in the Netherlands, close to the estimate of €13 also for the Netherlands by Ten Raa and Shestalova (2004). Bergman et al. (2007) estimate a switching point of €7.80 in Sweden based on data for 2002, though a more recent study by Segendorf and Jansson (2012) estimate this at just €1.88 based on data for 2009. Segendorf and Jansson suggest that an explanation for the decline in the switching point in Sweden is an increase in economies of scale in card

payments, while cash usage has been decreasing. Advances in payments technology, particularly the advent of contactless cards and/or mobile payments, could further lower this switching point in the future.

The costs by instrument and stakeholder are shown in Table 1 (adopted from Schmiedel et al. (2012))<sup>5</sup>. It shows that the cost of cash in Europe represents over half (51%) of the total societal cost of payment. A further 22% of total costs are for cards, which are evenly split between debit and credit cards. Cheque usage only costs 3%, though this figure would be far higher in high cheque-using countries like Ireland.

Turning to costs by stakeholder, around half (51%) of the overall costs of payments are incurred by banks and payment systems infrastructures, with most of the remainder (46%) being incurred by retailers and other businesses. The costs related to central banks and cash-in-transit companies account for 3% and 1% respectively.

The aggregate costs of retail payments in the EU are substantial and amount to 0.96% of GDP<sup>6</sup> though there is a variation of 0.8% between the most efficient and least efficient countries. Reducing the aggregate cost of payments could potentially improve national

<sup>5</sup> It does not include any payment made to other participants in the payment chain, for example fees or tariffs, to avoid double counting of costs.

<sup>6</sup> The payments considered in the study were cash, cheque, debit and credit card, direct debit and credit transfer payments up to €50,000, which account for at least 5% of all payments in terms of volume in each country. This estimate is the average of the 13 sample participating countries.

competitiveness and result in better value for the customer, lower back-office administration cost for Government, lower administration cost for businesses and lower operating costs for financial institutions. The costs incurred by consumers and households were not considered in the study, though data from Denmark and Hungary<sup>7</sup> suggest that on average these costs account for about 0.2% of GDP. Household costs of payments cover items such as the time spent on activities relating to making payments, fees paid to banks and interest income lost on their cash holdings (Danmarks Nationalbank (2011)).

The study includes Ireland in the cluster of the most expensive countries, with an estimate of the cost of payments of 1.2% of GDP. This cluster includes France, Greece, Italy, Cyprus and Malta which are typified by high cash and cheque usage by comparison with the European average, with a correspondingly low card usage.

There are a number of non-monetary costs and benefits associated with different payment methods. Most notably, there is a correlation between cash usage in an economy and the size of that economy's shadow economy. De Grauwe et al. (2006) show that the ratio of the shadow economy to the regular economy has a strong and negative impact on the choice of a debit card payment relative to cash. Studies of Scandinavian countries have shown that between 28% and 65% of cash in circulation is not accounted for by recorded payment activity, which is suggestive of a very significant element of shadow economy payments<sup>8</sup>.

In conclusion, while bank charges in Ireland receive considerable media and regulatory attention (particularly consumer charges), the corresponding costs of payment services do not. The evidence presented in this review shows that there are significant differences in the cost of provision of different payment instruments, which drives a higher overall cost

of payments in countries with payment usage exhibited in Ireland. The next section looks at the issue of bank pricing, which shows that there is little price differential which might provide an incentive to consumers to use more efficient means of payment.

#### 4. The pricing of retail payments

Pricing plays an important role in the payment system and can be applied by banks<sup>9</sup> or merchants, though in practice is mainly applied by the former. The most important role of pricing is to recover costs. Fee income is an attractive source of revenue for banks as it is less volatile than other sources of income<sup>10</sup>. Pricing can also signal the different costs associated with different instruments to users and change behaviour accordingly. However, non-price incentives – such as availability, convenience and security - can also be important in influencing payment behaviour.

While the use by merchants of a 'payment surcharge' or 'handling fee' is not widespread in Ireland, a number of merchants in the passenger travel, package travel, utilities and other sectors apply fees to debit or credit card payments (Department of Jobs, Enterprise and Innovation (2012)). Surcharging in retail outlets is rare as it is thought to generate confusion among consumers and would involve additional costs for merchants. Instead, retailers cover their payment costs by applying a general average mark-up on all customer prices.

For banks, payment related fee-income comes from three primary sources:

1. *Direct customer charges*: These can be applied to consumers (e.g., fees for use of a debit card) or corporate customers (e.g. fees paid by retailers for depositing cash)<sup>11</sup>;
2. *Debit/credit card interchange*: Merchants in Ireland have to pay a 'Merchant Service Charge' every time they accept a debit or

<sup>7</sup> As cited in Schmiedel et al. (2012).

<sup>8</sup> Further details can be found in Humphrey et al. (2000) and Paunonen and Jyrkönen (2002).

<sup>9</sup> Including merchant acquirers.

<sup>10</sup> Non-interest income increased from 26% to 41% of total income between 1989 and 1998 (ECB (2000)).

<sup>11</sup> Financial institutions operating in Ireland are subject to Section 149 of the Consumer Credit Act, 1995.

credit card payment. Part of this payment (called ‘interchange’) goes to the bank that issued the card;

3. *ATM interchange*: This is an interbank flow that compensates a bank when one of its ATMs is used by the customer of a different bank.

As Chart 5 shows, there is significant cross-subsidisation within the banking sector. Banks in Ireland suffered combined losses of €172m in the provision of cash and cheque services in 2009, which were largely offset by their highly profitable credit card business, which showed a profit of €140m<sup>12</sup>.

Since 2009, the degree of this cross-subsidisation is likely to have risen. The level of debit card interchange fees paid to the banks has increased to 10c per transaction with Visa debit cards, up from 3.8c per transaction under the domestic ‘Laser’ debit card scheme. Further, the re-introduction of per-transaction charging by the main banks in Ireland is likely to have generated more fee income on debit cards (with 238m transactions annually) than on ATM withdrawals (173m), despite the fact that the costs of maintaining the debit card infrastructure is far lower than that of providing cash services.

This cross-subsidisation has a number of potential drawbacks. It could alter the cost-benefit trade-offs that banks need to make to profitably allocate internal investment funds; it can also discourage merchant card acceptance, prevent consumers from making an informed choice among the payment services being offered, and make it more difficult for niche players to enter the market (Hakkarainen (2009)).

The persistence of cross-subsidisation may in part be explained by an intertwining of market structure and political considerations. A portion of revenue from cards is through card interchange fees set by the card schemes (e.g. VISA and MasterCard), though competition between card schemes is likely to push up interchange fees rather than reduce them. As with all merchant costs, the ultimate payers

Chart 5: Revenues and costs for different Payment methods in Irish banks, 2009



Source: Central Bank of Ireland.

Note: This data was compiled based on the methodology of Schmiedel et al (2012).

of interchange are the merchants’ customers, though these costs are recovered by a general average mark-up on customer prices that is not as obvious to the public. In contrast, a bank risks losing market share if it tries to impose cost-based pricing directly on its own customers, or may face political and/or regulatory barriers which prevent it from doing so. As such, raising revenue from interchange fees rather than directly via consumer charges may represent the path of least resistance, though may end up costing consumers more.

From an efficiency perspective, the mispricing of payments matters if customers’ demand for payment services is sensitive to pricing. Assessing this sensitivity is difficult because of the lack of available evidence. Transaction pricing of consumers is rare in Europe and the U.S., since banks fear a loss of deposit market share if they are the first bank to introduce such fees (Bolt et al. (2008)). In many countries banks cover their costs by other means, such as through fixed account management fees, applying zero interest rates on current accounts or by cross-subsidisation of one payment type by another.

<sup>12</sup> Central Bank Survey conducted as part of the contribution to Schmiedel et al. (2012).

**Table 2:** Per-transaction consumer bank charges 2012

	Ireland €	Norway €
<b>EFT vs. Cheque</b>		
EFT	14c	23c
Cheque <sup>15</sup>	67c	€5.48
Price Differentiation (euro/cent)	53c	€5.25
Price Differentiation (%)	379%	2283%
<b>Point of Sale</b>		
Debit Card	14c	24c
ATM (Other bank) <sup>16</sup>	14c	65c
Price Differentiation (euro/cent)	0c	41c
Price Differentiation (%)	0%	171%
<b>Internet vs. Over-the-counter</b>		
Internet	13c	22c
OTC	19c	€10.57
Price Differentiation (euro/cent)	6c	€10.35
Price Differentiation (%)	46%	4705%

**Source:** Figures for Norway from Norges Bank (2012). Figures for individual Irish banks downloaded from www.nca.ie, and weighted by market share.

The notable exception is Norway, where pricing of payments to consumers based on the cost of provision of payment services commenced in the 1980s with the explicit support of both the Norwegian Government and Norges Bank<sup>13</sup>. After the largest Norwegian commercial banks introduced charges, smaller commercial banks and savings banks followed suit (Enge (2006)). The pricing of transactions intensified following the banking crisis in Norway in the late 1980s and early 1990s.

In Ireland in 2011-2012 transaction pricing was extended by a number of banks struggling to return to profitability following the economic crisis. Table 2 shows that the consumer transaction pricing currently in place Ireland<sup>14</sup> generally lacks the significant differentiation by channel evident in Norway. The one exception is cheques, which are on average 379% dearer in Ireland than an EFT, though this is mostly because of Government Stamp Duty of 50c per cheque rather than being attributable to bank fees.

However for point of sale transactions, where the principal choice for the consumer is to either use a payment card or withdraw cash from an ATM, there is no differentiation in Ireland. In contrast, Norwegian consumers have a clear price differentiation between ATM usage and card usage, with the former being 171% dearer than the latter when using another banks ATM. In Norway charges for 'over-the-counter' (OTC) transactions are the most evident, being 47 times (4705%) more expensive than making an EFT. In Ireland the differential is only 6c, or 46%. However the charge for using your own banks ATM in Norway is only 0.3 NOK, far below the costs of production. As such, the application of cost-based pricing is not uniformly practiced, even in Norway.

Bolt et al. (2008) assessed the importance of price incentives by comparing the Norwegian experience with that of Netherlands, which experienced a significant shift towards electronic payments without explicit pricing of consumers. In the Netherlands, it was found

<sup>13</sup> A narrower example of the impact of pricing on usage of payment instruments is given by Nyberg et al. (2003), who attribute the sharp fall in the use of cheques in Sweden when banks started to charge for their use.

<sup>14</sup> Data downloaded on 28th December 2012.

<sup>15</sup> This includes the Stamp Duty of 50c levied on each cheque in Ireland.

<sup>16</sup> The charges in Norway for use of an ATM owned by a customer's own bank is 37c.

that controlling for other factors, the differential pricing of instruments accelerated the shift of consumers to electronic forms of payment by around 20%. De Grauwe et al. (2006) estimate that a switch to cost-based pricing would lead to a reduction in resource costs of €150-€200m in each of Belgium and the Netherlands. Given Ireland's comparable size, a cost saving of the same order of magnitude could possibly be expected.

The conclusion can be drawn that payments pricing in Ireland exhibits heavy cross-subsidisation of cash and cheques at the expense of card payments. A realignment of pricing of cash and cheques on the one hand, and electronic means of payment on the other, could lead to a more efficient usage of payments, and ultimately to lower costs for consumers.

## **5. Conclusion**

The overall aim of this paper is to show the usage of payments in Ireland, the cost implications that this usage pattern has for the economy, and the role of pricing in influencing societal choices about which payment instrument to use. The picture that emerges is of a society whose payment patterns are moving towards an increasing usage of electronic payments, though at the same time remaining relatively cash- and cheque-intensive.

The cost of these choices has recently been the subject of an ECB study, which shows that cheques are almost three times more expensive than their electronic equivalent. The evidence for cash is more ambiguous. Cash is the most efficient form of payment for low value transactions of up to around €10, though debit cards are more efficient for larger transactions. Ireland is in a cluster of the most expensive cohort of countries, with an estimate of the social cost of payments of 1.2% of GDP. Reducing the aggregate cost of payments could improve national competitiveness and result in better value for users of payments services.

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# Measuring the Value Added of the Financial Sector in Ireland

Mary Everett, Joe McNeill and Gillian Phelan<sup>1</sup>

## Abstract

The financial crisis has convincingly demonstrated the risks a large financial sector poses to society's well-being. An informed debate on financial regulation after the crisis should, therefore, evaluate the sector's contribution to economic activity. This requires an accurate measurement of the sector's output, which is not a straightforward task. Despite government supports of €63.1 billion to Irish banks, the financial sector continues to add value within national statistical accounts, amounting to €15 billion in 2011. The article examines this conundrum. The current measurement of financial sector output is presented in this article. It finds that financial sector output is likely to have been overstated, particularly after the onset of the financial crisis. It then examines the methodological and conceptual issues that result in these counterintuitive measures. Measurement of financial sector output, reflective of economic reality, continues to be the subject of international statistical debate. The conclusion of these discussions is essential for further work in this area.

<sup>1</sup> The views expressed in this article are solely the views of the authors and are not necessarily those held by the Central Bank of Ireland or the European System of Central Banks. The authors would like to acknowledge, with thanks, the helpful discussions with Christopher Sibley, Central Statistics Office (CSO).

## 1. Introduction

Financial markets are crucial players in a dynamic modern economy, channelling resources from savers to borrowers and allocating them to productive investment opportunities. The pre-crisis<sup>2</sup> period was characterised by the growing size, complexity and interconnectedness of financial markets, as financial services played a key role in supporting growth. The onset of the financial crisis showed that there can be a substantial trade-off between economic growth and financial stability; when credit growth exceeds the levels implied by economic fundamentals.

The crisis highlighted the need to understand the role of the financial sector within the real economy. It is important that on-going benefits are properly weighted alongside the costs of the crisis, Haldane et al. (2010). A good measurement of the sector's output is, therefore, a prerequisite. 'Value added' is the standard method of measuring the contribution of a sector to Gross Domestic Product (GDP) and, therefore, its contribution to economic activity. Firstly, this article will examine the value added of the financial sector in Ireland as measured within the national accounts framework. It will also present estimates of the value added of the major sub-sectors – banking, insurance and investment fund administration. Secondly, the article will discuss the issues underlying international statistical conventions which may not adequately reflect the contribution of the financial sector. This article will examine the puzzle of why Irish banks continue to generate positive value added in the national accounts, despite requiring €63.1 billion in supports from the Government. These conventions have been the subject of debate within the international statistical community where a number of alternative methodologies have been proposed. Ultimately, the goal is to develop measures of financial output that more accurately reflect the impact of the financial sector on real economic outcomes.

A large number of studies have examined the relationship between financial deepening and economic growth. Some have also attempted to assess the equilibrium size of the financial sector. However, the purpose of this article is more modest, focusing instead on value added and conceptual issues relating to its measurement. The measurement of output, which is reflective of economic reality, is key to accurately gauging the impact of the financial sector on the real economy and essential for further work in this area. This article is structured as follows: – Section 2 provides an overview of the financial sector in Ireland; in Section 3 the conventional measure of value added is outlined in terms of the current international statistical framework for the financial sector and sub-sectors; the general issues surrounding the appropriateness of national statistical conventions for measuring of financial sector activity, and specifically banks, are explored in Section 4; and Section 5 concludes.

## 2. The Financial Sector in Ireland

The financial sector in Ireland is diverse encompassing domestic financial activities and internationally-traded financial services, the latter known collectively as the Irish Financial Services Centre (IFSC)<sup>3</sup>. Domestically focused financial activities are predominantly banking and insurance. However, the IFSC is made up of heterogeneous entities in terms of size, complexity and nature of business. It includes entities such as global investment banks, shadow banks (predominantly money market funds and securitisation vehicles), investment funds, insurance and reinsurance enterprises and a variety of auxiliary financial service entities.<sup>4</sup> Financial auxiliaries engage in a variety of financial and advisory activities that assist financial intermediation e.g. brokering, management and administrative services.

Total assets of the financial sector in Ireland, shown in Chart 1, amounted to €3.6 trillion in Q2 2012, or 2,147 per cent of Irish GDP.

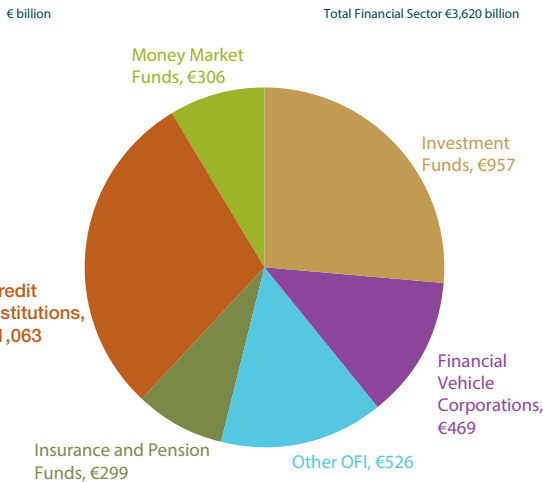
<sup>2</sup> Crisis refers to both the global financial and domestic banking crises.

<sup>3</sup> Following the abolition of tax certification for IFSC companies in 2000 (a transition period was implemented until 2006) there was no longer a requirement for international financial service providers to physically locate in Dublin's Docklands. Since then, IFSC categories in national statistical releases (the Central Statistics Office and the Central Bank of Ireland) reflect international financial services activities that have little interaction with the domestic economy.

<sup>4</sup> Ireland also hosts significant aircraft leasing and treasury industries, whose activities are classified differently within the national accounting and balance-of-payments frameworks. In national accounts these industries are not considered as part of the financial sector, whereas they are recorded as IFSC entities in the balance of payments – owing to their role in channelling capital via Ireland.

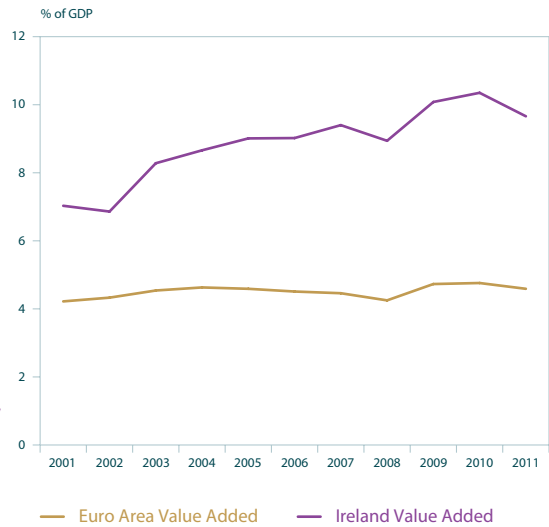


**Chart 1: Total Assets of the Financial Sector in Ireland, Q2 2012**



Sources: IF, FVC and QFA Statistics, Central Bank of Ireland.

**Chart 2: Euro Area and Irish Financial Sector Value Added as a Percentage of GDP, 2001-2011**



Source: Eurostat.

Within this, credit institutions accounted for €1.06 trillion, which means that 71 per cent of the sector is outside of the banking system. Insurance<sup>5</sup> companies and investment funds accounted for a further €299 billion and €957 billion, respectively; which is close to 50 per cent of the non-bank financial sector in total asset terms. Other financial entities accounted for €526 billion in Q2 2012.

The contribution of these various entities to national output varies significantly across the financial sector and is not reflective of their balance sheet size. Measurement of the output of the financial sector and its components is described in detail in the following section.

### 3. Measuring Irish Financial Sector Output

'Value added' is the standard statistical method of measuring the economic contribution of a sector i.e. output. The financial sector adds value directly to the economy through compensation of employees (wages) and operating surplus (the statistical definition of profits). The financial crisis has shown that there

are a number of issues with traditional measures of operating surplus. There is evidence that financial sector output grew less quickly over the recent past than the official data suggest. This will be examined further in Section 4.

At end-2011, the latest period for which these data are available, national accounts data record that the value added of the financial sector to the Irish economy was €15 billion or almost 10 per cent of Gross Domestic Product (GDP)<sup>6</sup>. This comprised wages of €6 billion, and operating surpluses of €9 billion. On the basis of this, the financial sector in Ireland makes a higher contribution to the economy's output compared to the euro area average but their trends are very closely correlated (Chart 2). The euro area average has remained close to 4 per cent of GDP since 2001; while in Ireland the value added as a percentage of GDP climbed from 7 per cent in 2001, peaked at just over 10 per cent in 2010 and has remained just below this level up to end-2011.

The contribution of the main financial sub-sectors to value added in 2011 is shown in Table 1.<sup>7</sup> The value added of the Irish financial sector is largely derived from just three

<sup>5</sup> For the purposes of this article, 'Insurance' is defined to include pension funds.

<sup>6</sup> Gross National Product (GNP) is frequently used as the most appropriate measure of Ireland's output given the significant volume of net factor flows. GDP is the most relevant denominator of output for value added as it reflects the total output of goods and services produced within Ireland.

<sup>7</sup> All sectors also contribute indirectly through the purchase of domestic services. This feeds into the value added of the sector providing the service.

**Table 1: Value Added of the Financial Sector, end-2011**

	Value added (€ million)	% of GDP	% of financial sector
Banks	10,672	6.7	69.0
Insurance	2,317	1.5	15.0
IF financial auxiliaries	1,057	0.7	6.8
Other financial auxiliaries	1,409	0.9	9.1
<b>Total Gross Value added</b>	<b>15,456</b>	<b>9.7</b>	<b>100</b>

Sources: CSO published data and internal Central Bank estimates.

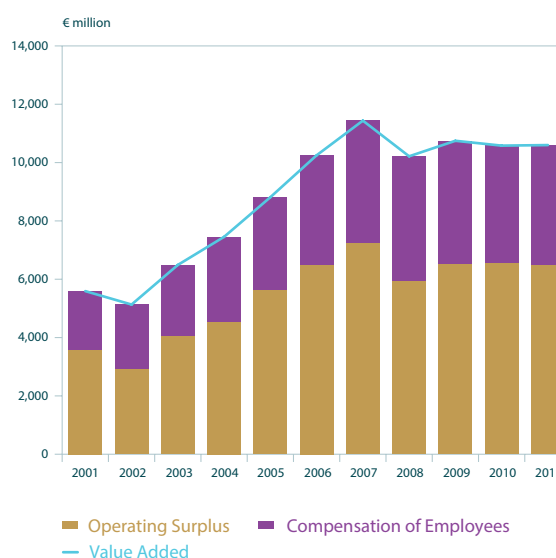
sub-sectors – banks, insurance and financial auxiliaries. The former two categories provide services to the domestic retail market and also trade internationally in financial services. The value added of financial auxiliaries is predominantly generated through international financial services exports by investment fund administrators. The contribution of other financial sub-sectors to value added is marginal.

Banks contribute most to this measure of financial sector output, with a value added of €10.7 billion, or nearly 7 per cent of GDP, and almost 70 per cent of the value added of the financial sector. The value added of insurance was €2.3 billion, contributing 1.5 per cent to GDP, and 15 per cent to financial sector value added. Investment funds administrators (the largest component of financial auxiliaries) made a smaller contribution representing just over €1 billion in value added, less than one per cent of GDP. The remaining contribution to value added from the financial sector is from financial auxiliaries other than investment fund administrators. In overall terms, non-bank financial activity accounted for almost 31 per cent of the value added of the financial sector.

The relative contribution of wages and operating surplus to value added differs significantly across the financial sector. The financial sub-sectors are examined in more detail below. The data is estimated based on a breakdown of the value added of the sector as measured within national accounts.

### 3.1 Banking

Banks provide a range of services including payment services, maturity transformation (transforming deposits into funding for borrowers) and liquidity transformation. A key role of banks in providing financial intermediary services is the reduction of asymmetric information between borrowers and lenders,

**Chart 3: Composition of Banking Value Added, 2001-2011**

Sources: CSO Published Data and Internal Central Bank of Ireland Estimates.

and through the screening and monitoring of borrowers.

The Irish banking system is diverse, comprising IFSC banks and a domestic banking system. While the former hosts a significant number of foreign subsidiaries with substantial balance sheets, their activities are largely with non-residents thereby having limited direct impact on the domestic Irish economy. Domestically relevant banks comprise both Irish-owned and foreign subsidiaries of European parents, offering retail banking services in the Irish credit market.

The value added of the Irish banking system is recorded as €10.7 billion at end-2011, with operating surplus accounting for just over 60 per cent of the sector's contribution to output, and employee compensation accounting for the remainder, see Chart 3.

**Table 2: Value Added of the Banking Sector, end-2011**

€ million	Value added	Compensation of employees	Operating surplus
Domestically relevant banks	5,000	2,952	2,048
IFSC banks	5,672	1,206	4,466
<b>Total banking sector</b>	<b>10,672</b>	<b>4,158</b>	<b>6,515</b>

**Sources:** CSO published data, the Central Bank of Ireland's Locational Banking Statistics Survey and internal Central Bank estimates.

Table 2 shows the split between wages and operating surplus for the domestically relevant banks and IFSC banks. Banks active in the Irish domestic retail market, the bulk of which are Irish-owned, added 3 per cent of value to the economy at end-2011. Almost 60 per cent of this contribution was in the form of employee compensation. Conversely, IFSC banks contributed more than 3.5 per cent to national output, with almost 80 per cent of this derived from operating surplus.

### 3.2 Insurance

The insurance industry plays a major role in the transfer of risk and the provision of risk management services within an economy. Insurers are important financial intermediaries through their investments arising from premium pre-funding. The core activity of insurers is underwriting premiums to enable funding for loss events. For most types of insurance these events are unique and idiosyncratic in nature, unlike other financial risks such as market and credit risk. These risks can be partially mitigated through reinsurance.

The Irish insurance industry is heterogeneous. There is a substantive captive market (where insurance is linked to the risks of only one company), a domestic life and non-life market and also a large international sector. The international sector covers a range of product types, with concentrations in reinsurance and variable annuity services. The ability to provide insurance products on a pan-European basis has been a driver of the growth in the IFSC. This model involves a company, operating as a single legal entity, but providing services on a cross-border basis via branches, rather than via subsidiaries. In the context of Solvency II<sup>8</sup>,

insurance undertakings are realising the value in moving to this so-called 'hub and spoke' operating model where they can make significant efficiency gains, particularly in relation to the concentration of capital, and building competitive advantage in the region.

'Reinsurance' is insurance for insurers allowing them to free themselves from the part of a risk that exceeds their underwriting capacity, or from risks which they do not wish to bear alone. In a typical transaction, the 'ceding insurer'<sup>9</sup> transfers a reinsurance premium to the reinsurer along with the accounting liability for the business being ceded. The reinsurance sector has been a particular growth area, with levels of business remaining relatively buoyant throughout the financial crisis.

Insurance improves allocation and productivity of capital through the increased availability of equity assets and by making additional business ventures where possible. A first effect of insurance growth is the direct contribution of the insurance sector to economy-wide value added; measured at €2.3 billion in 2011 (1.5 per cent of GDP). Employee compensation was derived using average industry salaries and the total number of employees. Table 3 shows that the total number employed in the insurance sector in 2010 was 20,343. The majority of these are involved in the traditional domestic businesses of life, non-life, pensions and health insurance. Results show that total employee compensation within the insurance sector has remained relatively stable since 2006 (Chart 4). In 2011 approximately 41 per cent of value added was derived from compensation of employees.

<sup>8</sup> Solvency II is an EU Directive that codifies and harmonises EU insurance regulation. Primarily this concerns the amount of capital that insurance companies must hold to reduce the risk of insolvency.

<sup>9</sup> The 'ceding insurer' is the insurance company purchasing the reinsurance.

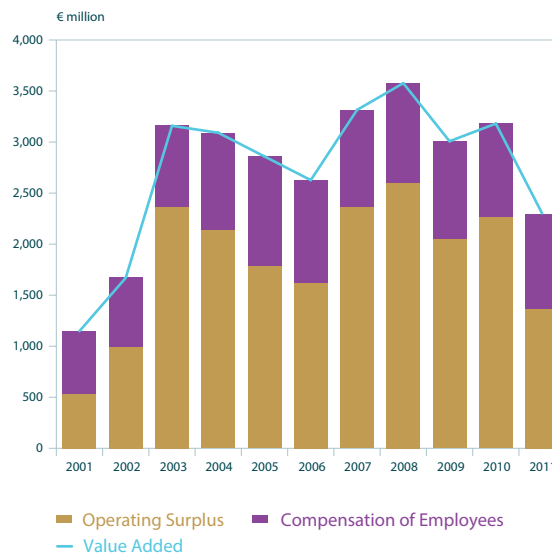
**Table 3:** Employment in the Insurance Sector, 2010

	Number employed
<b>Total</b>	<b>20,343</b>
Of which: IFSC	4,011
Of which: Reinsurance	405

Sources: CSO and Accenture.

Chart 4 also presents an estimate of the operating surplus for the insurance sector. Results show that it peaked at €2.6 billion in 2008 but by 2011 had fallen to €1.4 billion; its lowest level since 2002. This represented a fall in the contribution of operating surplus to value added from 73 per cent in 2008 to 59 per cent in 2011.

The structure of the insurance industry is changing. This, in part, reflects the changing regulatory structure. It is likely that these changes will significantly impact on the overall balance sheet of the sector, but the impact on the contribution of the sector to value added remains unclear.

**Chart 4:** Composition of Insurance Value Added, 2001-2011

Sources: CSO Published Data and Internal Central Bank of Ireland Estimates.

### 3.3 Investment Fund Administration

The investment fund sub-sector comprises two main components, namely investment funds themselves and their ancillary service providers. This sub-sector represents close to 40 per cent of the non-bank financial sector assets in Ireland (Chart 1); but represents just over 22 per cent of the value added of the non-bank financial sector (Table 1).

Beyond their legal incorporation, investment funds have a negligible physical presence in Ireland. In practice, the administration of investment funds is carried out by investment fund administrators, who may also carry out related trustee/custodian duties (Figure 1). In exchange for these administrative financial services, investment funds pay management fees to resident fund administrators. Value added by the funds industry to the Irish economy is predominantly attributable to

these administrators in their role as financial service providers. The investment funds only contribute marginally to value added through directors fees, and their profits are regarded as distributions to shareholders and not part of the operating surplus of the Irish economy. The fee income of administrators is classified as service exports within the balance of payments, as the unit holders in Irish investment funds are predominantly non-resident<sup>10</sup>. Furthermore, investment funds tend to invest little in the Irish domestic market, concentrating instead on accumulating foreign portfolios.<sup>11</sup>

<sup>10</sup> At end-June 2012, non-residents held over 94 per cent of units in Irish investment funds. Irish domiciled investment funds are exempt from tax on income and capital gains from their underlying investment assets. This facilitates use of Irish investment funds by foreign investors without incurring Irish tax liabilities.

<sup>11</sup> At end-June 2012, the value of these foreign investments was more than €850 billion.

**Figure 1: Schematic of the Irish Investment Fund Sector**



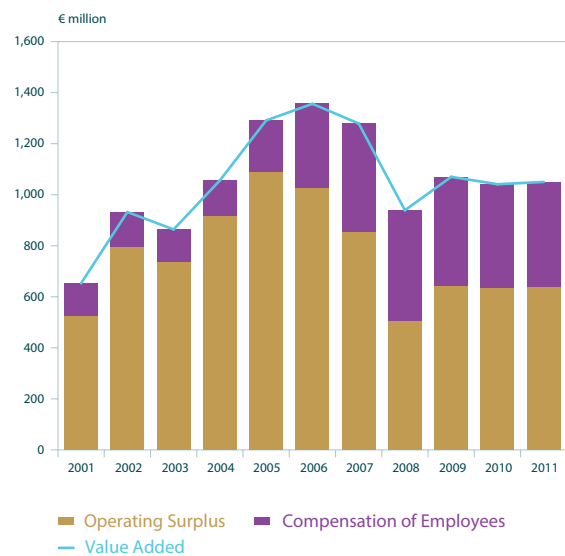
There are approximately 40 investment fund administrators employing over 9,000 people directly in Ireland.<sup>12</sup> The value added of investment fund administrators was estimated to be just over €1 billion at end-2011. Employee compensation related to these administrators amounted to approximately €418 million at end-2011, or 0.3 per cent of GDP. The balance of €639 million, or 0.4 per cent of GDP at end-2011, is attributable to operating surplus. The contribution of the sector to aggregate financial sector value added, from 2001 to 2011, is contained in Chart 5.

#### 4. Refining the Measurement of Financial Sector Output

Given its ability to both invigorate and incapacitate the non-financial economy, there is a strong case for seeking improved means of measuring the true value added of the financial sector, Haldane et al. (2010). It is important that the measure of value added is reflective of economic reality. Given the capital transfers and injections by the State of €63.1 billion into Irish banks; it is puzzling why they contribute any value to the economy in the recent past. This puzzle is explained by the treatment of financial sector output in national accounts. An overview of the complexity of measuring financial sector output is outlined in this section, with particular focus on banks.

Prior to 1995, the international statistical framework<sup>13</sup> did not attribute any profits to banks. The rationale was that banks merely intermediated between lenders and borrowers, and their only value added was through wages. Profits generated through financial

**Chart 5: Composition of Investment Fund Value Added, 2001-2011**



Sources: CSO Published Data and Internal Central Bank of Ireland Estimates.

intermediation were neither included as a contribution of the banking sector, nor as an expense of the borrowing sector. In this way, profits related to loans and deposits were perceived to net-out within the economy. However, this was considered an unrealistic measure of banks' economic contribution given the wide range of financial intermediation services provided.

Banks charge both explicitly and implicitly for their financial intermediation services. Explicit charges include account service fees, credit card fees, financial advice fees, asset management and brokerage fees. Difficulties lie in measuring the services not explicitly

<sup>12</sup> The estimate of employees on the Irish Funds Industry Association (IFIA) website is higher at 11,000, though this includes some indirect employment generated by the funds industry. This indirect employment is captured in other sectors, mainly professional services, in national accounts.

<sup>13</sup> Irish national accounts are compiled in accordance with the European System of Accounts, 1995 (ESA 95).

charged for. These implicit charges are the key component for measuring banks' financial services output.

Post-1995, a methodology was implemented that included a measurement of both explicit and implicit services of banks. The explicit services are easily quantifiable and this component of value added can be calculated as per non-banking sectors. Calculation of banks' implicit services is more complicated. The statistical framework measures these implicit services, for which banks do not charge directly, as the margin between a reference market rate (normally the interbank funding rate)<sup>14</sup> and retail deposit and loan interest rates. Banks imputed profits are derived as the sum of these deposit and loan margins. This indirect measure of the banks' implicit charges is called 'Financial Intermediation Services Indirectly Measured' (FISIM).

The current approach to measuring value added has various shortcomings as highlighted by the

crisis. Firstly, this method does not appropriately capture the full balance sheet composition of the banking sub-sector as shown by the example in Box 1. Secondly, banks' output omits other features such as capital gains and losses, impaired loans, capital injections and promissory notes. Value added measures a sector's output based on production (or transactions) in a given time period. During each period net income and expense flows accumulate in a profit or loss which is then carried forward to the balance sheet. Profits in the years preceding the crisis, contributed positively to value added and the balance sheet position of the sector. The losses on banks' assets which materialised subsequently are not, however, treated as negative output in national accounts, as they are not part of production. Instead, they are only reflected as a reduction in the sectoral balance sheet. This leads to an asymmetry in the treatment of profits and of holding gains/losses in national accounts, particularly in the measurement of value added. This issue is further explored in Box 2.

### Box 1: Deriving Value Added from Banks' Balance Sheets

Below is a stylised framework of two banks, A and B, balance sheets.

Bank A			
Assets		Liabilities	
Loans	100	Deposits	80
Other assets	2	Equity	22
<b>Total</b>	<b>102</b>	<b>Total</b>	<b>102</b>

Bank B			
Assets		Liabilities	
Loans	100	Deposits	20
Securities	1	Securities issued	70
Other assets	1	Equity	10
		Central Bank funding	2
<b>Total</b>	<b>102</b>	<b>Total</b>	<b>102</b>

We assume both banks seek to maximise profits, and have loan books worth €100 on the asset side of their balance sheets. Bank A operates a simplified balance sheet and funds its lending book mainly through its deposit base of €80. It charges 3 per cent for loans and pays an interest rate of 1% on deposits. Bank B raises funds mainly in the wholesale funding market and lends the proceeds onward to borrowers. It receives 3 per cent on loans and pays 1 per cent on both deposits and securities. An interbank rate of 2 per cent prevails.

<sup>14</sup> Value added is measured with regard to a benchmark reference rate. Defining appropriate reference rates proves problematic given the volatility in the financial markets during and post the financial crisis.

**Box 1: Deriving Value Added from Banks' Balance Sheets**

The statistical framework treats the operating surplus of these two banks differently. Firstly, the calculation of banks' operating surplus is confined to their loan and deposit portfolio and is not fully representative of their entire balance sheet. Bank A's profits of €1.80, comprise loan book related profits of €1 =  $[\text{€}100 \times (.03 - .02)]$ , and profits from its deposit book of €0.80 =  $[80 \times (.02 - .01)]$ . The total profits related to Bank B's loans and deposits, are lower, amounting to €1.20, comprising loan profits of €1 =  $[\text{€}100 \times (.03 - .02)]$  and deposit profits of €0.20 =  $[20 \times (.02 - .01)]$ . The debt borrowing in the wholesale funding market by Bank B of €70 is ignored as are its equity assets. FISIM is not applied to securities on the basis that the interest rates applicable represent market rates, which the bank cannot influence.

**Box 2: Government Supports to Banks and Debt Write-Downs in National Accounts**

It is notable that value added has been consistently positive for Irish-owned banks in the years following the onset of the financial crisis despite; large losses being recorded in their published financial statements; and the requirement for government supports. This apparently counter-intuitive treatment can be largely explained by the recording of these government supports and by the treatment of impairments/write-downs within the national accounts framework, particularly within institutional sector accounts.<sup>15</sup>

Institutional sector accounts sub-divide the economy between resident sectors including government and financial corporations. The accounts provide an overview, of the economic activities of resident sectors and the rest of the world and their inter-relationships. As the sum of transactions between the resident sectors and the rest of the world must net to zero, the accounts provide a net borrowing or lending figure for each sector. This net lending/borrowing total is reflected as the acquisition of financial assets or the incurrence of financial liabilities in the balance sheet of each sector as recorded within the accounts. Balance sheet changes also include non-transaction effects such as valuation movements in financial instruments or the writing down of debts.

The institutional sector accounts document the generation of value added by sector. This essentially comprises compensation of employees and operating surplus (profits). National GDP is derived as the sum of value added of the resident sectors from the production of goods and services. Gross Disposable Income is derived by adding net income from non-production activities to operating surplus. Non-production income includes dividend and land rental earnings, net transfer payments and net taxes payable on income and wealth. Gross Disposable Income is further adjusted to account for net capital transfers and capital formation to generate the net lending/borrowing for each institutional sector. The sequence of accounts is illustrated in a simplified example in Table A below.

**Treatment of Government Supports and Impairments**

State supports to the banking sector are recorded either as capital transfers or as financial transactions in line with Eurostat methodological treatments. Essentially capital transfers reflect the part of the supports that are not expected to generate a return for the exchequer. Financial transactions are regarded as an investment in the equity of the bank which should generate a return over time. To date, €63.1 billion has been transferred by the Irish Government to the banking sector to address balance sheet difficulties – of this €42.7 billion has been classified as capital transfers, while €20.4 billion has been recorded as the acquisition of financial assets.

<sup>15</sup> CSO, Institutional Sector Accounts.

**Box 2: Government Supports to Banks and Debt Write-Downs in National Accounts**

The capital transfer of €42.7 billion does not directly reduce GDP but is recorded as a transfer of income between the government and the financial sector. This has a negative impact on the government balance sheet and a corresponding increase in financial sector wealth.

Furthermore, writing-off debt and increasing provisions against bad debts is not part of GDP, even though this has been the key determinant of bank losses within their published financial statements. Realised losses also do not impact on GDP but are reflected in a decline in the balance sheet of the relevant sector. This is particularly important for Irish banks in the context of loan transfers to NAMA. Haircuts applied on the sale to NAMA contribute directly to losses in published financial statements. These are recorded, however, as holding losses and a reduction in assets on the balance sheet of the financial sector within the national accounting framework. This is not part of production activities and, therefore, is not part of GDP. Increased provisioning for loan losses is regarded as internal book-keeping entries within sectors and is not recorded within the international statistical system.

In summary, GDP is derived from real transactions in goods and services between economic entities. Non-transaction effects arising from distributions of income or debt write-downs are not measured as part of GDP for any economic sector. The application of this framework explains, in part, why the value added of the banking sector has remained positive following the crisis, despite large losses being recorded in their published accounts.

**Table A: Summary of the Sequence of Accounts for each Institutional Sector****Production Account***Output:*

Less intermediate consumption  
 = Gross Value Added  
 plus net taxes/subsidies on products  
 = Gross Domestic Product

**Generation of Income Account***Gross Domestic Product:*

Plus net property income  
 = Gross National Income

**Distribution of Income Account***Gross National Income:*

Plus net current transfers  
 Plus net taxes on income/wealth  
 = Gross Disposable Income

**Use of Disposable Income Account***Gross Disposable Income:*

Less final consumption  
 = Gross saving

**Changes in Net Worth***Gross saving:*

Plus net capital transfers\*  
 Less consumption of fixed capital  
 = Changes in net worth

**Acquisition of Non-Financial Assets Account***Changes in net worth:*

Less gross fixed capital formation  
 = net lending (+)/ borrowing (-)

\* Capital transfers described in this Box, are recorded as negative for government (outflow) and positive for financial institutions (inflow).



**Table 4: Irish-Owned Banks' Operating Surplus as a Per Cent of GDP, 1998 – mid-2012**

% of GDP	Modified approach	Current Approach	Profit/loss per published accounts
1998	2.58	2.65	3.14
1999	2.59	2.79	2.80
2000	3.13	3.17	2.66
2001	3.07	3.34	2.42
2002	2.68	3.18	2.42
2003	2.05	3.05	2.21
2004	2.39	3.14	2.53
2005	2.53	2.92	3.60
2006	3.33	3.39	3.23
2007	3.78	3.24	3.52
2008	3.46	4.08	1.90
2009	0.63	3.08	-11.01
2010	-3.97	3.15	-20.56
2011	-3.52	2.34	-4.36
Mid-2012	-1.65	2.50	-2.45

**Note:** Statistical operating surpluses based on the current methodology and the modified approach comprises domestically relevant banks. Published accounts are for the Government guaranteed banks.

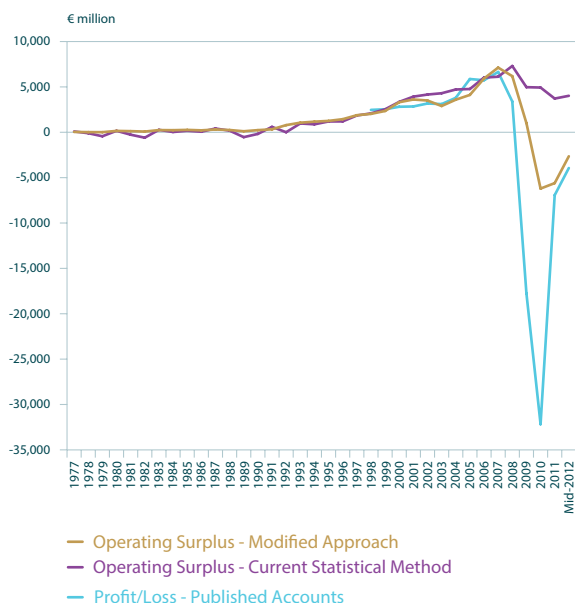
In summary, GDP is derived from real transactions in goods and services. Non-transaction effects arising from distributions of income or debt write-downs are not measured as part of GDP for any economic sector. This explains why the value added of the banking sector has remained positive following the crisis.

Given the shortcomings outlined above, the question arises of whether the value added of the financial sector in Ireland is overstated. Between 2002 and 2007, the output of the Irish financial sector averaged 14 per cent per year, compared with GDP growth averaging 8 per cent per annum over the same period. On the eve of the global financial crisis value added of the sector stood at 9 per cent of GDP. However, during the fourth quarter of 2008 market value losses of approximately €11 billion were recorded for the Irish banking sector. Between 2008 and 2011, a period that witnessed the onset of the domestic banking crisis, the value added of the financial sector in Ireland, as recorded in the national accounts, remained high. At end-2011 it amounted to 10 per cent of GDP.

The strong contribution of the banking sector to Irish GDP appears counter-intuitive compared to their published financial statements (Table 4). Conceptual difficulties in defining the measurement of financial sector output, particularly for the banking system, have raised uncertainty in international fora about the appropriateness of the existing methodology. This has been a long-standing issue within the statistical community. A recent strand of economic literature produced by the staff of the Federal Reserve and the European Central Bank contains a modified approach to estimate bank operating surplus<sup>16</sup>. The modified methodology for measuring banks operating surplus uses a suite of reference rates applied by type and maturity of loan and deposits held by each counterpart sector, as opposed to a single reference rate. The use of a single reference rate can lead to implausible results given that it excludes the maturity structure of loans and deposits. The choice of a single reference rate can, therefore, have a significant effect on the estimated level of banks' output.

<sup>16</sup> For a complete explanation of the methodology used in measuring output vis-à-vis the modified approach see Colangelo and Mink (2008); Colangelo and Inklaar (2012); and Basu et al. (2011).

Chart 6: Irish Banks' Profits, 1977 - Mid-2012



Source: Internal Central Bank of Ireland Estimates.

In order to benchmark the plausibility of operating surplus in the statistical framework, Chart 6 compares estimates based on the current methodology with the modified approach and with published bank profits. It is worth noting that operating surplus peaked in 2008, when calculated according to the current methodology.

Notably, accounting and statistical profits (current and modified) are highly correlated before the crisis and range from 3.2 to 3.8 per cent of GDP. However, published accounting profits of banks were also possibly over-stated pre-crisis, due to the accrual of income related to construction loans and the non-recognition of loan-related losses (Kay, 2011). While we would not expect to see profit measures equate exactly, we would expect to see similar trends. It is worth noting that the modified approach gives negative operating surplus for 2010 onwards. This is much smaller in magnitude, but follows the same trends as published financial statements.

A significant portion of the financial sector's role involves risk-taking activities. An important issue is the extent to which bearing risk should be measured as a productive service provided by financial intermediation activities. As currently measured, the contribution to

value added of an entity in the financial sector is not derived using a risk-adjusted rate. Given that riskier loans tend to attract higher interest rates, value added, therefore, increases as the level of risk rises. Haldane et al. (2010) highlights the fact that a banking system that does not accurately assess and price risk is not adding much value to the economy. Therefore, determining credit worthiness of borrowers and risk management can be regarded as production, thereby contributing to output. However, it is not clear that bearing risk is, in itself, a productive activity.

The interest rate spread between the retail interest rate and the reference market rate should reflect how banks charge for risk management and risk-bearing services. Risk-management activities, through the screening and monitoring of borrowers, add productive economic value via labour and capital inputs. Compensation for risk-bearing services, i.e. liquidity and credit risk, is not however, considered as productive output and it is questionable whether this should contribute to economic activity. However, current methodology does not differentiate between risk-management and risk-bearing activities, with the result that the entire margin between bank retail rates and the reference market rate is considered as value added. The conceptual issues arising from this treatment are demonstrated in the following scenario.

Consider two identical banks (A and B) with representative borrowers for each. Bank A lends to relatively safe borrowers, whose probability of default is low, and charges a relatively low interest rate. Bank B's borrowers are more risky and are correspondingly charged comparatively higher interest rates. Both banks employ the same level of lending services, i.e., the screening and monitoring of borrowers. Under current statistical methodology, Bank B yields greater value added than Bank A, as its lending rate has a higher spread over the reference market rate. This bank, therefore, appears to be more productive despite having no additional employment.

In the pre-crisis period, while lending volumes grew for Irish banks, the margins on bank loans compared to reference rates were

sharply compressed. While value added growth was driven by increased volumes lending in the pre-crisis period, the tight margins meant that returns to banks for risk management and risk bearing activities were very low. Excluding risk-bearing activities would have reduced the margins and value-added. However, as Oulton (2013) demonstrated it is unlikely that any overstatement of banking value added would have had a major impact on GDP growth. Furthermore, GDP levels may also not have been impacted as it is likely that the value added of other sectors may have been understated as a result.

In the wake of the crisis, Irish banks' responded to increased expectations of loan defaults by raising retail interest rates on loans. The related increase in compensation for rising risk levels implies greater banking sector financial services output as measured under the current international statistical framework. However, this increase in value added does not correspond with any increased economic activity. Furthermore, the contraction in the interbank lending market and increased reliance on official funding raised questions about the suitability of the reference interbank rate for measuring the operating surplus of Irish banks. Similar questions about the appropriateness of the measure also arise, for the years following the onset of the crisis.

A further cited conceptual criticism of current measures of financial sector output [Oulton (2013); Reinsdorf (2011); Haldane et al. (2010)] is that rising profits in the financial sector reflect the increasing assumption of 'tail risk'. The rationale is that profits are realised but they will inevitably be followed by losses at some date in the future. Accounting for this would require a risk-adjusted measure. However, this would have more far-reaching implications for the measurement of value added over the broad financial sector, and indeed the non-financial sector.

In summary, the use of a risk-adjusted rate for the measurement of bank value added would reduce output for both the pre-crisis period and for subsequent years. Similarly, sufficient loan provisioning during the mid-2000s would also have reduced banks' profits.

## 5. Conclusion

Despite government supports of €63.1 billion to Irish banks, the financial sector continues to add value within national statistical accounts. Official data suggest there is a direct positive contribution by the financial sector to the Irish economy of approximately €15 billion, of which €6 billion comprises wages, while operating surplus accounts for the remainder. At end-2011, this amounted to a contribution worth almost 10 per cent of GDP, which is significantly higher than the euro area average worth 4 per cent of GDP.

Representatives of the international statistical community have, however, raised concerns about the appropriateness of the current methodology for measuring the operating surplus of banks, particularly in the wake of the financial crisis. These concerns are particularly apposite in light of substantial losses experienced by Irish banks as evidenced in their published financial statements. The application of a modified approach would suggest the overstatement of Irish banks' operating surplus.

A further conceptual issue relates to the role of risk. The reward for risk is fundamental to any assessment of the economic role of the financial sector. It is a primary function of financial intermediation services. However, it is not adequately reflected in the current statistical framework. The use of a risk-adjusted rate for the measurement of bank value added would reduce output for both the pre-crisis period and for subsequent years. Debate is ongoing within the international statistical community in relation to these issues.

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**Note:** Data published in the Statistical Appendix for most recent months or quarters may be subject to revision.

# Section A

## Money and Banking

**Table A.1: Summary Irish Private Sector Credit and Deposits**

	<b>Credit Advanced to Irish Private Sector</b>						
	Households				Non-financial corporations		
		Loans for house purchase	Consumer credit	Other loans		Loans	Securities
	1	2	3	4	5	6	7
<b>Outstanding amounts – € million</b>							
<b>2012</b>							
January	109,601	80,190	16,220	13,191	87,687	87,534	153
February	109,218	79,954	16,107	13,156	87,292	87,142	151
March	108,953	79,874	15,916	13,164	87,343	87,192	151
April	109,212	81,031	14,991	13,190	87,210	87,059	150
May	109,010	80,819	15,022	13,169	87,211	87,056	154
June	108,145	80,012	15,003	13,130	86,485	86,332	153
July	106,929	79,166	14,700	13,062	86,455	86,300	155
August	106,825	79,508	14,689	12,628	86,090	85,902	188
September	106,728	79,355	14,767	12,606	85,622	85,470	151
October	105,835	78,810	14,500	12,525	85,092	84,941	151
November	105,216	78,740	14,254	12,223	84,942	84,781	161
December	111,076	84,973	14,206	11,897	84,431	84,305	126
<b>2013</b>							
January	110,255	84,543	13,906	11,806	83,629	83,507	122
<b>Transactions – € million</b>							
<b>2012</b>							
January	- 690	- 216	- 394	- 80	- 554	- 548	- 6
February	- 355	- 224	- 107	- 23	- 169	- 167	- 2
March	- 167	- 59	- 115	7	39	38	1
April	- 579	- 188	- 341	- 51	- 326	- 326	-
May	- 264	- 242	21	- 44	- 334	- 338	4
June	55	94	- 15	- 24	- 401	- 399	- 2
July	- 534	- 157	- 288	- 88	- 294	- 297	2
August	- 500	- 151	- 72	- 277	- 202	- 234	32
September	- 88	11	- 95	- 4	- 394	- 358	- 37
October	- 515	- 184	- 263	- 68	- 455	- 455	-
November	- 264	3	- 228	- 39	297	287	9
December	- 372	- 4	- 44	- 324	- 386	- 385	- 1
<b>2013</b>							
January	- 816	- 405	- 344	- 68	- 218	- 214	- 4
<b>Growth rates – per cent.</b>							
<b>2012</b>							
January	- 3.9	- 2.4	- 11.8	- 3.3	- 2.2	- 2.2	- 56.6
February	- 4.0	- 2.5	- 12.0	- 3.4	- 2.3	- 2.3	- 56.4
March	- 3.9	- 2.4	- 11.6	- 3.1	- 2.3	- 2.2	- 53.9
April	- 4.0	- 2.5	- 11.9	- 3.4	- 1.9	- 1.8	- 54.3
May	- 3.9	- 2.5	- 11.0	- 3.5	- 2.1	- 2.1	- 50.6
June	- 3.7	- 2.2	- 10.7	- 3.7	- 2.9	- 2.9	9.6
July	- 3.6	- 2.1	- 11.0	- 3.7	- 3.4	- 3.4	8.0
August	- 3.7	- 2.1	- 10.8	- 5.2	- 3.1	- 3.2	31.3
September	- 3.7	- 2.0	- 10.7	- 5.4	- 4.2	- 4.2	1.8
October	- 3.7	- 1.9	- 11.0	- 5.5	- 4.2	- 4.2	4.1
November	- 3.6	- 1.6	- 11.7	- 5.8	- 3.9	- 3.9	10.0
December	- 3.9	- 1.6	- 11.9	- 7.7	- 3.6	- 3.6	0.3
<b>2013</b>							
January	- 4.0	- 1.8	- 11.9	- 7.7	- 3.2	- 3.3	0.8

**Notes:**

- For commentary on developments in a given month see the relevant Money and Banking Statistics information release at: [Credit, Money and Banking Statistics: Publications and Releases](#)
- For a full set of explanatory notes see: [Money and Banking Statistics Explanatory Notes](#)
- Data in Money and Banking Statistics are collected with reference to business written out of the within-the-State offices of the entire population of credit institutions in the Republic of Ireland. The most up to date list of these institutions is available on the Central Bank website here: [Credit Institutions resident in the Republic of Ireland](#)
- Credit Unions entered the reporting population for Money and Banking Statistics in January 2009.



Table A.1 – continued

Insurance corporations and pension funds/Other financial intermediaries			Irish Private Sector Deposits				
			Total				
	Loans	Securities		Households	Non-financial corporations	Insurance corporations and pension funds/Other financial intermediaries	
8	9	10	11	12	13	14	
							<b>Outstanding amounts – € million</b>
							<b>2012</b>
124,120	41,638	82,482	162,037	91,245	29,795	40,998	January
123,427	41,146	82,282	162,254	91,190	29,793	41,271	February
123,092	41,345	81,748	163,141	92,127	29,742	41,272	March
120,440	40,171	80,269	167,270	92,045	30,099	45,127	April
120,799	40,665	80,133	167,336	92,154	30,328	44,854	May
118,133	40,747	77,385	164,009	92,257	30,236	41,516	June
118,645	41,545	77,100	166,007	91,975	30,806	43,226	July
117,913	41,337	76,576	167,872	92,214	30,712	44,946	August
116,541	40,534	76,007	166,682	92,585	30,020	44,077	September
116,463	40,193	76,270	168,136	92,493	31,369	44,274	October
115,937	39,950	75,987	166,504	92,176	30,198	44,131	November
106,656	38,806	67,851	166,475	92,391	30,888	43,195	December
							<b>2013</b>
104,086	37,582	66,504	167,450	92,369	30,870	44,211	January
							<b>Transactions – € million</b>
							<b>2012</b>
- 622	- 349	- 273	- 483	- 56	- 1,079	652	January
- 423	- 252	- 171	160	25	62	72	February
- 223	193	- 415	798	761	18	19	March
- 2,859	- 1,397	- 1,461	3,952	- 108	291	3,769	April
- 257	- 166	- 91	- 66	48	44	- 158	May
- 2,318	257	- 2,574	- 3,191	120	- 38	- 3,273	June
169	428	- 258	1,722	- 322	465	1,578	July
- 273	- 124	- 149	1,582	268	273	1,042	August
- 967	- 532	- 435	- 945	393	- 629	- 709	September
45	- 240	285	1,541	- 81	1,328	294	October
- 419	- 218	- 201	- 1,603	- 314	- 1,137	- 153	November
- 9,072	- 975	- 8,097	623	231	735	- 343	December
							<b>2013</b>
- 1,196	- 905	- 291	1,368	33	120	1,214	January
							<b>Growth rates – per cent.</b>
							<b>2012</b>
- 9.9	- 16.0	- 6.3	- 7.0	- 3.0	- 9.1	- 12.7	January
- 9.8	- 16.5	- 6.0	- 5.9	- 2.2	- 8.0	- 11.0	February
- 9.6	- 15.3	- 6.3	- 4.4	- 0.9	- 5.3	- 9.8	March
- 9.9	- 14.4	- 7.3	- 3.4	- 1.1	- 3.5	- 7.7	April
- 9.4	- 14.3	- 6.5	- 3.0	- 0.3	- 3.3	- 8.0	May
- 11.8	- 13.0	- 11.0	- 2.4	- 0.2	- 1.1	- 7.9	June
- 10.6	- 10.0	- 11.0	- 0.8	- 0.1	0.1	- 3.0	July
- 9.6	- 9.1	- 9.9	0.7	0.8	- 0.5	1.3	August
- 8.7	- 10.1	- 7.8	1.8	0.7	- 1.2	6.3	September
- 6.7	- 7.0	- 6.6	2.4	0.4	1.7	7.3	October
- 6.7	- 6.3	- 6.9	2.2	1.4	- 1.5	6.8	November
- 13.9	- 8.0	- 16.9	2.5	1.1	1.1	6.9	December
							<b>2013</b>
- 14.4	- 9.4	- 17.0	3.7	1.2	5.2	8.2	January

5. Prior to December 2010, the outstanding amount of loans is reported on a net of impairment provisions basis. As of December 2010, the outstanding amount of loans is reported on a nominal basis, i.e. gross of impairment provisions, which, all else being equal, would lead to an increase in the reported outstanding amount of loans in that month.
6. In December 2010 the outstanding amount of loans, deposits and other asset and liability instruments across a number of categories has been reduced following the exit of a credit institution from the Irish market.
7. In all instances the underlying transactions and growth rates are fully adjusted to account for non-transaction related effects (e.g. change in reporting population, revaluations, exchange rate movements) and accurately reflect the level of activity in a particular category through time.

**Table A.2:** Financial Statement of the Central Bank of Ireland

		<b>Assets</b>								
		Gold and Receivables	Lending to euro area credit institutions relating to monetary policy operations in euro							Credits related to margin calls
			Main refinancing operations	Longer- term refinancing operations	Fine- tuning reverse operations	Structural reverse operations	Marginal lending facility			
<b>Outstanding amounts – € million</b>										
<b>2012</b>										
24 February	158,784	235	87,121	19,315	67,806	-	-	-	-	-
30 March	156,423	235	85,071	6,050	79,021	-	-	-	-	-
27 April	156,492	240	86,826	7,810	79,016	-	-	-	-	-
25 May	154,241	240	84,456	4,290	80,166	-	-	-	-	-
29 June	158,199	240	84,644	7,648	76,996	-	-	-	-	-
27 July	155,151	241	80,020	11,324	68,696	-	-	-	-	-
31 August	154,399	241	79,121	11,445	67,676	-	-	-	-	-
28 September	152,531	241	79,071	12,095	66,976	-	-	-	-	-
26 October	150,184	266	78,171	12,495	65,676	-	-	-	-	-
30 November	148,145	266	75,701	12,775	62,881	-	-	45	-	-
28 December	137,599	266	70,936	7,850	63,086	-	-	-	-	-
<b>2013</b>										
25 January	136,073	244	70,061	8,465	61,596	-	-	-	-	-
22 February	130,550	244	61,881	6,225	55,656	-	-	-	-	-
		<b>Liabilities</b>								
		Banknotes in circulation	Liabilities to euro area credit institutions relating to monetary policy operations in euro						Other liabilities to euro area credit institutions in euro	
			Current accounts (covering the minimum reserve system)	Deposit facility	Fixed- term deposits	Deposits related to margin calls	Fine- tuning reverse operations			
<b>Outstanding amounts – € million</b>										
<b>2012</b>										
24 February	158,784	12,654	6,262	2,739	3,523	-	-	-	-	-
30 March	156,423	12,706	6,901	1,913	3,807	1,181	-	-	-	-
27 April	156,492	12,765	6,198	2,385	2,856	957	-	-	-	-
25 May	154,241	12,838	4,002	1,957	2,045	-	-	-	-	-
29 June	158,199	13,053	6,453	1,315	5,138	-	-	-	-	-
27 July	155,151	13,065	5,222	2,277	2,945	-	-	-	-	-
31 August	154,399	13,092	3,353	1,944	1,409	-	-	-	-	-
28 September	152,531	13,035	4,781	1,931	2,850	-	-	-	-	-
26 October	150,184	13,195	4,850	3,532	1,318	-	-	-	-	-
30 November	148,145	12,995	3,322	1,834	1,488	-	-	-	-	-
28 December	137,599	13,677	3,972	2,079	1,893	-	-	-	-	-
<b>2013</b>										
25 January	136,073	12,723	4,098	2,966	1,132	-	-	-	-	-
22 February	130,550	12,859	7,067	5,130	1,937	-	-	-	-	-

**Notes:**

1. For a full set of explanatory notes see:

<http://www.ecb.int/press/pr/wfs/html/wfs-userguide.en.html>

2. An accounting reclassification took place, in month ending 27 April 2012, in order to harmonise the disclosure of the Emergency Liquidity Assistance (ELA) provided by Eurosystem central banks to domestic credit institutions under 'Other Claims on Euro Area Credit Institutions in Euro'.

Table A.2 – continued

**Assets**

Other claims on euro area credit institutions in euro	Claims on euro area residents in foreign currency	Claims on non-euro area residents in euro	Claims on non-euro area residents in foreign currency	Securities of other euro area residents in euro	General Government debt in euro	Other assets
728	2,490	1,009	1,081	20,887	-	45,233
549	2,693	1,101	1,068	20,711	-	44,995
41,348	2,916	1,322	1,045	20,438	-	2,357
41,498	2,926	1,258	1,045	20,462	-	2,356
42,375	5,545	1,260	1,051	20,440	-	2,644
41,600	6,242	1,332	1,091	20,995	-	3,630
40,800	6,020	1,226	1,779	21,078	-	4,134
40,575	4,038	1,260	1,093	21,098	-	5,155
40,650	2,736	1,306	1,081	21,217	-	4,757
40,675	2,304	1,322	1,081	21,025	-	5,771
40,425	496	1,231	1,076	21,274	-	1,895
39,750	496	1,172	1,050	21,347	-	1,953
-	172	1,300	1,051	51,116	-	14,786

**Liabilities**

Debt certificates issued	Liabilities to other euro area residents in euro	Liabilities to non-euro area residents in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents in foreign currency	Counterpart of Special Drawing Rights allocated by the IMF	Revaluation Accounts	Capital and reserves	Other liabilities
-	18,385	28	-	-	920	303	1,953	118,279
-	18,967	26	-	-	920	303	1,893	114,707
-	17,192	29	-	-	900	346	1,893	117,169
-	16,999	29	-	-	900	346	1,893	117,234
-	17,173	27	-	-	900	346	1,893	118,354
-	20,526	72	-	-	935	339	1,893	113,099
-	23,425	25	-	-	935	339	1,893	111,337
-	25,953	24	-	-	935	339	1,893	105,571
-	22,054	23	-	-	925	375	1,893	106,869
-	23,306	22	-	-	925	375	1,893	105,307
-	19,480	22	-	-	925	375	1,893	97,255
-	22,828	59	-	-	904	335	1,893	93,233
-	19,151	55	-	-	904	335	1,893	88,286

3. In February 2013, 'Other Claims on Euro Area Credit Institutions in Euro' fell following the appointment of a liquidator to a credit institution. This was accompanied by an increase in the holdings of 'Securities of Other Euro Area Residents in Euro' and 'Other Assets'.

**Table A.4: Credit Institutions – Aggregate Balance Sheet**

	<b>Total Assets</b>								
		Loans to Irish residents				Holdings of securities issued by Irish residents			
			Monetary financial institutions	General government	Private sector		Monetary financial institutions	General government	Private sector
	15	16	17	18	19	20	21	22	23
<b>Outstanding amounts – € million</b>									
<b>2012</b>									
January	1,003,946	379,202	110,701	29,728	238,773	115,197	18,216	14,346	82,635
February	968,241	374,145	106,538	30,102	237,505	115,525	18,387	14,706	82,432
March	948,885	370,873	103,643	29,741	237,490	114,383	17,841	14,643	81,898
April	940,272	363,040	98,277	28,321	236,443	116,524	18,500	17,605	80,419
May	954,021	363,543	98,764	28,048	236,731	116,052	18,630	17,134	80,288
June	953,296	362,653	99,397	28,031	235,224	114,101	19,023	17,540	77,538
July	929,724	335,501	72,716	28,012	234,773	114,687	19,622	17,810	77,255
August	915,320	335,044	72,958	28,022	234,064	114,844	19,467	18,613	76,763
September	912,098	333,043	72,313	27,998	232,732	114,442	19,433	18,851	76,158
October	910,247	330,698	71,683	28,046	230,970	115,309	19,734	19,154	76,421
November	899,528	331,361	73,407	28,007	229,947	114,735	18,967	19,620	76,148
December	872,679	331,404	69,253	27,965	234,186	107,323	19,757	19,589	67,977
<b>2013</b>									
January	858,988	327,044	67,729	27,972	231,344	107,104	19,681	20,797	66,626

	<b>Total Liabilities</b>							
		Deposits from Irish residents				Debt securities issued		
			Monetary financial institutions	General government	Private sector	Irish resident	Euro area	Rest of the world
	32	33	34	35	11	36	37	38
<b>Outstanding amounts – € million</b>								
<b>2012</b>								
January	1,003,946	272,552	107,942	2,573	162,037	29,991	20,384	41,467
February	968,241	268,551	103,868	2,429	162,254	29,040	17,367	40,815
March	948,885	267,267	101,791	2,335	163,141	27,008	16,943	40,317
April	940,272	265,257	95,660	2,328	167,270	26,387	16,786	38,852
May	954,021	266,837	96,833	2,668	167,336	26,395	15,564	38,570
June	953,296	264,317	97,718	2,589	164,009	25,696	15,959	37,501
July	929,724	240,780	72,042	2,731	166,007	25,746	16,246	37,448
August	915,320	242,437	71,887	2,679	167,872	25,040	16,343	37,946
September	912,098	240,417	70,856	2,879	166,682	24,814	16,626	36,752
October	910,247	242,189	70,491	3,562	168,136	23,519	17,337	39,948
November	899,528	244,181	72,719	4,957	166,504	22,087	18,568	40,872
December	872,679	240,937	68,484	5,978	166,475	23,454	18,102	39,808
<b>2013</b>								
January	858,988	240,393	67,146	5,797	167,450	22,616	18,249	41,059

**Notes:**

- For commentary on developments in a given month see the relevant Money and Banking Statistics information release at: [Credit, Money and Banking Statistics: Publications and Releases](#)
- For a full set of explanatory notes see: [Money and Banking Statistics Explanatory Notes](#)
- Data in Money and Banking Statistics is collected with reference to business written out of the within-the-State offices of the entire population of credit institutions in the Republic of Ireland. The most up to date list of these institutions is available on the Central Bank website here: [Credit Institutions resident in the Republic of Ireland](#)

Table A.4 – continued

Loans to non-residents		Holdings of securities issued by non-residents		Central bank balances		Remaining assets		
Euro area	Rest of the world	Euro area	Rest of the world	Resident	Non-resident	Resident	Non-resident	
24	107	131	145	28	29	30	31	
								<b>Outstanding amounts – € million</b>
								<b>2012</b>
108,524	182,769	68,977	76,767	6,191	–	25,718	40,601	January
86,707	180,896	69,747	76,093	5,038	–	22,490	37,600	February
72,209	178,528	70,005	77,728	8,364	–	22,662	34,133	March
73,825	181,066	69,796	75,182	7,799	–	18,569	34,470	April
74,360	184,466	70,315	76,982	7,840	–	21,155	39,309	May
82,292	184,682	69,976	74,359	8,039	–	21,635	35,560	June
78,686	187,752	70,840	75,236	7,589	–	23,098	36,335	July
75,960	181,524	70,045	73,304	6,357	–	23,342	34,900	August
81,588	175,117	69,306	74,129	8,864	–	21,500	34,108	September
81,636	171,932	69,557	72,252	11,903	–	22,699	34,261	October
73,134	172,245	70,089	72,249	7,807	–	22,927	34,981	November
71,125	162,381	70,645	68,698	3,899	–	25,196	32,009	December
								<b>2013</b>
74,402	153,951	70,570	66,120	4,041	–	25,240	30,516	January
								<b>2012</b>
Deposits from non-residents		Capital & reserves		Borrowing from the Eurosystem relating to monetary policy operations		Remaining liabilities		
Euro area	Rest of the world	Resident	Non-resident			Resident	Non-resident	
39	40	41	42	43		45	46	
								<b>Outstanding amounts – € million</b>
								<b>2012</b>
147,917	152,368	107,500	18,745	94,905		70,889	47,227	January
136,263	153,431	107,565	18,805	87,021		65,548	43,835	February
126,195	149,663	110,719	17,536	87,749		65,227	40,260	March
124,066	148,923	111,148	17,556	89,759		60,981	40,555	April
125,423	153,121	112,206	17,174	88,010		64,973	45,748	May
130,596	150,800	116,970	16,901	90,244		63,265	41,049	June
127,260	151,962	116,432	17,223	86,410		66,606	43,610	July
122,607	143,260	116,560	17,544	85,782		65,014	42,787	August
128,930	140,125	117,408	17,261	82,977		64,278	42,509	September
123,986	137,882	117,764	17,373	84,371		63,999	41,880	October
116,170	136,136	117,831	17,812	77,973		65,129	42,771	November
112,963	128,475	118,214	18,180	71,410		61,588	39,549	December
								<b>2013</b>
113,850	121,638	116,866	18,600	67,067		60,602	38,048	January

4. Credit Unions entered the reporting population for Money and Banking Statistics in January 2009.

5. Prior to December 2010, the outstanding amount of loans is reported on a net of impairment provisions basis. As of December 2010, the outstanding amount of loans is reported on a nominal basis, i.e. gross of impairment provisions, which, all else being equal, would lead to an increase in the reported outstanding amount of loans in that month.

6. In December 2010 the outstanding amount of loans, deposits and other asset and liability instruments across a number of categories has been reduced following the exit of a credit institution from the Irish market.

**Table A.4.1: Credit Institutions (Domestic Group) – Aggregate Balance Sheet**

	<b>Total Assets</b>								
	15	Loans to Irish residents				Holdings of securities issued by Irish residents			
		16	Monetary financial institutions	General government	Private sector	20	Monetary financial institutions	General government	Private sector
	16	17	18	19	20	21	22	23	
<b>Outstanding amounts – € million</b>									
<b>2012</b>									
January	623,785	334,224	90,625	29,430	214,169	111,814	17,350	14,242	80,222
February	614,138	331,861	88,806	29,804	213,251	112,150	17,537	14,601	80,013
March	609,553	328,314	85,729	29,443	213,143	111,056	16,979	14,539	79,539
April	602,777	321,987	80,149	28,083	213,755	113,297	17,720	17,500	78,077
May	603,057	321,321	79,950	27,816	213,555	112,837	17,864	17,032	77,942
June	605,886	320,847	80,993	27,805	212,048	110,878	18,209	17,436	75,233
July	580,499	293,899	55,118	27,789	210,992	111,475	18,806	17,704	74,965
August	570,179	292,588	54,242	27,802	210,544	111,586	18,618	18,507	74,461
September	567,086	292,340	54,662	27,778	209,900	111,330	18,583	18,745	74,002
October	565,438	289,774	54,024	27,826	207,924	112,001	18,638	19,048	74,315
November	561,569	290,369	55,668	27,778	206,922	111,103	17,558	19,514	74,031
December	545,675	292,308	52,825	27,741	211,742	103,918	18,537	19,483	65,898
<b>2013</b>									
January	540,666	289,769	52,260	27,748	209,762	103,779	18,476	20,690	64,613

	<b>Total Liabilities</b>							
	32	Deposits from Irish residents				Debt securities issued		
		33	Monetary financial institutions	General government	Private sector	Irish resident	Euro area	Rest of the world
	33	34	35	11	36	37	38	
<b>Outstanding amounts – € million</b>								
<b>2012</b>								
January	623,785	239,534	95,803	2,541	141,190	29,524	7,957	11,466
February	614,138	237,599	93,780	2,405	141,415	28,583	7,851	11,057
March	609,553	236,494	91,766	2,298	142,430	26,547	7,267	10,360
April	602,777	234,601	85,843	2,322	146,436	25,925	7,265	8,861
May	603,057	235,079	86,373	2,645	146,060	25,903	7,268	8,737
June	605,886	232,029	86,938	2,551	142,540	25,211	7,258	8,108
July	580,499	208,226	61,655	2,698	143,872	25,264	7,188	7,905
August	570,179	206,757	60,216	2,647	143,894	24,567	7,186	7,821
September	567,086	206,363	60,130	2,806	143,426	24,350	7,183	7,809
October	565,438	208,633	60,010	3,534	145,089	23,120	7,171	7,781
November	561,569	211,353	62,173	4,932	144,247	21,684	7,851	7,289
December	545,675	210,036	59,196	5,971	144,868	23,057	7,326	7,482
<b>2013</b>								
January	540,666	209,102	58,318	5,794	144,990	22,224	7,284	7,440

**Notes:**

- For commentary on developments in a given month see the relevant Money and Banking Statistics information release at: [Credit, Money and Banking Statistics: Publications and Releases](#)
- For a full set of explanatory notes see: [Money and Banking Statistics Explanatory Notes](#)
- Data in Money and Banking Statistics is collected with reference to business written out of the within-the-State offices of the entire population of credit institutions in the Republic of Ireland. The most up to date list of these institutions is available on the Central Bank website here: [Credit Institutions resident in the Republic of Ireland](#)

Table A.4.1 – continued

Loans to non-residents		Holdings of securities issued by non-residents		Central bank balances		Remaining assets		
Euro area	Rest of the world	Euro area	Rest of the world	Resident	Non-resident	Resident	Non-resident	
24	107	131	145	28	29	30	31	
								<b>Outstanding amounts – € million</b>
								<b>2012</b>
8,393	93,430	8,956	27,875	4,260	–	19,256	15,577	January
7,909	92,925	8,773	27,456	3,363	–	15,528	14,174	February
7,902	92,387	8,488	29,766	4,588	–	14,366	12,686	March
8,107	93,780	8,347	26,655	5,905	–	12,335	12,364	April
8,187	93,930	8,190	26,827	5,460	–	13,115	13,190	May
7,619	98,434	7,840	26,267	6,352	–	14,821	12,828	June
8,226	97,029	7,772	26,617	6,179	–	16,442	12,859	July
8,012	91,546	7,749	25,873	4,915	–	16,188	11,722	August
7,773	88,108	7,693	25,869	6,822	–	15,747	11,403	September
7,598	85,910	7,659	24,904	10,237	–	15,699	11,657	October
7,733	86,233	7,591	25,018	6,118	–	15,451	11,953	November
7,642	79,948	7,617	23,561	1,881	–	17,211	11,591	December
								<b>2013</b>
7,492	77,266	7,612	22,657	2,326	–	18,212	11,552	January
								<b>2012</b>
								<b>2013</b>

Deposits from non-residents		Capital & reserves		Borrowing from the Eurosystem relating to monetary policy operations	Remaining liabilities			
Euro area	Rest of the world	Resident	Non-resident		Resident	Non-resident		
39	40	41	42	43	45	46		
								<b>Outstanding amounts – € million</b>
								<b>2012</b>
12,872	80,618	87,354	2,393	71,252	64,071	16,743	January	
12,932	81,604	87,532	2,382	71,289	57,847	15,460	February	
11,873	79,204	90,420	2,201	74,955	56,219	14,013	March	
11,479	76,767	90,959	2,125	76,958	54,334	13,502	April	
11,043	76,641	90,727	2,203	75,444	56,140	13,874	May	
10,913	78,843	94,902	1,932	77,764	55,727	13,199	June	
10,419	78,971	93,769	1,949	73,912	58,776	14,119	July	
10,777	73,232	94,209	1,827	73,338	57,023	13,442	August	
10,401	72,518	95,329	1,673	70,449	57,937	13,073	September	
9,823	70,410	95,580	1,640	72,146	56,263	12,872	October	
9,293	71,161	95,739	1,658	65,742	56,759	13,040	November	
9,633	64,991	96,721	1,579	59,211	52,928	12,710	December	
								<b>2013</b>
12,356	63,445	96,150	2,353	55,676	53,110	11,528	January	

4. Credit Unions entered the reporting population for Money and Banking Statistics in January 2009.

5. Prior to December 2010, the outstanding amount of loans is reported on a net of impairment provisions basis. As of December 2010, the outstanding amount of loans is reported on a nominal basis, i.e. gross of impairment provisions, which, all else being equal, would lead to an increase in the reported outstanding amount of loans in that month.

6. In December 2010 the outstanding amount of loans, deposits and other asset and liability instruments across a number of categories has been reduced following the exit of a credit institution from the Irish market.

**Table A.14: Credit Advanced to Irish Resident Private-Sector Enterprises**

	Series Code	Outstanding amounts – € million				
		Dec-11	Mar-12	Jun-12	Sep-12	Dec-12
<b>1. Primary Industries</b>	<b>1,226</b>	<b>5,069</b>	<b>5,114</b>	<b>5,057</b>	<b>5,110</b>	<b>4,977</b>
1.1 Agriculture	1,227	4,260	4,290	4,252	4,277	4,146
1.1.1 Growing of crops, market gardening, horticulture	301	482	474	482	482	435
1.1.2 Farming of animals	302	2,730	2,761	2,761	2,760	2,675
1.1.3 Other agricultural activities	303	1,048	1,055	1,009	1,034	1,036
1.2 Forestry, logging, mining and quarrying	304	490	505	497	538	548
1.3 Fishing and aquaculture	305	320	319	307	295	283
<b>2. Manufacturing</b>	<b>306</b>	<b>5,248</b>	<b>5,066</b>	<b>5,244</b>	<b>5,148</b>	<b>5,018</b>
2.1 Manufacture of food, beverages and tobacco products	307	2,348	2,225	2,432	2,429	2,403
2.2 Wood, pulp, paper, paper products, printing and reproduction of recorded media	308	669	698	670	690	612
2.3 Chemicals, rubber/plastic products, other non-metallic mineral products	309	713	624	651	647	652
2.4 Pharmaceutical products and preparations, medical and dental instruments and supplies	310	74	69	64	76	56
2.5 Fabricated metal products, except machinery and equipment	311	92	96	90	87	83
2.6 Computer, electronic and optical products	312	93	101	78	81	73
2.7 Production, installation and repair of commercial machinery/equipment, not including computers	313	432	436	460	408	381
2.8 Other manufacturing	314	827	818	799	730	759
<b>3. Electricity, Gas, Steam and Air Conditioning Supply</b>	<b>315</b>	<b>785</b>	<b>773</b>	<b>774</b>	<b>575</b>	<b>578</b>
<b>4. Water Supply, Sewerage, Waste Management and Remediation Activities</b>	<b>316</b>	<b>143</b>	<b>138</b>	<b>124</b>	<b>125</b>	<b>112</b>
<b>5. Construction</b>	<b>317</b>	<b>3,005</b>	<b>2,948</b>	<b>2,891</b>	<b>2,877</b>	<b>2,821</b>
5.1 Construction of buildings carried out on contract	318	1,470	1,447	1,393	1,385	1,360
5.2 Civil engineering activities carried out on contract	319	689	673	670	672	671
5.3 Other construction activities	320	846	828	828	820	790
<b>6. Wholesale/Retail Trade &amp; Repairs</b>	<b>321</b>	<b>9,430</b>	<b>9,274</b>	<b>9,129</b>	<b>8,859</b>	<b>8,554</b>
6.1 Sale, maintenance/repair of motor vehicles, retail sale of fuel	322	1,761	1,716	1,674	1,600	1,709
6.2 Wholesale trade and commission trade (except vehicles)	323	1,843	1,777	1,688	1,647	1,522
6.3 Retail trade (except vehicles), repair of personal/household goods	324	4,898	4,866	4,848	4,853	4,655
6.4 Other wholesale/retail	325	928	914	919	759	668
<b>7. Transportation and Storage</b>	<b>326</b>	<b>1,469</b>	<b>1,545</b>	<b>1,580</b>	<b>1,395</b>	<b>1,355</b>
7.1 Land, water and air transport	327	824	907	936	760	730
7.2 Postal, courier, warehousing and support activities for transportation	328	324	316	323	302	301
7.3 Other transportation and storage	329	321	323	320	333	325
<b>8. Hotels and Restaurants</b>	<b>330</b>	<b>7,720</b>	<b>7,709</b>	<b>7,678</b>	<b>7,688</b>	<b>7,490</b>
8.1 Hotels	331	4,248	4,321	4,363	4,398	4,335
8.2 Restaurants	332	607	606	599	585	547
8.3 Bars	333	2,535	2,449	2,385	2,382	2,296
8.4 Other accommodation and catering	334	331	332	330	322	312

**Notes:**

\* For metadata and explanatory notes see:

[http://www.centralbank.ie/polstats/stats/cmab/Documents/Business\\_Credit\\_and\\_Deposits\\_Explanatory\\_Notes\\_Jun11.pdf](http://www.centralbank.ie/polstats/stats/cmab/Documents/Business_Credit_and_Deposits_Explanatory_Notes_Jun11.pdf)

\*\* For commentary on most recent developments see:

<http://www.centralbank.ie/polstats/stats/cmab/Pages/releases.aspx>



Table A.14 – continued

Transactions – € million					Growth rates – per cent.				
Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12
<b>-243</b>	<b>34</b>	<b>-58</b>	<b>53</b>	<b>-130</b>	<b>-4.1</b>	<b>-3.3</b>	<b>-3.7</b>	<b>-4.0</b>	<b>-2.0</b>
-158	20	-38	24	-128	-4.5	-3.6	-3.6	-3.4	-2.9
9	-8	8	1	-47	0.2	-3.1	-1.2	1.9	-9.7
-119	33	0	-1	-85	-4.8	-3.3	-3.1	-3.0	-1.9
-48	-6	-45	25	4	-5.8	-4.4	-5.9	-6.7	-2.1
-83	15	-8	41	10	3.1	2.2	-1.5	-6.2	11.9
-2	-1	-12	-12	-11	-9.1	-7.7	-8.7	-8.3	-11.4
<b>123</b>	<b>-244</b>	<b>106</b>	<b>-82</b>	<b>-100</b>	<b>-1.3</b>	<b>-5.7</b>	<b>-1.3</b>	<b>-1.8</b>	<b>-6.0</b>
189	-159	154	6	-4	-1.8	-0.7	7.6	8.9	-0.3
10	29	-28	19	-78	3.7	7.8	-0.4	4.6	-8.6
-46	-111	22	-1	8	-0.6	-22.0	-19.5	-18.3	-11.8
-20	-4	-6	11	-19	-9.1	-37.4	-32.7	-21.2	-25.6
6	4	-5	-3	-5	22.2	-23.7	-20.9	2.0	-10.1
14	9	-24	3	-7	16.1	6.2	-11.2	2.3	-21.6
19	-4	22	-50	-26	-1.4	-4.9	8.1	-2.9	-13.2
-49	-7	-26	-68	31	-6.5	-9.2	-6.0	-17.3	-8.3
<b>-17</b>	<b>-11</b>	<b>-8</b>	<b>-222</b>	<b>4</b>	<b>-10.3</b>	<b>-17.0</b>	<b>0.4</b>	<b>-31.9</b>	<b>-29.9</b>
<b>1</b>	<b>-5</b>	<b>-15</b>	<b>2</b>	<b>-13</b>	<b>19.1</b>	<b>14.4</b>	<b>0.9</b>	<b>-12.0</b>	<b>-21.6</b>
<b>-30</b>	<b>-32</b>	<b>-14</b>	<b>-14</b>	<b>-48</b>	<b>2.3</b>	<b>-2.5</b>	<b>-2.4</b>	<b>-2.9</b>	<b>-3.6</b>
-26	-1	-11	-8	-17	17.8	9.0	2.3	-2.9	-2.6
-8	-14	-4	2	0	-14.0	-12.1	-9.1	-3.4	-2.3
4	-18	0	-8	-30	-9.4	-13.8	-5.8	-2.7	-6.6
<b>68</b>	<b>-196</b>	<b>-158</b>	<b>-270</b>	<b>-150</b>	<b>-3.4</b>	<b>-3.8</b>	<b>-2.4</b>	<b>-5.9</b>	<b>-8.2</b>
120	-44	-40	-74	113	4.8	4.6	4.9	-2.3	-2.6
209	-110	-93	-41	-81	2.8	2.0	-3.1	-1.7	-17.4
-246	-32	-16	5	-194	-8.2	-8.4	-5.4	-5.7	-4.8
-16	-10	-10	-159	13	-3.1	-2.3	3.1	-20.5	-17.8
<b>-57</b>	<b>68</b>	<b>33</b>	<b>-184</b>	<b>-41</b>	<b>-4.0</b>	<b>-8.0</b>	<b>-7.9</b>	<b>-9.2</b>	<b>-8.3</b>
-73	75	28	-176	-30	-8.7	-8.8	-6.0	-16.0	-12.3
14	-8	6	-21	-2	7.0	1.2	3.1	-2.5	-7.5
1	1	-2	13	-8	-0.9	-13.5	-21.5	4.2	1.4
<b>-35</b>	<b>-5</b>	<b>-45</b>	<b>9</b>	<b>-136</b>	<b>-2.0</b>	<b>-2.0</b>	<b>-1.9</b>	<b>-1.0</b>	<b>-2.3</b>
2	75	19	35	-39	-1.0	0.6	1.8	3.1	2.1
-13	-6	-5	-15	-38	-6.3	-7.3	-6.6	-6.4	-10.5
-24	-76	-59	-3	-59	-2.7	-5.2	-6.9	-6.3	-7.8
0	2	0	-8	0	-2.6	-1.8	-1.4	-1.7	-1.7

Table A.14 – continued

	Series Code	Outstanding amounts – € million				
		Dec-11	Mar-12	Jun-12	Sep-12	Dec-12
<b>9. Information and Communication</b>	<b>335</b>	<b>583</b>	<b>567</b>	<b>463</b>	<b>440</b>	<b>442</b>
9.1 Publishing of printed material	336	174	174	175	172	168
9.2 Audio-visual production and publishing, programming and broadcasting activities	337	49	49	28	32	37
9.3 Telecommunications and information service activities	338	248	230	145	124	118
9.4 Software publishing, computer programming, consultancy and related activities	339	111	113	114	113	118
9.5 Other information and communication	340	1	1	1	1	1
<b>10. Financial Intermediation (Excl. Monetary Financial Institutions)</b>	<b>1,228</b>	<b>124,188</b>	<b>122,387</b>	<b>117,397</b>	<b>115,892</b>	<b>106,135</b>
10.1 Financial leasing	342	1,536	1,496	1,485	1,464	1,404
10.2 Non-bank credit grantors, excluding credit unions	343	16,196	15,787	15,587	15,743	14,823
10.3 Investment funds, excluding financial vehicle corporations and money market funds	344	520	544	592	623	528
10.4 Financial vehicle corporations (FVCs)	345	87,458	86,440	82,635	81,337	74,858
10.5 Life insurance	346	2,778	2,701	1,368	1,434	1,396
10.6 Pension funding	347	69	69	69	69	68
10.7 Non-life insurance	348	167	231	240	195	181
10.8 Security broker/fund management	349	2,850	367	363	394	379
10.9 Other financial intermediation/Unallocated	1,229	12,615	14,751	15,058	14,632	12,498
<b>11. Real Estate, Land and Development Activities</b>	<b>351</b>	<b>54,907</b>	<b>54,462</b>	<b>54,103</b>	<b>53,559</b>	<b>52,231</b>
11.1 Property investment/development of residential real estate	1,230	18,221	18,296	18,622	19,020	18,641
11.2 Property investment/development of commercial real estate	1,231	14,246	14,187	14,532	14,664	14,303
11.3 Property investment/development of mixed real estate	1,232	18,276	17,928	16,938	15,802	15,213
11.4 Investment in unzoned land	358	894	863	849	843	849
11.5 Other real estate activities	359	3,269	3,187	3,161	3,230	3,226
<b>12. Business and Administrative Services</b>	<b>360</b>	<b>5,138</b>	<b>5,020</b>	<b>4,692</b>	<b>4,748</b>	<b>4,855</b>
12.1 Legal, accounting and management consultant activities	361	1,314	1,294	1,197	1,225	1,254
12.2 Architectural and engineering activities, technical testing and analysis	362	173	178	176	174	167
12.3 Scientific research and development	363	29	33	29	29	29
12.4 Rental and leasing activities, services to buildings and landscape activities	364	92	90	86	87	165
12.5 Employment, office administration and business support activities	365	268	268	249	279	281
12.6 Other business and administrative services	366	3,262	3,157	2,955	2,954	2,959
<b>13. Other Community, Social and Personal Services</b>	<b>367</b>	<b>2,160</b>	<b>2,124</b>	<b>2,109</b>	<b>2,088</b>	<b>2,099</b>
13.1 Recreational, cultural and sporting activities	368	895	869	865	867	880
13.2 Membership organisations (business, employers, professional, trade unions, religious, political)	369	304	300	296	291	285
13.3 Other service activities	370	960	955	948	930	935
<b>14. Education</b>	<b>371</b>	<b>565</b>	<b>495</b>	<b>500</b>	<b>553</b>	<b>568</b>
<b>15. Human Health and Social Work</b>	<b>372</b>	<b>1,999</b>	<b>1,937</b>	<b>1,895</b>	<b>1,837</b>	<b>2,014</b>
15.1 Hospitals and medical practice activities	373	1,336	1,277	1,251	1,183	1,365
15.2 Residential care activities	374	312	313	310	309	312
15.3 Other health and social work	375	351	347	333	345	338
<b>16. Extra-Territorial Organisations and Bodies</b>	<b>376</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>17. Total</b>	<b>378</b>	<b>222,409</b>	<b>219,558</b>	<b>213,634</b>	<b>210,894</b>	<b>199,251</b>
<b>17.1 Total ex Financial Intermediation</b>	<b>1,233</b>	<b>98,221</b>	<b>97,171</b>	<b>96,238</b>	<b>95,002</b>	<b>93,116</b>
<b>17.2 Total ex Financial Intermediation and Property Related Sectors</b>	<b>1,234</b>	<b>40,309</b>	<b>39,761</b>	<b>39,244</b>	<b>38,566</b>	<b>38,064</b>

Table A.14 – continued

Transactions – € million					Growth rates – per cent.				
Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12
<b>-11</b>	<b>-17</b>	<b>-103</b>	<b>-32</b>	<b>2</b>	<b>-6.9</b>	<b>-9.0</b>	<b>-23.4</b>	<b>-27.4</b>	<b>-25.8</b>
-3	0	1	-18	-3	-14.8	-1.7	-3.4	-11.4	-11.7
7	0	-21	9	5	0.0	6.9	-33.7	-13.8	-13.8
-16	-17	-84	-21	-5	-4.8	-10.8	-42.8	-52.7	-51.9
0	1	2	-1	5	-1.2	-20.6	-10.2	1.0	5.7
0	0	0	0	0	-3.8	-1.9	-4.7	-19.9	-5.8
<b>-2,926</b>	<b>-1,177</b>	<b>-5,463</b>	<b>-983</b>	<b>-9,278</b>	<b>-10.1</b>	<b>-9.8</b>	<b>-11.8</b>	<b>-8.7</b>	<b>-13.7</b>
-106	-38	-15	-24	-57	2.7	-11.3	-14.2	-11.2	-8.8
-1,780	-364	-371	192	-834	-28.9	-19.9	-15.1	-12.9	-8.5
54	26	43	33	-57	22.6	-35.4	8.6	33.5	8.7
-499	-642	-3,900	-626	-6,224	-4.7	-4.7	-9.8	-6.6	-13.1
-13	-73	-1,353	71	-27	-7.9	-11.0	-53.4	-49.1	-49.8
8	0	-1	1	-2	13.2	26.9	2.1	10.4	-2.4
-6	67	2	-43	-11	-27.7	58.9	59.9	12.2	9.5
-400	-17	-6	31	-13	-39.4	-37.3	-24.7	-7.3	2.5
-184	-135	138	-618	-2,053	-11.6	-15.8	-7.9	-5.7	-17.7
<b>-581</b>	<b>-182</b>	<b>-646</b>	<b>-537</b>	<b>-887</b>	<b>0.5</b>	<b>0.0</b>	<b>-2.0</b>	<b>-3.5</b>	<b>-4.1</b>
-358	185	-81	71	-357	-1.2	2.1	-0.9	-1.3	-0.9
-49	-384	-96	12	-130	-0.5	-3.2	-4.1	-3.6	-4.1
-72	30	-372	-681	-405	4.0	1.3	-0.8	-6.2	-8.3
-54	-27	-13	-9	6	-3.3	-7.8	-9.6	-10.5	-4.8
-49	14	-83	69	0	0.0	-1.4	-3.2	-1.5	0.0
<b>-276</b>	<b>-19</b>	<b>-348</b>	<b>41</b>	<b>114</b>	<b>-14.3</b>	<b>-8.7</b>	<b>-14.0</b>	<b>-11.6</b>	<b>-4.2</b>
10	-9	-98	12	29	-22.0	-6.6	-10.8	-6.6	-5.1
-12	6	-3	-2	-7	6.7	19.1	-1.3	-5.9	-3.2
0	3	-4	0	0	1.2	12.2	-10.5	-3.3	-2.6
-12	0	-4	0	72	-35.7	-32.3	-16.6	-14.9	75.5
-11	0	-21	30	2	4.3	-17.0	-15.4	-1.0	3.9
-250	-18	-219	0	18	-12.2	-9.2	-15.7	-14.7	-6.9
<b>-35</b>	<b>-33</b>	<b>-16</b>	<b>-21</b>	<b>12</b>	<b>-45.6</b>	<b>-6.1</b>	<b>-5.3</b>	<b>-4.8</b>	<b>-2.7</b>
-1	-24	-4	1	13	-53.3	-6.2	-3.6	-3.2	-1.5
-8	-4	-5	-4	-6	-25.8	-7.3	-7.1	-6.7	-6.4
-26	-5	-8	-18	5	-42.8	-5.7	-6.1	-5.7	-2.6
<b>-32</b>	<b>-70</b>	<b>6</b>	<b>52</b>	<b>15</b>	<b>-22.8</b>	<b>-27.6</b>	<b>-22.8</b>	<b>-7.5</b>	<b>0.6</b>
<b>10</b>	<b>-61</b>	<b>-40</b>	<b>-58</b>	<b>180</b>	<b>0.4</b>	<b>-2.9</b>	<b>-5.1</b>	<b>-7.5</b>	<b>1.0</b>
15	-58	-29	-68	184	-1.1	-4.6	-6.2	-10.6	2.2
-15	1	1	-2	3	-22.2	-1.7	-5.4	-4.6	1.0
11	-4	-12	12	-7	42.0	2.2	-0.7	1.7	-3.5
<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>-4,042</b>	<b>-1,951</b>	<b>-6,769</b>	<b>-2,246</b>	<b>-10,455</b>	<b>-6.6</b>	<b>-6.2</b>	<b>-7.9</b>	<b>-6.8</b>	<b>-9.7</b>
<b>-1,116</b>	<b>-774</b>	<b>-1,306</b>	<b>-1,263</b>	<b>-1,177</b>	<b>-2.6</b>	<b>-2.1</b>	<b>-3.2</b>	<b>-4.5</b>	<b>-4.6</b>
<b>-505</b>	<b>-559</b>	<b>-646</b>	<b>-712</b>	<b>-243</b>	<b>-7.1</b>	<b>-4.8</b>	<b>-4.9</b>	<b>-5.9</b>	<b>-5.3</b>

**Table A.16: Deposits from Irish Resident Private-Sector Enterprises**

	Series Code	Outstanding amounts – € million				
		Dec-11	Mar-12	Jun-12	Sep-12	Dec-12
1. Primary Industries	900	2,986	2,873	2,794	2,563	2,807
2. Manufacturing	901	4,413	3,827	3,891	4,018	4,307
3. Electricity, Gas, Steam and Air Conditioning Supply	902	524	495	487	504	583
4. Water Supply, Sewerage, Waste Management and Remediation Activities	903	49	47	53	58	52
5. Construction	904	1,965	1,835	1,747	1,720	1,835
6. Wholesale/Retail Trade & Repairs	905	4,348	3,603	3,765	3,684	4,204
7. Transportation and Storage	906	2,397	2,461	2,480	2,580	2,203
8. Hotels and Restaurants	907	615	568	632	695	639
9. Information and Communication	908	1,106	1,039	1,001	982	1,054
10. Financial Intermediation (Excl. Monetary Financial Institutions)	1,240	40,303	41,227	41,521	44,042	43,201
11. Real Estate, Land and Development Activities	910	3,782	3,590	3,676	3,647	3,545
12. Business and Administrative Services	911	7,035	7,481	7,683	7,642	7,995
13. Other Community, Social and Personal Services	912	4,168	4,239	4,345	4,287	4,179
14. Education	913	1,714	1,832	1,763	1,882	1,795
15. Human Health and Social Work	914	1,024	1,113	1,125	1,161	1,067
16. Extra-Territorial Organisations and Bodies	915	0	0	0	0	0
<b>17. Total</b>	<b>917</b>	<b>76,429</b>	<b>76,230</b>	<b>76,964</b>	<b>79,466</b>	<b>79,464</b>

**Notes:**

\* For metadata and explanatory notes see:

[http://www.centralbank.ie/polstats/stats/cmab/Documents/Business\\_Credit\\_and\\_Deposits\\_Explanatory\\_Notes\\_Jun11.pdf](http://www.centralbank.ie/polstats/stats/cmab/Documents/Business_Credit_and_Deposits_Explanatory_Notes_Jun11.pdf)

\*\* For commentary on most recent developments see:

<http://www.centralbank.ie/polstats/stats/cmab/Pages/releases.aspx>

Table A.16 – continued

Transactions – € million					Growth rates – per cent.				
Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12
227	-61	-88	-229	246	-1.3	6.0	3.7	-5.7	-4.5
308	-567	19	142	339	-4.3	-15.5	-5.7	-2.5	-1.6
14	-27	-10	17	40	-30.7	-11.9	-5.9	-1.3	3.7
-12	-1	6	4	-6	7.4	-18.8	-9.1	-5.4	5.8
57	-130	-89	-27	116	-13.2	-3.1	-13.0	-9.9	-6.6
344	-687	147	198	525	5.7	-4.5	-5.6	-0.4	5.4
-280	75	-10	105	-376	-15.7	6.6	-5.1	-4.2	-8.6
-53	-46	63	64	-56	-6.3	-9.4	-2.9	4.1	3.9
141	-65	-46	-18	73	0.3	0.8	3.5	1.1	-5.1
-392	746	389	1,849	-158	-17.1	-11.6	-7.8	6.4	7.0
-42	-190	82	-29	-100	-13.9	-21.9	-5.4	-4.6	-6.3
-141	473	126	-16	386	5.0	3.2	8.7	6.2	13.8
-236	16	99	-59	-105	-8.9	-3.1	-2.3	-4.1	-1.1
-50	118	-70	119	-86	-6.6	-4.8	2.3	6.7	4.7
-109	-3	8	37	-93	-4.6	-3.3	-5.9	-6.0	-4.6
-3	0	0	0	0	0.0	0.0	0.0	0.0	0.0
-227	-349	625	2,157	742	-11.7	-8.5	-4.9	2.9	4.1

**Table A.18: Credit Advanced to and Deposits from Irish Private Households**

Series Code	<b>Total Lending</b>									
	Lending for house purchase									
	Floating rate			Fixed rate						
			Standard variable	Tracker	Up to 1 year fixed		Over 1 and up to 3 years	Over 3 and up to 5 years	Over 5 years	
	1,243	777	1,244	1,245	1,246	1,247	1,248	1,249	1,250	1,251
<b>Outstanding amounts – € million</b>										
<b>2011</b>										
December	99,955	80,396	69,117	28,154	39,599	1,363	11,279	5,995	4,060	1,223
<b>2012</b>										
March	98,713	79,874	69,496	28,810	39,403	1,284	10,377	5,411	3,783	1,184
June	98,008	80,012	70,969	30,522	39,135	1,311	9,043	4,503	3,384	1,156
September	96,939	79,355	71,325	31,186	38,901	1,238	8,029	3,834	3,058	1,137
December	101,947	84,973	77,234	33,371	42,557	1,306	7,739	3,630	2,956	1,153
<b>Transactions – € million</b>										
<b>2011</b>										
December	-916	-503	568	376	-331	523	-1,071	-495	-555	-21
<b>2012</b>										
March	-1,143	-500	402	657	-175	-80	-902	-586	-278	-39
June	-666	-335	1,346	1,645	-328	29	-1,682	-1,083	-561	-37
September	-783	-298	710	819	-34	-75	-1,008	-679	-309	-21
December	-770	-185	568	925	-424	66	-752	-458	-268	-26
<b>Growth rates – per cent.</b>										
<b>2011</b>										
December	-3.1	-2.4	-1.7	-0.7	-3.0	27.6	-7.4	-2.4	-14.0	-5.2
<b>2012</b>										
March	-4.1	-2.4	0.8	5.6	-2.8	27.3	-21.1	-20.0	-25.0	-11.7
June	-3.8	-2.2	3.2	11.9	-3.0	31.1	-32.8	-36.0	-33.7	-12.7
September	-3.4	-1.9	4.2	12.4	-2.0	29.9	-37.2	-43.4	-35.9	-9.2
December	-3.4	-1.6	4.4	14.4	-2.4	-4.4	-37.9	-46.0	-34.2	-10.0

**Notes:**

\* For metadata and explanatory notes see:

[http://www.centralbank.ie/polstats/stats/cmab/Documents/Private\\_Households\\_Credit\\_and\\_Deposits\\_Explanatory\\_Notes\\_Jun11.pdf](http://www.centralbank.ie/polstats/stats/cmab/Documents/Private_Households_Credit_and_Deposits_Explanatory_Notes_Jun11.pdf)

\*\* For commentary on most recent developments see:

<http://www.centralbank.ie/polstats/stats/cmab/Pages/releases.aspx>

Table A.18 – continued

<b>Total Lending</b>		<b>Total Deposits</b>		
Other personal				
	Finance for investment	Finance for other purposes		
1,252	1,253	1,254	962	Series Code
<b>Outstanding amounts – € million</b>				
<b>2011</b>				
19,559	2,794	16,765	86,155	December
<b>2012</b>				
18,839	2,725	16,114	86,910	March
17,996	2,748	15,248	87,045	June
17,584	2,556	15,029	87,216	September
16,974	2,416	14,558	87,010	December
<b>Transactions – € million</b>				
<b>2011</b>				
-413	-100	-313	-390	December
<b>2012</b>				
-643	-61	-582	826	March
-330	-41	-289	74	June
-485	-82	-403	180	September
-585	-128	-457	-179	December
<b>Growth rates – per cent.</b>				
<b>2011</b>				
-6.3	-7.6	-6.2	-3.3	December
<b>2012</b>				
-11.6	-7.6	-12.2	-0.7	March
-10.7	-9.3	-10.9	0.0	June
-9.5	-9.9	-9.4	0.8	September
-10.6	-11.2	-10.5	1.0	December

**Table A.20.1: Money Market Funds – Monthly Aggregate Balance Sheet**

	<b>Assets</b>							Money market fund shares/units	Other assets including shares and other equities	
	Total	Deposits and loan claims	Securities other than shares				MFI's			Other
			Issued by Irish residents	Issued by other euro area residents	Issued by non-euro area residents					
					MFI's	Other				
<b>Outstanding Amounts – € million</b>										
<b>2012</b>										
January	295,445	72,873	1,880	53,321	115,305	50,878	-	1,189		
February	292,698	70,192	1,442	50,412	120,452	49,194	-	1,005		
March	301,311	44,316	2,165	59,434	144,337	50,053	-	1,006		
April	305,128	54,027	2,294	61,565	138,185	48,320	-	737		
May	317,335	58,151	1,988	66,987	143,088	46,246	-	875		
June	309,471	72,273	2,003	59,936	126,602	46,444	-	2,212		
July	308,920	68,547	2,693	63,333	124,885	49,082	-	382		
Aug	315,149	69,351	2,992	69,271	126,377	46,750	-	408		
September	312,015	68,077	3,210	69,356	124,178	46,849	-	345		
October	311,488	70,556	3,501	69,794	121,446	45,705	-	487		
November	306,583	63,609	2,891	71,982	122,956	44,466	-	679		
December	297,322	62,190	3,155	62,087	124,259	44,929	-	705		
<b>2013</b>										
January	291,548	60,868	4,028	79,270	99,992	46,439	-	950		
<b>Liabilities</b>										
	Total	Money market fund shares/units issued			Other Liabilities					
		Issued to Irish residents	Issued to other euro area residents	Issued to non-euro area residents						
<b>Outstanding amounts – € million</b>										
<b>2012</b>										
January	295,445	13,345	35,798	242,458	3,844					
February	292,698	14,766	34,366	237,439	6,127					
March	301,311	16,085	38,141	242,199	4,886					
April	305,128	16,517	38,222	246,992	3,396					
May	317,335	16,331	38,464	255,343	7,198					
June	309,471	15,789	36,487	252,693	4,502					
July	308,920	13,995	40,992	252,002	1,931					
Aug	315,040	14,074	42,073	254,438	4,565					
September	312,015	13,167	39,532	254,452	4,865					
October	311,488	13,678	41,861	251,818	4,131					
November	306,583	11,916	37,869	251,723	5,075					
December	297,322	11,567	34,904	249,500	1,352					
<b>2013</b>										
January	291,548	11,579	37,537	237,711	4,720					

The change in definition of money market funds (MMFs) required by Regulation of the European Central Bank ECB/2001/12 has been implemented in December 2011.

This has led to €114billion of funds previously classified as MMF's being re-categorised as Investment Funds and no longer being included in these statistics.

The difference in total assets between the monthly and quarterly tables is accounted for by the inclusion of remaining assets in the monthly table but omission from the corresponding quarterly data.



**Table A.20.2: Money Market Funds – Currency Breakdown of Assets**

	<b>Assets</b>								
	Total	Loans				Securities other than shares			
		Euro	Sterling	USD	Other	Issued by Irish residents			
						Euro	Sterling	USD	Other
<b>Outstanding Amounts – € million</b>									
<b>2010</b>									
September	345,662	11,789	9,808	20,853	330	1,861	1,239	798	3
December	357,873	10,774	12,080	24,566	330	1,007	1,674	652	78
<b>2011</b>									
March	345,996	11,651	11,482	20,573	355	1,384	489	486	72
June	349,497	30,731	25,405	52,446	280	2,024	432	438	75
September	365,026	27,219	31,372	56,403	340	1,961	243	326	-
December	286,317	16,415	33,309	25,089	453	1,195	216	148	1
<b>2012</b>									
March	300,305	13,025	14,197	16,807	288	1,722	243	198	3
June	307,259	15,011	35,515	21,412	335	1,426	392	181	3
September	311,670	12,786	30,903	24,075	313	2,164	763	281	2
December	296,617	8,863	29,908	23,170	248	1,666	1,069	418	2
Securities other than shares									
Issued by other euro area residents									
Issued by non-euro area residents									
	Euro	Sterling	USD	Other	Euro	Sterling	USD	Other	
<b>2010</b>									
September	49,810	23,858	15,248	449	14,772	85,043	108,590	1,212	
December	51,219	24,083	16,142	1,068	15,587	90,212	106,412	1,989	
<b>2011</b>									
March	50,068	22,544	18,792	427	14,603	88,462	103,847	761	
June	25,952	17,456	15,284	358	21,357	73,769	82,533	959	
September	28,504	25,320	9,986	421	27,643	72,570	81,775	941	
December	24,407	19,608	7,254	282	15,740	76,407	64,606	1,184	
<b>2012</b>									
March	20,873	29,235	8,901	425	21,862	100,374	71,079	1,074	
June	21,829	27,895	9,699	513	18,839	86,313	66,759	1,135	
September	23,832	34,333	10,822	369	17,794	89,270	62,557	1,406	
December	22,790	30,773	8,075	447	13,942	84,956	69,133	1,157	

The change in definition of money market funds (MMFs) required by Regulation of the European Central Bank ECB/2001/12 has been implemented in December 2011.

This has led to €114billion of funds previously classified as MMF's being re-categorised as Investment Funds and no longer being included in these statistics.

The difference in the total assets figure included in the monthly and quarterly tables, is accounted for due to the remaining assets being included in the monthly table but omitted from the corresponding quarterly data.



# Section B

## Interest Rates



**Table B.1.1: Retail Interest Rates – Deposits, Outstanding Amounts**

	<b>Households</b>				<b>Non-financial corporations</b>		
	Overnight	Redeemable at notice	With agreed maturity		Overnight	With agreed maturity	
			Up to 2 years	Over 2 years		Up to 2 years	Over 2 years
<b>Rates (per cent per annum)</b>							
<b>2012</b>							
January	0.61	2.27	3.57	2.37	0.22	3.22	1.42
February	0.53	2.08	3.60	2.43	0.20	3.21	1.53
March	0.56	1.95	3.61	2.47	0.21	3.14	1.59
April	0.57	1.95	3.68	2.51	0.21	3.06	1.67
May	0.52	1.95	3.66	2.54	0.24	3.06	1.58
June	0.52	1.96	3.64	2.53	0.24	3.05	1.72
July	0.50	1.80	3.60	2.54	0.26	2.99	1.72
August	0.49	1.79	3.54	2.53	0.23	2.84	1.69
September	0.48	1.53	3.47	2.52	0.23	2.64	1.66
October	0.46	1.51	3.41	2.48	0.22	2.57	1.55
November	0.45	1.51	3.35	2.42	0.24	2.57	1.72
December	0.35	1.49	3.29	2.36	0.23	2.42	1.75
<b>2013</b>							
January	0.35	1.50	3.23	2.41	0.24	2.36	1.78
<b>Volumes (€ million)</b>							
<b>2012</b>							
January	33,945	12,097	29,507	4,084	15,133	12,291	503
February	33,625	11,971	29,773	4,190	14,810	12,225	525
March	34,214	11,806	30,094	4,281	14,866	12,070	533
April	33,978	11,745	30,371	4,321	15,165	12,298	533
May	33,759	11,527	30,763	4,422	15,094	12,116	504
June	33,969	11,315	30,820	4,414	15,487	11,893	526
July	33,649	11,151	31,083	4,444	15,872	11,571	523
August	33,921	10,970	31,180	4,463	15,587	11,814	543
September	34,358	10,771	31,290	4,504	15,550	11,706	540
October	34,634	10,482	31,276	4,485	16,743	11,792	514
November	34,606	10,315	31,236	4,388	16,073	11,125	486
December	34,767	10,224	31,349	4,331	17,163	11,062	477
<b>2013</b>							
January	34,648	10,139	31,609	4,304	16,623	10,723	468

**Notes:** The interest rate and volume data refer to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in Ireland and other Monetary Union Member States. Rates reported are weighted averages for each instrument category. Data are representative of resident offices of banks and building societies. Credit union data are not included in the interest rates tables.

**Table B.1.2: Retail Interest Rates – Loans, Outstanding Amounts**

	<b>Households</b>						
	Overdrafts	Loans for house purchases with original maturity			Consumer loans and other loans with original maturity		
		Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years
<b>Rates (per cent per annum)</b>							
<b>2012</b>							
January	13.36	3.74	3.47	2.98	8.83	6.26	4.34
February	13.52	3.69	3.36	2.98	8.86	6.27	4.24
March	13.41	3.47	3.30	2.98	8.73	6.19	4.12
April	13.50	3.38	3.36	3.00	8.64	6.15	4.17
May	13.47	3.35	3.32	2.98	8.68	6.21	4.14
June	13.52	3.28	3.30	2.98	8.95	6.12	4.11
July	13.48	3.22	3.22	2.86	8.95	6.05	4.00
August	13.54	3.21	3.26	2.84	9.00	5.98	3.98
September	13.50	3.42	3.16	2.90	9.26	5.87	3.94
October	13.53	3.24	3.15	2.92	8.99	5.86	3.92
November	13.47	3.25	3.16	2.99	8.98	5.84	3.99
December	13.57	3.21	3.18	2.97	9.11	5.83	3.98
<b>2013</b>							
January	13.65	3.24	3.24	2.98	9.07	5.83	3.98
<b>Volumes (€ million)</b>							
<b>2012</b>							
January	4,522	474	586	78,701	6,574	7,504	10,574
February	4,436	460	584	78,488	6,525	7,433	10,558
March	4,333	455	573	78,421	6,439	7,235	10,655
April	3,725	455	583	79,564	5,806	7,115	10,701
May	3,698	447	582	79,400	5,843	6,983	10,771
June	3,706	444	578	78,562	5,628	7,018	10,775
July	3,717	437	556	77,733	5,603	6,745	10,844
August	3,706	399	553	78,066	5,410	6,511	10,889
September	3,896	266	537	78,064	5,198	6,344	11,357
October	3,857	285	517	77,524	5,202	6,213	11,338
November	3,887	276	521	77,480	5,132	5,982	11,155
December	3,882	278	513	83,744	5,186	5,526	11,177
<b>2013</b>							
January	3,807	273	479	83,382	5,065	5,298	11,334

**Notes:** The interest rate and volume data refer to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in Ireland and other Monetary Union Member States. Rates reported are weighted averages for each instrument category. Data are representative of resident offices of banks and building societies. Credit union data are not included in the interest rates tables.

Table B.1.2 – Continued

Non-financial corporations

Overdrafts	Loans with original maturity			
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	
<b>Rates (per cent per annum)</b>				
<b>2012</b>				
5.06	3.67	3.65	3.51	January
4.95	3.56	3.53	3.42	February
5.58	3.63	3.39	3.30	March
4.92	3.75	3.25	3.26	April
4.66	3.77	3.16	3.23	May
4.99	3.76	3.15	3.19	June
4.77	3.75	3.04	3.09	July
4.46	3.58	2.94	3.07	August
4.68	3.56	2.82	3.02	September
4.65	3.19	2.79	2.96	October
5.32	3.16	2.73	2.97	November
4.69	3.19	2.72	2.97	December
<b>2013</b>				
4.62	3.16	2.75	2.96	January
<b>Volumes (€ million)</b>				
<b>2012</b>				
9,686	23,122	24,297	40,660	January
9,773	22,953	24,530	40,681	February
9,506	23,318	24,303	40,428	March
9,432	23,426	23,627	40,572	April
9,359	23,677	23,255	40,489	May
9,291	23,382	22,913	40,859	June
9,462	23,302	22,554	41,156	July
9,304	23,231	22,279	41,300	August
9,308	23,580	21,846	41,638	September
9,150	23,725	21,559	41,243	October
9,371	23,823	21,326	41,103	November
9,279	24,269	20,911	41,044	December
<b>2013</b>				
9,324	24,325	20,060	41,296	January

**Table B.2.1: Retail Interest Rates and Volumes – Loans and Deposits, New Business**

<b>Loans</b>							
<b>Households</b>							
For house purchases			For consumption purposes			For other purposes	
Floating rate and up to 1 year fixation	Over 1 year fixation	APRC	Floating rate and up to 1 year fixation	Over 1 year fixation	APRC		

**Rates (per cent per annum)****2012**

January	3.11	4.22	3.25	6.36	9.36	7.33	4.38
February	3.09	4.19	3.19	7.94	10.50	9.03	4.59
March	3.13	4.37	3.24	5.13	10.49	6.12	5.26
April	3.05	4.39	3.15	6.57	10.40	7.52	4.69
May	3.04	4.25	3.16	7.36	10.55	8.32	4.53
June	3.00	4.21	3.10	7.12	10.44	7.98	5.03
July	3.00	4.13	3.10	6.81	10.12	7.74	4.59
August	2.91	4.10	3.00	6.71	10.70	7.69	4.29
September	3.12	4.06	3.22	5.59	10.89	6.52	5.46
October	3.23	4.62	3.46	7.03	10.85	7.96	4.71
November	3.35	4.28	3.62	5.17	10.65	6.00	5.50
December	3.43	4.35	3.61	5.81	10.69	6.58	4.33

**2013**

January	3.20	4.23	3.37	6.38	10.29	7.42	4.92
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**Volumes (€ million)****2012**

January	656	91	-	116	55	-	43
February	669	66	-	105	65	-	63
March	681	60	-	166	37	-	42
April	794	66	-	105	34	-	46
May	785	78	-	85	36	-	46
June	712	62	-	81	28	-	27
July	772	74	-	91	36	-	43
August	852	68	-	95	31	-	89
September	737	94	-	123	26	-	36
October	810	162	-	86	28	-	44
November	965	272	-	152	27	-	54
December	1,019	216	-	90	17	-	49

**2013**

January	1,072	164	-	92	34	-	27
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**Notes:** The interest rate and volume data refer to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in Ireland and other Monetary Union Member States. Rates reported are weighted averages for each instrument category. Data are representative of resident offices of banks and building societies. Credit union data are not included in the interest rates tables.



Table B.2.1 – Continued

Loans				Deposits		
Non-financial corporations				Households	Non-financial corporations	
Loans up to €1 million		Loans over €1 million		With agreed maturity	With agreed maturity	
Floating rate and up to 1 year fixation	Over 1 year fixation	Floating rate and up to 1 year fixation	Over 1 year fixation			
						<b>Rates (per cent per annum)</b>
						<b>2012</b>
4.70	6.05	2.84	4.19	2.47	1.78	January
4.72	6.36	2.72	4.22	2.43	1.89	February
4.33	6.19	3.12	6.80	2.39	1.84	March
4.23	6.47	2.91	4.41	2.42	1.68	April
4.38	6.33	3.14	4.10	2.31	1.59	May
4.51	6.18	2.94	4.58	1.95	1.51	June
4.30	6.26	2.92	3.94	1.69	1.38	July
4.41	5.94	2.72	4.04	1.63	1.32	August
3.79	6.23	2.56	4.44	1.55	1.03	September
3.98	5.43	2.50	3.55	1.35	1.08	October
4.64	6.02	2.65	4.04	1.28	0.83	November
4.04	5.66	2.69	3.19	1.34	0.94	December
						<b>2013</b>
4.03	6.73	2.42	4.17	1.29	0.81	January
						<b>Volumes (€ million)</b>
						<b>2012</b>
253	38	749	22	7,829	4,964	January
264	44	719	26	7,331	4,397	February
316	53	715	118	7,523	4,731	March
270	45	542	41	7,293	5,019	April
246	52	652	32	7,072	4,646	May
237	43	692	111	5,852	3,982	June
246	45	1,106	24	5,879	4,273	July
197	36	627	19	6,032	4,428	August
246	38	515	20	6,979	5,022	September
251	51	542	57	7,632	5,068	October
265	45	497	53	7,265	4,573	November
266	46	838	102	6,038	4,212	December
						<b>2013</b>
240	37	686	48	7,062	4,901	January

**Table B.3:** Official and Selected Interest Rates

Per cent per annum	Eurosystem Official Interest Rates			Interbank Market				Clearing Banks' Prime Rates
	Marginal lending facility	Deposit facility	Main refinancing operations	Eonia (overnight)	1 month Euribor	3 month Euribor	12 month Euribor	Ireland
End-month								
<b>2012</b>								
January	1.75	0.25	1.00	0.38	0.71	1.13	1.75	1.25 - 2.50
February	1.75	0.25	1.00	0.37	0.56	0.98	1.61	1.10 - 2.30
March	1.75	0.25	1.00	0.39	0.42	0.78	1.42	0.96 - 2.10
April	1.75	0.25	1.00	0.34	0.40	0.71	1.31	0.88 - 2.00
May	1.75	0.25	1.00	0.33	0.39	0.67	1.23	0.88 - 2.00
June	1.75	0.25	1.00	0.38	0.37	0.65	1.21	0.88 - 2.00
July	1.50	0.00	0.75	0.11	0.15	0.39	0.95	0.63 - 1.70
August	1.50	0.00	0.75	0.11	0.12	0.28	0.81	0.63 - 1.60
September	1.50	0.00	0.75	0.11	0.12	0.22	0.68	0.62 - 1.50
October	1.50	0.00	0.75	0.08	0.11	0.20	0.62	0.61 - 1.50
November	1.50	0.00	0.75	0.08	0.11	0.19	0.57	0.61 - 1.50
December	1.50	0.00	0.75	0.13	0.11	0.19	0.54	0.61 - 1.50
<b>2013</b>								
January	1.50	0.00	0.75	0.08	0.12	0.23	0.62	0.61 - 1.50

**Note:** Euribor is the rate at which euro interbank term deposits are offered by one prime bank to another, within the euro area. Daily data from 30 December 1998 are available from [www.euribor.org](http://www.euribor.org).

# Section C

## Other Financial Data

Table C.1: Investment Funds – Aggregate Balance Sheet

		Total Assets							
		Deposits and loan claims			Securities other than shares				
		Domestic Total	OMUMs' Total	ROW Total	Domestic Total	OMUMs' Total	ROW Total		
<b>Outstanding amounts – € million</b>									
<b>2011</b>									
June	670,762	4,220	2,075	21,275	5,022	40,433	192,748		
September	661,748	3,661	1,803	23,513	4,538	40,778	210,498		
December	818,648	4,046	4,285	52,827	9,683	53,101	292,980		
<b>2012</b>									
March	885,550	5,381	6,078	53,153	12,628	57,207	315,302		
June	922,941	5,060	2,641	63,523	14,260	67,308	323,216		
September	985,295	5,195	2,782	83,369	17,586	70,519	328,749		
December	1,018,752	3,766	2,854	73,843	14,841	75,833	350,361		
<b>Transactions – € million</b>									
<b>2011</b>									
June	25,363	-439	42	646	-215	955	13,171		
September	3,255	-1,844	-318	3,377	270	-31	4,950		
December	-9,559	295	-291	586	1,991	2,019	-4,040		
<b>2012</b>									
March	32,916	1,952	1,796	-537	2,952	3,965	17,861		
June	5,064	-307	-3,443	6,830	1,795	9,615	-9,419		
September	38,205	258	211	23,689	3,022	-2,985	1,596		
December	23,098	-1,241	147	-7,699	-3,670	6,101	19,013		
		Total Liabilities							
		Investment fund shares/units							
		Domestic MFIs	Domestic Non-MFI's	Domestic Total	OMUMs' MFI	OMUMs' Non-MFI's	OMUMs' Total	ROW Total	Total
<b>Outstanding amounts – € million</b>									
<b>2011</b>									
June	670,762	18,222	27,242	45,464	78,845	117,875	196,720	381,223	623,407
September	661,748	16,605	24,824	41,429	73,178	109,402	182,580	381,949	605,958
December	818,648	15,922	27,298	43,220	78,293	134,234	212,527	512,919	768,667
<b>2012</b>									
March	885,550	15,948	31,503	47,451	72,642	143,490	216,133	555,864	819,448
June	922,941	16,968	33,516	50,484	76,298	150,713	227,011	577,356	854,851
September	985,295	18,390	36,326	54,716	72,206	142,630	214,836	623,134	892,686
December	1,018,752	18,223	35,996	54,219	75,665	149,462	225,127	652,799	932,145
<b>Transactions – € million</b>									
<b>2011</b>									
June	25,363	8,746	-8,850	-104	37,658	-39,178	-1,520	21,737	20,133
September	3,255	-1,693	-2,531	-4,224	-3,539	-5,291	-8,831	10,942	-2,113
December	-9,559	-2,433	-2,059	-4,493	-10,988	-7,460	-18,447	20,591	-2,349
<b>2012</b>									
March	32,916	-751	2,668	1,917	-8,326	3,971	-4,356	18,548	16,110
June	5,064	-968	2,648	1,680	-5,580	9,749	4,169	2,926	8,775
September	38,205	470	929	1,400	-5,945	-11,744	-17,689	29,778	13,488
December	23,098	-424	-838	-1,262	2,536	5,010	7,546	21,674	27,958

**Note:** The data contains the following reclassifications: €25,409 million from Non-Financial assets to Other Assets in Q4 2010, former Money Market Funds were reclassified as Investment Funds in November 2011 resulting in additional funds €114,002 million by end-Q4 2011. €15,689 million moved, within asset holdings, from Securities other than shares to Deposits and Loans in Q4 2011 and an additional €4,684 million in Q1 2012, driven by improvements in the recording of repurchase agreements (repos). In Q1 2012, improvements in the recording of reverse repos saw the overall balance sheet increase by €4,140 million, via Securities other than shares on the asset side and Deposits and loans on the liability side. In net terms, Securities other than shares decreased by an additional €689 million in Q1 2012 (the net effect of repo and reverse repo reclassifications in Q1 2012).

Table C.1 – continued

Shares and other equity			Investment fund shares/units (incl. MMF shares)			Non-financial assets			Other assets
Domestic Total	OMUMs' Total	ROW Total	Domestic Total	OMUMs' Total	ROW Total	Domestic Total	OMUMs' Total	ROW Total	Total
12,243	45,187	230,348	33,417	8,115	25,919	11	0	63	49,684
14,170	33,909	204,114	36,313	8,609	28,655	11	0	65	51,111
15,331	33,917	220,138	39,206	9,083	28,047	11	0	64	55,927
16,504	39,424	240,047	42,469	9,241	28,407	10	0	58	59,640
18,830	36,624	244,721	40,221	11,066	33,911	10	0	58	61,491
16,837	39,815	257,096	46,665	11,185	30,669	10	0	65	74,751
17,525	44,017	269,341	47,132	11,243	32,121	781	0	67	75,026
-2,144	264	8,677	1,985	1,050	889	0	0	-71	551
794	-6,230	-5,891	3,319	1,188	2,356	0	0	-14	1,330
575	-1,137	-5,656	278	-166	-2,212	0	0	-35	-1,765
684	1,004	2,364	-387	-589	-622	0	0	-5	2,480
300	-863	1,966	-4,098	1,743	4,825	0	0	1	-3,880
-2,427	-455	563	4,422	-535	-3,798	0	0	8	14,636
551	1,474	8,803	-333	247	1,836	0	0	-45	-2,855
Loans and deposits received									
Total		Other liabilities Total							
5,419	41,936								
5,626	50,165								
6,094	43,887								
12,292	53,810								
8,383	59,707								
19,787	72,821								
22,432	64,174								
566	4,684								
-141	5,509								
428	-7,637								
6,278	10,529								
-4,423	712								
11,584	13,133								
3,042	-7,902								

**Table C.1.1: Resident Credit Institutions International Business: Analysis by Currency and Sector<sup>a</sup>**

€ million	28 September 12	31 December 12
<b>Assets</b>		
<b>1. Analysis by currency</b>		
<i>Irish residents in non-euro</i>	29,701	30,722
US Dollar	14,809	16,203
Sterling	12,999	12,144
Other	1,893	2,375
<i>Non-residents in non-euro</i>	213,796	226,821
US Dollar	88,836	100,793
Sterling	98,749	98,205
Other	26,211	27,823
<i>Non-residents in euro</i>	177,056	206,134
<b>2. Analysis by sector</b>		
<i>Irish residents in non-euro</i>		
Monetary financial institutions	4,279	7,085
Non-monetary financial institutions	25,422	23,637
<i>Non-residents in non-euro</i>		
Monetary financial institutions	110,374	119,594
Non-monetary financial institutions	103,422	107,227
<i>Non-residents in euro</i>		
Monetary financial institutions	108,551	125,229
Non-monetary financial institutions	71,157	80,905
<b>3. Total international business</b>	<b>420,554</b>	<b>463,677</b>

<sup>a</sup> Data for December and September 2012 are not directly comparable due to a change in the compilation process

Table C.1.1 – continued

€ million	28 September 12	31 December 12
<b>Liabilities</b>		
<b>1. Analysis by currency</b>		
<i>Irish residents in non-euro</i>	23,741	50,298
US Dollar	15,042	33,172
Sterling	6,175	9,154
Other	2,524	7,972
<i>Non-residents in non-euro</i>	155,746	173,747
US Dollar	66,423	85,943
Sterling	65,157	67,688
Other	24,166	20,117
<i>Non-residents in euro</i>	166,688	193,930
<b>2. Analysis by sector</b>		
<i>Irish residents in non-euro</i>		
Monetary financial institutions	8,684	32,939
Non-monetary financial institutions	15,057	17,358
<i>Non-residents in non-euro</i>		
Monetary financial institutions	95,624	115,262
Non-monetary financial institutions	60,122	58,486
<i>Non-residents in euro</i>		
Monetary financial institutions	124,391	116,833
Non-monetary financial institutions	42,297	77,098
<b>3. Total international business</b>	<b>346,174</b>	<b>417,975</b>

**Table C.1.2: Resident Credit Institutions International Business - Analysis by Geography<sup>a</sup>**

	Liabilities			Assets			Net external liabilities <sup>b</sup>
	Euro	Non-euro	Total	Euro	Non-euro	Total	
€ million	December 12						
<b>1. EU Countries</b>	<b>150,099</b>	<b>175,859</b>	<b>325,958</b>	<b>189,697</b>	<b>187,802</b>	<b>377,499</b>	<b>- 71,118</b>
<b>MU Countries</b>	<b>98,432</b>	<b>90,783</b>	<b>189,215</b>	<b>134,185</b>	<b>53,206</b>	<b>187,392</b>	<b>- 17,752</b>
Austria	114	43	157	1,629	266	1,895	- 1,738
Belgium	18,362	3,927	22,288	4,016	635	4,651	17,637
Finland	41	108	149	815	252	1,067	- 918
France	25,671	9,903	35,574	18,225	6,167	24,392	11,182
Germany	34,816	7,505	42,322	24,736	5,950	30,686	11,635
Greece	36	18	54	87	72	159	- 104
Ireland	-	50,298	50,298	-	30,722	30,722	-
Italy	7,059	3,519	10,578	45,728	4,412	50,141	- 39,563
Luxembourg	1,141	1,627	2,768	3,296	1,023	4,319	- 1,551
Netherlands	9,510	13,560	23,069	12,076	1,923	13,999	9,070
Portugal	31	22	53	1,628	2	1,630	- 1,577
Spain	1,588	174	1,761	20,646	1,264	21,911	- 20,149
Other MU	64	80	144	1,303	517	1,820	- 1,676
<b>Other EU</b>	<b>51,667</b>	<b>85,076</b>	<b>136,742</b>	<b>55,512</b>	<b>134,596</b>	<b>190,108</b>	<b>- 53,365</b>
Denmark	5,641	-751	4,890	5,441	662	6,103	- 1,214
Sweden	17	166	183	655	1,102	1,757	- 1,574
United Kingdom	45,835	85,502	131,337	47,229	129,934	177,162	- 45,826
Other EU	174	159	333	2,186	2,899	5,085	- 4,752
<b>2. Other Europe</b>	<b>1,281</b>	<b>4,565</b>	<b>5,846</b>	<b>2,258</b>	<b>9,860</b>	<b>12,118</b>	<b>- 6,272</b>
Switzerland	1,170	3,972	5,142	717	4,476	5,193	- 51
Other Europe	111	593	704	1,541	5,384	6,925	- 6,221
<b>3. Other Industrial Countries</b>	<b>38,742</b>	<b>26,952</b>	<b>65,694</b>	<b>10,191</b>	<b>43,468</b>	<b>53,659</b>	<b>12,035</b>
Australia, New Zealand, South Africa	191	107	298	455	2,861	3,316	- 3,018
Canada	451	3,631	4,082	1,772	3,638	5,410	- 1,328
Japan	60	59	119	113	3,283	3,396	- 3,277
United States	37,955	23,038	60,994	7,809	33,597	41,406	19,588
<b>4. Offshore Centres</b>	<b>2,576</b>	<b>14,166</b>	<b>16,742</b>	<b>1,698</b>	<b>8,902</b>	<b>10,600</b>	<b>6,142</b>
<b>5. Other</b>	<b>1,232</b>	<b>2,504</b>	<b>3,735</b>	<b>2,291</b>	<b>7,511</b>	<b>9,801</b>	<b>- 6,066</b>
<b>Grand Total</b>	<b>193,930</b>	<b>224,045</b>	<b>417,975</b>	<b>206,134</b>	<b>257,543</b>	<b>463,677</b>	<b>- 65,278</b>

<sup>a</sup> Data for December and September 2012 are not directly comparable due to a change in the compilation process.

<sup>b</sup> Net external liabilities are based on the selected assets and liabilities which are included in this table. A plus sign denotes net external liabilities; a minus sign net external assets.

<sup>c</sup> Positions vis-a-vis Slovenia, Cyprus, Malta, Slovakia and Estonia are not statistically significant.



Table C.1.2 – continued

Liabilities			Assets			Net external liabilities <sup>b</sup>
Euro	Non-euro	Total	Euro	Non-euro	Total	
Friday 28 September 12						
<b>161,580</b>	<b>145,396</b>	<b>306,976</b>	<b>165,938</b>	<b>181,463</b>	<b>347,401</b>	<b>- 34,465</b>
<b>107,493</b>	<b>61,804</b>	<b>169,297</b>	<b>127,975</b>	<b>51,556</b>	<b>179,531</b>	<b>- 4,274</b>
1,228	115	1,342	1,944	404	2,348	- 1,006
22,597	4,884	27,481	3,656	1,113	4,770	22,711
21	24	45	855	174	1,029	- 984
30,797	11,022	41,819	20,049	6,805	26,854	14,965
34,372	4,847	39,219	18,063	2,956	21,019	18,200
16	19	35	164	76	240	- 205
-	23,741	23,741	-	29,701	29,701	-
9,149	2,729	11,878	43,914	5,177	49,092	- 37,214
823	1,560	2,384	3,471	1,125	4,596	- 2,213
7,139	12,738	19,878	11,844	2,207	14,051	5,827
26	5	31	1,572	6	1,579	- 1,548
1,165	50	1,214	20,955	1,458	22,413	- 21,199
158	72	230	1,487	353	1,840	- 1,610
<b>54,087</b>	<b>83,592</b>	<b>137,679</b>	<b>37,962</b>	<b>129,907</b>	<b>167,870</b>	<b>- 30,191</b>
4,124	253	4,377	4,747	1,427	6,174	- 1,797
22	281	303	498	1,116	1,614	- 1,311
49,905	82,978	132,884	30,091	125,239	155,330	- 22,446
36	80	115	2,626	2,126	4,752	- 4,637
<b>1,593</b>	<b>4,068</b>	<b>5,662</b>	<b>1,578</b>	<b>8,806</b>	<b>10,384</b>	<b>- 4,722</b>
1,436	3,383	4,819	491	4,580	5,071	- 252
157	686	843	1,087	4,226	5,312	- 4,470
<b>1,345</b>	<b>22,209</b>	<b>23,554</b>	<b>7,680</b>	<b>41,260</b>	<b>48,940</b>	<b>- 25,386</b>
101	42	143	417	2,695	3,112	- 2,969
62	1,530	1,592	1,179	2,758	3,938	- 2,346
99	46	145	115	3,437	3,552	- 3,407
1,083	20,591	21,674	5,969	32,369	38,338	- 16,664
<b>1,603</b>	<b>6,414</b>	<b>8,016</b>	<b>353</b>	<b>5,329</b>	<b>5,681</b>	<b>2,335</b>
<b>567</b>	<b>1,400</b>	<b>1,967</b>	<b>1,508</b>	<b>6,640</b>	<b>8,148</b>	<b>- 6,181</b>
<b>166,688</b>	<b>179,487</b>	<b>346,174</b>	<b>177,056</b>	<b>243,498</b>	<b>420,554</b>	<b>- 68,419</b>

Table C.2.1: Securities Issues Statistics: Debt Securities

€ million	Debt securities: All currencies					
	Short-term securities					
	Total	MFIs	OFIs	IC&PF	NFCs	Govt
<b>Outstanding amounts</b>						
<b>2011</b>						
January	100,726	35,235	60,782	0	0	4,709
February	87,498	35,254	48,800	0	0	3,444
March	84,591	34,574	48,125	0	0	1,893
April	86,280	37,242	48,310	0	0	728
May	85,582	36,377	48,489	0	0	716
June	80,722	32,255	48,014	0	0	452
July	78,465	30,837	47,153	0	0	475
August	78,732	28,950	48,473	0	0	1,309
September	77,280	28,777	48,005	0	0	497
October	78,507	28,048	48,597	0	0	1,862
November	75,771	27,342	47,935	0	0	494
December	80,210	26,940	52,920	0	0	349
<b>2012</b>						
January	81,027	28,632	51,760	0	0	635
February	73,488	20,217	52,531	0	0	740
March	74,812	20,720	53,241	0	0	852
April	73,725	20,734	52,039	0	0	952
May	72,121	18,994	52,089	0	0	1,038
June	68,339	18,653	48,569	0	0	1,117
July	65,234	16,118	47,826	0	0	1,289
August	65,427	15,516	48,091	0	0	1,820
September	62,592	12,276	48,061	0	0	2,256
October	67,582	17,975	47,175	0	0	2,431
November	63,592	14,897	45,903	0	0	2,793
December	61,027	14,650	44,067	0	0	2,310
<b>2013</b>						
January	62,869	16,588	43,668	0	0	2,613
<b>Transactions</b>						
<b>2011</b>						
January	17,191	16,854	2,497	0	0	-2,160
February	-13,233	19	-11,987	0	0	-1,265
March	-2,907	-681	-675	0	0	-1,551
April	1,689	2,668	186	0	0	-1,164
May	-698	-865	178	0	0	-12
June	-4,860	-4,122	-474	0	0	-264
July	-2,257	-1,418	-861	0	0	23
August	267	-1,887	1,320	0	0	834
September	-1,453	-173	-468	0	0	-812
October	1,227	-729	592	0	0	1,365
November	-2,736	-706	-662	0	0	-1,368
December	4,439	-402	4,985	0	0	-145
<b>2012</b>						
January	817	1,692	-1,160	0	0	286
February	-7,539	-8,415	772	0	0	105
March	1,324	503	709	0	0	112
April	-1,087	15	-1,202	0	0	101
May	-1,604	-1,740	50	0	0	86
June	-3,782	-341	-3,519	0	0	79
July	-3,105	-2,535	-743	0	0	172
August	193	-602	265	0	0	531
September	-2,835	-3,240	-31	0	0	436
October	4,990	5,700	-885	0	0	175
November	-3,990	-3,078	-1,273	0	0	361
December	-2,565	-247	-1,836	0	0	-483
<b>2013</b>						
January	1,842	1,938	-399	0	0	303

Table C.2.1 – continued

Debt securities: All currencies

Long-term securities

Total	MFls	OFls	IC&PF	NFCs	Govt
982,085	99,327	787,741	1,109	3,734	90,174
975,078	99,508	780,791	1,101	3,596	90,081
959,151	94,511	770,128	1,070	3,549	89,892
951,834	93,242	765,026	1,027	2,867	89,673
952,433	92,760	766,046	1,056	2,906	89,666
948,404	91,083	763,843	1,048	2,719	89,711
952,553	90,892	768,009	1,063	2,816	89,773
940,688	90,407	756,549	1,056	2,806	89,870
943,170	89,300	760,078	1,118	2,990	89,684
936,611	88,370	754,435	1,094	2,939	89,773
940,553	88,896	762,151	1,134	2,993	85,380
947,224	86,035	771,566	1,169	3,044	85,410
937,288	83,110	764,567	1,160	3,032	85,419
930,742	79,955	761,207	1,143	3,008	85,429
938,226	76,399	777,910	1,160	3,012	79,745
938,039	74,291	776,586	1,152	2,774	83,237
958,454	74,484	796,651	1,226	2,859	83,234
950,325	73,453	789,620	1,197	2,825	83,230
964,928	73,468	804,179	1,236	2,832	83,214
952,275	72,078	788,796	1,206	2,798	87,397
947,718	71,581	783,747	1,178	2,606	88,606
946,290	70,794	783,969	1,169	2,002	88,356
946,687	69,695	785,034	1,169	2,400	88,389
940,988	69,779	779,227	1,152	2,890	87,941
922,140	68,400	759,384	1,118	2,868	90,371
1,942	-1,792	3,872	-185	68	-21
-7,002	181	-6,945	-8	-137	-92
-15,907	-4,997	-10,643	-31	-47	-189
-7,288	-1,269	-5,074	-43	-683	-219
580	-482	1,001	29	40	-7
-2,645	-1,677	-819	-7	-188	45
2,760	-192	2,778	15	97	62
-11,861	-484	-11,455	-7	-10	96
2,441	-1,108	3,488	62	184	-185
-6,543	-930	-5,626	-24	-51	89
3,915	526	7,688	41	53	-4,393
6,648	-2,861	9,392	35	51	30
-9,936	-2,924	-6,999	-9	-12	9
-6,546	-3,155	-3,360	-17	-25	11
7,484	-3,557	16,703	17	5	-5,685
-187	-2,108	-1,324	-9	-239	3,492
20,415	193	20,065	74	85	-3
-8,129	-1,031	-7,031	-29	-34	-4
14,603	15	14,559	39	7	-16
-12,653	-1,390	-15,383	-29	-34	4,183
-4,556	-497	-5,049	-28	-192	1,209
-1,428	-787	222	-9	-604	-250
397	-1,099	1,065	0	398	33
-5,699	84	-5,807	-18	490	-448
-18,848	-1,378	-19,843	-34	-23	2,430

Table C.2.1 – continued

€ Million

## Debt securities: Euro denominated

## Short-term securities

	Total	MFIs	OFIs	IC&PF	NFCs	Govt
<b>Outstanding amounts</b>						
<b>2011</b>						
January	87,986	27,434	56,289	0	0	4,262
February	75,807	28,332	44,366	0	0	3,109
March	72,494	27,445	43,485	0	0	1,563
April	74,443	30,315	43,623	0	0	505
May	74,483	30,263	43,926	0	0	295
June	71,890	28,183	43,412	0	0	295
July	70,393	27,384	42,869	0	0	140
August	70,800	25,738	44,072	0	0	990
September	69,214	25,545	43,429	0	0	240
October	70,803	25,374	43,934	0	0	1,495
November	68,584	24,697	43,701	0	0	185
December	70,672	24,258	46,115	0	0	300
<b>2012</b>						
January	72,579	26,029	45,968	0	0	582
February	63,040	17,576	44,839	0	0	625
March	64,338	17,871	45,737	0	0	729
April	63,514	17,866	44,845	0	0	804
May	61,469	16,061	44,681	0	0	727
June	57,254	15,721	40,832	0	0	701
July	54,168	12,842	40,115	0	0	1,211
August	53,883	11,886	40,258	0	0	1,739
September	51,538	8,797	40,552	0	0	2,188
October	56,842	14,404	40,076	0	0	2,363
November	53,168	11,289	39,181	0	0	2,699
December	50,697	11,092	37,435	0	0	2,170
<b>2013</b>						
January	52,537	13,183	37,094	0	0	2,260
<b>Transactions</b>						
<b>2011</b>						
January	17,019	16,236	2,683	0	0	-1,900
February	-12,179	898	-11,923	0	0	-1,154
March	-3,313	-886	-881	0	0	-1,546
April	1,949	2,869	138	0	0	-1,058
May	40	-52	302	0	0	-210
June	-2,593	-2,079	-514	0	0	0
July	-1,497	-799	-543	0	0	-155
August	407	-1,647	1,204	0	0	850
September	-1,586	-193	-643	0	0	-750
October	1,588	-171	504	0	0	1,255
November	-2,219	-676	-232	0	0	-1,310
December	2,089	-440	2,413	0	0	115
<b>2012</b>						
January	1,907	1,771	-146	0	0	282
February	-9,540	-8,453	-1,129	0	0	43
March	1,298	295	899	0	0	104
April	-823	-6	-892	0	0	75
May	-2,045	-1,805	-163	0	0	-77
June	-4,216	-340	-3,850	0	0	-26
July	-3,086	-2,879	-717	0	0	510
August	-285	-957	144	0	0	528
September	-2,345	-3,088	294	0	0	450
October	5,304	5,606	-477	0	0	175
November	-3,674	-3,115	-895	0	0	336
December	-2,471	-196	-1,746	0	0	-529
<b>2013</b>						
January	1,839	2,090	-340	0	0	90

Table C.2.1 – continued

Debt securities: Euro denominated

Long-term securities

Total	MFI	OFI	IC&PF	NFCs	Govt
714,445	75,906	546,369	0	2,086	90,085
709,418	76,973	540,492	0	1,960	89,993
701,465	73,083	536,615	0	1,960	89,807
706,744	72,596	543,203	0	1,356	89,590
703,411	72,055	540,420	0	1,356	89,581
701,756	71,341	539,533	0	1,256	89,626
698,103	71,065	536,098	0	1,256	89,684
690,471	70,889	528,547	0	1,256	89,779
682,904	69,173	522,785	0	1,356	89,589
680,892	69,299	520,556	0	1,356	89,681
676,333	69,850	519,843	0	1,356	85,284
673,874	66,617	520,590	0	1,356	85,310
667,499	64,113	516,712	0	1,356	85,318
665,228	62,700	515,835	0	1,356	85,337
654,618	59,838	513,773	0	1,356	79,651
653,281	57,471	511,311	0	1,356	83,142
657,384	57,732	515,165	0	1,356	83,131
654,956	57,525	512,943	0	1,356	83,131
652,444	57,339	510,681	0	1,314	83,110
648,456	56,312	503,534	0	1,314	87,295
648,571	56,248	502,502	0	1,314	88,506
647,502	55,564	502,365	0	1,314	88,259
643,001	54,907	498,084	0	1,714	88,295
638,882	55,585	493,230	0	2,214	87,853
629,343	56,067	480,771	0	2,214	90,290
-9,046	-642	-8,326	-160	100	-18
-5,027	1,068	-5,877	0	-126	-92
-7,953	-3,890	-3,878	0	0	-186
5,280	-488	6,588	0	-603	-217
-3,333	-541	-2,783	0	0	-9
-1,656	-714	-887	0	-100	45
-3,653	-276	-3,434	0	0	58
-7,632	-176	-7,551	0	0	95
-7,567	-1,715	-5,762	0	100	-190
-2,012	126	-2,230	0	0	92
-4,559	550	-712	0	0	-4,397
-2,459	-3,232	747	0	0	26
-6,374	-2,505	-3,878	0	0	9
-2,271	-1,413	-877	0	0	19
-10,610	-2,862	-2,062	0	0	-5,686
-1,337	-2,367	-2,462	0	0	3,492
4,103	260	3,854	0	0	-11
-2,429	-207	-2,222	0	0	0
-2,511	-186	-2,262	0	-42	-22
-3,989	-1,026	-7,148	0	0	4,186
115	-64	-1,032	0	0	1,211
-1,069	-684	-137	0	0	-247
-4,501	-656	-4,281	0	400	36
-4,120	677	-4,855	0	500	-442
-9,539	482	-12,458	0	0	2,437

Table C.2.2: Securities Issues Statistics: Equities

€ million	Equity Securities					
	Quoted securities					
	Total	MFIs	OFIs	IC&PF	NFCs	Govt
<b>Outstanding amounts</b>						
<b>2011</b>						
January	157,241	9,118	10,832	220	137,072	..
February	159,813	9,753	11,047	253	138,760	..
March	158,153	8,567	11,088	241	138,257	..
April	163,489	11,370	10,704	241	141,174	..
May	163,210	10,020	10,410	243	142,538	..
June	160,292	9,410	10,636	238	140,008	..
July	155,654	10,895	10,420	229	134,110	..
August	150,602	14,860	9,983	223	125,536	..
September	147,772	14,512	10,497	216	122,546	..
October	160,882	15,328	11,303	215	134,036	..
November	162,047	14,997	11,561	218	135,271	..
December	163,102	14,667	11,889	216	136,330	..
<b>2012</b>						
January	175,567	15,631	12,174	233	147,529	..
February	182,217	16,269	12,087	285	153,575	..
March	186,563	15,637	11,777	287	158,863	..
April	189,824	15,577	12,159	290	161,799	..
May	185,040	14,884	12,336	270	157,551	..
June	184,319	15,251	12,258	268	156,541	..
July	194,543	15,282	12,597	263	166,400	..
August	193,705	14,890	12,828	298	165,689	..
September	198,564	15,161	13,008	329	170,066	..
October	193,583	15,011	12,766	321	165,485	..
November	196,699	15,613	12,572	353	168,161	..
December	206,651	15,673	12,561	336	178,080	..
<b>2013</b>						
January	216,179	16,546	13,881	363	185,388	..
<b>Transactions</b>						
<b>2011</b>						
January	108	190	0	0	-81	..
February	-97	0	0	0	-97	..
March	-159	0	-225	0	66	..
April	2,508	2,394	1	0	114	..
May	-535	0	0	0	-535	..
June	140	0	5	0	135	..
July	2,092	2,024	0	0	68	..
August	5,501	5,534	-158	0	125	..
September	2,211	0	2,284	0	-73	..
October	1,561	0	0	0	1,561	..
November	-371	0	343	0	-714	..
December	-108	0	58	0	-166	..
<b>2012</b>						
January	-63	0	-77	0	14	..
February	-280	0	-73	0	-207	..
March	16	0	-82	0	98	..
April	-17	0	0	0	-17	..
May	648	0	216	0	432	..
June	358	279	0	0	79	..
July	913	0	179	0	734	..
August	-905	0	-110	0	-795	..
September	979	0	0	0	979	..
October	-873	0	233	0	-1,106	..
November	192	0	-97	0	289	..
December	8,690	0	156	0	8,534	..
<b>2013</b>						
January	453	0	-17	0	470	..



**Table C.3: Assets and Liabilities of Irish Financial Vehicle Corporations****Outstanding Amounts - € billions**

	2010Q4	2011Q1	2011Q2	2011Q3	2011Q4	2012Q1	2012Q2	2012Q3	2012Q4
<b>Assets</b>									
<b>Deposits and loan claims</b>	<b>87.3</b>	<b>80.0</b>	<b>83.3</b>	<b>77.9</b>	<b>76.5</b>	<b>74.2</b>	<b>72.7</b>	<b>72.9</b>	<b>70.8</b>
<i>To euro area FVCs</i>	35.0	35.6	36.2	38.4	38.4	38.6	35.9	36.1	33.6
<b>Securitised loans</b>	<b>266.2</b>	<b>259.2</b>	<b>254.3</b>	<b>244.2</b>	<b>231.4</b>	<b>227.5</b>	<b>226.7</b>	<b>224.3</b>	<b>215.6</b>
Originated by euro area MFIs	194.6	189.6	187.3	158.4	145.7	144.4	143.6	143.3	134.6
By borrowing sector									
<i>Domestic households</i>	74.8	69.6	69.4	59.6	59.2	60.2	59.6	59.0	53.0
<i>OMUM households</i>	11.7	10.5	9.9	8.5	3.7	3.2	2.7	2.3	1.8
<i>Domestic non-financial corporations</i>	44.5	54.9	41.9	54.0	56.5	54.4	54.8	55.1	54.0
<i>OMUM non-financial corporations</i>	31.3	28.4	34.1	13.1	6.7	6.8	6.3	7.2	6.8
<i>Euro area residents (*)</i>	1.0	0.9	4.7	4.3	0.5	0.5	0.4	0.4	1.0
<i>Non euro area residents</i>	31.3	25.4	27.3	18.9	19.1	19.3	19.9	19.3	18.0
Originated by euro area residents (*)	15.8	12.1	12.1	14.7	14.6	14.5	14.4	14.3	13.9
Originated by euro area non-financial corporations	17.3	16.9	16.5	17.8	18.5	18.1	17.7	18.0	17.7
Originated by non-euro area residents	38.4	40.5	38.5	53.3	52.7	50.5	50.9	48.7	49.5
<b>Securities other than shares</b>	<b>153.0</b>	<b>149.5</b>	<b>138.5</b>	<b>135.4</b>	<b>132.6</b>	<b>121.2</b>	<b>120.4</b>	<b>110.9</b>	<b>107.9</b>
<i>Issued by euro area FVCs</i>	20.6	19.0	18.5	16.9	15.7	15.1	14.7	13.1	13.3
<b>Other securitised assets</b>	<b>12.0</b>	<b>11.7</b>	<b>12.0</b>	<b>11.5</b>	<b>11.3</b>	<b>10.5</b>	<b>9.7</b>	<b>9.3</b>	<b>8.8</b>
<i>Originated by euro area general government</i>	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.0
<i>Originated by euro area non-financial corporations</i>	3.3	3.1	3.1	3.0	2.7	2.3	2.2	1.9	1.8
<b>Shares and other equity</b>	<b>34.9</b>	<b>30.1</b>	<b>29.0</b>	<b>27.9</b>	<b>26.1</b>	<b>25.2</b>	<b>19.4</b>	<b>17.5</b>	<b>16.9</b>
<i>Issued by euro area FVCs</i>	31.4	27.1	26.2	24.9	23.3	22.7	17.0	15.0	14.6
<b>Other assets</b>	<b>22.7</b>	<b>13.3</b>	<b>16.5</b>	<b>19.9</b>	<b>21.6</b>	<b>22.4</b>	<b>20.5</b>	<b>22.3</b>	<b>21.9</b>
<b>Liabilities</b>									
<b>Loans and deposits received</b>	<b>65.4</b>	<b>63.2</b>	<b>63.0</b>	<b>62.6</b>	<b>64.1</b>	<b>63.3</b>	<b>65.4</b>	<b>64.2</b>	<b>61.3</b>
<i>From euro area FVCs</i>	39.0	39.4	38.8	39.0	39.0	39.0	37.0	37.0	35.0
<b>Debt securities issued</b>	<b>444.2</b>	<b>416.9</b>	<b>408.5</b>	<b>386.8</b>	<b>369.2</b>	<b>350.2</b>	<b>334.0</b>	<b>325.0</b>	<b>312.5</b>
<i>Up to 1 year original maturity</i>	24.5	24.8	25.2	23.6	24.7	19.6	16.6	15.9	16.3
<i>1 to 2 years original maturity</i>	7.0	5.5	5.1	5.4	6.0	5.6	4.4	5.4	2.9
<i>Over 2 years original maturity</i>	412.7	386.6	378.3	357.8	338.6	324.9	313.0	303.7	293.3
<b>Capital and reserves</b>	1.8	0.0	0.1	0.1	0.0	0.0	- 0.4	- 0.2	0.1
<b>Other liabilities</b>	64.7	63.6	62.2	67.2	66.3	67.6	70.5	68.2	68.0
<b>Total</b>	<b>576.1</b>	<b>543.8</b>	<b>533.7</b>	<b>516.6</b>	<b>499.6</b>	<b>481.1</b>	<b>469.4</b>	<b>457.2</b>	<b>441.9</b>

(\*) Euro area residents include general government, other financial intermediaries, insurance corporations and pension funds.



**Table C.3: Assets and liabilities of Irish Financial Vehicle Corporations**

**Transactions - € billions**

	2010Q4	2011Q1	2011Q2	2011Q3	2011Q4	2012Q1	2012Q2	2012Q3	2012Q4
<b>Assets</b>									
<b>Deposits and loan claims</b>	<b>15.4</b>	<b>-6.6</b>	<b>3.4</b>	<b>-5.9</b>	<b>-1.3</b>	<b>-2.0</b>	<b>-1.6</b>	<b>0.6</b>	<b>-1.9</b>
<i>To euro area FVCs</i>	17.5	0.4	0.9	1.9	-	0.1	-2.8	0.2	-2.0
<b>Securitised loans</b>	<b>13.6</b>	<b>-7.1</b>	<b>-3.9</b>	<b>-12.9</b>	<b>-15.0</b>	<b>-3.4</b>	<b>-1.6</b>	<b>-2.3</b>	<b>-7.8</b>
Originated by euro area MFIs	15.4	-6.2	-1.1	-4.8	-13.3	-0.6	-1.3	-0.6	-8.1
By borrowing sector									
<i>Domestic households</i>	3.5	-3.5	-2.8	-1.5	0.3	0.4	-1.1	-0.8	-6.3
<i>OMUM households</i>	1.2	-1.2	-0.6	-1.0	-4.9	-0.5	-0.5	-0.3	-0.5
<i>Domestic non-financial corporations</i>	9.1	-0.4	-1.9	1.5	2.0	-1.5	-	0.2	-0.4
<i>OMUM non-financial corporations</i>	-0.5	-0.6	4.0	-0.5	-6.5	-	0.5	1.0	-0.4
<i>Euro area residents (*)</i>	-0.7	-0.1	3.7	-	-3.9	0.2	-0.1	0.1	0.5
<i>Non euro area residents</i>	2.8	-0.4	-3.5	-3.4	-0.4	0.8	-	-0.7	-0.9
Originated by euro area residents (*)	-0.1	-3.6	-	-0.1	-0.1	-0.2	-	-0.1	-0.4
Originated by euro area non-financial corporations	-1.3	-0.1	-0.4	0.1	0.8	-0.3	-0.4	0.2	-0.1
Originated by non-euro area residents	-0.4	2.9	-2.4	-8.2	-2.3	-2.3	0.1	-1.8	0.7
<b>Securities other than shares</b>	<b>-3.0</b>	<b>-2.8</b>	<b>-10.0</b>	<b>-3.5</b>	<b>-3.2</b>	<b>-11.5</b>	<b>-1.6</b>	<b>-10.3</b>	<b>-3.1</b>
<i>Issued by euro area FVCs</i>	-2.0	-0.7	-0.2	-0.2	-0.9	-0.5	-0.8	-1.3	0.3
<b>Other securitised assets</b>	<b>-1.2</b>	<b>0.1</b>	<b>0.3</b>	<b>-0.6</b>	<b>-0.1</b>	<b>-1.1</b>	<b>-0.9</b>	<b>-0.3</b>	<b>-0.5</b>
<i>Originated by euro area general government</i>	-	-	-	-	-	-	-0.1	-0.1	-0.1
<i>Originated by euro area non-financial corporations</i>	-0.3	-	-	-0.1	-0.3	-0.4	-0.1	-0.3	-0.1
<b>Shares and other equity</b>	<b>-0.1</b>	<b>-4.7</b>	<b>-0.9</b>	<b>-1.2</b>	<b>-1.7</b>	<b>-0.8</b>	<b>-5.9</b>	<b>-2.0</b>	<b>-0.6</b>
<i>Issued by euro area FVCs</i>	-0.4	-4.2	-0.9	-1.3	-1.6	-0.7	-5.7	-2.0	-0.4
<b>Other assets</b>	<b>3.6</b>	<b>-12.2</b>	<b>-2.8</b>	<b>-6.9</b>	<b>-1.2</b>	<b>-2.0</b>	<b>-4.3</b>	<b>0.7</b>	<b>-4.0</b>
<b>Liabilities</b>									
<b>Loans and deposits received</b>	<b>16.6</b>	<b>-1.7</b>	<b>0.2</b>	<b>-0.8</b>	<b>1.4</b>	<b>-0.3</b>	<b>1.9</b>	<b>-1.1</b>	<b>-2.8</b>
<i>From euro area FVCs</i>	17.6	0.2	-0.2	0.2	-0.1	-	-2.1	0.7	-1.9
<b>Debt securities issued</b>	<b>10.5</b>	<b>-26.0</b>	<b>-11.6</b>	<b>-21.8</b>	<b>-17.7</b>	<b>-18.9</b>	<b>-17.4</b>	<b>-9.4</b>	<b>-12.5</b>
<i>Up to 1 year original maturity</i>	0.2	0.1	-3.7	-2.8	1.0	-5.6	-3.0	-0.7	0.5
<i>1 to 2 years original maturity</i>	1.9	-1.5	-0.4	0.4	0.7	-0.6	-1.1	0.7	-2.5
<i>Over 2 years original maturity</i>	8.4	-24.6	-7.5	-19.4	-19.4	-12.7	-13.3	-9.3	-10.5
<b>Capital and reserves</b>	<b>-1.5</b>	<b>-1.6</b>	<b>0.6</b>	<b>-1.1</b>	<b>-0.7</b>	<b>-0.1</b>	<b>-0.1</b>	<b>0.5</b>	<b>0.1</b>
<b>Other liabilities</b>	<b>2.5</b>	<b>-4.1</b>	<b>-3.2</b>	<b>-7.3</b>	<b>-5.6</b>	<b>-1.5</b>	<b>-0.3</b>	<b>-3.7</b>	<b>-2.7</b>
<b>Total</b>	<b>28.2</b>	<b>-33.3</b>	<b>-14.0</b>	<b>-30.9</b>	<b>-22.6</b>	<b>-20.8</b>	<b>-15.9</b>	<b>-13.7</b>	<b>-18.0</b>

(\*) Euro area residents include general government, other financial intermediaries, insurance corporations and pension funds.



# Section D

## Quarterly Financial Accounts



**Table D.1: Financial Balance Sheet By Sector, Q3 2012**

	<b>Total Assets</b>	<b>Total Liabilities</b>	<b>Net Financial Wealth</b>	<b>Total Assets Transactions</b>	<b>Total Liabilities Transactions</b>	<b>Net Financial Borrowing/Lending</b>
<b>€ million</b>						
<b>Non-financial corporations</b>	<b>652,508</b>	<b>831,278</b>	<b>-178,770</b>	<b>7,539</b>	<b>2,538</b>	<b>5,001</b>
<b>Financial corporations</b>	<b>3,620,334</b>	<b>3,654,424</b>	<b>-34,089</b>	<b>6,924</b>	<b>12,204</b>	<b>-5,280</b>
Monetary financial institutions	1,369,146	1,373,085	-3,940	-26,424	-34,857	8,433
Other financial intermediaries and financial auxiliaries	1,952,156	1,977,866	-25,710	31,740	44,053	-12,314
Insurance corporations and pension funds	299,033	303,472	-4,439	1,608	3,008	-1,399
<b>General government</b>	<b>78,409</b>	<b>211,951</b>	<b>-133,542</b>	<b>8,969</b>	<b>10,380</b>	<b>-1,412</b>
<b>Households and non-profit institutions serving households</b>	<b>318,299</b>	<b>186,052</b>	<b>132,247</b>	<b>1,584</b>	<b>-1,370</b>	<b>2,954</b>
<b>Rest of the world</b>	<b>3,295,053</b>	<b>3,079,596</b>	<b>215,457</b>	<b>28,852</b>	<b>30,115</b>	<b>-1,263</b>

**Table D.1.1: Financial Balance Sheet By Sector, Q3 2012**

	<b>Total Assets</b>								
		Gold & SDRs	Currency & Deposits			Securities other than shares			
			Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives	
<b>€ million</b>									
<b>Non-financial corporations</b>	<b>652,508</b>	<b>0</b>	<b>52,532</b>	<b>20,088</b>	<b>32,444</b>	<b>3,177</b>	<b>482</b>	<b>2,347</b>	<b>347</b>
<b>Financial corporations</b>	<b>3,620,334</b>	<b>1,303</b>	<b>575,732</b>	<b>99,920</b>	<b>475,812</b>	<b>1,292,645</b>	<b>338,376</b>	<b>896,210</b>	<b>58,059</b>
Monetary financial institutions	1,369,146	1,303	456,494	74,666	381,828	536,633	218,781	287,113	30,739
Other financial intermediaries and financial auxiliaries	1,952,156	0	92,965	21,839	71,126	671,984	115,383	531,754	24,846
Insurance corporations and pension funds	299,033	0	26,274	3,416	22,858	84,028	4,212	77,342	2,474
<b>General government</b>	<b>78,409</b>	<b>0</b>	<b>30,216</b>	<b>0</b>	<b>30,216</b>	<b>8,747</b>	<b>0</b>	<b>7,487</b>	<b>1,260</b>
<b>Households and non-profit institutions serving households</b>	<b>318,299</b>	<b>0</b>	<b>124,669</b>	<b>54,921</b>	<b>69,749</b>	<b>494</b>	<b>0</b>	<b>194</b>	<b>300</b>
<b>Rest of the world</b>	<b>3,295,053</b>	<b>0</b>	<b>388,826</b>	<b>58,809</b>	<b>330,017</b>	<b>605,368</b>	<b>17,754</b>	<b>533,018</b>	<b>54,595</b>
	<b>Total Liabilities</b>								
	Gold & SDRs	Currency & Deposits			Securities other than shares				
		Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives		
<b>€ million</b>									
<b>Non-financial corporations</b>	<b>831,278</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,144</b>	<b>0</b>	<b>10,472</b>	<b>1,672</b>
<b>Financial corporations</b>	<b>3,654,424</b>	<b>0</b>	<b>789,739</b>	<b>131,242</b>	<b>658,497</b>	<b>651,048</b>	<b>42,889</b>	<b>545,816</b>	<b>62,344</b>
Monetary financial institutions	1,373,085	0	789,739	131,242	658,497	124,108	10,836	75,385	37,887
Other financial intermediaries and financial auxiliaries	1,977,866	0	0	0	0	524,516	32,053	468,007	24,457
Insurance corporations and pension funds	303,472	0	0	0	0	2,424	0	2,424	0
<b>General government</b>	<b>211,951</b>	<b>0</b>	<b>16,573</b>	<b>667</b>	<b>15,907</b>	<b>99,457</b>	<b>5,100</b>	<b>93,131</b>	<b>1,226</b>
<b>Households and non-profit institutions serving households</b>	<b>186,052</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Rest of the world</b>	<b>3,079,596</b>	<b>0</b>	<b>365,664</b>	<b>101,830</b>	<b>263,834</b>	<b>1,147,781</b>	<b>308,623</b>	<b>789,837</b>	<b>49,321</b>

Table D.1.1 – continued

**Total Assets**

Loans			Shares and other equity				Insurance technical reserves				Other accounts receivable/payable		
	Short-term loans	Long-term loans		Quoted shares	Unquoted shares and other equity	Mutual fund shares		Net equity of households in life insurance reserves	Net equity of households in pension fund reserves	Prepayment of insurance premiums and reserves for outstanding claims			
	186,507	82,844	103,663	280,029	2,003	275,129	2,897	3,598	0	0	3,598	126,664	<b>Non-financial corporations</b>
	997,250	225,428	771,822	643,599	n.a.	n.a.	159,340	31,988	0	0	31,988	77,816	<b>Financial corporations</b>
	343,124	62,652	280,471	21,395	9,006	9,011	3,378	0	0	0	0	10,197	Monetary financial institutions
	649,236	160,911	488,324	487,601	363,346	35,935	88,319	0	0	0	0	50,370	Other financial intermediaries and financial auxiliaries
	4,891	1,865	3,026	134,603	66,961	0	67,643	31,988	0	0	31,988	17,249	Insurance corporations and pension funds
	8,811	353	8,458	23,251	7,019	14,493	1,738	0	0	0	0	7,385	<b>General government</b>
	0	0	0	46,838	9,699	37,139	0	138,576	68,971	66,906	2,698	7,722	<b>Households and non-profit institutions serving households</b>
	520,984	249,397	271,587	1,541,972	117,766	292,252	1,131,954	112,314	87,466	0	24,848	125,590	<b>Rest of the world</b>

€ million

**Total Liabilities**

Loans			Shares and other equity				Insurance technical reserves				Other accounts receivable/payable		
	Short-term loans	Long-term loans		Quoted shares	Unquoted shares and other equity	Mutual fund shares		Net equity of households in life insurance reserves	Net equity of households in pension fund reserves	Prepayment of insurance premiums and reserves for outstanding claims			
	316,939	91,293	225,646	360,129	170,066	190,063	0	0	0	0	0	142,066	<b>Non-financial corporations</b>
	410,131	266,369	143,762	1,448,741	21,498	226,030	1,201,213	257,233	156,438	66,906	33,889	97,532	<b>Financial corporations</b>
	0	0	0	441,625	8,161	126,061	307,403	0	0	0	0	17,614	Monetary financial institutions
	404,071	264,804	139,267	982,689	13,008	75,871	893,810	0	0	0	0	66,590	Other financial intermediaries and financial auxiliaries
	6,060	1,565	4,495	24,426	329	24,097	0	257,233	156,438	66,906	33,889	13,329	Insurance corporations and pension funds
	87,805	1,102	86,704	1,798	0	1,798	0	0	0	0	0	6,317	<b>General government</b>
	176,861	6,495	170,366	0	0	0	0	0	0	0	0	9,191	<b>Households and non-profit institutions serving households</b>
	721,816	192,764	529,052	725,022	384,236	246,069	94,717	29,243	0	0	29,243	90,071	<b>Rest of the world</b>

€ million

n.a. not available.

Table D.1.2: Financial Transactions By Sector, Q3 2012

	Total Assets Transactions								
		Gold & SDRs	Currency & Deposits			Securities other than shares			
				Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives
<b>€ million</b>									
<b>Non-financial corporations</b>	<b>7,539</b>	<b>0</b>	<b>2,086</b>	<b>128</b>	<b>1,958</b>	<b>80</b>	<b>-53</b>	<b>128</b>	<b>5</b>
<b>Financial corporations</b>	<b>6,924</b>	<b>16</b>	<b>-34,761</b>	<b>-974</b>	<b>-33,786</b>	<b>28,777</b>	<b>10,587</b>	<b>19,156</b>	<b>-966</b>
Monetary financial institutions	-26,424	16	-39,273	-174	-39,099	13,337	8,181	5,159	-2
Other financial intermediaries and financial auxiliaries	31,740	0	5,132	-621	5,753	13,795	2,431	12,056	-692
Insurance corporations and pension funds	1,608	0	-620	-179	-440	1,645	-25	1,942	-272
<b>General government</b>	<b>8,969</b>	<b>0</b>	<b>9,862</b>	<b>0</b>	<b>9,862</b>	<b>121</b>	<b>0</b>	<b>121</b>	<b>0</b>
<b>Households and non-profit institutions serving households</b>	<b>1,584</b>	<b>0</b>	<b>974</b>	<b>460</b>	<b>514</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>0</b>
<b>Rest of the world</b>	<b>28,852</b>	<b>0</b>	<b>-19,916</b>	<b>2,875</b>	<b>-22,791</b>	<b>4,851</b>	<b>-1,281</b>	<b>7,794</b>	<b>-1,662</b>
	Total Liabilities Transactions								
	Gold & SDRs	Currency & Deposits			Securities other than shares				
			Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives	
<b>€ million</b>									
<b>Non-financial corporations</b>	<b>2,538</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>790</b>	<b>0</b>	<b>767</b>	<b>23</b>
<b>Financial corporations</b>	<b>12,204</b>	<b>0</b>	<b>-38,902</b>	<b>3,829</b>	<b>-42,731</b>	<b>4,834</b>	<b>421</b>	<b>6,028</b>	<b>-1,614</b>
Monetary financial institutions	-34,857	0	-38,902	3,829	-42,731	315	90	243	-18
Other financial intermediaries and financial auxiliaries	44,053	0	0	0	0	4,439	331	5,705	-1,596
Insurance corporations and pension funds	3,008	0	0	0	0	80	0	80	0
<b>General government</b>	<b>10,380</b>	<b>0</b>	<b>472</b>	<b>-12</b>	<b>485</b>	<b>4,848</b>	<b>1,034</b>	<b>3,815</b>	<b>0</b>
<b>Households and non-profit institutions serving households</b>	<b>-1,370</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Rest of the world</b>	<b>30,115</b>	<b>0</b>	<b>-3,326</b>	<b>-1,328</b>	<b>-1,998</b>	<b>23,364</b>	<b>7,799</b>	<b>16,597</b>	<b>-1,032</b>



Table D.1.2 – continued

**Total Assets Transactions**

Loans			Shares and other equity				Insurance technical reserves				Other accounts receivable/payable		
	Short-term loans	Long-term loans		Quoted shares	Unquoted shares and other equity	Mutual fund shares		Net equity of households in life insurance reserves	Net equity of households in pension fund reserves	Prepayment of insurance premiums and reserves for outstanding claims			
	2,269	2,515	-246	-80	-2	498	-577	-32	0	0	-32	3,216	<b>Non-financial corporations</b>
	4,517	3,959	559	449	n.a.	n.a.	525	710	0	0	710	7,215	<b>Financial corporations</b>
	417	130	287	-1,313	-1,281	-7	-25	0	0	0	0	392	Monetary financial institutions
	4,086	3,839	248	1,973	2,161	214	-402	0	0	0	0	6,754	Other financial intermediaries and financial auxiliaries
	14	-10	25	-210	-1,163	0	953	710	0	0	710	70	Insurance corporations and pension funds
	12	113	-101	4	-43	0	47	0	0	0	0	-1,031	<b>General government</b>
	0	0	0	19	0	19	0	720	613	153	-47	-137	<b>Households and non-profit institutions serving households</b>
	9,445	4,733	4,712	20,494	425	2,123	17,946	2,199	2,062	0	137	11,796	<b>Rest of the world</b>

€ million

**Total Liabilities Transactions**

Loans			Shares and other equity				Insurance technical reserves				Other accounts receivable/payable		
	Short-term loans	Long-term loans		Quoted shares	Unquoted shares and other equity	Mutual fund shares		Net equity of households in life insurance reserves	Net equity of households in pension fund reserves	Prepayment of insurance premiums and reserves for outstanding claims			
	-1,984	-900	-1,084	554	918	-364	0	0	0	0	0	3,178	<b>Non-financial corporations</b>
	6,956	7,634	-678	17,115	69	1,545	15,501	3,042	2,675	153	214	19,160	<b>Financial corporations</b>
	0	0	0	1,847	0	-344	2,191	0	0	0	0	1,884	Monetary financial institutions
	6,317	7,116	-800	15,124	69	1,745	13,310	0	0	0	0	18,173	Other financial intermediaries and financial auxiliaries
	639	517	122	143	0	143	0	3,042	2,675	153	214	-897	Insurance corporations and pension funds
	5,328	92	5,235	5	0	5	0	0	0	0	0	-272	<b>General government</b>
	-1,367	16	-1,383	0	0	0	0	0	0	0	0	-3	<b>Households and non-profit institutions serving households</b>
	7,311	4,478	2,833	3,213	-889	1,662	2,440	554	0	0	554	-1,001	<b>Rest of the world</b>

€ million

n.a. not available.



# Section E

## Public Finances and Competitiveness Indicators

**Table E.1: Government Debt**

€ million	2012			
	End-quarter	30 Mar.	29 Jun.	30 Sep.
<b>Government Debt</b>				
Amount outstanding (gross)				
<b>Euro-denominated debt</b>				
Government Bonds	79,651	83,131	88,506	87,853
Exchequer Bills/Notes, Central Treasury Notes	1,421	1,764	4,004	1,391
Saving Certificates/Stamps, National Solidarity Bonds	5,015	5,209	5,416	5,789
Prize Bonds	1,501	1,539	1,584	1,649
Savings Bonds	4,956	5,084	5,228	5,568
National Instalment Savings	469	469	472	472
Ways and means	2,232	2,183	1,233	789
Borrowings from Central Bank, etc.	-	-	-	-
Local loans funds	5	5	5	5
Short-term paper	719	699	1,169	1,159
FX contracts	604	1,357	654	706
EIB loans	-	-	100	100
Public bond issues	-	-	-	-
Private placements	602	602	602	602
IMF <sup>a</sup>	5,853	6,357	6,677	6,998
EFSM	18,400	18,400	20,700	21,700
EFSF <sup>b</sup>	9,409	12,209	12,214	12,214
Bilateral loans	100	250	250	500
Medium-term notes	-	-	-	-
Swaps	10,992	11,476	12,907	13,986
<b>Total euro-denominated debt</b>	<b>141,928</b>	<b>150,734</b>	<b>161,722</b>	<b>161,482</b>
<b>Non-euro-denominated debt</b>				
EIB loans	-	-	-	-
Public bond issues	-	-	-	-
Private placements	-	-	-	-
Medium-term notes	91	100	100	88
IMF <sup>a</sup>	10,220	11,766	12,153	12,288
EFSM	-	-	-	-
EFSF	-	-	-	-
UK Bilateral Loan	1,451	1,500	2,022	2,471
Swaps	-11,266	-12,429	-13,694	-14,284
Short-term paper	120	418	68	140
FX contracts	-605	-1,351	-651	-703
<b>Total non-euro-denominated debt</b>	<b>12</b>	<b>3</b>	<b>-3</b>	<b>-</b>
<b>Gross debt</b>	<b>141,940</b>	<b>150,737</b>	<b>161,719</b>	<b>161,481</b>
<b>Residual Maturity Profile</b>				
Amounts due to mature in:				
- ≤ 1 year	7,181	7,194	7,227	11,319
- Over 1 year but ≤ 5 years	45,863	46,479	45,739	52,486
- Over 5 years but ≤ 10 years	70,241	72,016	79,831	71,322
- Over 10 years	18,655	25,050	28,922	26,354
<b>Total</b>	<b>141,940</b>	<b>150,737</b>	<b>161,719</b>	<b>161,481</b>

a The IMF liability is denominated in SDRs. The € equivalent of the SDR liability is equal to the SDR amount divided by the EUR/SDR exchange rate. The EUR portion of this € equivalent amount is equal to the SDR amount multiplied by the EUR currency amount (0.423).

b EFSF is net of a €530m prepaid margin deducted from the first disbursement.

Source: NTMA.

**Table E.2: Irish Government Long-Term Bonds – Nominal Holdings**

€ million	2012			
	30 Mar.	29 Jun.	28 Sep.	31 Dec.
End-quarter				
1. Resident <sup>a</sup>	18,755	22,447	24,212	24,387
– MFIs and Central Bank	17,158	20,083	21,285	21,784
– General government	349	841	1,558	1,706
– Financial intermediaries	1,043	1,339	1,179	710
i) Financial auxiliaries	445	501	313	288
ii) Insurance corporations and pension funds	453	452	447	12
iii) Other financial intermediaries	146	386	419	410
– Non-financial corporations	10	8	5	5
– Households	195	176	184	183
2. Rest of world	60,896	60,684	64,295	63,466
<b>Total</b>	<b>79,651</b>	<b>83,132</b>	<b>88,507</b>	<b>87,853</b>
3. Amounts due to mature in:				
– Less than 3 years	17,908	17,903	16,949	16,363
– 3 or more years but less than 5 years	10,176	10,176	10,188	14,105
– 5 or more years but less than 10 years	43,283	43,300	48,603	44,618
– 10 or more years but less than 15 years	8,284	11,753	11,780	11,780
– 15 or more years	0	0	986	986
<b>Total</b>	<b>79,651</b>	<b>83,132</b>	<b>88,507</b>	<b>87,853</b>

<sup>a</sup> Above conform to ESA95 standard. Financial auxiliaries include, for example, insurance and security brokers and investment advisors, etc. Other financial intermediaries include mutual funds, financial leasing, etc.

Table E.3: Harmonised Competitiveness Indicators for Ireland (HCIs)

1999 Q1 = 100	Nominal HCI (Monthly average)	Real HCI (Deflated by consumer prices)	Real HCI (Deflated by producer prices)
<b>2006</b>			
January	102.78	113.34	104.29
February	102.14	113.12	104.68
March	102.65	113.59	104.72
April	103.52	114.51	105.63
May	104.67	115.96	107.25
June	104.82	116.03	107.12
July	104.93	116.29	106.58
August	104.97	116.64	107.32
September	104.73	116.20	107.97
October	104.30	115.84	105.52
November	104.96	116.43	105.55
December	105.83	117.58	106.78
<b>2007</b>			
January	105.06	116.79	106.75
February	105.35	117.14	105.64
March	106.08	118.00	105.62
April	106.74	118.74	106.78
May	106.67	118.69	107.19
June	106.22	118.16	107.62
July	106.81	118.90	107.83
August	106.69	118.74	108.81
September	107.58	119.71	108.34
October	108.39	120.37	109.73
November	109.79	121.92	109.91
December	109.80	121.74	111.41
<b>2008</b>			
January	110.55	122.28	110.53
February	110.50	122.38	111.41
March	113.03	125.56	113.37
April	114.12	126.34	115.89
May	113.56	125.67	114.63
June	113.54	125.46	114.00
July	113.98	125.24	113.70
August	111.99	122.85	114.20
September	110.73	121.60	110.82
October	108.14	118.78	109.30
November	107.56	118.65	108.58
December	111.59	122.96	110.78
<b>2009</b>			
January	111.28	122.40	110.30
February	109.76	119.82	109.65
March	111.70	121.74	111.22
April	111.10	120.86	110.86
May	111.67	120.78	111.26
June	112.23	121.01	111.52
July	112.36	120.56	113.23
August	112.67	120.48	111.35
September	113.93	121.32	113.41
October	114.91	121.98	113.66
November	114.77	121.59	112.73
December	113.87	119.93	111.72
<b>2010</b>			
January	112.25	117.96	109.84
February	110.26	115.14	108.94
March	110.05	114.41	107.53
April	108.78	112.80	107.34
May	105.95	109.92	105.26
June	104.15	107.85	102.34
July	105.91	109.91	104.20
August	105.76	109.43	104.17
September	106.34	109.64	105.09
October	109.33	112.56	106.66
November	108.15	110.92	106.29
December	106.52	109.19	103.56
<b>2011</b>			
January	106.66	109.33	103.30
February	107.56	110.07	104.12
March	108.99	111.30	105.30
April	110.46	112.54	107.04
May	109.88	111.63	107.70
June	110.15	111.51	106.65
July	109.47	110.71	105.87
August	109.56	110.51	106.00
September	108.33	109.06	104.48
October	108.43	109.37	103.95
November	107.83	108.76	103.94
December	106.40	107.31	103.02
<b>2012</b>			
January	104.94	105.71	102.16
February	105.68	106.73	102.73
March	105.81	107.33	102.49
April	105.45	106.53	102.89
May	104.13	105.13	102.15
June	103.51	104.35	101.27
July	102.08	103.02	98.97
August	102.24	103.32	99.43
September	103.83	104.59	100.36
October	104.34	104.84	100.83
November	103.89	104.09	101.49
December	105.07	105.34	103.13
<b>2013</b>			
January	106.29	106.50	104.57

**Table E.3: Harmonised Competitiveness Indicators for Ireland (HCIs) – continued**

1999 Q1=100	Real HCI (Deflated by GDP)	Real HCI (Deflated by whole economy unit labour costs)
<b>1999</b>		
Q1	100.00	100.00
Q2	97.66	98.74
Q3	99.75	96.54
Q4	99.40	95.21
<b>2000</b>		
Q1	96.78	92.52
Q2	96.16	90.94
Q3	95.56	90.09
Q4	94.72	88.87
<b>2001</b>		
Q1	99.10	92.58
Q2	98.72	92.25
Q3	100.28	94.84
Q4	100.95	94.91
<b>2002</b>		
Q1	102.43	93.45
Q2	103.09	94.82
Q3	106.60	96.22
Q4	108.86	97.33
<b>2003</b>		
Q1	113.05	102.92
Q2	116.07	106.39
Q3	116.57	107.77
Q4	117.47	106.94
<b>2004</b>		
Q1	118.17	112.09
Q2	117.74	111.03
Q3	118.07	112.82
Q4	120.14	112.77
<b>2005</b>		
Q1	119.94	115.78
Q2	120.02	114.28
Q3	117.36	116.47
Q4	116.58	114.40
<b>2006</b>		
Q1	118.90	115.80
Q2	119.25	118.91
Q3	121.85	117.10
Q4	119.86	119.21
<b>2007</b>		
Q1	120.13	116.15
Q2	121.59	122.01
Q3	119.57	127.58
Q4	121.74	128.05
<b>2008</b>		
Q1	119.42	128.39
Q2	120.25	135.02
Q3	119.10	132.46
Q4	115.46	131.95
<b>2009</b>		
Q1	112.30	126.17
Q2	111.81	123.23
Q3	113.29	122.59
Q4	112.73	120.89
<b>2010</b>		
Q1	109.00	115.78
Q2	104.15	110.85
Q3	103.13	108.75
Q4	100.72	110.31
<b>2011</b>		
Q1	102.40	107.87
Q2	104.70	108.42
Q3	103.39	106.80
Q4	101.15	102.32
<b>2012</b>		
Q1	100.68	101.12
Q2	100.07	99.10
Q3	98.53	98.54

**Notes:**

1. See article entitled "Measuring Ireland's Price and Labour Cost Competitiveness" in the Bank's Quarterly Bulletin No. 1 of 2010.
2. A rise in an indicator implies a disimprovement in competitiveness, while a fall in an indicator implies an improvement.
3. These indicators are available from January 1995 in excel format on the Bank's website.
4. Real HCIs may be subject to revisions to reflect latest available price data.











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