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Central Bank Quarterly Bulletin



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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 mid-December 2012 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 and by telephone at 353 1 2246380.

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Forecast Summary Table

	2010	2011	2012 ^e	2013 ^f	2014 ^f
Real Economic Activity					
(% change)					
Personal consumer expenditure	1.0	-2.4	-1.3	-0.4	+0.2
Public consumption	-6.5	-4.3	-3.0	-1.6	-3.3
Gross fixed capital formation	-22.6	-12.6	-0.8	0.6	4.3
<i>of which:</i> Building and construction	-30.1	-15.8	-9.7	-2.9	2.2
Machinery and equipment	-8.4	-8.3	10.0	4.0	6.0
Exports of goods and services	6.2	5.1	3.0	3.0	5.4
Imports of goods and services	3.6	-0.3	1.3	1.9	4.1
Gross Domestic Product (GDP)	-0.8	1.4	0.7	1.3	2.5
Gross National Product (GNP)	0.9	-2.5	1.5	0.5	1.4
External Trade and Payments					
Balance-of-Payments Current Account (€ million)	1,782	1,785	5,993	7,233	9,070
Current Account (% of GNP)	1.4	1.4	4.6	5.4	6.7
Prices, Costs and Competitiveness					
(% change)					
Harmonised Index of Consumer Prices (HICP)	-1.6	1.1	2.0	1.3	1.2
<i>of which:</i> Goods	-2.4	1.5	2.0	1.0	0.7
Services	-0.7	0.8	1.9	1.6	1.8
HICP excluding energy	-2.7	0.0	0.9	1.5	1.6
Consumer Price Index (CPI)	-1.0	2.6	1.7	1.2	1.1
Nominal Harmonised Competitiveness Indicator (Nominal HCI) ^a	-4.2	0.9	-4.3	n.a.	n.a.
Compensation per Employee	-2.8	0.7	0.8	1.0	1.2
Labour Market					
(% change year-on-year)					
Total employment	-4.0	-1.8	-0.7	0.3	1.2
Labour force	-2.0	-0.9	-0.5	-0.1	0.5
Unemployment rate (ILO)	13.9	14.6	14.8	14.5	13.9
Technical Assumptions^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	0.81	0.81
Oil price (\$ per barrel)	79.61	111.26	111.74	105.01	100.48
Interbank market – Euribor ^c (3-month fixed)	0.81	1.39	0.57	0.26	0.44

^a Based upon the annual change in the average nominal HCI for the first eleven months of 2012.

^b The technical assumption made is that exchange rates remain unchanged at their average levels in early-December. Oil prices and interest rates are assumed to move in line with the futures market.

^c 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.

Comment

While the economic outlook remains challenging, the forecast is for a continuation of the gradual recovery in the overall level of economic activity, though at a slightly slower pace than previously projected. The second half of 2012 saw a slowdown in economic activity at the broader international level and a downward revision to growth prospects in Ireland's main trading partner countries. Weakening global demand has slowed Irish export growth and, given the on-going reliance on exports to offset domestic economic weakness, GDP growth has eased somewhat compared to 2011. Nonetheless, the outcome for 2012 is likely to be a little higher than projected at the time of the last Bulletin, reflecting both a small rise in GDP in the third quarter and the recent upward revision to growth estimates for the first-half of the year. Looking ahead, with growth in key trading partner countries projected to slow this year, weaker external demand is set to dampen Irish export growth in 2013 as compared to earlier expectations, while domestic demand is forecast to continue along its slow path towards stabilisation.

These developments suggest both a slightly stronger growth outturn last year, but a weaker outlook for this year, than previously forecast. GDP is now projected to have grown by 0.7 per cent in 2012, with GNP forecast to have expanded by 1.5 per cent, boosted by a much lower than expected increase in net factor income outflows. While GDP growth is expected to rise to 1.3 per cent in 2013, this represents a downward revision of 0.4 per cent to the previous forecast, reflecting the less favourable international outlook. Assuming a return to a more typical pattern in net factor income flows, GNP growth is projected to moderate to 0.5 per cent this year. In 2014, on the basis of consensus assumptions from the main international economic institutions projecting a recovery in external demand back to its long run trend and also supported by the projected stabilisation of domestic demand, GDP is forecast to grow by 2.5 per cent, with GNP expected to rise by 1.4 per cent. Uncertainty attaches to these projections, however, and with net exports set to remain the main engine of growth in coming years, the outcome will be particularly sensitive to developments in the external environment.

Adherence to EU/IMF Programme targets remains strong and progress on the main policy challenges continues to be made. However, on some issues, more needs to be achieved. In the banking sector, the key issues

revolve around the need for greater progress in addressing the problems in relation to asset quality and restoring profitability, both of which are essential if the sector is to be put back on a sustained sound footing and to be in a position to increase its lending capacity to support economic recovery. With regard to asset quality issues, of particular concern is the growing long-term nature of the mortgage arrears problem. While banks have now started to develop and roll-out some long-term mortgage modification and resolution measures, the level of implementation, through either debt restructuring or loan recovery, has been far from adequate so far. While there is a delicate balance to be struck here, it is critical that financial institutions move to deal decisively with the issue of long-term mortgage arrears. Much more needs to be done, and in a timely manner. The Central Bank will continue its intensive step-by-step engagement with the banks on this matter until we are satisfied that they have sufficient policies and procedures in place and are making sufficient quantitative progress in ensuring that the growth in arrears is stemmed and that arrears are recovered or, where necessary, restructured or resolved.

On other banking issues, progress continues to be made. With deposits at domestic banks remaining relatively stable in recent months, deleveraging progressing and banks undertaking some market issuance, the

dependence on central bank funding, while still elevated, has declined somewhat. Funding challenges remain, however, and allied to pressures from impaired assets and high funding and operating costs, are continuing to pressure profitability. In response, banks have continued to rationalise and restructure their operations and to make progress in reducing costs.

The latest fiscal data confirm that the public finances continued to improve last year and the General Government Deficit for 2012 now seems set to be below 8 per cent of GDP, lower than the level of 8.2 per cent signalled recently on Budget day and well below the 8.6 per cent target for 2012. While, in principle, this lessens the future burden of fiscal adjustment, it would not be appropriate to use the buffer this provides to ease back on the adjustment effort. It is important to continue to adhere to the planned consolidation effort of €8.6 billion between 2013 and 2015, which was reaffirmed in the Medium Term Fiscal Statement (MTFS). Doing so would imply maintaining the 2012 gain in deficit reduction relative to the target over coming years. This would help to get the deficit down to 3 per cent more quickly and should serve to reduce uncertainty and, through this channel, contribute to a faster domestic recovery. By enhancing Ireland's reputation for credible policymaking, it should also help to reinforce the confidence of official

and private international lenders and further improve the access of the Irish Sovereign to market funding.

Exports have been a significant mitigating factor during the downturn and, while domestic demand is projected to gradually stabilise, a strong external performance will remain central to a return to steady growth. Given the prospective weakness of external demand and the uncertainties associated with the international outlook, continuing to improve competitiveness and recover more of the ground lost during the boom will be crucial. As has been pointed out in previous Bulletins, due to structural changes in the economy, the standard international measures of competitiveness and productivity growth overstate the level of improvement which has occurred. Reflecting this, further progress is needed. Reducing the elevated cost base of the economy, both in the public and private sectors, and increasing flexibility and efficiency, particularly in the public sector, would be important ways in which such progress could be achieved. The challenges in these areas need to be met to genuinely strengthen Ireland's competitiveness position and its trading performance. Doing so would greatly enhance the prospects for a sustainable return to steady growth and rising living standards.

The Domestic Economy

Overview

- *Output in the Irish economy increased in 2012 for the second successive year but at a more moderate rate than in 2011, reflecting a significant slowdown in external demand. The contribution from domestic demand was again negative, but its rate of decline was less pronounced than in previous years. For 2012 as a whole, real GDP is estimated to have increased by about 0.7 per cent. A projected pick-up in GDP growth to about 1.3 per cent in 2013 and to about 2.5 per cent in 2014 reflects the expectation of a gradual stabilisation in activity in the domestic economy and a recovery in external demand next year. These projections are subject to significant risk, mostly related to external demand, which is likely to remain the main driver of growth over the forecast horizon.*
- *Estimated GNP growth for 2012, at 1.5 per cent, has been revised upwards significantly compared to the last Bulletin, reflecting a much lower than expected increase in net factor income¹ outflows. A return to a more usual trend in net factor income flows in 2013 should see GNP growth moderating to about 0.5 per cent before picking up again to about 1.4 per cent in 2014.*
- *The revisions to GDP projections compared to the previous Bulletin point to a somewhat better outturn for 2012, but a weaker pick-up in growth in 2013 than previously anticipated. With domestic demand behaving broadly in line with expectations, external demand has been the main factor underlying these revisions. Exports account for over 100 per cent of GDP, and as a consequence, growth prospects for the Irish economy are particularly sensitive to the outlook for external demand.*
- *Although external demand has been weaker than expected, exports have performed relatively well and point to some increase in market share reflecting favourable product effects and the benefits of some recovery in competitiveness. Overall export growth is estimated at about 3 per cent last year reflecting a significant weakening in goods exports, particularly in the pharmaceutical sector, but a robust performance for services exports which recorded over 9 per cent growth in the first three quarters of 2012. A similar outturn is expected for 2013 with a forecast pick-up in export growth in 2014 to about 5.4 per cent, led by continued buoyancy in services exports.*
- *Domestic demand declined in 2012 but the pace of decline slowed appreciably compared to the previous year. This improving trend is projected to continue into 2013 with a return to modest positive growth in domestic expenditure in 2014. Last year witnessed continued declining disposable income, weak labour market conditions and fragile consumer confidence. However, following a weak first quarter, consumption recovered during the remainder of the year and actually posted positive year-on-year growth in the third quarter.*
- *Recent Quarterly National Accounts (QNA) data point to a significant moderation in the decline in investment expenditure in 2012 with machinery and equipment spending picking up strongly in the second half of the year while the decline in construction investment was broadly in line with expectations. The prospects for 2013 are for a further modest fall in construction output and further growth in machinery and equipment expenditure with both categories projected to increase in real terms in 2014. Finally, the on-going consolidation in the public finances points to further declines in public consumption both this year and next.*
- *Employment declined last year but, at 0.7 per cent, the pace of decline was more moderate than in previous years, reflecting*

¹ Net factor income flows to the rest of the world measure the difference between the inflow of investment income (interest, profits, etc.) and labour income earned abroad by Irish based residents and firms and corresponding income outflows to non-residents. In the Irish case net factor income outflows are significant reflecting the impact of the large multinational company presence here.

the gradual stabilisation of labour market conditions. A modest increase in employment is projected for 2013 which would mark the first annual increase in employment since 2007. Public sector employment is expected to fall over the period of the forecast reflecting the impact of incentivised early retirement schemes and other redundancy programmes, but this should be slightly outweighed by renewed expansion in private sector hiring. Unemployment averaged about 14.8 per cent in 2012 but is projected to decline to 14.5 per cent in 2013. Assuming the projected growth outlook for 2014 materialises, further inroads could be made into reducing the unemployment rate in 2014.

- *The annual rate of HICP inflation for 2012 is estimated at 2.0 per cent. Higher energy prices were the largest single contributor to this inflation rate. When energy prices are excluded, the inflation rate for 2012 is estimated to be just 0.9 per cent. Measures taken in the budget should add approximately 0.3-0.4 per cent to the average HICP inflation rate in 2013. Based on current assumptions for exchange rates and oil prices, energy prices are expected to have a smaller impact on inflation in 2013 relative to 2012. HICP inflation is forecast at 1.2 per cent in 2014.*

Demand

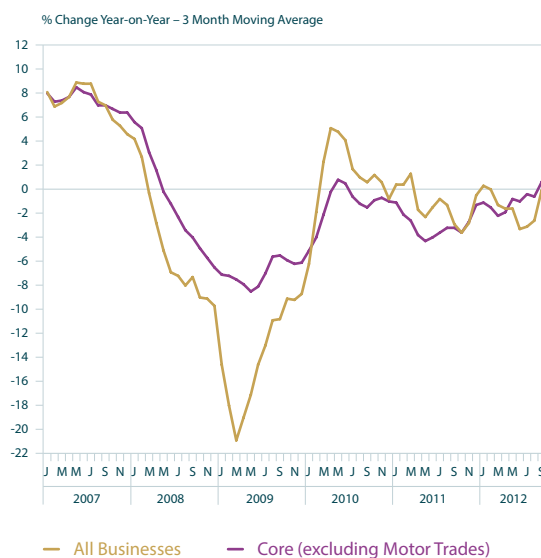
Consumer spending

Consumer spending has been on a fairly consistent downward path in recent years, reflecting the impact of declining real disposable incomes, exceptionally weak labour market conditions and a high level of personal indebtedness. This downward trend continued last year, with real consumption declining by about 1.3 per cent. The pattern of demand during the course of the year was one of pronounced weakness in the first quarter, in part related to the timing of a VAT increase on 1 January 2012, followed by a gradual recovery thereafter. Quarterly National Accounts (QNA) data show real consumer spending increasing in seasonally adjusted terms by 0.5 per cent in the third quarter of 2012.

Recent indicators are broadly consistent with a modest recovery in consumer demand from about the mid-point of last year. Consumer sentiment, while remaining quite fragile and well below historic norms, improved moderately as the year progressed. Similarly, retail sales recorded a modest recovery during the course of 2012 following a very weak start to the year. In the three months to November 2012, core retail sales, excluding the motor trade, increased in volume terms by 1.8 per cent compared to the previous three months and was up by 1.7 per cent on an annual basis.

Turning to the outlook for this year, a further decline in consumer spending is expected, albeit at a much more moderate pace than in recent years. While labour market conditions are showing signs of stabilising, the prospects are for limited growth in nominal wages, while measures introduced in Budget 2013 will weigh on personal disposable incomes. Furthermore, the continuing need to repair household balance sheets gives little scope for a significant decline in the savings rate which is expected to remain elevated. For the year as a whole, a decline in real consumer spending of about 0.4 per cent is forecast. A marginal real increase in consumer spending of 0.2 per cent is forecast for 2014 on the basis of a spill-over from improving conditions internationally, some moderation in fiscal headwinds and a modest increase in employment and wages.

Chart 1: Index of Volume of Retail Sales



Source: CSO.

Table 1: Expenditure on Gross National Product 2011, 2012^e, 2013^f, 2014^f

	2011			2012 ^e			2013 ^f			2014 ^f	
	Percentage change in			Percentage change in			Percentage change in			Percentage change in	
	EUR millions	volume	price	EUR millions	volume	price	EUR millions	volume	price	EUR millions	
Personal Consumption Expenditure	81308	-1.3	1.9	81800	-0.4	1.3	82510	0.2	1.1	83538	
Public Consumption	25410	-3.0	1.4	25002	-1.6	1.2	24893	-3.3	0.6	24213	
Gross Domestic Fixed Capital Formation	16112	-0.8	-0.4	15932	0.6	0.1	16057	4.3	1.2	16946	
<i>Building and Construction</i>	8800	-9.7	-2.7	7736	-2.9	-0.8	7736	2.2	1.5	7730	
<i>Machinery and Equipment</i>	7312	10.0	1.9	8196	4.0	1.0	8609	6.0	1.0	9216	
Value of Physical Changes in Stocks	227			0			100			100	
Statistical Discrepancy	1020			1020			1020			1020	
GROSS DOMESTIC EXPENDITURE	124077	-1.7	1.5	123754	-0.4	1.1	124580	0.0	1.0	125817	
Exports of Goods & Services	166791	3.0	2.9	176781	3.0	1.1	184096	5.4	1.2	196329	
FINAL DEMAND	290868	1.0	2.3	300535	1.6	1.1	308676	3.2	1.1	322146	
Imports of Goods & Services	-131875	1.3	3.0	-137586	1.9	1.1	-141821	4.1	1.2	-149433	
GROSS DOMESTIC PRODUCT	158993	0.7	1.8	162949	1.3	1.1	166855	2.5	1.0	172713	
Net Factor Income from Rest of the World	-31977			-32038			-33849			-36600	
GROSS NATIONAL PRODUCT	127016	1.5	1.5	130911	0.5	1.1	133006	1.4	1.0	136113	

Investment

The latest Quarterly National Accounts (QNAs), relating to the third quarter of 2012, provided some unexpectedly positive news on the investment front. Following a construction-led cumulative decline of approximately 56 per cent over the 2007 to 2011 period, investment in the economy's fixed capital may have recorded its first year of growth in 2012; this turnaround has come slightly earlier than anticipated. Although the QNAs are provisional, the latest release, which contained upward revisions to previous quarters' estimates along with a buoyant third quarter estimate, gives tentative reason to expect that the low point in investment may have been reached. In year-on-year terms, investment expenditure increased by 8.8 per cent in the third quarter. The decline in building

and construction investment continued – down 8.5 per cent for the first three quarters year-on-year, but was offset by a very strong performance in machinery and equipment spending.

While the decline in the overall building and construction sector continued, performance varied across the sub-sectors. New house completions numbered just 6,036 for the first three quarters of 2012 and the forecast of 8,000 units looks on target for the full year. Forward-looking indicators suggest that completions are unlikely to deviate much from this figure this year, before increasing marginally to 10,000 units in 2014. The latter forecast is, however, subject to uncertainty. As anticipated, the weak trend in repairs and maintenance expenditure continued into the

third quarter of 2012 and is expected to remain so in the final quarter. Overall, investment in the housing sector is projected to have declined by approximately 16 per cent in 2012 and is forecast to remain broadly flat this year before increasing by about 10 per cent in 2014, albeit from a very low base.

The CSO's Production in Building and Construction Index (PBCI) points to continued weakness, with the non-residential sector down 16.3 per cent and 12.7 per cent for the third quarter and first three quarters of 2012, respectively. While there have been some positive developments in terms of the inward FDI pipeline of late, the commercial sector is unlikely to bolster construction activity significantly as businesses remain cautious about expansion in a weak domestic and international economic environment. On the whole, non-residential building and construction investment is forecast to fall by 5 per cent in both 2012 and 2013, before moderating to a decline of 3 per cent in 2014.

As mentioned above, the decline in building and construction expenditure was offset by a strong performance in machinery equipment investment last year, which, according to the QNAs, was up over 10 per cent for the first three quarters of the year. Even excluding the volatile 'other transport equipment' sector (mainly aircraft), the underlying performance was robust – up a promising 7.3 per cent year-on-year for the first three quarters of 2012. Taken together with the building and construction forecasts, these forecasts imply a contraction in investment of approximately 0.8 per cent in 2012, a levelling-off of activity in 2013 and an expansion of about 4 per cent in 2014.

Stock Changes

Stock changes are estimated to have made a marginal negative contribution to growth in 2012 of about 0.1 percentage points. A similar

positive contribution is projected for 2013 with stock changes assumed to have a broadly neutral impact on the change in GDP in 2014.

Government Consumption

According to the latest QNA, government consumption declined by 4.1 per cent, year-on-year, on average in the first three quarters of 2012 and is estimated to have contracted by 3 per cent in real terms for the year as a whole. 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.

External Demand and the Balance of Payments

Merchandise Trade

In the latest QNA for 2012 Q3, the estimates suggest continued weakness in merchandise exports during the third quarter of the year. Following a contraction of 4.3 per cent in the second quarter, the volume of goods exports declined by 3.4 per cent in the third quarter. The weakness of goods exports during the first nine months of the year occurred in an environment of weak external demand.

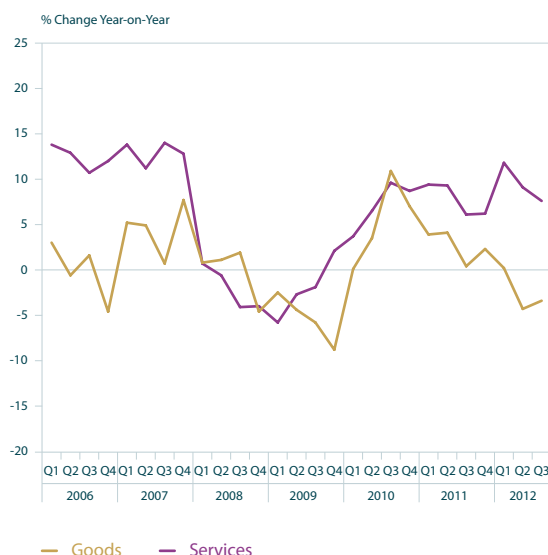
The CSO's Goods Exports and Imports publication provides information on the composition of merchandise trade on a value basis. The data indicate a decline in the value of exports from the broad chemicals sector on a year-on-year basis during the first two quarters of the year. Following a sharp rise in the value of chemicals exports in August, there was evidence of renewed weakness in September and October, albeit partially offset by increases in other sectors such as food.

Despite the deterioration in the external environment and the poor performance of

Table 2: Merchandise Trade (Adjusted) 2011, 2012^e, 2013^f, 2014^f

	2011	Percentage change in		2012 ^e	Percentage change in		2013 ^f	Percentage change in		2014 ^f
	EUR millions	volume	price	EUR millions	volume	price	EUR millions	volume	price	EUR millions
<i>Merchandise Exports</i>	84858	-1.8	4.7	87261	-0.9	1.0	87338	1.9	1.0	89891
<i>Merchandise Imports</i>	48270	-1.5	5.5	-50176	0.8	1.0	-51075	2.6	1.0	-52951
Merchandise Trade Balance (Adjusted)	36588			37085			36263			36940
%GNP	28.8			28.3			27.4			27.1

Chart 2: Volume of Exports



Source: CSO Quarterly National Accounts.

goods exports over the first nine months, the latest data from the Manufacturing Purchasing Managers Index (PMI) suggest expansion in output and new export orders up to the end of 2012. The overall PMI stood at 51.4 in December while the new export orders component measured 53.6; 50 marks the boundary between expansion and contraction.

The continued strength of the Irish PMI readings contrasts with the weakness evident in global and euro area PMIs. Following a weak performance in the first three quarters of 2012, it remains to be seen whether the recent positive PMI figures are reflected in an improved merchandise trade outturn over the coming months.

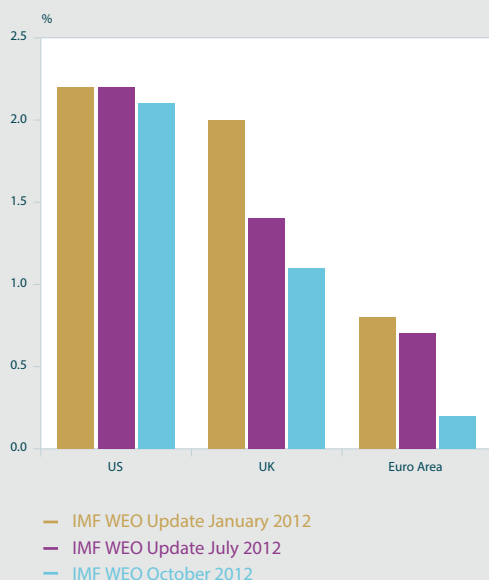
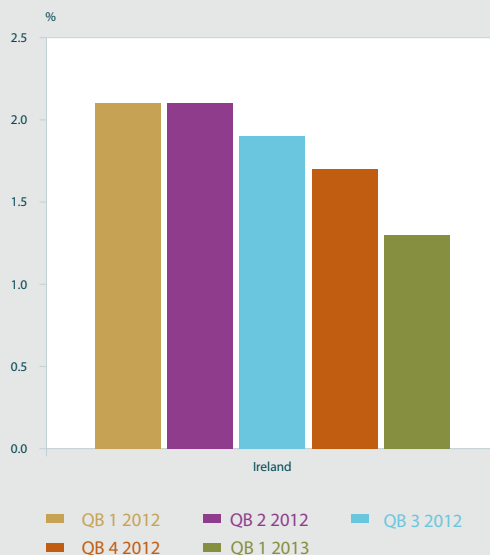
Box A: Understanding Revisions to Short-Term Economic Forecasts

By Thomas Conefrey²

This Box explains the pattern since early 2012 of downward revisions to Ireland's 2013 growth projections in the context of large revisions to international growth forecasts over the same period. With Irish exports equivalent to over 100 per cent of GDP, developments in external demand weigh heavily on the prospects for overall GDP growth (see trade section). Research on the Irish economy has highlighted the sensitivity of Irish output and exports to changes in external demand (Conefrey and Bermingham, 2011; Fitz Gerald et al, 2009). In preparing forecasts for the Irish economy, a key input is the projected level of demand over the forecast horizon in Ireland's key trading partners. Consequently, revisions to the short-term projections for the world economy could be expected to influence the forecasts for Irish GDP growth.

² The author is an economist in the Irish Economic Analysis Division.

³ See Bermingham, C. and T. Conefrey. 2011. "The Irish Macroeconomic Response to an External Shock with an Application to Stress Testing", Central Bank of Ireland Research Technical Paper 10RT11. Fitz Gerald et al, 2009. "The Behaviour of the Irish Economy: Insights from the HERMES Macro-Economic Model", ESRI Working Paper 287, April 2009.

Box A: Understanding Revisions to Short-Term Economic Forecasts*By Thomas Conefrey²***Box A Chart 1: IMF real GDP forecasts for 2013****Box A Chart 2: CBI real GDP forecasts for 2013**

Over the course of 2012, a pattern emerged of consistent downward revisions to short-term growth forecasts for Ireland's key trading partners by the main international forecasters such as the ECB, IMF and OECD. Figure A1 shows the evolution of the IMF's forecasts for real GDP growth in Ireland's key trading partners – US, UK and euro area – in successive IMF World Economic Outlooks (WEO) through 2012. Between January and October 2012, IMF forecasts for 2013 GDP growth in the UK and euro area were reduced by 1 and 0.6 percentage points respectively. While the reduction was somewhat smaller for the US, the 2013 forecast was revised down to 2.1 per cent in October. This pattern of successive downward revisions to projections for 2013 was also a feature of the forecasts produced by the ECB and the OECD over the course of the last year. In a box in the latest WEO and in a recent paper,⁴ Blanchard and Leigh argue that the negative short-term effects of fiscal consolidation have been larger than expected because fiscal multipliers were underestimated during the crisis. They state that this was an important factor leading to the initial overestimation of likely growth prospects in a number of economies.

The international forecasts used in the *Quarterly Bulletin* are taken from a range of sources including internal ECB projections as well as forecasts from the IMF and OECD. That these forecasts became progressively more pessimistic during 2012 has been a key factor explaining the downward revisions to Irish growth forecasts over the same period. Figure A2 shows the Central Bank's forecasts of 2013 real GDP growth since January 2012. In April 2012, the Bank's forecast of 2013 GDP growth was 2.1 per cent. In the subsequent Quarterly Bulletins, the 2013 projections for Ireland were also revised downwards in line with the scale of the revisions to the projections for external demand. GDP growth is now forecast to measure 1.3 per cent this year. The 0.8 of a percentage point reduction in GDP growth projections for Ireland is in line with the reductions of 1 and 0.6 percentage points respectively in IMF forecasts for 2013 GDP growth in the UK and euro area.

⁴ Blanchard, O. and D. Leigh, 2013. "Growth Forecast Errors and Fiscal Multipliers", IMF Working Paper WP/13/1, January 2013.

Box A: Understanding Revisions to Short-Term Economic Forecasts*By Thomas Conefrey²*

Sluggish external demand growth in 2012 and the expectation that this will persist into 2013 explains a large part of the successive downward revisions to Irish growth forecasts for 2013. The main international forecasters are currently projecting a recovery to stronger growth in the Ireland's key trading partners in 2014 and this expectation of an improved international environment underpins the forecasts in this bulletin. A repeat of the experience of 2012, whereby the prospects for the international economy deteriorated as the year progressed, would raise the prospect of further downward revisions to Ireland's short-term growth outlook. Of course, a more robust recovery in the world economy is also possible, which would in turn imply a brighter outlook for Irish exports and output.

Goods exports are expected to be negatively impacted by the persistence of sluggish external demand in 2013. Output in the euro area is expected to fall again this year while no significant growth is expected in the UK, the destination for 15 per cent of Irish merchandise exports. Offsetting the negative effect of these developments to some extent will be the impact of expected growth in the US economy. As reflected in the latest PMI data, a favourable product mix should also support Irish exports over the forecast horizon. The lack of demand from key trading partners, however, is likely to outweigh these positive developments. Based on the prospects for the world economy discussed in the *International Chapter*, merchandise exports are expected to decline in 2013 by 0.9 per cent, and assuming the forecast recovery in world trade materialises, return to positive growth in 2014.

Merchandise imports have displayed considerable volatility over recent quarters with a year-on-year decline of 7.8 per cent in Q2 followed by growth of 2.2 per cent in Q3. Comparing the first three quarters of 2012 to the same period in 2011, merchandise imports are 1.8 per cent lower. Given Irish exports tend to be highly import intensive, part of the recent weakness of goods imports likely reflects the fall in merchandise exports during 2012. In light of the projected recovery in consumption and investment over the forecast period, a small increase in merchandise imports is expected this year, followed by stronger growth in 2014.

Services, Factor Incomes and International Transfers

The mainstay of growth in exports over recent quarters has been the services sector. Services exports accounted for 21 per cent of all exports in 2000, but as of Q3 2012, are estimated to amount to 50 per cent of the total. Services export growth accelerated during the first nine months of 2012, although the pace of growth has moderated slightly over the course of the year. Year-on-year volume growth in services exports measured 11.8 per cent in the first quarter but slowed to 7.6 per cent in Q3.

The main contributions to the growth in services exports have come from the computer services and business services sectors. Computer services exports grew at an average rate of 14.6 per cent over the first three quarters of the year while the value of business services exports was 14.2 per cent higher in the year to Q3 2012 compared to the same period in 2011. These two sectors combined account for over two-thirds of services exports.

Data from the Services Purchasing Managers Index suggest continued buoyancy in the sector over recent months although the overall index remains well below the level recorded in 2007. The services PMI recorded a five-year high value of 56.1 in October and November before declining marginally in December. The new export orders index also indicated growth in new orders in December, the seventeenth

Table 3: Balance of Payments 2011, 2012^a, 2013^f, 2014^f

Current Account Items	2011	2012 ^a	2013 ^f	2014 ^f
Merchandise Trade Balance	36588	37085	36263	36940
Services	-1810	1943	5816	9727
Net Factor Income from Rest of the World	-31834	-31895	-33706	-36457
Current International Transfers	-1159	-1140	-1140	-1140
Balance on Current Account	1785	5993	7233	9070
(% of GNP)	1.4	4.6	5.4	6.7

successive month of expansion. The most recent quarterly data for Q3 indicate that even with no further growth in the final quarter of 2012, volume growth in services exports for the year as a whole would be 7.4 per cent. Our forecasts imply that services exports will continue to grow strongly in 2013 and lead the expansion in overall exports over the forecast horizon. This underpins the positive growth in overall exports forecast in 2013 and 2014.

Imports of services expanded again in the first half of 2012 with growth of 1.3 per cent recorded. Services imports were flat in the third quarter reflecting in large part a reduced rate of expansion in imports of royalties and licences, which had been very buoyant in the first half of the year, as well as lower tourism and insurance imports. The outlook envisages an increase in services import volumes in both 2013 and 2014.

A notable development in the *Balance of Payments* statistics during 2012 was the emergence for the first time of a surplus in the services trade balance. With the deficit having narrowed over the course of 2011, a small positive services balance of €59 million was recorded in Q1 2012; by Q3 this had expanded to over €1.5 billion or around 1.2 per cent of GNP. On the merchandise side, the trade balance for the first three quarters of 2012 was over €12 billion higher than for the same period in 2007, reflecting the large reduction in imports. With the services balance now also in positive territory, this has resulted in a very sharp widening of the overall trade

balance in goods and services. Based on the forecasts for exports and imports, further increases in the overall trade balance are expected both this year and next.

The increase in the trade balance will be partially offset by larger than expected net factor income outflows over the forecast horizon. Profit repatriations by foreign multinationals located in Ireland and higher national debt interest payments abroad comprise the main factor outflows. The scale and timing of net factor income inflows remain highly uncertain and could impact projections for the current account balance over the coming years. On the basis of the latest data, the projected increase in the trade balance is expected to give rise to a surplus on the current account of the balance of payments of over 5 per cent of GNP in 2013.

The increasing deficit on the current account of the balance of payments after 2003 was an important indicator of growing imbalances in the economy at that time. In the same way, the disappearance of that deficit over the course of 2009 and 2010 and the prospects for the emergence of a large current account surplus this year, is symptomatic of the important structural realignment currently underway in the Irish economy as it readjusts towards the exporting sector.

Supply

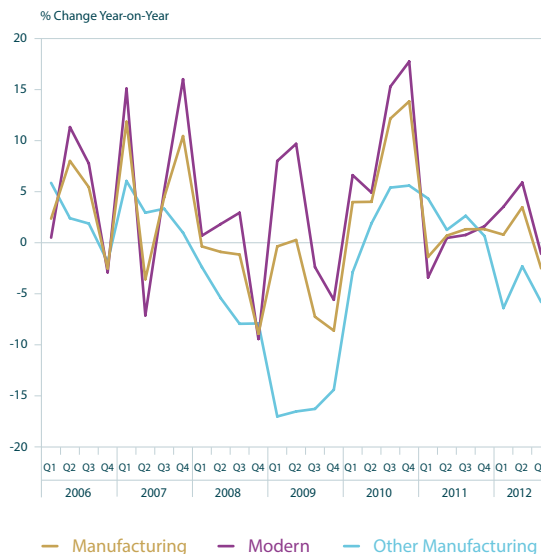
Industry and Services Output

After months of modest growth in the overall industrial sector in 2012, the latest CSO industrial output data shows significant retrenchment, reporting an annual decline of -6.2 per cent in November, compared to average growth of 4.5 per cent per annum between May and July last year. This sharp deterioration was largely a result of a significant fall in output in the modern sector which declined at an annual rate of 7.7 per cent in November. Specifically, there was a significant year-on-year volume decline in basic pharmaceuticals of 27.7 per cent in October and 9.7 per cent in November. This may have been due in part to the impact of the expiry of a number of patents in the pharmaceutical sector. A component of the modern manufacturing sector which has been performing particularly well recently is the computers, electrical and optical products category. This sub-sector contracted by 7.8 per cent in 2011 on an annual basis, before expanding by 6.5 per cent between January and November last year.

The latest quarterly trends in the traditional sector point to a year-on-year fall in output of 3.9 per cent per annum between September and November last year. This poor performance has in large part reflected the very weak monthly outturn for the food and beverages sub-sector. Declines in the output of meat were partially offset by more favourable conditions in the dairy and animal feeds sub-sectors of the food and beverages sector for 2012.

Data from the National Accounts for the third quarter of 2012, which are not directly comparable to the data on industrial output, show a more positive performance for the industrial sector. Output in the industrial sector, excluding building and construction, declined by 3.9 per cent in the third quarter on a seasonally adjusted basis. 2011 data for the industrial sector need to be treated with caution as the figures include some service activities which are recorded as part of industry under an older classification used by the CSO. While the rate of

Chart 3: Volume of Industrial Production



Source: CSO.

growth in the building and construction sector continues to deteriorate, the rate of decline has slowed somewhat, from a peak of -34 per cent in the first quarter of 2010 to -9.9 per cent in the third quarter of last year.

In comparison to the CSO Industrial Production data the latest NCB Purchasing Managers Index (PMI) data for manufacturing reports significant positive trends in the manufacturing sector, as the seasonally adjusted headline index was 51.4 in December, which was the tenth successive month of improvement, although the latest increase was the weakest since August. New orders rose in each month since February of last year due to increased export orders which were supported by new product launches. Increased demand from the US was a key factor in December's growth which fostered continued employment growth.

On the basis of the current available data, manufacturing sector output as a whole is expected to decline by 2.2 per cent in 2012 and by 0.8 per cent in 2013, before increasing by 1.8 per cent in 2014 as demand improves further. Growth is expected to be driven primarily by the modern sector, within which weaknesses relating to subsectors

Table 4: Industry and Manufacturing Output, Annual Percentage Change

	Modern ⁵	Other	Manufacturing	Total Industry
2005	5.3	0.3	4.0	3.9
2006	4.1	1.6	3.3	3.0
2007	6.8	3.0	5.5	5.2
2008	-1.2	-4.1	-2.9	-2.4
2009	2.6	-14.1	-3.9	-4.3
2010	10.7	2.5	8.3	7.7
2011	-0.2	0.3	0.4	0.0
2012f	-0.5	-4.1	-2.2	-2.1
2013f	0.7	0.2	-0.8	-1.0
2014f	1.0	0.8	1.8	1.5
Average 2005-2011	4.0	-1.5	2.1	1.9

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).

outside of the large and volatile chemicals and pharmaceuticals areas are expected to continue to moderate.

Output volumes in the other services sector increased by 0.3 per cent year-on-year in the third quarter of 2012 according to National Accounts data from the CSO. Output in the distribution, transport and communications sector increased by 1.8 per cent, year-on-year in the third quarter, while the public administration section declined by 4.1 per cent. The latest NCB Services PMI of 55.8 in December indicates that the services sector expanded for the fifth month in a row. Activity has increased in line with higher new orders both domestically and abroad, especially from the Middle East and the UK. This resulted in higher employment levels due to both increased orders and expectations of further improved economic conditions.

Agricultural Output

Box A below discusses advance CSO estimates of output and income for 2012 which suggests a disappointing year for farm incomes compared to 2011. Data from the Quarterly National Accounts, which are not directly comparable to the Output, Input and Income in Agriculture estimates, nonetheless

reinforce the negative outturn for the farming sector. In the third quarter of 2012 output in the broader Agricultural, Forestry and Fishing sector declined by 11.8 per cent on a seasonally adjusted basis, compared to a decline of 3.7 per cent in the second quarter.

Turning to the outlook for agriculture for 2013 and 2014 and assuming there is no repeat of the adverse weather conditions experienced in 2012, average annual farm incomes should increase by around 5 per cent in 2013 and 3.5 per cent in 2014. Expenditure on feed is likely to be lower as a result of improved weather. The forecast is also based on the expectation of higher overall milk prices as the international dairy market recovers. Cattle and sheep prices are expected to stay stable. However, changes in Budget 2013 will reduce subsidies for suckler farmers by up to 50 per cent in the cattle industry. These forecasts are subject to considerable uncertainty, with downside risks relating to exchange rate movements, commodity price volatility, adverse weather conditions and weakening demand.

⁵ The modern sector comprises the following industrial sectors: Chemicals and Pharmaceuticals, Computer, Electronic, Optical and Electrical equipment, Reproduction of Recorded Media and Medical and Dental Instruments and Supplies.

Table 5: Summary of Agricultural Output and Income 2012^e, 2013^f, 2014^f

	2012 ^e				% change in				2014 ^f	
	€ million	Value	Volume	Price	€ million	Value	Volume	Price	€ million	
Goods Output at Producer Prices ^a	6,535	3.6	0.8	2.8	6,727	3.0	1.2	1.8	6,869	
Intermediate Consumption	5,189	6.9	0.4	6.5	5,174	-0.3	0.3	-0.6	5,163	
Net Subsidies plus Services Output less Expenses	1,661	-9.0			1,645	-1.0			1,637	
Operating Surplus	2,183	-10.4			2,292	5.0			2,372	

a Including the value of stock changes.

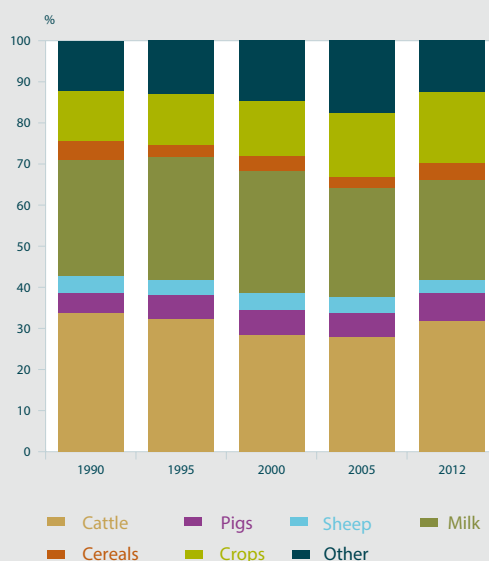
b CSO estimates.

Box B: Trends in Farm Output, Input and Income

By Thomas Conefrey⁶

Preliminary estimates from the CSO⁷ indicate that the operating surplus in agriculture decreased by 10.4 per cent in 2012 following a 30.5 per cent rise in 2011 and a similar increase in 2010. Agricultural incomes fell by almost a third in 2009 as a result of sharp declines in the price of agricultural output, especially milk and cereals. Over the course of 2010 and 2011, prices of the main agricultural commodities recovered and this succeeded in reversing the decline in agricultural incomes recorded in 2009. The decline in incomes in 2012 saw the agriculture sector relinquish some of the gains of recent years with the overall operating surplus returning to around 2008 levels.

Box B Chart 1: Structure of Agriculture Sector: Main Commodities



The structure of the agriculture sector is illustrated in Figure B1 which shows the share of gross output accounted for by the main commodities. In 2012, cattle and milk output accounted for almost 60 per cent of total gross output with cereals accounting for around 5 per cent of output. The share of milk in total gross output has remained broadly flat since 1991 at between 25 and 30 per cent.

⁶ The author is an economist in the Irish Economic Analysis Division

⁷ The data used in this box come from the CSO publication Output, Input and Income in Agriculture 2012 - Advance Estimate.

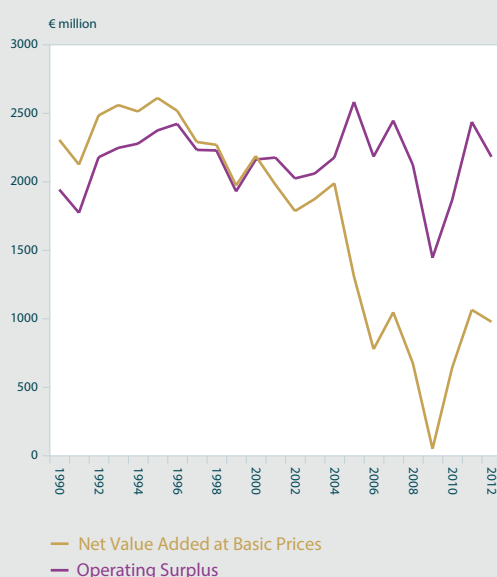
Box B: Trends in Farm Output, Input and Income*By Thomas Conefrey⁶*

The main commodity outputs from Irish farms experienced substantial price falls in 2009. The downturn in the international economy impacted on global food demand and contributed to the decrease in commodity prices observed over the course of 2009. The price of agricultural commodities recovered strongly in 2010 and 2011, aided by the upturn in the world economy, renewed demand from emerging Asia and tighter supplies. The value of milk output increased by almost 20 per cent in 2011 reflecting higher milk prices. The value of livestock and cereals output increased by 17 per cent and 49 per cent respectively, primarily as a result of price increases.

While the value of cattle output expanded again in 2012, these positive price developments were not sustained in the dairy or cereals sectors. According to the preliminary 2012 estimates from the CSO, the value of milk output fell by 13 per cent due to a 10 per cent decline in milk prices as shown in Table B1, while the value of cereals output reduced by 5 per cent, primarily as a result of lower volume output due to poor weather. Expenditure on inputs increased by almost 7 per cent in 2011 as result of higher feed and energy prices. The increase in input costs exceeded the rise in output contributing a 5 per cent decline to €1.7 billion in gross value added at basic prices.

Net value added at basic prices measures the prices farmers receive for their output, net of product specific subsidies and taxes. In 2009, this declined by 77 per cent to just €51 million. The increase in agricultural output in 2010 and 2011 resulted in a strong recovery in net value added at basic prices which increased almost eight fold to €1.1 billion in 2011. The decline in gross output and higher input cost in 2012 contributed to an 8.2 per cent reduction to €978 million in net value added at basic prices. In addition, farmers receive direct payments which in 2012 amounted to €1.7 billion. Thus, the operating surplus in agriculture fell from €2.4 billion in 2011 to €2.2 billion in 2012, a decline of 10 per cent.

Box B Chart 2: Net Value Added and Operating Surplus in Agriculture



To derive a measure of farm income at basic prices, it is necessary to deduct, from net value added at basic prices, expenditure by farmers on hired labour, interest payments on borrowed capital and land rental. In 2012, these totalled €456.7 million, €309.7 million and €198.8 million respectively. This implies that in 2012, farm income at basic prices was minus €13.2 million. This highlights the importance of direct payments paid for by the EU under the CAP and by the Exchequer to the viability of Irish farm enterprises.⁸

⁸ In addition, payment of capital grants under the Farm Waste Management Scheme exceeded €900 million. Payments to farmers under this scheme were made on a phased basis over the period to 2011.

Box B: Trends in Farm Output, Input and Income*By Thomas Conefrey⁶*

A number of key developments are likely to impact Irish agriculture over the coming years. These include the outlook for higher global food prices, the removal of milk quotas in 2015, the prospect of further trade liberalisation and the outcome of negotiations on the EU budget. These factors present both challenges and opportunities for Irish agriculture. For the dairy sector, the prospects remain bright. Ireland's grass based production model gives it a comparative advantage in this area. The sector should be well placed to take advantage of the expected strong demand for dairy products as a result of income growth, urbanisation and favourable demographic trends. The expansion of the dairy sector should be aided by the abolition of milk quotas in the EU by 2015.

All sectors face a considerable challenge to meet the ambitious targets set out in the Food Harvest 2020 report.⁹ This is especially evident given the trends in the value of agricultural output (Figure B2) which, despite gains in 2010 and 2011, has been broadly static since the mid-1990s. Addressing structural and competitiveness issues in Irish agriculture will be critical in ensuring the opportunities of the coming years can be realised.

Table B1: Output, Input and Income in Agriculture

	2009	2010	2011	2012 ^e	% Change, 2012/2011		
					Value	Volume	Price
All Livestock	2224.9	2282.4	2661.9	3073.0	15.4	2.3	12.8
Livestock - Cattle	1475.6	1502.3	1794.8	2077.6	15.8	0.2	15.5
Livestock - Pigs	300.2	333.7	394.2	432.7	9.8	-0.1	9.9
Livestock - Sheep	159.4	165.6	189.8	209.0	10.1	17.1	-6.0
All Livestock Products	1148.3	1590.9	1894.0	1669.1	-11.9	-2.9	-9.2
Livestock Products - Milk	1106.5	1541.9	1834.8	1596.8	-13.0	-3.5	-9.8
All Crops	1377.4	1523.8	1751.8	1792.5	2.3	-5.6	8.4
All Cereals	107.0	193.9	288.9	274.7	-4.9	-26.5	29.4
Crops - Forage Plants	852.6	887.3	1051.3	1115.2	6.1	0.7	5.3
Goods Output at Producer Prices	4750.6	5397.2	6307.7	6534.6	3.6	-1.3	5.0
Contract Work	268.7	277.7	335.7	352.4	5.0	3.7	1.2
Subsidies less Taxes on Products	-9.3	-10.5	-11.0	-12.6			
Agricultural Output at Basic Prices	5010.0	5664.4	6632.4	6874.4			
Intermediate Consumption	4184.9	4277.3	4853.4	5189.1			
Gross Value Added at Basic Prices	825.1	1387.0	1779.0	1685.3			
Fixed Capital Consumption	774.1	743.4	713.3	706.9			
Net Value Added at Basic Prices	51.0	643.7	1065.7	978.4			
Other Subsidies Less Taxes on Production	1822.4	1659.2	1825.1	1661.4			
Factor Income	1873.4	2302.8	2890.7	2639.8			
Compensation of Employees	427.7	434.8	453.4	456.7			
Operating Surplus	1445.7	1868.1	2437.4	2183.0			

⁹ See <http://www.agriculture.gov.ie/agri-foodindustry/foodharvest2020/> The targets include a 50 per cent increase in milk production by 2020 and a 20 per cent increase in the value of beef output.

The Labour Market

Although very weak in overall terms, a number of positive signals have emerged from recent labour market data. According to the Quarterly National Household Survey (QNHS), unemployment in Q3 2012 was 3,600 lower than in the same quarter of 2011. This was the first year-on-year decline in the number unemployed since 2005. The long-term unemployment rate increased to 9.5 per cent in the first quarter of 2012, but declined in Q2 and Q3 and stood at 8.9 per cent in the most recent data. Other indicators provide evidence of stabilisation in labour market conditions with annual changes close to zero recorded in employment, unemployment and the labour force as of Q3 2012.

The Earnings, Hours and Employment Costs Survey (EHECS) data from the CSO also provide information on public and private sector employment. These data are not directly comparable to the estimates of the number of employees from the QNHS. The data suggest some recovery in private sector employment over recent quarters following the sharp declines recorded in 2009 and 2010. Private sector employment increased by 1 per cent for two consecutive quarters from 2011 Q4 before recording a small decline in the second quarter of last year. These were the first increases in private sector employment since the series commenced in 2008.

Compared to the very sharp deterioration recorded in each of these labour market aggregates during 2009 and 2010, data for more recent quarters tentatively suggest that the period of exceptional upheaval in the labour market may be nearing an end. Nevertheless, caution must be exercised in identifying trends from recent numbers given the volatility in quarterly data and the fact that changes (increases and decreases) in key aggregates such as employment and unemployment have been very small (in the range 0-3,000).

The pace of contraction in the labour force moderated during the third quarter of 2012. In

the year to the second quarter, the labour force declined by 19,600. The equivalent figure for Q3 was -7,900. Reductions in the labour force due to both falling labour force participation and migration have moderated the impact on the unemployment rate from the continued decline in employment.

Turning to the composition of the labour force decline, net outward migration explains the majority of the fall in the labour force over recent quarters. This represents a change on the position in 2010 and 2011 when the fall in the labour force was explained mostly by lower labour force participation. In the year to the third quarter of 2012, it is estimated that the negative demographic effect contributed approximately 14,200 persons to the overall decline in the labour force. The net outward migration is concentrated almost entirely in the younger 20-24 and 25-34 age groups (see Box C). The overall labour force participation rate declined marginally to 60.2 per cent in the year to Q3 2012. Across age groups, a range of increases and decreases were recorded. A decrease of 1 percentage point was recorded in the participation rate for the 60-64 age group, while increases were recorded for the 15-19 and 45-54 age groups respectively. The net effect of these changes in participation rates across age groups was to increase the labour force by 6,300.

When adjusted for seasonal factors, the unemployment rate remained unchanged in the second quarter of 2012 at 14.8 per cent. More timely data from the Live Register points to further small declines in unemployment over recent months. The number of persons signing on the Live Register declined for the sixth consecutive month in December. The standardised unemployment rate measured 14.6 per cent compared to the latest estimate from the QNHS for Q3 2012 of 14.8 per cent.

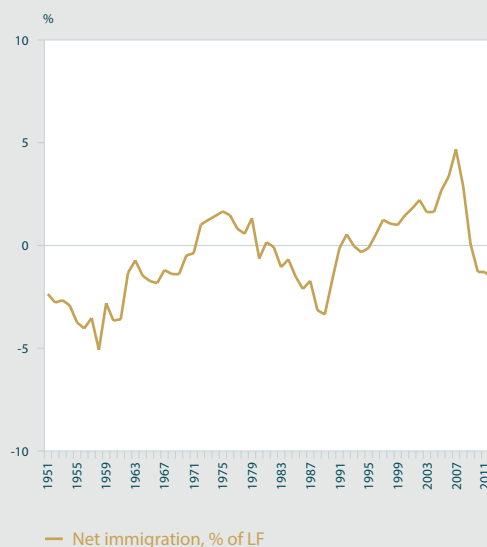
Box C: Migration in Ireland: Recent Trends in Historical Context

By Thomas Conefrey¹⁰

The National Income and Expenditure Accounts for 2011 show that national output was around 7 per cent below its 2007 peak at the end of 2011; using current price GNP as a measure of the size of the economy, the loss of output from peak is 22 per cent. At 159 billion, the volume of GDP in 2011 was back to just below 2006 levels. The consequences of this decline in output for the labour market have been stark. From the third quarter of 2007 to the third quarter of 2012, 328,000 jobs were lost, the unemployment rate trebled, the number in the labour force declined by 15 per cent and net emigration resumed. The focus of this box is on the latter; what has been the scale and composition of migration during the crisis, who has emigrated and where have they gone?

The substantial level of migration and its impact on labour supply in an Irish context has been the subject of research (Duffy, Fitz Gerald and Kearney, 2005, Fitz Gerald et al., 2008).¹¹ Figure C1 shows net immigration as a percentage of the labour force from 1950 to the present. For the period up to the 1970s there was sustained emigration out for Ireland. The 1970s saw some net immigration however this came to an end in the 1980s as the poor economic performance resulted in a return to significant net emigration, especially during the 1986 to 1989 period. The rapid growth in the economy from 1994 resulted in a reversal of the flow of labour with substantial net immigration over the second half of the 1990s. The inflow swelled from 2004 with the enlargement of the EU giving rise to an influx of non-Irish nationals. The decline in the economy from 2008 again resulted in a reversion to a pattern of substantial net emigration averaging 1.4 per cent of the labour force each year from 2010 to 2012.

Box C Chart 1: Net immigration, % of the Labour force 1951-2012



¹⁰ The author is an economist in the Irish Economic Analysis Division.

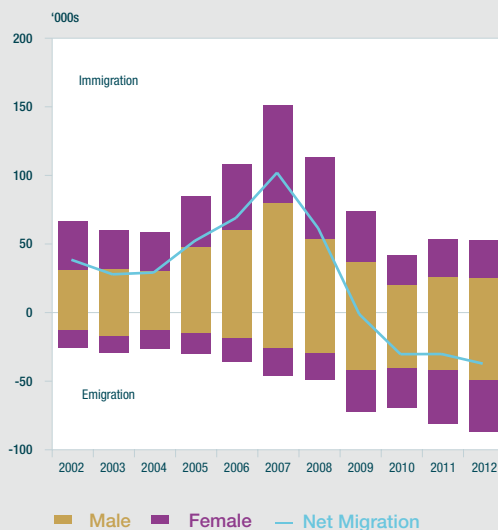
¹¹ See Duffy, D., J. Fitz Gerald and I. Kearney, 2005. "Rising House Prices in an Open Labour Market", *The Economic and Social Review*, Vol. 36, No 3, Winter and Fitz Gerald J., et al., 2008, Medium-Term Review: 2008-2015, Dublin: The Economic and Social Research Institute.

Box C: Migration in Ireland: Recent Trends in Historical Context*By Thomas Conefrey¹⁰*

Figure C2 shows the breakdown of the net migration figure into emigration and immigration by gender. Two interesting features are visible from the chart. The first is the rapid increase in emigration from 2008 which measured 87,000 in the year to April 2012. The second notable trend from the chart is the continuing high levels of immigration into Ireland since 2008 despite the deterioration in the economy. Although immigration reduced sharply from its peak in 2007 when over 151,000 people came to Ireland, the inflow of labour has averaged over 55,300 annually since 2009, despite the dismal economic environment. This high level of inward migration has kept the figure for net emigration to below levels recorded during the late 1980s despite record numbers leaving Ireland. The gender breakdown in Figure 2 indicates that males account for a larger share of total emigration than females.

Figure C3 shows the breakdown of emigration by nationality from 2006. In 2009, citizens of the accession states accounted for the largest share of total emigrants; of the 72,000 who emigrated in that year, 30,500, or 42 per cent were citizens of the new member states. Irish nationals numbered 19,000 or around 27 per cent of all emigrants. The chart shows a change in the composition of emigration over recent years with Irish nationals now accounting for over 50 per cent of all those leaving the country since 2010. In the year to April 2012, it is estimated that Irish nationals accounted for 54 per cent of all emigration while accession state citizens comprised the second largest group accounting for close to one in five of all emigrants.

Box C Chart 2: Immigration and Emigration by gender, thousands

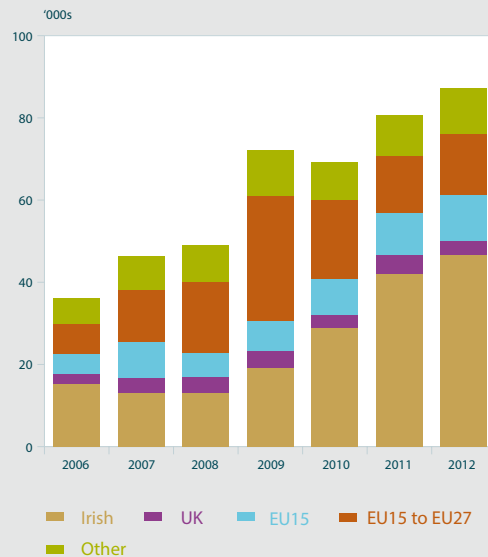


The decomposition of immigration by nationality is shown in Figure C4. The chart illustrates the sharp decline in the number of immigrants coming to Ireland from the accession states as economic growth stalled from 2008. In 2007, 85,000 people came to Ireland from the accession states accounting for just under half of total immigration to Ireland. This number declined to just 9,300 in 2010 and 10,000 in both 2011 and 2012. In contrast, the number of Irish nationals returning to the state has remained broadly stable at around 20,000 per annum since 2009. With the decline in the number of non-Irish nationals coming into the state, Irish nationals now account for the largest share of total immigrants at around 40 per cent over the last 4 years.

Box C: Migration in Ireland: Recent Trends in Historical Context

By Thomas Conefrey¹⁰

Box C Chart 3: Emigration by nationality, thousands



Box C Chart 4: Immigration by nationality, thousands

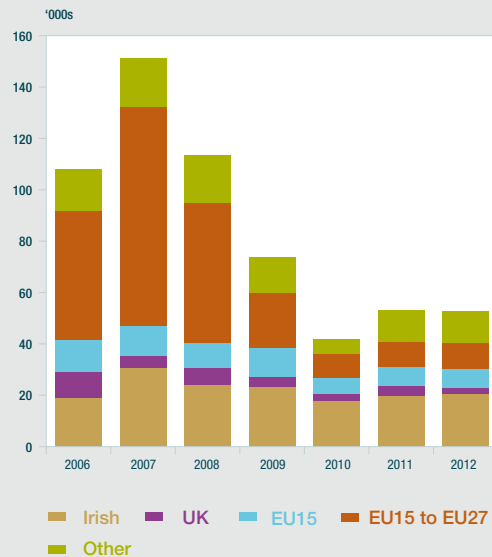
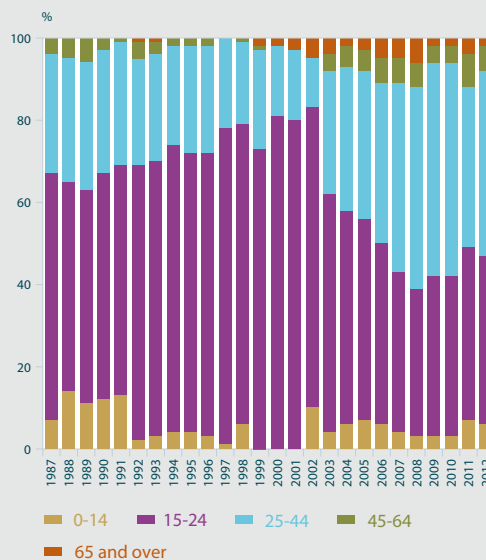


Figure C5 shows the breakdown of emigration by age group from 1987. As shown in the graph, emigration has been concentrated among the younger 15-24 and 25-44 age cohorts. The data indicate an increase since 2003 in the share of emigrants in the 25-44 year old age group compared to the previous episode of large-scale emigration in the late 1980s.

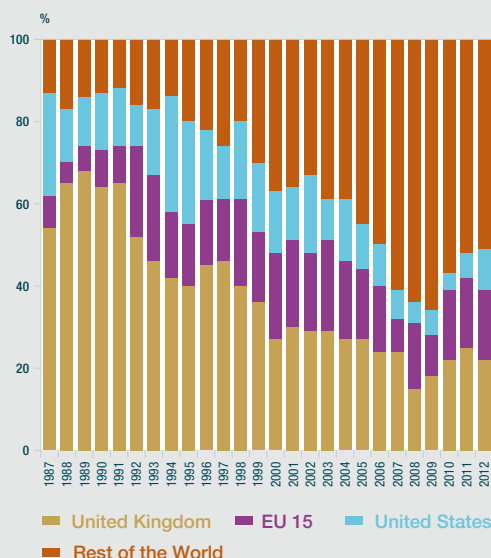
Box C Chart 5: Emigration by age group, 1987-2012



Box C: Migration in Ireland: Recent Trends in Historical Context*By Thomas Conefrey¹⁰*

A notable shift in the choice of destination of emigrants from Ireland is evident in Figure C6. In the late 1980s the UK was the destination of choice for the bulk of emigrants with 60 to 70 per cent of all those leaving the state moving to the UK. Since then, however, there has been a steady decline in the proportion of Irish emigrants leaving for the UK with a substantial increase in the share emigrating to countries outside the UK, EU and US, as shown in the chart. In the year to April 2012, over half of emigrants moved to countries outside these three regions while around one in five relocated to the UK. Within the rest of the world category, Australia and Canada are the most important destinations.

Box C Chart 6: Emigration by Destination, 1987-2012



In summary, this Box highlights recent trends in migration and compares developments to the last period of substantial outward migration in the late 1980s. Although net outward migration since 2010 has been substantial, averaging 1.4 per cent of the labour force annually, it has not reached the levels recorded in the late 1980s. This is because record levels of emigration have been partially offset by continuing high levels of immigration (around 50,000 annually since 2010) thereby reducing the overall net outflow figure. Emigration is concentrated in the younger age cohorts and data point to a shift in the destination of emigrants with the majority now moving to regions other than the UK, EU or US.

In the short-run, the resumption of net outward migration has helped moderate the rise in the unemployment rate highlighting the importance of the migration channel to labour supply in an Irish context. If the return to net emigration experienced over recent years led to a permanent reduction in the labour force, this would have a damaging impact on the long-run potential output of the economy. However, there is also evidence that emigration can have positive impacts on source countries. Using Irish data, Barrett and Goggin (2010) find evidence of higher wages for returned emigrants (many who left in the 1980s) relative to comparable workers who never left. This finding is consistent with the view of emigration and subsequent return being seen as part of a process of human capital formation. A return to growth in the Irish economy within a reasonable timeframe would greatly enhance the prospect of return migration making a positive contribution to the Irish economy over the coming years, as occurred from the mid-1990s.

¹³ See Barrett, A. and J. Goggin, 2010. "Returning to the Question of a Wage Premium for Returning Migrants," *National Institute Economic Review*, National Institute of Economic and Social Research, vol. 213(1), pages R43-R51, July.

Table 6: Employment, Labour Force and Unemployment 2011, 2012^a, 2013^f and 2014^f

	2011	2012	2013	2014
Agriculture	83	82	82	83
Industry (including construction)	348	340	339	343
Services	1418	1413	1419	1435
Total Employment	1849	1835	1840	1862
Unemployment	317	320	311	301
Labour Force	2166	2155	2152	2163
Unemployment Rate (%)	14.6	14.8	14.5	13.9

Note: Figures may not sum due to rounding.

Taking into account the latest available data as well as our forecasts for output, the number employed is expected to average 1.84 million in 2012. This would represent a fall of 13,800 relative to the annual average in 2011, or 0.7 per cent. A small rise in the number employed in 2013 is projected. This would mark the first annual increase in employment since 2007. On the basis of expected stronger growth in output, employment should expand again in 2014. Public sector employment is expected to fall over the period of the forecasts reflecting the impact of incentivised early retirement schemes and other redundancy programmes. The pace of contraction in the labour force has eased over recent quarters and this trend is expected to continue over the forecast horizon. A marginal decline of 0.1 per cent, driven by demographic factors, is projected in 2013. On unemployment, the rate is forecast to average 14.8 per cent in 2012 and 14.5 per cent in 2013. Assuming the projected growth outlook for 2014 materialises, further inroads could be made into reducing the unemployment rate in 2014. In addition to a return to economic growth, these forecasts depend critically on the implementation of appropriate policy measures to avoid long-term structural unemployment.

Pay

The national income and expenditure accounts for 2011 indicate a small rise of 0.7 per cent in economy-wide compensation per employee. Data from the CSO's Earnings, Hours and Employment Costs Survey for the first nine months of last year show a continuation of this

upward trend in earnings during 2012. Growth in average weekly earnings measured 0.5 per cent on a year-on-year basis in the second quarter; in the third quarter the equivalent figure was 1.1 per cent. Comparing the first nine months of 2012 with the same period in 2011, average weekly earnings were 1 per cent higher. A decomposition of the increase in whole economy average weekly earnings in Q3 reveals that it solely reflected an increase in average hourly earnings – average hours worked fell by 0.9 per cent while average hourly earnings increased by 1.9 per cent. Economy-wide average hourly earnings in the third quarter of 2012 were 0.5 per cent above the level recorded in the corresponding quarter of 2009. These data provide little evidence of a pronounced reduction in overall economy-wide earnings since the economy went into decline in 2008. While public sector earnings declined during 2010, private sector earnings were broadly stable over the period 2008-2010 and recorded a small increase in 2011.

Increases in average weekly earnings took effect across both the public and private sector during the year to the third quarter of 2012. While an increase of 0.9 per cent was recorded in the public sector over this period, a larger increase of 1.6 per cent took effect in private sector average weekly earnings. Turning to the composition of the increase in average weekly earnings, the data indicate that the increases in both the public and private sector were due to higher average hourly earnings. Hours worked declined on a year-on-year basis in both sectors during the quarter.

At a sectoral level, average hourly earnings rose in seven of the thirteen economic sectors annually in the third quarter of 2012, with the largest percentage increases recorded in the *construction, professional, scientific and technical* sector (+4.6 per cent) and the *manufacturing* sector (+4.4 per cent). Annual declines in hourly earnings were recorded in *administration and support services, arts and entertainment and mining and quarrying*.

Looking ahead, with the unemployment rate estimated to stay close to 14 per cent both this year and next, wage pressures are expected to remain muted. Consistent with the trend evident in the data up to 2012 Q3, the payment of annual salary increments is likely to lead to an increase in compensation per public sector employee in 2012. With public sector employment projected to decline in 2013 in line with government announcements, compensation per employee in the public sector is expected to rise modestly in 2013. Up to Q2 2012, private sector hourly earnings experienced little movement with the annual rate of change falling within the range +0.6 per cent to -0.7 per cent. In Q3 2012, average hourly earnings increased by 2.5 per cent on an annual basis, the largest such rise since the introduction of the EHECS survey. Despite the large Q3 increase, weak output growth in 2012 as well as the considerable spare capacity in the labour market are expected to result in a small increase in private sector compensation in 2012. On the basis of the projected expansion in output and a small improvement in the unemployment rate, some increase in the pace of private sector wage growth is envisaged in 2013 and 2014. Regarding overall economy-wide wage developments, annual growth in 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.

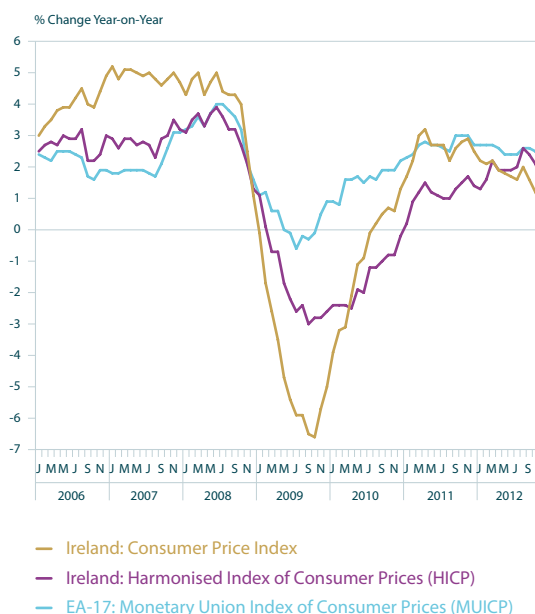
Inflation

Inflation has been low or negative in Ireland since 2009. Indeed, prices measured by the HICP have increased by just 1.1 per cent on a cumulative basis during the four year period between January 2009 and November 2012.

Excluding energy, the HICP inflation rate is expected to be just 0.9 per cent in Ireland in 2012. It appears that weakness in the domestic economy has restrained inflation during the financial crisis. However, overall inflation in Ireland was pushed higher in 2012 by imported energy price inflation.

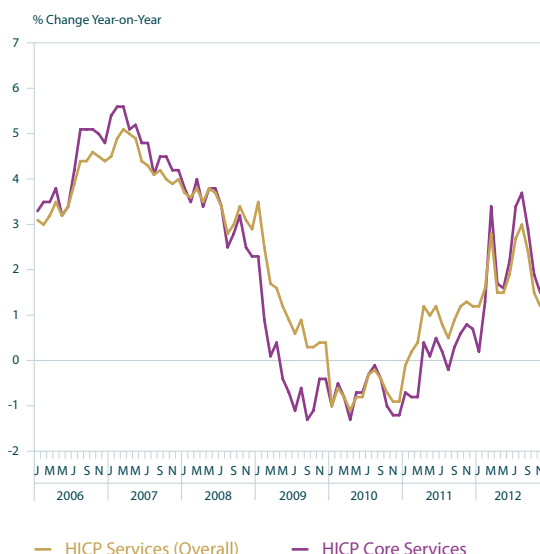
Inflation has been weaker than expected over recent months. An increase in core services inflation during the middle of 2012 proved temporary in nature. Energy prices also fell more quickly than anticipated and a stronger exchange rate versus the dollar means that the forecast for energy price inflation in 2013 has been revised downwards. Countering these downward pressures on the forecast for 2013 are the measures announced in Budget 2013. The Budget is expected to add 0.3-0.4 per cent to the inflation rate for this year, with the increased excise on alcohol and tobacco accounting for roughly three quarters of this impact. Taking all factors into account, the HICP inflation rate for 2013 is unchanged since the last Bulletin at 1.3 per cent.

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.

Food price inflation currently stands at 1.8 per cent. Following increases in agricultural commodity prices during the year, unprocessed food inflation is also at 1.8 per cent. Processed food inflation is 1.7 per cent but this masks some underlying variation. Once tobacco and alcohol are excluded, underlying inflation in processed food is much weaker at just 0.3 per cent. This is expected to increase this year as higher agricultural commodity prices filter through to processed food.

Energy price inflation, on an annual basis, averaged approximately 9.6 per cent in the first eleven months of 2012. This has been the major driver of inflation over the past year. This was due to the euro price of oil being higher in 2012 relative to 2011. The increased price was caused both by exchange rate movements

(weaker euro against the dollar) and underlying oil price movements. Since the last Bulletin, there have been increases in gas and electricity prices charged by utility companies. Despite some recent falls, petrol and diesel prices have increased by 8.8 and 8.0 per cent respectively in the last twelve months but are unaffected by changes in the 2013 Budget and have been falling in recent months. The carbon tax will impact on the price of coal and briquettes when introduced next May but the impact on overall inflation will be minimal. Based on current assumptions regarding exchange rates and oil prices, energy price inflation will be close to zero this year.

HICP services inflation is expected to average 1.9 per cent for 2012, with core services inflation at 2.1 per cent. The main contributors to core services inflation in 2012 are health insurance, third level tuition and transport services.

Unusually large increases in some seasonal items such as air fares and hotels during the summer months have been unwound. Inflation of alcohol related services for 2013 will increase as a result of the Budget measures although the exact impact will depend on how much of the price increase is passed on by publicans and restaurants. The increases in motor tax are not included in the HICP services inflation rate but are included in the CPI services inflation rate. As a result, the Budget measures have a slightly stronger impact on CPI inflation relative to HICP inflation. Core services inflation is expected to average 1.7 per cent in 2013. This is weaker than the outturn for 2012. Taking services as a whole, the inflation rate is expected to be 1.6 per cent in 2013, down slightly from 2.0 per cent in 2012.

Turning to the consumer price index (CPI), Table 7 shows the annual average inflation

Table 7: Inflation Measures – Annual Averages, Per Cent

Measure	HICP	HICP excluding Energy	Services ^a	Goods ^a	CPI
2009	-1.7	-1.0	1.2	-4.1	-4.5
2010	-1.6	-2.7	-0.7	-2.4	-1.0
2011	1.1	0.0	0.8	1.5	2.6
2012 ^f	2.0	0.9	1.9	2.0	1.7
2013 ^f	1.3	1.5	1.6	1.0	1.2
2014 ^f	1.2	1.6	1.8	0.7	1.1

^a Goods and services inflation refers to the HICP goods and services components.

rate for 2012 is estimated to be lower than the HICP annual rate at about 1.7 per cent. The lower forecast for the CPI relative to the HICP reflects the impact of mortgage interest repayments, which are included in the CPI but not the HICP. The year-on-year inflation rate for mortgage interest stood at -17.1 per cent in November despite some increases in standard variable rates in that month. The impact of energy prices on the HICP estimate for 2012 is also evident from the table. Excluding energy, the HICP forecast would be 0.9 per cent for 2012 rather than 2.0 per cent. The impact of energy prices on inflation is expected to be less important this year. Consequently, goods price inflation is expected to fall to 1 per cent in 2013. Combining this with a services inflation forecast of 1.6 per cent yields the forecast for overall HICP inflation of 1.3 per cent for 2013. The forecast for overall HICP inflation in 2014 is slightly weaker than 2013 at 1.2 per cent. The domestic component to inflation is expected to be stronger in 2014, with services inflation of 1.8 per cent, but this is offset by weaker imported goods inflation.

Property Prices

Market indicators suggest that the Irish residential property market, in some sectors at least, is entering a period of stabilisation following five years of declines. The CSO's Residential Property Price Index for November 2012, which is based on mortgage drawdowns, points to a gradual easing in the year-on-year rate of decline – from 17.4 per cent in January 2012 to 5.7 per cent in November 2012. The later months of last year even witnessed some month-on-month increases¹⁴ in some market segments; nationally, however, property prices are down approximately 2.2 per cent over the January to November period. In terms of a cumulative fall from peak, national property prices are 49 per cent below their peak, although again considerable differences exist depending on location and type. Prices in Dublin have fallen further than the rest of the country – ostensibly because prices there increased more during the boom, with house prices down 54.8 per cent and apartment prices down 63 per cent; house prices outside of Dublin

have fallen by a lesser 46 per cent. The Daft, ie Property Price Register Index also reveals a deceleration in actual transaction prices, which were reportedly down 8 per cent year-on-year in the final quarter of 2012, a deceleration compared to a decline of almost 19 per cent a year previously.

Chart 6: Residential Property Price Indices



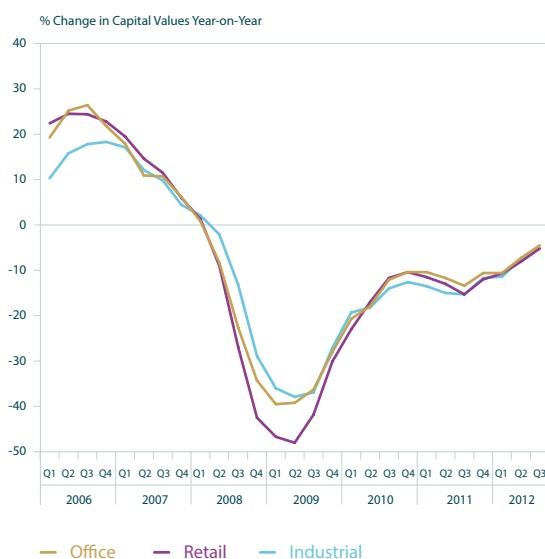
Source: CSO.

Considerable uncertainties remain in determining future movements with a differing range of demand and supply factors set to impact on developments over the course of the year. Prices for family homes in well-located urban areas have witnessed some stabilisation. There is evidence that the supply of housing in these regions are falling back to pre-crisis levels and are selling faster than other market segments; house prices in Dublin, for example, even increased marginally in the latter stages of last year. However, it is possible that the end of mortgage interest relief may have brought forward some house purchases into the later stages of last year, with an associated negative impact on activity this year. From a demand perspective, there are some positives in that a substantial cohort of potential buyers

¹⁴ Low levels of transactions mean that a small number of property sales can have an undue impact on the headline month-on-month figure which is prone to short-term volatility, exacerbated by difficulties in regional categorisations associated with the CSO's hedonic model.

has built up over the last five years; this is reflected in upward pressures in the residential rental market – up almost 6 per cent since their low at end-2010. Affordability levelled off in 2012, as reduced disposable incomes and increased variable mortgage interest rates offset falls in house prices. As well as a demand/supply mismatch, over-supply remains an issue in many areas and while there is evidence that mortgage supply is picking up, it is coming from a very low base and with stricter financing conditions. The number of actual housing transactions only increased marginally in the first nine months of 2012 – at 14,000 compared to 12,000 in 2011 and 15,000 in 2010. Uncertainty also remains over the potential impact of repossessions in the buy-to-let sector. In all, the polarisation looks set to continue and while there has been some increase in mortgage supply, activity and prices look set to remain depressed this year.

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 third 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 1.7 per cent quarter-on-quarter capital value decrease in Q3 2012. This is corroborated by the Jones Lang LaSalle index for Q3 2012, which recorded a slightly larger decrease of 2.4 per cent in capital values for the third quarter of 2012. This index also reported some weakness in rental values, reporting a quarterly decline of 0.5 per cent in the third quarter. With prime rental yields at a relatively attractive level in some sectors, a potential influx of investment in the form of Real Estate Investment Trusts could provide some much-needed impetus for the commercial market this year.

Competitiveness

Exchange Rate Developments

Positive market sentiment at efforts to stabilise and separate the European sovereign and banking crisis resulted in a strengthening of the euro against both the dollar and sterling in the latter stages of last year and the early stages of this year. The euro appreciated by 6.6 per cent and 3.8 per cent against the dollar and sterling over the August 2012 to January 2013 period, respectively. This resulted in some reversal of competitiveness improvements evidenced in the Harmonised Competitiveness Indicators (HCIs) in the latter stages of last year, available up to October 2012, which increased by 2.2 per cent in the July 2012 to October 2012 period. By this measure of competitiveness, Ireland has returned to pre-crisis levels, with most of the improvement coming in the form of lower price levels relative to our main trading partners from 2010 to present; inflation differentials with our trading partners, however, have narrowed of late as the deflationary impact of the recession spread to the wider global economic environment.

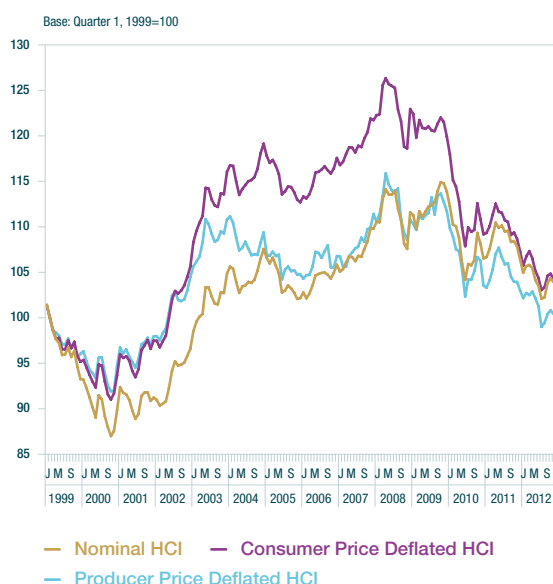
Productivity and Cost Competitiveness

Building on improvements in 2009 and 2010, National Account and employment data for 2011 indicated that there were further improvements in productivity in 2011, with productivity on a GDP basis increasing annually by 3.5 per cent. Productivity,

15 The EBS DKM Affordability index for November 2012 indicated that a first-time buyer working couple is spending 11.7 per cent of their joint income to fund a mortgage, compared with a peak of 26.4 in December 2006.

however, measured on a GNP basis declined by 0.7 per cent, tempered by higher net factor income outflows related to profit repatriation of foreign multinationals operating in Ireland. As highlighted in previous Bulletins, there were likely two factors at play behind the higher GDP productivity measure: firstly, strong growth in the high-value added, mostly foreign-owned export orientated manufacturing sectors and, secondly, a sharp fall in activity in lower productivity sectors such as construction and services. (For a more nuanced analysis of Ireland's cost competitiveness performance see "Cost Competitiveness and Export Performance in the Irish Economy during the Recession" in Bulletin Number 3 2012).

Chart 8: Harmonised Competitiveness Indicators



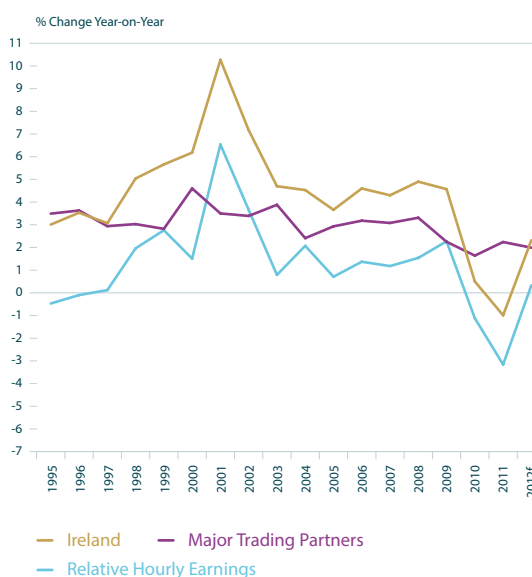
Source: Central Bank of Ireland and ECB.

More recently, and for the projection horizon, these compositional effects are likely to play less of a role, with much of the structural change in the construction sector already occurring - it now accounts for a much smaller share of output (approximately 6 per cent). Following projected productivity growth of 1.5 per cent last year and in light of the overall economic and labour market outlook set out above, average annual productivity growth of

1 per cent on a GDP basis is projected for this year, before increasing to 1.3 per cent in 2014.

Taking into account the more modest increase projected for productivity, and factoring in relatively modest increases to compensation of employees, the large declines in unit labour costs experienced in previous years are forecast to moderate over the projection period. Following unit labour costs declines of 3 per cent (on a GDP basis) in 2011 and a projected decline of 0.6 per cent last year, absolute unit labour costs are projected to remain 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.

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.

In terms of the other competitiveness indicators, the CSO's experimental Services Producer Price Index points to some upward pressure on business-to-business services prices in Ireland, with prices up 2 per cent year-on-year in the third quarter of 2012, although down 0.3 per cent compared to the previous quarter. Much of the annual increase is accounted for by higher transport costs and by high computer and consultancy fees. On-going work of the National Competitiveness Council (NCC) highlights areas of concern in 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 programme, 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.

The Public Finances

Overview

The public finances continued to improve last year, with the quarterly and annual targets set under the Programme achieved once again. The latest fiscal data reveal that the Exchequer deficit outturn was a lower than expected €14.9 billion in 2012, a decline of over €10 billion from the preceding year. As a result the general government deficit is likely to be lower than the 8.2 per cent of GDP forecast on Budget day and considerably lower than the 8.6 per cent ECOFIN target. Looking ahead there is still significant work to be done before the public finances are returned to a sustainable level. The Government introduced €3.5 billion in consolidation measures in December's Budget and anticipate that a further adjustment of €5.1 billion will be required in the following years to ensure that the deficit falls below 3 per cent of GDP in 2015.

Exchequer Returns

End-year Exchequer returns revealed a deficit of €14.9 billion last year, a substantial reduction of €10 billion from the 2011 figure (see Table 8) and below the Budget 2013 forecast of €15.7 billion. The annual improvement primarily reflected developments on the expenditure side, as spending declined by 11.8 per cent against the backdrop of substantially lower banking support costs and the decision to settle the 2012 promissory note payment with a Government bond rather than cash. Enhanced revenues also supported the improved Exchequer position, increasing by 6.3 per cent year-on-year, with tax revenue ending 2012 €270 million above April's revised profile (see Chart 11).

Table 8: 2012 Exchequer returns

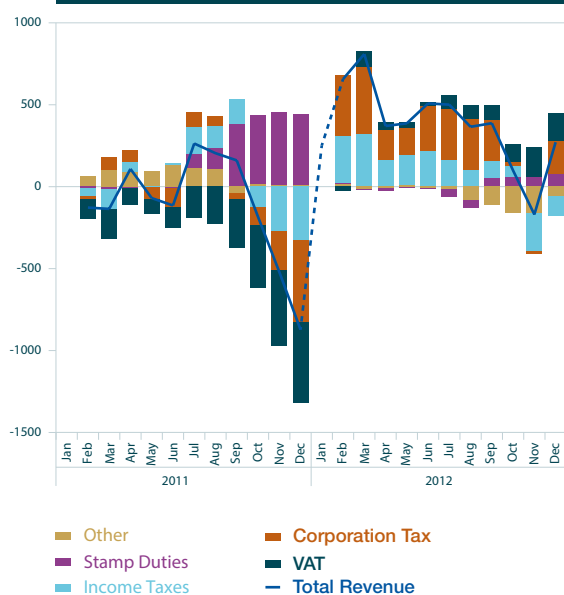
	2011 €m	2012 €m	% Annual Change
Current Expenditure			
– Voted ¹⁶	41,419	41,461	
– Non-voted ¹⁷	6,607	8,103	
Total	48,026	49,564	3.2
Current Revenue			
– Tax revenue	34,027	36,646	
– Non-tax revenue	2,774	2,819	
Total	36,801	39,466	7.2
Current Budget Balance	-11,225	-10,098	
Capital Budget Balance	-13,693	-4,793	
Exchequer Balance	-24,918	-14,891	
General Government Balance (% of GDP)¹⁸	-13.4	-8.2	
Source and Application of Funds			
– Total Borrowing/Repayments	27,046	24,110	
– Promissory Note Issued to IBRC ¹⁹		3,060	
– Total Increase in Exchequer Deposits	2,128	6,159	
Exchequer Balance	-24,918	-14,891	

¹⁶ Government current expenditure voted on by the Dail in the areas of Social Welfare, Health, etc.

¹⁷ Includes items such as debt servicing and EU Budget contribution.

¹⁸ The 2012 figure is the Department of Finance's Budget 2013 estimate. Following the publication of end-year Exchequer returns, it appears that the figure will be lower.

¹⁹ The promissory note transaction is not included in non-voted expenditure as no cash was issued arising from the transaction. The bond issued is included in total borrowing / repayments.

Chart 11: Cumulative Exchequer Revenue Performance Relative to Target, 2012

Note: 'Other' tax items here comprise of Capital Acquisitions Tax, Capital Gains Tax, excise duties, customs and a minor balancing item for unallocated tax revenues.

Source: Central Bank of Ireland calculations and Department of Finance profiles.

Taking a closer look at revenue developments, tax receipts increased to €36.6 billion during the year, annual growth of 7.7 per cent. The strength of this increase partly reflected two temporary elements which boosted inflows - the delayed receipt of corporation tax payments in January and a decision by the Revenue Commissioners to reclassify a portion of PRSI receipts as income tax. Even after adjusting for these factors, however, tax revenue still increased by an estimated 5.3 per cent. The performance in the second half of the year disappointed somewhat relative to the first - with monthly tax receipts weaker than expected in four of the final six months - but strong inflows in December ensured that tax revenue ended the year €270 million higher than was profiled in April and €480 million above the Budget 2013 estimate. There were divergent developments in the 'big four' tax heads. Against the backdrop of strong carry-over effects from Budget 2011 - most notably the introduction of the Universal Social Charge - and new measures in Budget 2012, income tax recorded annual growth of 10 per cent but still fell €124 million or 0.8 per cent

below its April profile. Excise duties also fell below their April target, by €108 million, but corporation tax and VAT surpassed expectations by €196 million and €176 million respectively. Corporation tax receipts were boosted by very strong inflows in December. Non-tax revenue, which makes up a much smaller portion of total revenue, was broadly unchanged from 2011 at €2.8 billion with higher Central Bank surplus income offset by lower guarantee fees. The final revenue component – capital receipts – was around €250 million lower, year-on-year, notwithstanding a stronger than expected €450 million inflow from the sale of the UMTS license.

On the spending side, total net voted expenditure was €45 billion last year, a reduction of €760 million from 2011 but €520 million or 1.2 per cent ahead of its April profile. This was primarily caused by a shortfall in PRSI inflows, however, receipts of which are subtracted from gross expenditure to give the net figure. Adjusting for this, net voted expenditure was a more modest 0.4 per cent above its revised April target. There were divergent developments in current and capital expenditure; the former ended the year above target, but this was partly offset by lower than expected capital spending. From a Departmental perspective, meanwhile, 13 of the 16 Vote Groups recorded under or on target spending, but this was more than offset by large overspends occurring in Social Protection – mainly due to pressures in the Jobseekers Allowance area – and Health.

Non-voted expenditure, by comparison, was substantially weaker than in 2011, and has driven the decline in the overall Exchequer deficit. Debt servicing costs ended the year €1.7 billion higher (€1.1 billion when use of the Capital Services Redemption Account for debt servicing purposes in 2011 is taken into account), but bank support payments declined sharply as the €5.3 billion recapitalisation outlay in July 2011 was not repeated. Furthermore, the decision to finance the 2012 promissory note payment with a Government bond rather than cash produced a cash saving of €3.1 billion. Taking all of these factors into account, non-voted expenditure declined by €6.8 billion or 37 per cent last year.

General Government Developments

In terms of the broader general government balance, the Government submitted updated Maastricht returns to Eurostat at end-September²⁰ which revised up the estimated deficit for 2011 to 13.4 per cent of GDP. The underlying general government deficit – which excludes the costs of supporting the banking sector and is the relevant measure for the EU-IMF Financial Assistance Programme – was estimated to have been 9.1 per cent of GDP. Turning to last year, meanwhile, Budget 2013 had estimated a deficit of 8.2 per cent of GDP for the year as a whole, well inside the ECOFIN deficit target of 8.6 per cent of GDP. Given the better than expected end of year Exchequer position, however, it now seems likely that the actual general government deficit for the year will be better than this and could even fall below 8 per cent of GDP. The next formal estimate of the 2012 outturn will be published in the context of the end-March 2013 Maastricht returns.

Exchequer Financing

The Exchequer returns show that the deficit was financed by net government borrowing of €24.1 billion last year. When the €3.1 billion promissory note bond is taken into account, and against the backdrop of a solid increase in market funding, this resulted in a €6.2 billion increase in Exchequer cash balances over the period (see Table 8). The conclusion of the eighth Programme review by the European Commission and the IMF in January paved the way for the disbursement of an additional €2.2 billion of programme funds (€0.8 billion from the EU, €0.9 billion from the IMF, and €0.5 billion from Ireland's other EU bilateral partners). Once this tranche has been fully drawn down, some €57 billion will have been disbursed, over 84 per cent of the total external financing of €67.5 billion. As noted in the detailed Chapter on the EU-IMF Financial Assistance Programme later in this Bulletin, the quantitative fiscal targets underpinning the Programme continued to be fully met in the second half of last year.

²⁰ Maastricht returns are submitted by each Member State to Eurostat twice yearly, at end-March and end-September, for the application of the Excessive Deficit Procedure.

Table 9: Fiscal consolidation outlined in Budget 2013 and planned in MTFS for 2014 and 2015

€ Billion	2013	2014	2015
Total Consolidation	3.5	3.1	2.0
Revenue	1.43	1.1	0.7
– New measures	1.21	0.9	0.6
– Carry forward	0.22	0.2	0.1
Expenditure	1.94	2.0	1.3
– Current	1.44	1.9	1.3
– Capital	0.50	0.1	0.0
Increased Dividends	0.1	–	–

Budget 2013

As signalled in November's Medium Term Fiscal Statement (MTFS), the Government introduced €3.5 billion in fiscal consolidation measures in Budget 2013 to ensure that this year's ECOFIN deficit target of 7.5 per cent of GDP is achieved. The Department of Finance's pre-Budget Estimates had forecast a deficit of 8.9 per cent of GDP under the assumption of unchanged policies.

Revenue raising measures accounted for €1.43 billion of the consolidation (around €200 million higher than outlined in the MTFS), and were mainly concentrated in direct tax heads. Most notably the introduction of a local property tax will yield €500 million in a full year, the removal of the weekly PRSI allowance from full rate and modified rate PRSI contributors will yield €289 million and changes to supplementary pensions will yield €100 million this year and at least €250 million from 2014 onwards. With regard to indirect taxes, changes to excise duties are expected to boost revenues by around €300 million in a full year. The expenditure side accounted for €1.94 billion of the adjustment package (€300 million less than outlined in the MTFS) with €1.44 billion of this representing current savings and €500 million coming from capital savings. Departmental expenditure ceilings for this year have been adjusted upwards marginally in light of the updated consolidation path and other specific developments, but net savings of 3.7 per cent and 11.9 per cent are still expected for current and capital spending respectively. The Exchequer pay and pensions

bill is forecast to fall by €500 million or 3 per cent, with the numbers employed in the public service expected to fall by around 7,500²¹ from the 2012 ceiling. The final €100 million in consolidation will come from increased dividends (see Table 9).

Looking further ahead, the MTFS estimated that an additional €5.1 billion in consolidation would be required in the next two years - €3.1 billion in 2014 and €2.0 billion in 2015 - to achieve ECOFIN deficit targets of 5.1 and 2.9 per cent of GDP respectively.

With regard to general government debt, the Department of Finance anticipates that the debt to GDP ratio will increase from its end-2012 level of 118 per cent of GDP to a peak of 121 per cent in 2013. It is then expected to gradually decline in the following years, falling to 117 per cent of GDP by 2015.

²¹ As measured by Whole Time Equivalents and including local authority staff.

An Timpeallacht Gheilleagrach

Cé go bhfuil an t-ionchas eacnamaíoch dúshlánach i gcónaí, meastar go leanfaidh an téarnamh céimseach i leibhéal foriomlán na gníomhaíochta eacnamaíche ach go mbeidh luas an téarnaimh sin níos moille ná mar a measadh roimhe seo. Sa dara leath den bhliain 2012, chonacthas moilliú ar an ngníomhaíocht eacnamaíoch ar leibhéal ní ba leithne idirnáisiúnta agus chonacthas athbhreithniú anuas ar na hionchais fáis i bpríomh-chomhpháirtithe trádála na hÉireann. Ba é an lagú ar an éileamh domhanda ba chionsiocair leis an moilliú ar fhás onnmhairí na hÉireann agus, i bhfianaise an spleáchais leanúnaigh ar onnmhairí chun an laigeacht eacnamaíoch intíre a fhritháireamh, tháinig lagú ar fhás OTI in 2012 i gcomparáid le 2011. Ar a shon sin, is dócha go mbeidh an toradh do 2012 beagainín níos airde ná mar a measadh tráth na Faisnéise Ráithiúla deireanaí, rud a léiríonn méadú beag ar an OTI sa tríú Ráithe agus athbhreithniú aníos le déanaí ar na meastacháin fáis don chéad leath den bhliain. Ag féachaint romhainn, meastar go maolóidh fás onnmhairí na hÉireann in 2013 i gcomparáid leis na meastacháin roimhe seo de thoradh éilimh sheachtraigh níos laige agus toisc go meastar go moilleoidh an fás sna príomh-chomhpháirtithe trádála, fad a mheastar go leanfaidh an t-éileamh intíre de bheith ag gluaiseacht go mall i dtreo na cobhsaíochta.

Tugann na forbairtí seo le tuiscint go raibh an toradh fáis don bhliain seo caite beagainín ní ba láidre ná mar a bhíodhas ag súil leis ach go bhfuil an t-ionchas don bhliain seo níos laige ná mar a bhíodhas ag súil leis. Meastar anois gur mhéadaigh an OTI faoi 0.7 faoin gcéad in 2012 agus gur leathnaigh an OTN faoi 1.5 faoin gcéad, méadú arna threisiú le méadú ní ba ísle ná mar bhíodhas ag súil leis ar eis-sreafaí glanioncaim. Cé go gceaptar go méadóidh fás OTI go dtí 1.3 faoin gcéad in 2013, is ionann é sin agus athbhreithniú anuas ó 0.4 faoin gcéad sa réamhaisnéis roimhe seo, rud a léiríonn an t-ionchas idirnáisiúnta is lú fabhar. Ag glacadh leis go bhfillfear ar phátrún is dual do shreafaí glanioncaim, meastar go maolóidh fás OTN go dtí 0.5 faoin gcéad i mbliana. Ar bhonn toimhdí comhdhearcaidh ó na príomh-institiúidí eacnamaíocha lena meastar go mbeidh téarnamh ar an éileamh seachtrach sa mhéid go bhfillfidh sé ar a threocht fadtréimhseach agus i bhfianaise go meastar go gcobhsóidh an t-éileamh intíre, tuartar go dtiocfaidh méadú 2.5 faoin gcéad ar OTI agus méadú 1.4 faoin gcéad ar OTN. Baineann éiginnteacht leis na meastacháin seo, áfach, agus ó tharla go gceaptar go leanfaidh glan-onnmhairí de

bheith ina bpríomhfhoirsa tiomána don fhás sna blianta atá le teacht, beidh tionchar mór ag forbairtí sa timpeallacht sheachtrach ar an toradh.

Leantar de bheith ag cloí go dlúth le spriocanna Chlár AE/CAI agus leantar leis an dul chun cinn ar na príomhdhúshláin beartais. Ar a shon sin, ní mór dul chun cinn breise a dhéanamh i dtaca le saincheisteanna áirithe. San earnáil baincéireachta, baineann na príomh-shaincheisteanna leis an ngá chun dul chun cinn breise a dhéanamh chun dul i ngleic leis na fadhbanna a bhaineann le cáilíocht sócmhainní agus le hathbhunú na brabúsachta, dhá rud atá rithabhachtach chun go bhféadfar an earnáil a chur ar ais ar bhonn cobhsaí marthanach agus chun go mbeidh an earnáil in ann a hacmhainn iasachtaithe a mhéadú chun tacú leis an téarnamh eacnamaíoch. Ó thaobh na saincheisteanna a bhaineann le cáilíocht sócmhainní, is ábhar imní é go bhfuil gné fhadtéarmach ag baint le fadhb na riaráistí morgáiste. Cé go bhfuil na bainc ag tabhairt faoi mhodhnú fadtéarmach morgáistí agus faoi bhearta réitigh a fhorbairt agus a chur i bhfeidhm, ní leor an leibhéal cur

chun feidhme go dtí seo, i dtéarmaí fiachas a athstruchtúró nó iasachtaí a ghnóthú. Cé gur gá cothromaíocht chúng a bhaint amach, tá sé sár-riachtanach go ndéileálfadh institiúidí airgeadais go cinntitheach le riaráistí morgáiste. Ní foláir níos mó a dhéanamh ar mhodh tráthúil. Leanfaidh an Banc Ceannais lena dhlúthchaidreamh gníomhach leis na bainc ar an ábhar seo go dtí go mbeimid sásta go bhfuil beartais agus nósanna imeachta leordhóthanacha i bhfeidhm acu agus go bhfuil dul chun cinn cainníochtúil leordhóthanach á dhéanamh acu chun a chinntiú go gcoiscfear méadú ar riaráistí agus go ndéanfar riaráistí a ghnóthú nó, i gcás inar gá, go ndéanfar iad a athstruchtúró nó a réiteach.

Leantar leis an dul chun cinn atá á dhéanamh maidir le saincheistean baineceireachta eile. Ó tharla go bhfuil taiscí sna bainc intíre sách cobhsaí le míonna beaga anuas, go bhfuil dul chun cinn á dhéanamh maidir le díghiaráil agus ó tharla go bhfuil na bainc ag tabhairt faoi eisiúintí margaidh, tá laghdú tar éis teacht ar an spleáchas ar mhaoiniú ón mbanc ceannais, cé go bhfuil an spleáchas sin fós ard. Tá dúshlán ann i gcónaí ó thaobh maoiniúcháin, áfach. Idir na dúshlán sin agus an brú ó shócmhainní bearnaithe agus ó ardchostais maoiniúcháin agus oibríochta, cuirtear brú ar bhrabúsacht. Mar fhreagra ar na dúshlán sin, lean na bainc dá n-oibríochtaí a chuíchóiriú agus a athstruchtúró agus de dhul chun cinn a dhéanamh maidir lena gcuid costas a laghdú.

Deimhnítear leis na sonraí fíoscacha is déanaí gur lean an t-airgeadas poiblí de bheith ag feabhsú anuraidh agus is cosúil anois go mbeidh an Fiachas Rialtais Ghinearálta do 2012 faoi bhun 8 faoin gcéad den OTI, figiúr atá níos ísle ná an figiúr de 8.2 faoin gcéad a cuireadh in iúl le déanaí ar lá an Bhuiséid agus go mór faoi bhun an sprioc do 2012 arb ionann agus 8.6 faoin gcéad. Cé go laghdófar leis sin, i bprionsabal, ualach an choigeartaithe fhioscaigh amach anseo, níorbh iomchuí an maolán a chuirfear ar fáil leis a úsáid chun an coigeartú a mhaolú. Tá sé tábhachtach go gcoifear leis an gcomhdhlúthú beartaithe arb ionann é agus €8.6 billiún idir 2013 agus 2015, rud a athdhearbhaíodh sa Ráiteas Fíoscach Meántéarmach. Dá ndéanfaí

amhlaidh, thabharfaí le tuiscint go leanfar leis an laghdú easnaimh arna bhaint amach in 2012 i gcoibhneas leis an sprioc sna blianta atá le teacht. Chabhródh an méid sin leis an easnamh a thabhairt anuas go dtí 3 faoin gcéad ar mhodh ní ba thapúla agus ba cheart go laghdódh sé an éiginnteacht agus, ar an gcaoi sin, ba cheart go gcuirfeadh sé le téarnamh intíre níos gasta. Trí chlú na hÉireann a fheabhsú maidir le ceapadh beartais, ba cheart go gcuideofaí le muinín iasachtóirí idirnáisiúnta oifigiúla agus príobháideacha a neartú agus le rochtain an Stáit ar mhaoiniú margaidh a fheabhsú tuilleadh.

Ba thoisc mhaolaitheach shuntasach iad onnmhairí le linn an choir chun donais agus, cé go meastar go gcobhsóidh an t-éileamh intíre de réir a chéile, tá sé bunriachtanach go bhfeidhmeoidh an geilleagar go láidir go seachtrach chun go bhféadfar filleadh ar fhás cothrom. I bhfianaise laigeacht ionchasach an éilimh sheachtraigh agus na n-éiginnteachtaí a bhaineann leis an ionchas idirnáisiúnta, beidh sé ríthábhachtach go ndéanfar iomaíochas a fheabhsú agus aon talamh a cailleadh le linn an bhorrtha a aisghabháil. Mar a tugadh le fios i bhFaisnéisí roimhe seo, leagann na tomhais chaighdeánacha idirnáisiúnta iomaíochais agus táirgiúlachta róbhéim ar leibhéal an fheabhais, de thoradh athruithe struchtúracha sa gheilleagar. Dá bhrí sin, is gá dul chun cinn breise a dhéanamh. D'fhéadfaí an dul chun cinn sin a bhaint amach trí bhonn costas ardaithe an gheilleagair a ísliú, san earnáil phoiblí agus phríobháideach ar aon, agus trí sholúbthacht agus éifeachtúlacht a mhéadú, go háirithe san earnáil phoiblí. Ní mór dul i ngleic leis na dúshlán sin chun go bhféadfar staid iomaíochais na hÉireann mar aon lena feidhmíocht trádála a neartú go fírinneach. Dá ndéanfaí amhlaidh, d'fheabhsófaí go suntasach na hionchais maidir le filleadh go marthanach ar fhás cothrom agus ar chaighdeán ardaithe mhaireachtála.

Financing Developments in the Irish Economy

Overview

European financial markets were relatively calm over the closing months of 2012, as market participants awaited clarity over the proposed banking Single Supervisory Mechanism (SSM). Meanwhile, sentiment remained broadly positive following the announcement by the Governing Council in early September in relation to Outright Monetary Transactions (OMT). Amidst this backdrop, financing conditions for the Irish sovereign and the Irish-owned credit institutions improved, as yields on sovereign bonds continued to fall and the two main Irish-owned banks issued covered bonds outside the Eligible Liabilities Guarantee (ELG) scheme. Overall developments in government debt and deficit positions over the third and into the fourth quarter of 2012 were in line with expectations, with a successful completion of the latest review of the EU/IMF Financial Assistance Programme and further disbursements received.

Overall funding requirements of credit institutions have also eased in line with the reduction in the size of the banking sector. Reliance on central bank funding decreased in recent months as, in general, deposits in the resident offices of banks in the State have stabilised, with deposits from the Irish private-sector in particular increasing. Retail interest rates on deposits for households and NFCs began to move downwards in late 2012, as banks continue to realign their margins where possible. This is particularly relevant as the prevailing interest rates on a significant amount of existing (particularly tracker mortgages) and new loans, remain relatively low.

Meanwhile, Irish households continue to deleverage their balance sheet, with a further reduction in household liabilities in the first half of 2012. However, the ongoing reduction in the value of housing assets has meant that household net worth reduced further over the period. Developments in the mortgage market, however, remain dominated by the continuing rise in the incidence of arrears on principal dwelling and buy-to-let properties. Mortgage accounts for principal dwelling houses (PDHs) greater than 90 days in arrears rose to 11.3 per cent of total at end-Q3 2012. While there

are indications that the transition into arrears is slowing, there remains a persistent problem of accounts that are in longer term arrears of over 180 days.

The leverage position of the resident non-financial corporation sector (NFCs) declined over the first half of 2012, despite an increase in overall financial liabilities of the sector which was driven by multinational enterprises operating in the State. Recourse to both resident bank and total non-bank debt financing generally declined in the second half of 2012. The interest rates on new NFC loan agreements in Ireland declined during 2012, in line with the reduction in the main policy rates. However, the reduction seen in Ireland has been smaller than for the euro area as a whole, and particularly so for the rates prevailing on smaller value loans which would be most used by small and medium sized enterprises (SMEs). Retail interest rates still remain below the prevailing rates for the sovereign, however. In volume terms, lending to non-financial SMEs by credit institutions in the State declined by 4.1 per cent in the year to end-Q3 2012.

The non-bank financial sector in Ireland expanded through 2012, with growth in investment funds (IFs), money market funds (MMFs), and insurance corporations and pension funds (ICPFs). However, financial vehicle corporations (FVCs) have continued to decline. Over the second half of 2012, the value of bond funds in particular increased, driven by increased appetite for investment in both sovereign and MFI debt.

Monetary Financial Institutions

Credit Institutions' Funding

Credit institutions' recourse to Eurosystem refinancing operations continued to decline during the second half of 2012, with borrowing related to monetary policy implementation (euro and non-euro denominated) standing at €77.9 billion at end-November, a reduction of €10 billion over the six months up to that point. Underlying these aggregate developments was a reduction in Eurosystem borrowing by the Irish-owned credit institutions of €9.4 billion over the period. In the context of their continuing deleveraging, the funding requirements of the Irish-owned institutions continued to ease. Eurosystem refinancing operations continue to be settled on a full allotment basis, with the main refinancing operations rate currently standing at 0.75 per cent. The share of longer term refinancing operations (LTROs) in total Eurosystem refinancing operations undertaken by the Central Bank of Ireland was slightly lower at 83 per cent end-November when compared with earlier months in 2012, after being above 90 per cent around the time of the three-year LTRO offering in early 2012.

The downward trend in the outstanding amount of debt securities issued by the Irish banking sector witnessed throughout the first six months of 2012 has continued into Q3, with the cumulative value of outstanding debt securities falling to €83.9 billion by end-Q3 2012 (compared with €92.1 billion at end-Q2). This was driven by net redemptions

of €8.2 billion over the course of Q3 2012, with redemptions of short-term securities accounting for some 77 per cent of the total change. The scale of these net redemptions in Q3 2012 was higher than for the equivalent period in 2011 (€5.3 billion). However, the downward trend in the outstanding amount of debt securities issued was reversed in October 2012, when a net issuance of €4.9 billion was recorded.

By end-Q3 2012, listed equity for the Irish banking sector had an outstanding value of approximately €15.2 billion; this represents a fall of almost 1 per cent since end-Q2 2012. This downward trend continued into October 2012 with the outstanding value of these equities falling further to just over €15 billion; 2 per cent lower than the equivalent figure for October 2011.

The first eleven months of 2012 have seen net inflows of private-sector deposits into Irish resident credit institutions of €2.7 billion. Underlying this was a rise of €3.5 billion in Irish private-sector deposits, bringing the annual rate of change at end-November to 2.2 per cent, the fourth successive month such an annual increase has been recorded. Deposits from Irish households and NFCs, increased by €332 million in the eleven months up to end-November 2012, compared with a decline of over €5.7 billion over the same period in 2011.

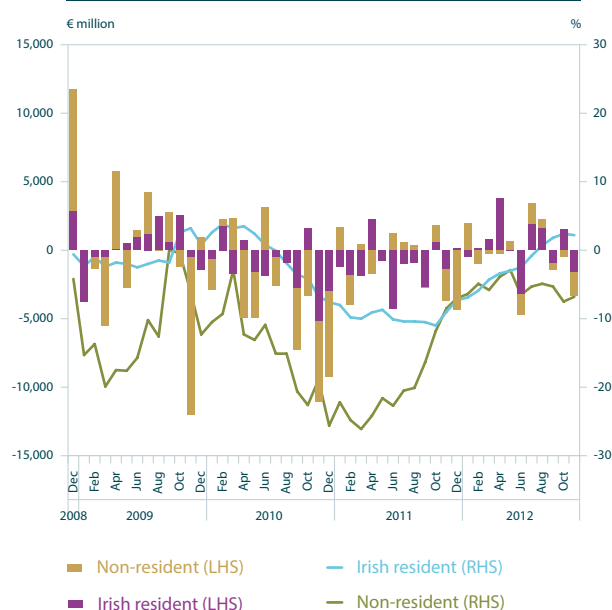
Irish private-sector overnight deposits increased at an average annual rate of 0.1 per cent in the three months ending November 2012. Significantly, the rise in aggregate overnight deposits included increases in deposits from households and non-financial corporations, particularly during the second half of the year. While recent developments in the overnight deposit category are in contrast to those in 2011, the trend of net inflows into longer-term savings deposit categories present for much of the past year has continued, particularly for non-bank financial intermediaries. Term deposits with an agreed maturity of up to two years from the Irish private sector recorded a net inflow

of €732 million over the first eleven months of 2012, driven by a rise of households' deposits of €1.9 billion over the period. Term deposits with an agreed maturity of over two years have also increased in recent months, particularly from the OFI sector. The compositional shift in private-sector deposit holdings over the past year, especially for households, appears to reflect developments in the relative pricing of retail interest rates for demand, redeemable at notice and term deposit categories. The most recent months (October and November), however, could also reflect a shift into more liquid deposit categories in order to support consumption, as overall household deposits have declined in those months.

Following positive net inflows over the first seven months of 2012, deposits held by the non-resident private sector in credit institutions in Ireland have fallen in recent months, and were €763 million lower at end-November 2012 compared to end-2011. Based on the average for the three months ending November 2012, deposits from the non-resident private sector fell by an annual rate of 6.5 per cent. This compares with an average annual decline of 12.2 per cent for the same three-month period to November 2011. Deposits held by the non-euro area private sector continue to contract at a slower pace than those of private-sector counterparties in other euro area Member States.

The external liabilities (i.e. debt securities and deposits held by foreign investors) of Irish credit institutions decreased by 3 per cent (or €11.6 billion) to €346 billion during Q3 2012 (see Table 1). Liabilities to other euro area countries remained broadly unchanged. Liabilities to the UK fell by a further €2.8 billion, whilst liabilities to Offshore Centres decreased by €2.7 billion.

Chart 1: 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.

Table 1: Geographic Profile of Credit Institutions' External Liabilities for Selected Countries, Q3 2012

€ million

	Q2 2012 – Q3 2012 change	Outstanding Amount
Total	(11,591)	346,174
of which:		
France	4,742	41,819
United States	3,714	21,674
Canada	(6,446)	1,592
Germany	(3,687)	39,219
Denmark	(2,927)	4,377
United Kingdom	(2,809)	132,884

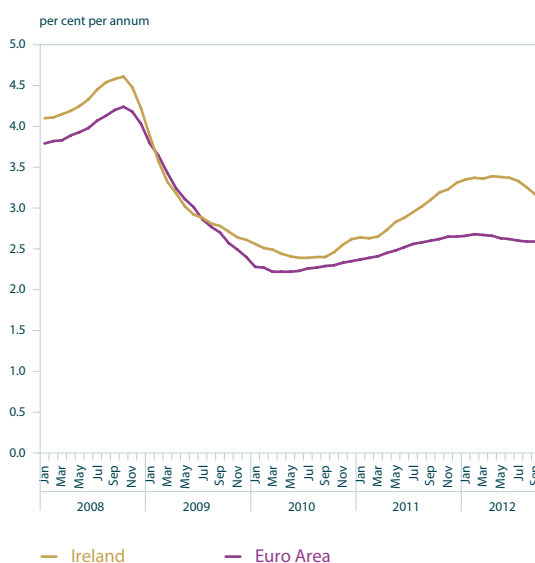
Source: Table A19.2 (Statistical Appendix), Central Bank of Ireland.

Deposit developments have resulted in an increase in the Irish contribution to euro area M1 on an annual basis in recent months, the first sustained increase since August 2010. Currency in circulation increased at an annual rate of 3.7 per cent, based on the average for the three months ending November 2012. This was accompanied by the annual increase in overnight deposits outlined above, resulting in a rise in Irish contribution to euro area M1 of 0.8 per cent, based on the three-month average for the same period. The developments in term deposits with agreed maturity up to two years continue to impact the pace of decline in the Irish M2-M1 contribution. The average annual rate of decline was 4.2 per cent in the three months ending November 2012, compared with an average annual fall of 16.7 per cent for the same period in 2011. The overall decline in the Irish M2 contribution was 1.6 per cent on an annual basis over the three months to end-November 2012. The Irish contribution to euro area M3 fell at an annual rate of 5.6 per cent, based on the average annual rate for the same period. In contrast, the equivalent measure for the euro area M3 as a whole, was an annual increase of 3.4 per cent, over this three-month period.

Although the Irish-owned credit institutions continue to source their funding largely outside of the interbank markets, it is worth noting that the cost of borrowing in these markets fell further in recent months. At end-November 2012, the one-month, three-month and twelve-month EURIBOR were 91, 117 and 137 basis points lower, respectively, than at end-December 2011. Meanwhile, retail interest rates on deposits in Ireland have remained relatively high over the past year. While the interest rates being reported by Irish credit institutions increased steadily during 2011, rates generally exhibited more stability during the first six months of 2012 moving within a narrow range of 3.35 to 3.39 per cent. However, during the latter part of 2012, retail interest rates reported by Irish credit institutions have consistently fallen, with the weighted

average retail interest rate on deposits falling from a peak of 3.39 per cent in April 2012 to stand at 3.1 per cent at end-October 2012, representing the sixth consecutive month in which rates had declined. Up to end-October 2012, credit institutions in Ireland paid on average 69 basis points more per annum on household and NFC term deposits than the euro area average.

Chart 2: Interest Rates on Deposits with Agreed Maturity from Households and NFCs (Outstanding Amounts)



Sources: Central Bank of Ireland and the ECB.

Aggregate Credit Developments

Credit advanced to the Irish Government by resident credit institutions has increased over 2012, as larger holdings of government securities have more than offset decreases in loans over the year. This largely reflects the settling of a promissory note payment via a government bond in March, as well as Irish institutions' participation in the most recent bond and treasury bill auctions by the NTMA. The outstanding amount of loans to government was €28 billion at end-November 2012, compared with €29.7 billion at end-

Table 2: Geographic Profile of Credit Institution's External Claims for Selected Countries, Q3 2012

€ million

	Q2 2012 – Q3 2012 change	Outstanding Amount
Total	(8,558)	420,554
of which:		
Denmark	(2,629)	6,174
United Kingdom	(2,096)	155,330
Netherlands	(1,401)	14,051
United States	(1,372)	38,338
Italy	1,107	49,092
Luxembourg	688	4,596

Source: Table A19.2 (Statistical Appendix), Central Bank of Ireland.

2011. Holdings of Irish government securities increased to €19.2 billion at end-November 2012, compared with €12.6 billion at end-2011, with €5.1 billion of this increase being driven by increased holdings and €1.5 billion being due to valuation effects as the price of existing government securities held rose during the year.

The amount of outstanding loans to the Irish private sector on the balance sheets of Irish resident credit institutions fell by an annual rate of 4.5 per cent, based on the average for the three months ending November 2012. Credit institutions' holdings of Irish private-sector securities decreased at an annual rate of 7.1 per cent, based on the average for the three months ending November 2012. This compares with an average increase of 11.6 per cent for the same three-month period in 2011.

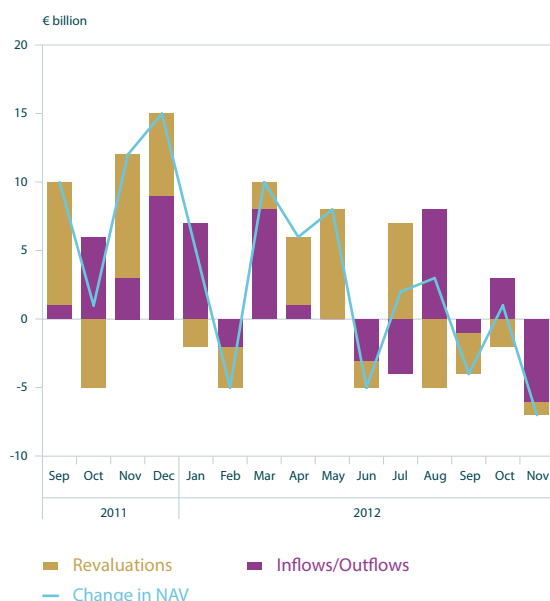
Credit advanced to non-residents by credit institutions in Ireland continued to fall sharply in recent months, declining at an annual rate of 16.1 per cent, based on the average for the three months ending November 2012. Credit to the non-resident private sector fell by an average annual rate of 16.2 per cent, largely reflecting developments in lending to non-euro area residents. During Q3 2012, the external claims of Irish credit institutions

on non-residents decreased by 2 per cent (or €8.6 billion) to €421 billion. €2.6 billion of this decrease was accounted for by Denmark. Claims on the UK fell by €2.1 billion whilst claims on non-EU industrialised countries decreased by almost €0.5 billion.

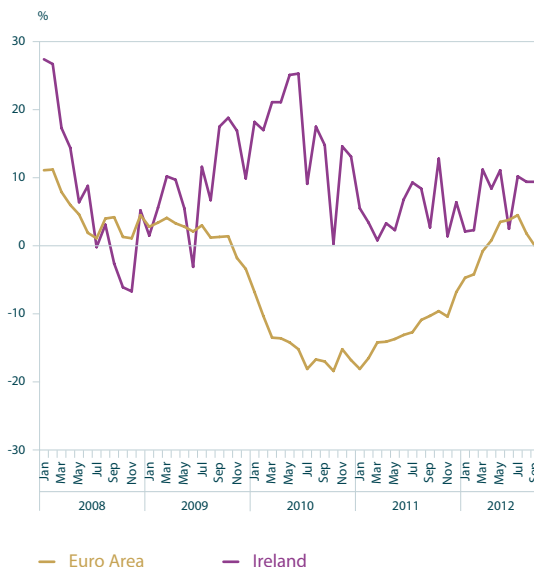
Money Market Funds¹

The total net asset value (NAV) of money market funds (MMFs) resident in Ireland rose by €35 billion over the twelve months to November 2012, to reach €301.5 billion. The increase in the value of MMF NAVs over the period has been dominated by inflows, or net purchases of MMF shares/units of circa €19.3 billion, and also by positive revaluations as the market value of assets held by these MMFs increased (Chart 3). Despite this increase, the NAV of MMFs has been falling in general in recent months, largely due to withdrawals from the funds, but also reflecting negative revaluations in September and November.

¹ Entities are classified as MMFs in accordance with the recently updated (Dec 2010) ECB statistical classification which more closely reflects the regulatory definition of an 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. In contrast, 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 3: Monthly Change in Money Market Funds' Net Asset Values

Source: Central Bank of Ireland.

Chart 4: Annual Growth Rate of MMF Shares/Units

Source: European Central Bank.

Euro area MMFs have also recorded significant outflows, in particular during Q3 2012. Despite the recent outflows, the annual growth rate of the value of MMF shares/units in issue, both in Ireland and for the euro area as a whole, remains in positive territory (Chart 4). The annual growth rate of euro area MMF shares/units in issue had been negative since November 2009, before turning positive in April 2012. In contrast, the annual growth rate for MMF shares/units in issue in Ireland has been positive since July 2009. The annual growth rate has generally been above the euro area aggregate since February 2009. This probably reflects the asset composition of Irish MMFs with investments primarily in non euro-area securities.

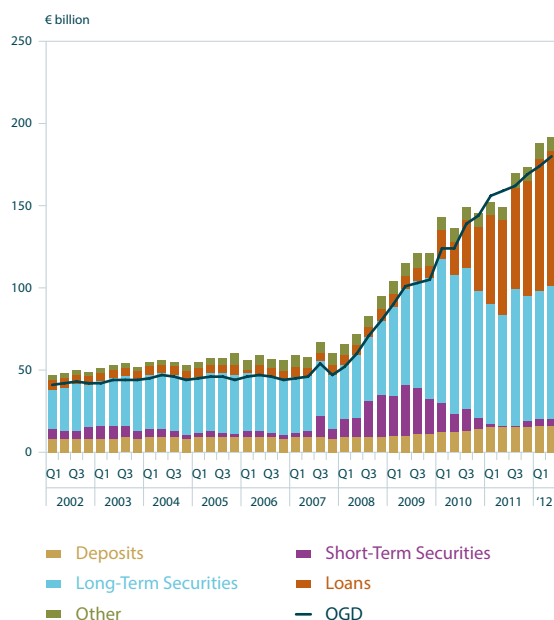
MMFs primarily invest in money market instruments, repurchase agreements, bank deposits, or pursue a rate of return that approaches the interest rates of money market instruments. MMF balance sheets show that investments are primarily in securities other than shares and deposits which include repurchase agreements. In November 2012, 79 per cent of assets under management (AUM) were invested in securities, with approximately three quarters of those securities being issued by MFIs. The share of holdings of government securities in MMF portfolios has decreased somewhat in the first eleven months of 2012, while the share of non-government and non-MFI securities has risen, reflecting higher activity globally in the corporate debt markets.

Government

Debt and Deficit Developments

Government liabilities increased further during Q2 2012 reaching €192.7 billion, their highest level to date. This represented an increase of €6 billion, or 3.2 per cent, on the previous quarter, as shown in Chart 5. The chart also shows that the Quarterly Government Debt (QGD), which is the standard quarterly measure of debt consistent with Excessive Deficit Procedure (EDP) methodology², increased by €5.4 billion over the quarter. The increase in government liabilities over the period largely reflected the receipt of €5.2 billion in further funding as part of the EU/IMF programme, as well as additional securities issued. Securities transactions (i.e. issues minus redemptions) amounted to €3.4 billion over the quarter. Q2 2012 marked the first quarter the State issued government securities since Q3 2010.

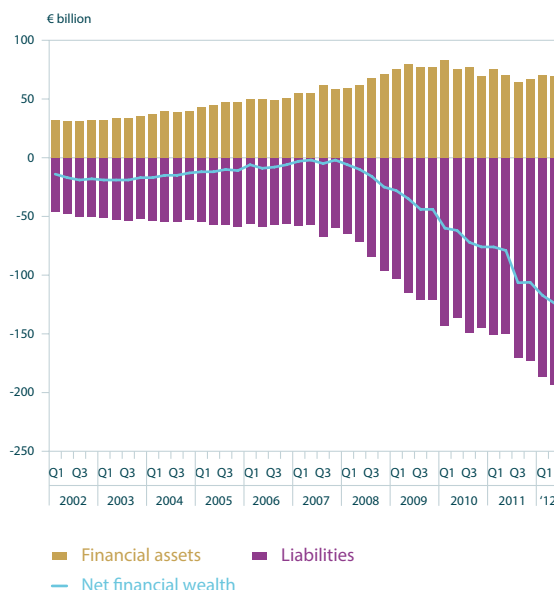
Chart 5: Government Liabilities



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

Net financial wealth, the difference between financial assets and liabilities, declined further over the quarter reaching minus €124 billion, (Chart 6). The decline reflected the continued increase in liabilities, as well as a slight decline in financial assets.

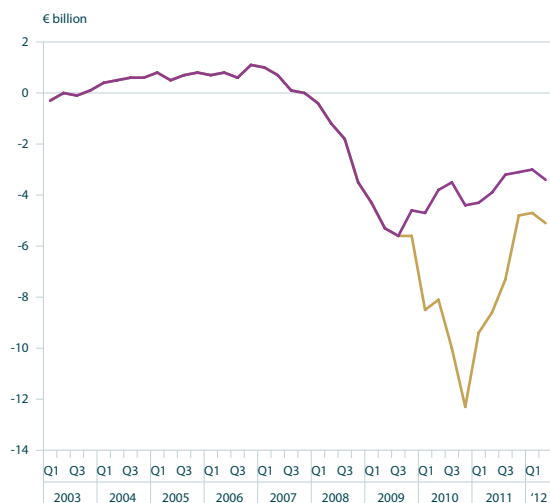
Chart 6: Government Net Financial Wealth



Source: Quarterly Financial Accounts, Central Bank of Ireland.

The surplus/deficit, as a four-quarter moving average, is depicted in Chart 7. The chart shows that the government deficit increased slightly over the quarter from €4.7 billion to €5.1 billion. When capital transfers are excluded, the government deficit measured as a four-quarter moving average stood at €3.4 billion, an increase from €3 billion in Q1. Since 2009, the State has injected €63 billion into the banking sector, of which €42.4 billion has been treated as a deficit-increasing capital transfer. The remainder was treated as financial transactions (or investments) in government accounts and therefore does not impact the deficit.

² Government liabilities in QFA 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: The Four-Quarter Moving Average of the Surplus/Deficit

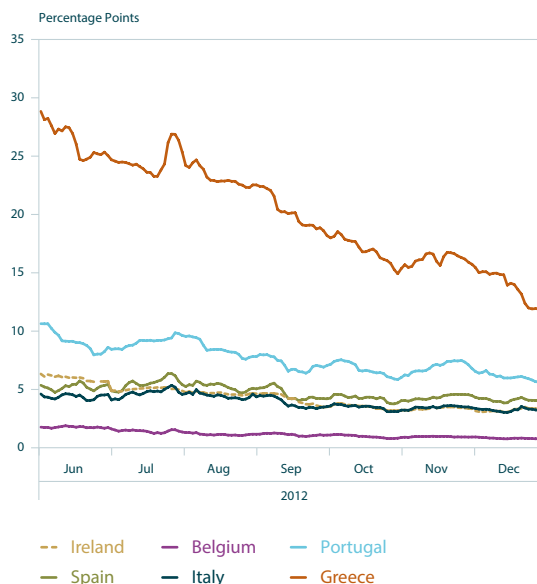
Source: Quarterly Financial Accounts, Central Bank of Ireland.

Sovereign Debt Market

Developments in euro area sovereign bond markets in late-Q3 2012 and Q4 reflected positive market sentiment in anticipation of the ECB's announcement of the modalities of the Outright Monetary Transactions (OMTs). The OMT programme, which would be subject to strict conditionality, aims at ensuring an effective transmission of the Eurosystem's monetary policy. This positive momentum in the euro area was boosted by the final approval of the ESM by the German Federal Constitutional Court, and by further OMT-related announcements. However, the impact of these factors upon market sentiment were later partially offset by negative developments such as the downgrade of five Spanish regions by Moody's and negative ratings decisions on some French and Belgian banks.

In July 2012, the sovereign bond yield spread of Greek debt relative to German Bunds began to fall and this fall continued into Q4 2012. Over a three-week period starting in early-Q4, this yield spread had fallen by almost 300 basis points before it began to climb again. Thereafter, the spread resumed its downward trajectory and by

mid-December, the yield spread had fallen by a cumulative 740 basis points (compared with early-October). Over the same period, a downward trend was also observed for a number of other periphery euro area Member States, including Ireland and Portugal. In Ireland's case, the yield spread fell by more than 50 basis points in October and had fallen by almost 60 basis points over the course of Q4. This downward trend was even more pronounced for Portugal, where the yield spread narrowed by more than 200 basis points over the same period, see Chart 8.

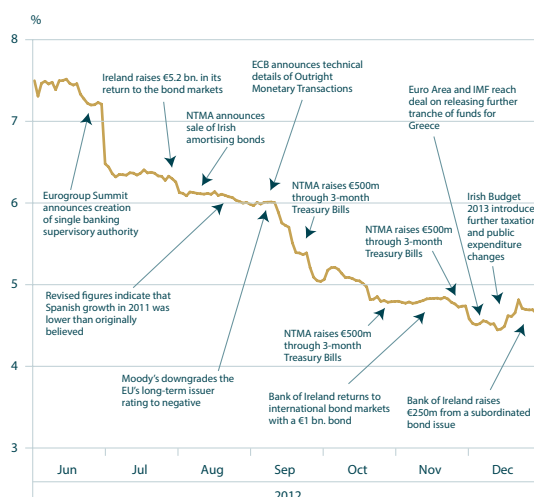
Chart 8: Selected Euro Area Ten-Year Sovereign Bond Spreads over German Bunds

Source: Thomson Reuters Datastream.

The yield on ten-year Irish government debt remained at over 6 per cent during the opening weeks of Q3 2012 but went on to fall steadily towards 5 per cent over the following two months on foot of the announcement of the technical details of the OMTs. The yield resumed its downward trajectory from late-September and continued to fall steadily over the course of the following six weeks (see Chart 9) reflecting Ireland's progress in regaining entry to international capital markets with two further successive issuances of Treasury Bills in October and November 2012. Over the same period,

Bank of Ireland became the first of the Irish-owned banks to re-enter the international bond market with a €1 billion bond offering, thereby reducing its reliance on the ELG scheme. By early-December, the yield on ten-year Irish government debt had fallen back to less than 4.5 per cent, a reduction of more than 60 basis points (or 12 per cent) over the quarter. This was the lowest level for this yield since late-2008. The announcement of the OMT has, however, had a proportionately greater impact on the performance of sovereign bonds of other peripheral Member States, as the yield spreads for Greece, Portugal and Spain over equivalent German Bunds have generally fallen to a greater extent than those of Irish debt.

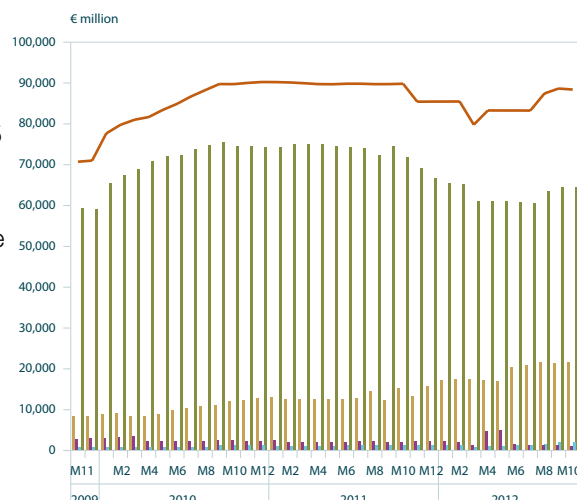
Chart 9: Irish Government Ten-Year Bond Yields



Source: Thomson Reuters Datastream.

The outstanding nominal volume of existing Irish government long-term bonds in issue was €88.3 billion at end-October 2012 (down from €89.7 billion at end-October 2011). By end-October 2012, the holders of Irish government bonds continued to be predominantly non-resident, with 73 per cent of government bonds in issue held by foreign investors. Resident holders are predominantly banks, which hold 24 per cent of outstanding amounts.

Chart 10: Holders of Irish Government Bonds

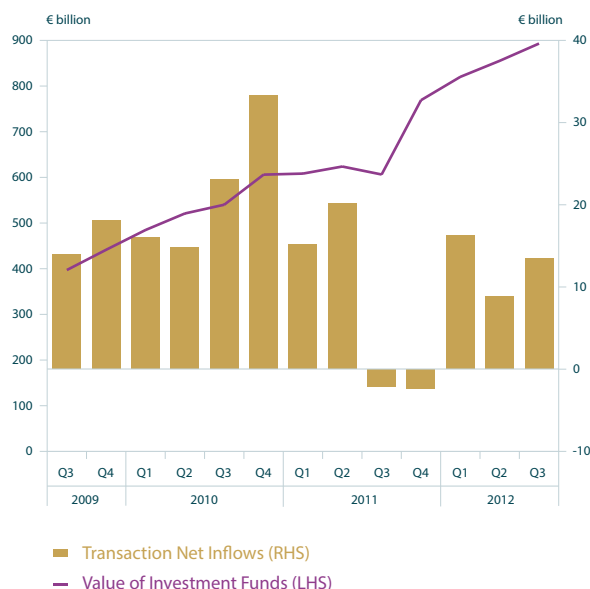


Source: Central Bank of Ireland.

Institutional Investors: Investment Funds, Financial Vehicle Corporations and Insurance Corporations & Pension Funds

Investment Funds

The Irish investment fund (IF) industry expanded for the fourth successive quarter in Q3 2012, following a difficult period of market uncertainty in the middle of 2011. Measured by total shares/units in issue, the industry increased in value by 4.4 per cent in Q3 to €892 billion, driven by positive revaluations of €24.3 billion and net transactions inflows of €13.5 billion. Growth in the year to Q3 2012 was 20.5 per cent, discounting the impact of a reclassification of some money market funds to investment funds in Q4 2011.

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 €114 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.

Seventy-seven per cent of the asset holdings of Irish IFs were located outside of the euro area, 14 per cent in the rest of the euro area and 9 per cent within the State³. Looking at the ownership of shares/units in Irish IFs, 70 per cent were held by non-euro area residents, 24 per cent by other euro area residents and 6 per cent by Irish residents.

Sovereign bond holdings increased by 6.5 per cent to €160 billion in Q3 2012. Looking at the three largest country holdings, UK sovereign bonds saw net inflows of €3.1 billion to close at €46.9 billion, US sovereigns remained relatively stable at €39 billion while German sovereign bonds saw a net inflow of €1.2 billion to close at €20.1 billion. French sovereigns experienced outflows of €0.5 billion, despite positive revaluations of €0.9 billion, to close at €11.3 billion, perhaps reflecting market speculation about a possible ratings downgrade. Spanish and Italian sovereign bonds had inflows of €0.5 billion and €1.8 billion, respectively, to close at €1.4 billion and €8.4 billion, indicating a favourable response to ECB policy measures. Investment in non-government paper far exceeded that of sovereign bonds, accounting for €430 billion, of which 36 per cent were US assets.

Irish IFs increased their exposure to Monetary and Financial Institutions' (MFIs) assets to €203 billion in Q3 2012, comprising €176 billion in bonds and notes and €26.9 billion in shares. UK MFIs experienced the largest net inflows of €5.6 billion to close at €34.4 billion. Exposure to German MFIs was reduced with outflows of €2.6 billion to close at €10.5 billion. In overall terms, investments in non-financial sector counterparts experienced net outflows of 2 per cent to close at €364 billion, split between €235 billion in equity and €129 billion in commercial paper.

Table 3: Debt Securities – Investment Fund Holdings by Sovereign and Private Sector – Selected Countries

€ billion

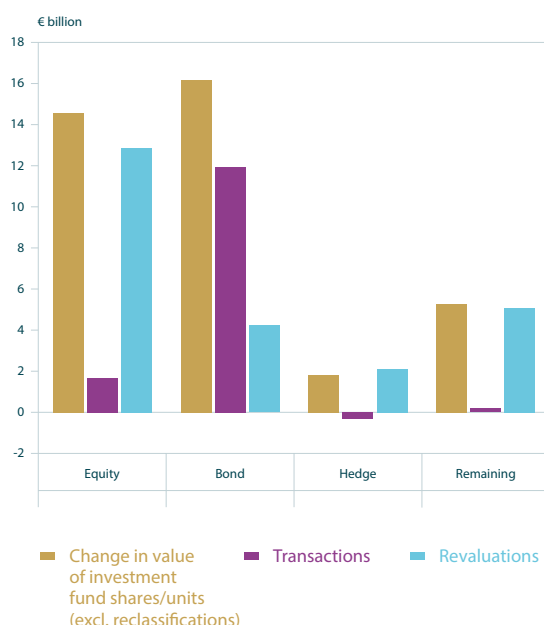
	Sovereign	Private
Total	160	430
of which:		
US	39	155
UK	47	52
Ireland	0.4	22
Germany	20	14
France	11	21

Source: Central Bank of Ireland.

³ These figures exclude unclassified assets which account for €75 billion, or 7.6 per cent, of total assets of €985 billion.

Bond funds experienced the largest growth over the quarter, with inflows of €12 billion and positive revaluations of €4.2 billion, and now account for €373 billion of Irish IFs by shares/units in issue. This continues a longer-term trend of significant inflows into bond funds, which comprised 42 per cent of Irish IFs in Q3 2012, compared with 24 per cent in Q1 2010. Equity funds, which account for €290 billion of IFs, saw positive revaluations of €12.9 billion and net transactions inflows of €1.7 billion. Hedge funds increased in value to €79 billion, driven largely by revaluations of €2.2 billion, more than offsetting a net transactions outflow of €0.3 billion. Hedge funds have underperformed other investment strategies in the year to date. Other funds, comprising mostly mixed funds⁴, experienced very minor inflows of just €0.2 billion, despite positive revaluations of €5.1 billion, culminating in an increase in overall stock to €152 billion.

Chart 12: Change in Value of Shares/Units by Investment Fund Category, Q3 2012



Source: Investment Funds Statistics, Central Bank of Ireland.

Financial Vehicle Corporations

Total assets for financial vehicle corporations (FVCs) resident in Ireland continued to decline during Q3 2012. This decline in assets was matched by a decrease in the number of reporting vehicles in Ireland which had fallen to 688 at the close of Q3, reversing a slight increase in reporting numbers in Q2 2012. Overall, the value of Irish resident FVCs has fallen from a peak of €576.1 billion in Q4 2010 to €456.4 billion in Q3 2012; with Residential Mortgage-Backed Securities, Multi-Issuance Vehicles and Asset-Backed Commercial Paper showing the most significant declines.

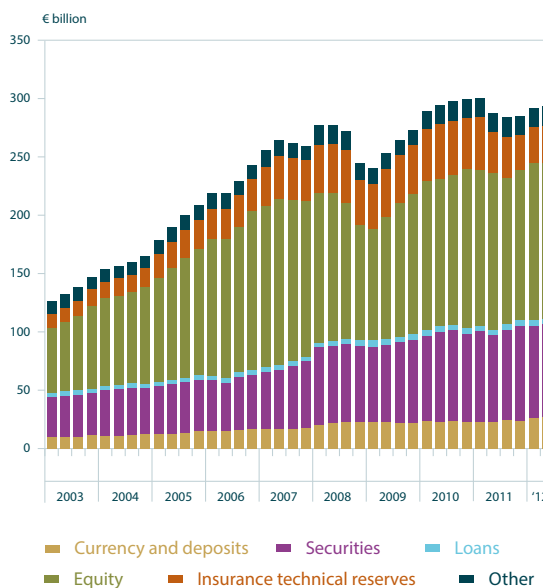
The decrease in assets reflected negative transactions of €14.3 billion in Q3 2012 which was somewhat offset by positive revaluations of €1.5 billion. These negative transactions were predominantly in securities other than shares and securitised loans with outflows of €9.5 billion and €3.8 billion, respectively. The negative transactions of €9.5 billion reported for securities other than shares in Q3 2012, were significantly higher than the equivalent figure of minus €1.6 billion in Q2 2012. Deposit and loan claims and other assets classes reported positive transactions of €0.5 billion and €0.6 billion respectively, the first positive transactions seen across any asset class since Q4 2011. Revaluations for Q3 2012 were €1.5 billion, continuing the trend of positive quarterly revaluations since Q1 2010 and were mainly attributable to derivatives and securities other than shares.

With reference to the liabilities side of the balance sheet, the decline was primarily reflected in negative transactions in debt securities issued of €9.6 billion, lower than the fall of €17.6 billion recorded in Q2 2012. All of this was attributable to securities with an original maturity over 2 years. This has contributed to an overall fall in debt securities issued to €324.7 billion from €333.7 billion in Q2 2012.

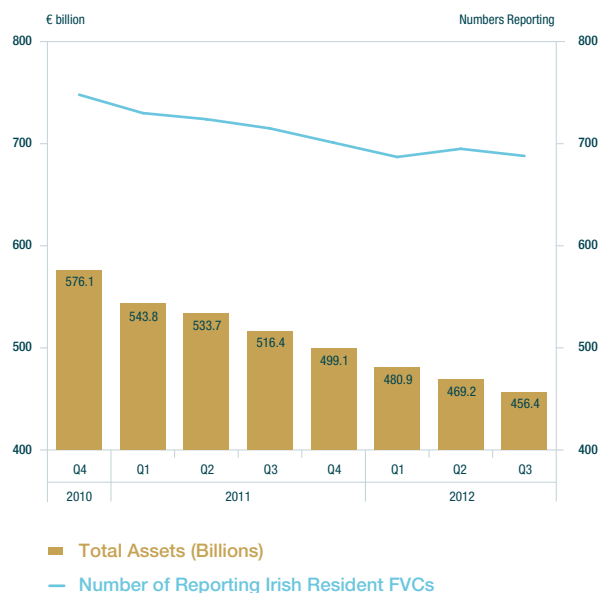
⁴ These also include real estate and other unclassified funds.

Chart 13: Quarterly Change in Total Assets of Irish Resident FVCs

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

Chart 15: Assets Portfolio of Insurance Corporations and Pension Funds

Source: Quarterly Financial Accounts, Central Bank of Ireland.

Chart 14: Number of Reporting Irish Resident FVCs and Total Assets

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

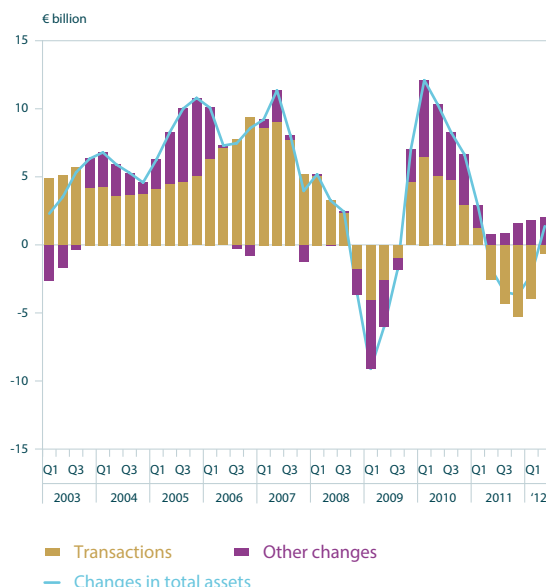
Net outflows from Irish resident FVCs in Q3 2012 mirrored developments in the euro area throughout 2012. Irish resident FVCs outflows of €14.3 billion, which were the lowest reported since Q2 2011, contributed to total euro area outflows of €82.6 billion. This was largely unchanged from outflows reported for Q2 2012 of €83 billion. Total euro area FVC asset figures measured €2,079 billion at end-Q3 2012. The Irish share of euro area assets stood at 21.9 per cent at the end of this period, unchanged from the previous quarter.

Insurance Corporations & Pension Funds

By the end of the second quarter of 2012, Irish resident insurance corporations and pension funds (ICPFs) held financial assets of €293 billion. This accounts for just over 8 per cent of the total financial assets of the Irish financial sector. Chart 15 shows that the financial assets of ICPFs increased slightly over the quarter, by 0.4 per cent or €1.3 billion.

Changes in the balance sheet position of the ICPF sector are driven by two factors, financial transactions and other changes, including valuation changes, as shown in Chart 16. These other changes have been positive since the last quarter of 2009 on a four-quarter moving average basis. Over the same time period, ICPFs recorded positive asset transactions up until Q1 2011, but this was followed by large, negative transactions causing the balance sheet to decline up to the first quarter of 2012. In Q2 2012, the decline in financial assets as measured on a four-quarter moving average basis, was reversed. This was principally caused by a reduction in the volume of negative transactions, which were the lowest recorded in the previous four quarters. The positive revaluations in Q2 2012, which more than offset the negative transactions, were largest for long-term securities, which increased in value by approximately €771 million.

Chart 16: Contribution of Transactions in Assets and Valuation Changes to ICPFs' Assets, Four-Quarter Moving Average

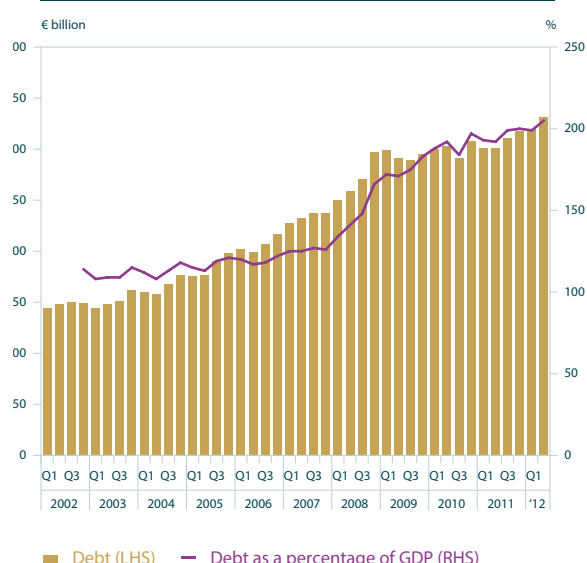


Source: Quarterly Financial Accounts, Central Bank of Ireland.

Non-Financial Corporations

Non-financial corporation (NFC) debt⁵ increased during Q2 2012 to €331 billion, or 205 per cent of GDP, its highest level to date⁶. This represented an increase of €11 billion or 3.4 per cent compared with the previous quarter, as seen in Chart 17. NFC debt has been on an upward trend since Q3 2011, largely driven by the activities of multinational corporations operating in Ireland.

Chart 17: NFC Debt as a Percentage of GDP



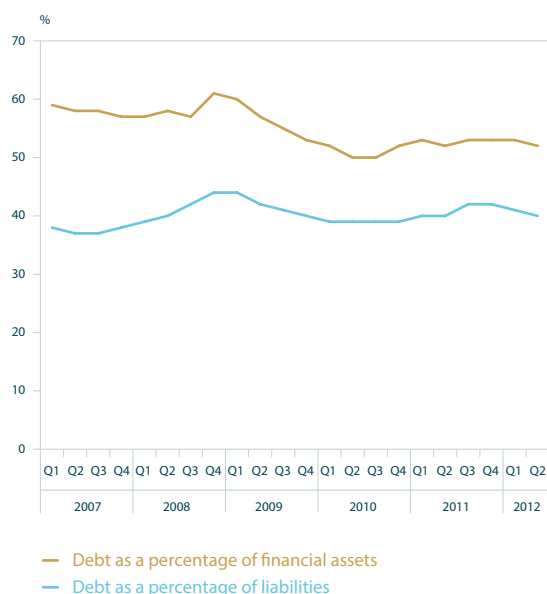
Sources: Quarterly Financial Accounts, Central Bank of Ireland and Quarterly National Accounts, CSO.

⁵ 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.

⁶ GDP is measured as a four-sum moving average of quarterly GDP at market prices.

Chart 18 presents the ratios of debt to financial assets and NFC debt to total liabilities from Q1 2007 onwards. The chart shows that NFC debt as a percentage of financial assets declined by 1 per cent from the previous quarter to 52 per cent. Similarly, NFC debt to total liabilities stood at 40 per cent in Q2 2012⁷, also representing a decline of 1 percentage point from the previous quarter.

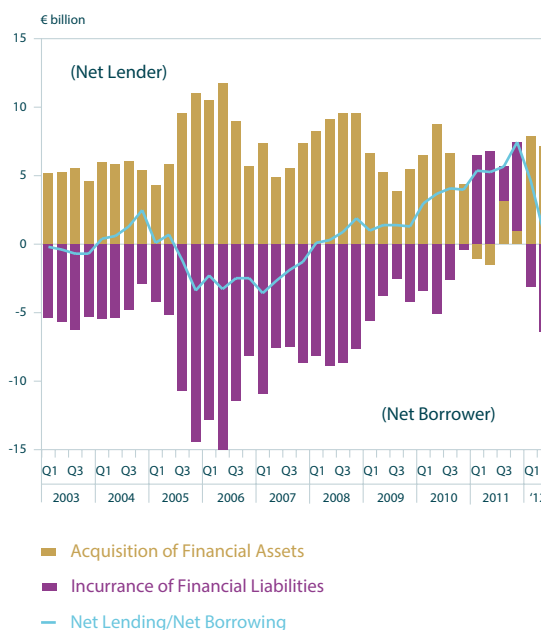
Chart 18: NFC Debt to Financial Assets and NFC Debt to Liabilities



Source: Quarterly Financial Accounts, Central Bank of Ireland.

The NFC sector was a net lender in Q2 2012, as it has been since Q1 2008 (Chart 19)⁸. The chart shows that NFC net lending amounted to €0.8 billion in Q2 2012, down from €4.7 billion in Q1 2012, its lowest level for some 15 quarters and the largest quarter-on-quarter fall to date.

Chart 19: NFC Net Lending/Net Borrowing on a Four-Quarter Moving Average Basis



Source: Quarterly Financial Accounts, Central Bank of Ireland.

Credit Advanced to the NFC Sector by Irish Resident Credit Institutions

Credit advanced to the resident NFC sector (including loans to NFCs as well as credit institutions' holdings of securities issued by NFCs) declined at an annual rate of 4.1 per cent, based on the average for the three months ending November 2012. The monthly net flow of credit to the NFC sector, which removes any non-transaction effects, averaged minus €185 million during this three-month period.

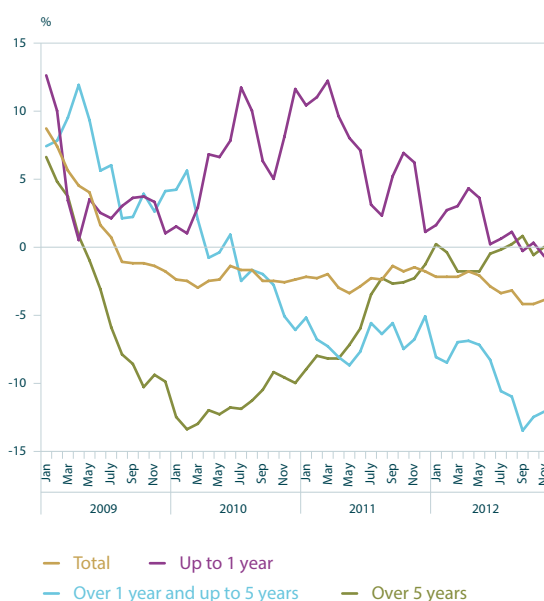
The annual rate of change in loans to Irish resident NFCs averaged minus 4.1 per cent in the three months ending November 2012. Loans issued by resident credit institutions are an important source of funding for indigenous corporations. This is particularly relevant for small and medium sized enterprises (SMEs), unlike the multinational sector which may have greater ease of access to alternative market-based funding and injections from overseas parent entities. The pace of contraction in longer-term loans has eased in recent months, and with positive net flows in this category in most of the second half of 2012 there could be indications that lending for

⁷ NFC debt is explored in detail in the article "Why are Irish Non-Financial Corporations So Indebted" included in this *Bulletin*.

⁸ The NFC net lending/net borrowing position is measured as a four-quarter moving average, to adjust for seasonality.

longer-term investments in machinery, equipment and other fixed capital is improving. In contrast, loans with an original maturity of between one and five years continued to fall more sharply, declining at an average annual rate of 12.7 per cent in the three months ending July. Meanwhile, short-term loans to NFCs with an original maturity up to one year, which include the use of overdraft facilities, fell slightly on an annual basis. Short-term loans to NFCs recorded an average rate of change of minus 0.3 per cent over the same three month period. Despite contractions being recorded in both September and November on a year-to-year basis, there were positive net flows in this loan category in most recent months.

Chart 20: Loans to Irish Resident NFCs, Annual Rates of Change



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

Credit to non-financial enterprises, which covers both corporations and non-incorporated businesses, fell again on an annual basis in the year ending September 2012, with the pace of contraction rising to 4.3 per cent from 3 per cent in the previous quarter. The reduction in credit outstanding, resulting from both supply and demand dynamics, was reflected across all the main sectors of economic activity (Table 4). However, the annual declines in credit advanced to some key sectors (eg. manufacturing, wholesale/retail trade and hotels/restaurants sectors) were lower at end-September 2012 when compared with the same period a year earlier, including lending to SMEs in those sectors. Total lending to non-financial SMEs was 4.1 per cent lower on an annual basis at end-September 2012, compared with 8.2 per cent at end-September 2011. This easing of the pace of contraction in SME credit outstanding has been evident in all the main sectors of activity, but has been particularly strong for the more capital intensive industries (eg. manufacturing), which may in part reflect the improvements in longer-term lending noted above.

Interest rates on outstanding loans to NFCs issued by Irish resident credit institutions declined for the twelfth consecutive month. The weighted average interest rate on all outstanding NFC loans was 2.98 per cent at end-October 2012, falling almost 80 basis points since end-October last year. The fall in the weighted average interest rate of all loans to NFCs was principally derived from a decline in rates pertaining to loans with original maturities of up to one year. Interest rates on loans to

Table 4: Credit Advanced to Non-Financial Enterprises - Annual Percentage Change

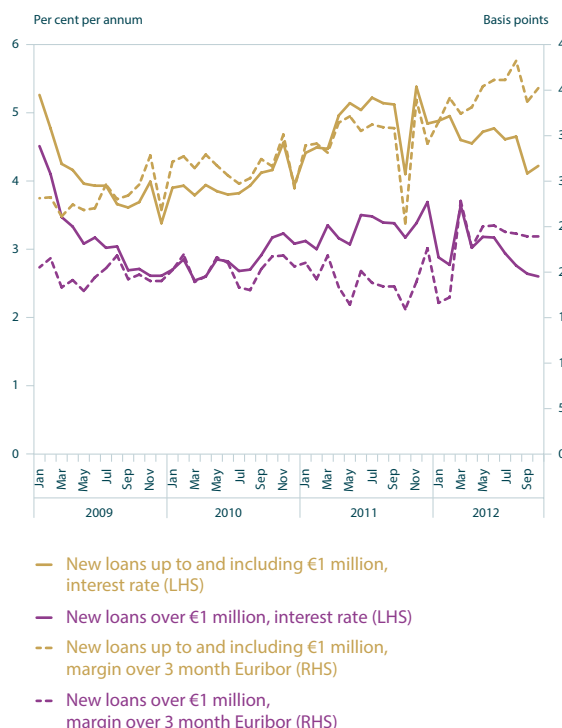
	All Enterprises					SMEs				
	Sep-11	Dec-11	Mar-11	Jun-12	Sep-12	Sep-11	Dec-11	Mar-11	Jun-12	Sep-12
Construction and Real Estate	-1.2	0.6	-0.2	-1.9	-3.4	-7.9	-5.1	-3.7	-1.6	-3.5
Agriculture	-3.1	-4.5	-3.6	-3.6	-3.4	-8.2	-9.8	-7.2	-4.9	-4.4
Manufacturing	-5.5	-1.3	-5.7	-1.3	-1.8	-9.8	-5.9	-6.6	-0.4	0.6
Wholesale/Retail Trade & Repairs	-8.3	-3.4	-3.8	-2.4	-5.9	-8.4	-6.0	-6.8	-6.3	-8.0
Hotels and Restaurants	-4.1	-2.0	-2.0	-1.9	-1.0	-10.4	-4.2	-3.6	-2.8	-3.0
Business and Administrative Services	-3.0	-14.3	-8.7	-11.8	-9.4	-5.4	-10.3	-9.4	-4.8	-3.9
Other	-21.3	-15.6	-6.3	-7.5	-10.7	-8.5	-4.4	-6.4	-5.4	-5.7
Total	-4.5	-2.6	-2.1	-3.0	-4.3	-8.2	-5.4	-4.9	-2.9	-4.1

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

NFCs with original maturities of up to one year declined from 3.56 per cent in September to 3.19 per cent at end-October 2012. At a euro area level, the corresponding interest rates on all outstanding loans to NFCs stood at 3.39 per cent at end-October 2012. Loans with an original maturity over one year accounted for over 73 per cent of all outstanding loans issued to NFCs by Irish resident credit institutions at end-October 2012. The weighted average interest rate on both medium- and long-term loans⁹ was approximately 2.88 per cent at end-October 2012. The equivalent short-term interest rates stood at 3.19 per cent during the same period, highlighting the term-effect of rates currently being offered to NFCs by Irish resident credit institutions with these shorter-term loans mostly being used for working capital purposes.

In terms of new business, the weighted average interest rate on new loans to NFCs up to a value of €1 million¹⁰ was 4.22 per cent at end-October 2012, representing a decline of 62 basis points since December 2011. The equivalent rate reported by euro area credit institutions for October 2012 was 3.92 per cent. The interest rate on loans to NFCs by Irish resident credit institutions valued at over €1 million was 2.6 per cent at end-October 2012, having fallen 109 basis points since end-December 2011.

Chart 21: Interest Rates on New NFC Loan Agreements



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

Multinational NFC Developments

Inward direct investment into Irish-based foreign-owned multinational companies increased by €13 billion to €225.8 billion in the third quarter of 2012. Foreign direct investment by Irish-owned multinational companies also continued to increase during the third quarter of 2012, amounting to €271.9 billion, representing an increase of 14 per cent since end-September 2011. Part of the increase in Irish foreign direct investment assets is explained by the activities of PLCs headquartered in Ireland, who consolidate foreign earned income into Ireland. These investment income inflows have not been offset by outflows on

⁹ Short-term loans are those with an original maturity up to one year, medium-term loans have an original maturity of between one and five years and long-term loans are those with an original maturity of over five years.

¹⁰ The weighted average interest rate on new loans to NFCs up to a value of €1 million is often used as a proxy for the interest rate most applicable to the SME sector.

the current account. Instead, profits received have in part flowed out via the financial account of the balance of payments as foreign direct investment abroad, thereby inflating GNP.¹¹

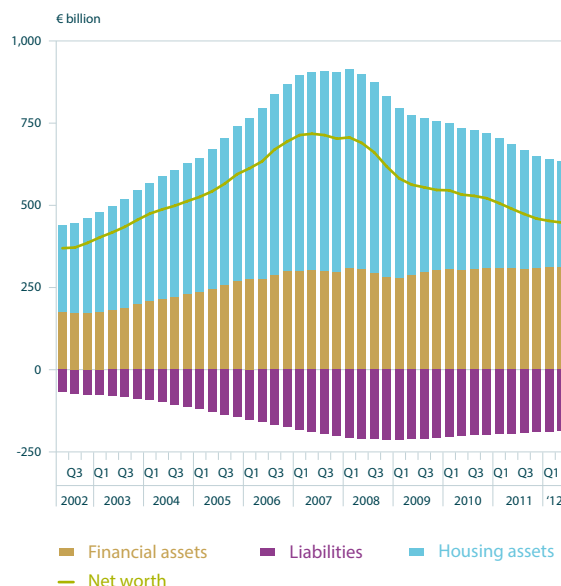
Recourse by resident multinational NFCs, both foreign and Irish-owned, to market-based funding as an alternative to bank funding declined over the course of Q3 2012, to just over €2.6 billion. In Q3 2012, net redemptions were €219 million. This compares with net redemptions of €188 million during Q2 2012 and net issuance of €271 million during Q3 2011.

Over the year to Q3 2012, the value of multinational NFCs' equities rose by 39 per cent to €170.1 billion. This mirrored the performance of all listed equity, namely shares, which increased in value from €147.8 billion by end-Q3 2011 to €198.6 billion by end-Q3 2012, a rise of some 34 per cent over the course of the year.

Households

Household net worth¹² (Chart 22) continued to decline during Q2 2012, falling to €446.6 billion, or €97,392 per capita. This represented a decline of €5.5 billion or 1.2 per cent compared with the previous quarter. Overall, net worth has declined by 37.7 per cent since its peak at Q2 2007. The further decline in net worth over the quarter largely reflected the continued fall in the value of housing assets and, to a much lesser extent, a further decrease in the value of financial assets. The decline in net worth was mitigated, in part, by the further reduction in household liabilities over the quarter.

Chart 22: Household Net Worth

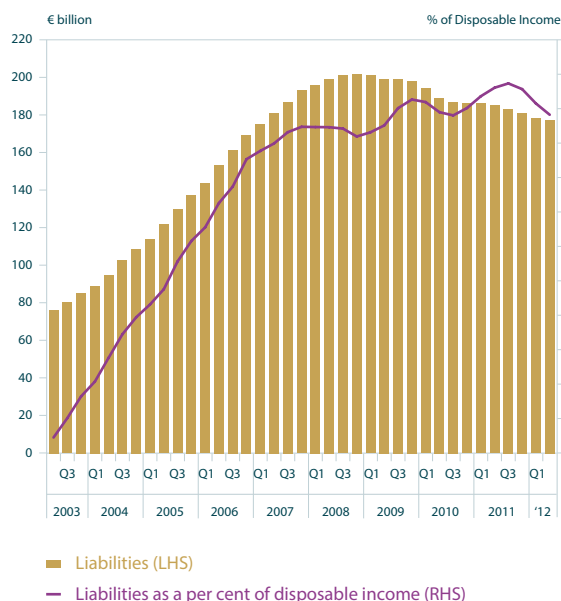


Household debt¹³ declined further during Q2 2012, falling to €178.5 billion or €38,938 per capita. This represented the lowest level of household debt since Q1 2007 (Chart 23). Household debt has declined by €25.2 billion or 12.4 per cent since its peak of €203.8 billion in Q4 2008. Household debt to disposable income, an indicator of debt sustainability, also declined further during Q2 2012, to stand at 209.3 per cent. This decrease reflected the continued decline in household debt, offset only slightly by an increase in household disposable income. The latter has been on an upward trend since Q1 2012, when measured as a four-sum moving average. The decrease in debt to disposable income marked the third consecutive decline in this ratio from its peak of 218.4 per cent in Q3 2011.

¹¹ See Box 3 "The Statistical Implications of Multinational Companies' Corporate Structures" in the Financing Developments in the Irish Economy Chapter of Bulletin No.2 2012 for a detailed outline of the macroeconomic statistical treatment of the headquartered PLCs activities.

¹² 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).

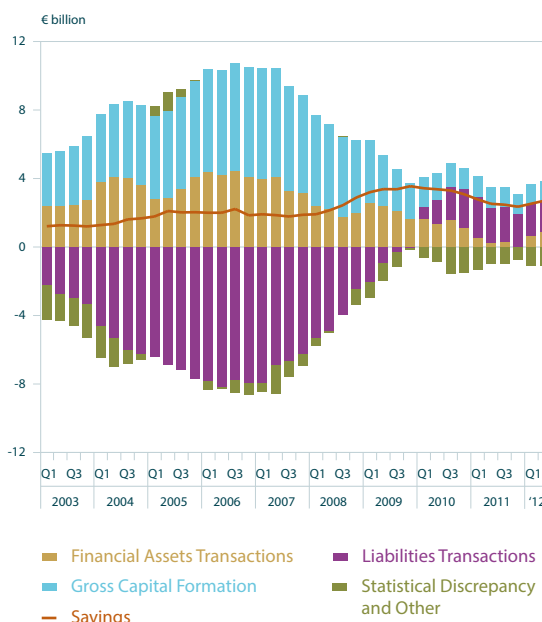
¹³ Household debt is defined as total loans.

Chart 23: Household Liabilities and Debt as a per cent of Disposable Income

Source: Quarterly Financial Accounts, Central Bank of Ireland.

Combining household saving and gross capital formation 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 savings¹⁴. Chart 24 shows that households increased savings for the third consecutive quarter during Q2 2012 to reach €2.7 billion, when measured as a four-quarter moving average. This represented an increase of €170 million compared with the previous quarter. The increase in saving was largely as a result of continued debt reduction, as well as a further recovery in investment in financial assets. Investment in gross capital formation by households continued to remain relatively low however, over the quarter.

Investment by households in financial assets continued to increase during Q2 2012 (Chart 25). This marked the second consecutive quarterly increase in financial asset investments. This increase in financial assets is partly explained by a resumption of investment in 'currency and deposits' during Q2, following five consecutive quarters of disinvestment in this asset type (investment in 'insurance technical reserves'¹⁵ and 'shares and other equity' remained largely unchanged).

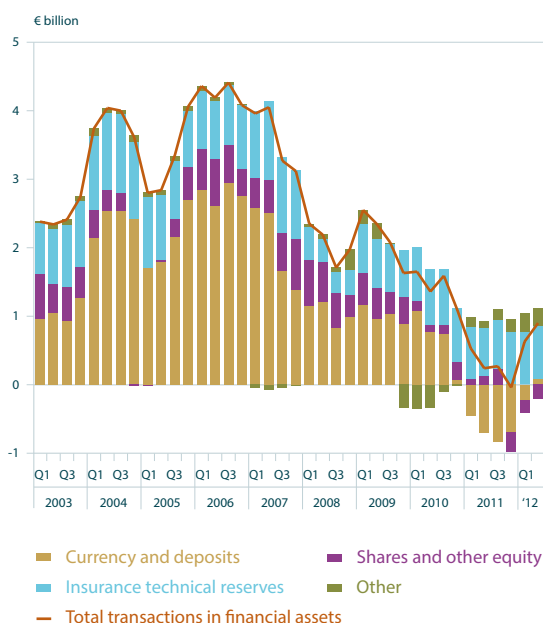
Chart 24: Household Savings Decomposed by Use, Four-Sum Moving Average

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

¹⁴ The derivation of savings from a non-financial accounts perspective and a financial accounts perspective is elaborated upon further in Cussen, O' Leary, Smith (2012), 'The Impact of the Financial Turmoil on Households: a Cross Country Comparison', Central Bank of Ireland, Quarterly Bulletin No. 2.

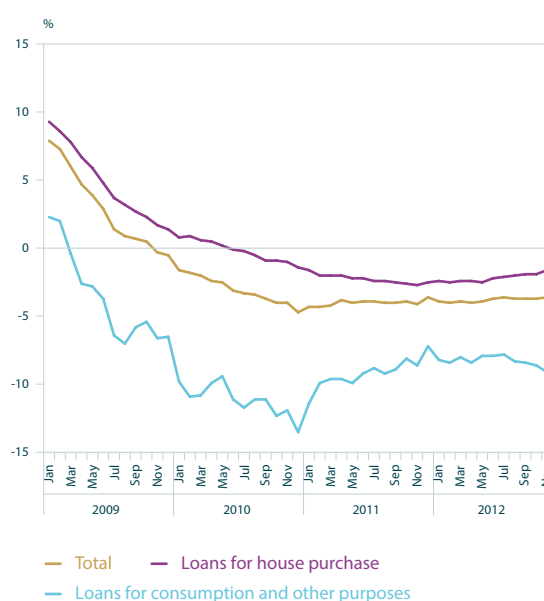
¹⁵ 'Insurance technical reserves' include life assurance policies and pension funds.

Chart 25: Household Transactions in Financial Assets, Four-Quarter Moving Average



Source: Quarterly Financial Accounts, Central Bank of Ireland.

Chart 26: 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

Loans to Irish households advanced by Irish resident credit institutions continued to decline in recent months, falling at an annual rate of 3.7 per cent, based on the average for the three months ending November 2012. Developments of loans related to house purchase and those related to consumption and other purposes have been dichotomous in recent quarters. During the three months to end-November period, loans to households for house purchase fell at an average annual rate of 1.8 per cent, while the decline in loans for consumption and other purposes was more pronounced at 8.7 per cent. Overall, the monthly net flow of loans to households averaged minus €289 million in these three months.

Loans for house purchase account for 70 per cent of on-balance sheet lending to Irish households, and have continued to contract in recent months, albeit at a slower pace as some evidence of stabilisation or a turn in the credit cycle in this category begins to emerge. Over the first eleven months of 2012 loans for house purchase declined by €1.3 billion, compared with a decline of €2.4 billion over the same period in 2011. In contrast, loans for consumption purposes fell by a greater extent over the first eleven months of 2012 than the same period in 2011 (€1.9 billion versus €1.2 billion respectively). This was especially the case for medium-term loans with an original

maturity over one year and up to five years. In most recent months, however, the pace of contraction in short-term loans with an original maturity of up to one year, which include the use of overdrafts and credit card facilities, has also increased somewhat. Lending for other purposes, which includes loans for debt consolidation, education and business loans declined by €691 million over the period end-2011 to end-November 2012.

Floating rate mortgages, which include standard variable rate, tracker rate, and mortgages with a fixed rate up to one year, accounted for 91.6 per cent of the total outstanding amount of loans for house purchase issued by resident credit institutions at end-September 2012, a 1.4 percentage point increase from end-June. The shift into floating rate mortgages, particularly at standard variable rates, has continued in recent months. The overall decline in mortgages over the first three quarters of 2012 was driven by a fall of €3.3 billion in fixed rate mortgages while floating rate mortgages rose by €2.1 billion. Tracker mortgages accounted for 52 per cent of outstanding loans for house purchase (including securitised loans) at end-September 2012, following an annual decline of 3.9 per cent. These developments reflect the fact that certain products such as trackers are no longer available, as well as the effective interest rates in the market at the moment. As the spread between new business fixed rates and new business floating rates has been relatively high (averaging 120 basis points over the year

ending October 2012) customers perceive little benefit to opt for fixed rate products over a standard variable rate mortgage.

Loans for principal dwellings (PDH) continued to account for approximately three quarters of all mortgages at end-September 2012, with the remainder predominantly comprised of buy-to-let (BTL) mortgages. The annual rate of decline in PDH mortgages averaged 2.2 per cent in the

first three quarters of 2012, slightly higher than the equivalent measure for BTL mortgages at 2 per cent.

Overall developments in the residential mortgage market continue to be significantly affected by the debt overhang arising from mortgage lending in the mid-2000s. This is particularly evident when examining the trends in mortgage arrears in recent quarters (see Box 1).

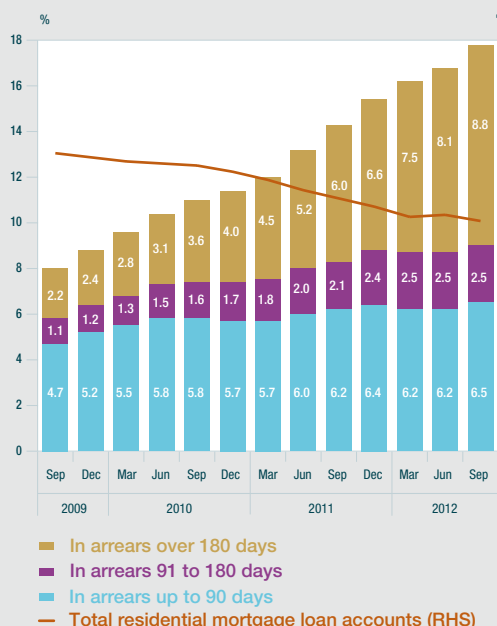
Box 1: Residential Mortgage Arrears

By Jean Goggin & Martin O'Brien*

The current difficulties in the mortgage market are a key area of concern for policy makers. In this Box, we examine in more detail recent trends evident in the data on residential mortgage arrears and repossessions, including newly available data on buy-to-let mortgages, and in particular how progress in resolving the arrears problem can be monitored.

Since 2009 the Central Bank has published data on residential mortgage arrears for principal dwelling (PDH) mortgage accounts¹⁶, as well as detail on restructured accounts and the number of houses that have been repossessed by mortgage providers. Over that time, the increase in arrears cases in the PDH mortgage market has been substantial. By end-September 2012, the number of PDH mortgage accounts in arrears over 90 days was 86,146, or 11.3 per cent of total, up from 26,271 (3.3 per cent) over the three years to that point (Box 1 Chart 1). Accounts with arrears up to 90 days, which had been rising through 2011, have so far in 2012 stabilised at around 6.2 per cent¹⁷, indicating a recent slowdown in the pace of mortgage accounts slipping into arrears.

Box 1 Chart 1: Principal Dwelling Mortgage Accounts and Proportion in Arrears



Source: Residential Mortgage Arrears and Repossessions Statistics, Central Bank of Ireland.

Box 1 Chart 2: Average Outstanding Amount on PDH Mortgages by Status



Source: Residential Mortgage Arrears and Repossessions Statistics, Central Bank of Ireland.

* The authors are Economists in the Statistics Division of the Central Bank.

¹⁶ This refers to all PDH mortgage accounts within the State, covering both resident credit institutions and other mortgage providers which are both resident and non-resident.

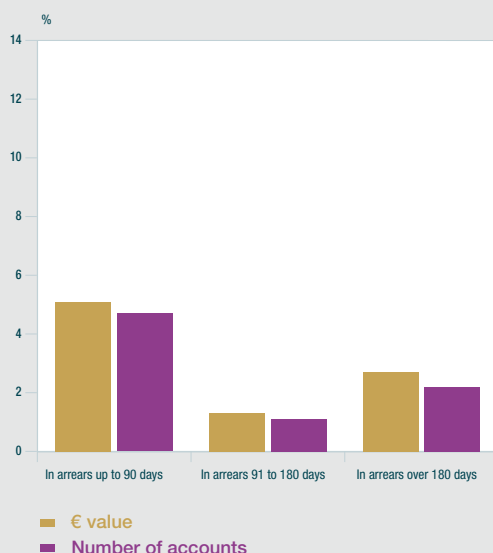
¹⁷ Data for Q3 2012 showed a rise in this category which was entirely due to very short-term technical arrears due to timing issues related to end-month receipt and processing of mortgage repayments. Excluding these technical issues would indicate that arrears up to 90 days actually fell in the quarter.

Box 1: Residential Mortgage Arrears

By Jean Goggin & Martin O'Brien

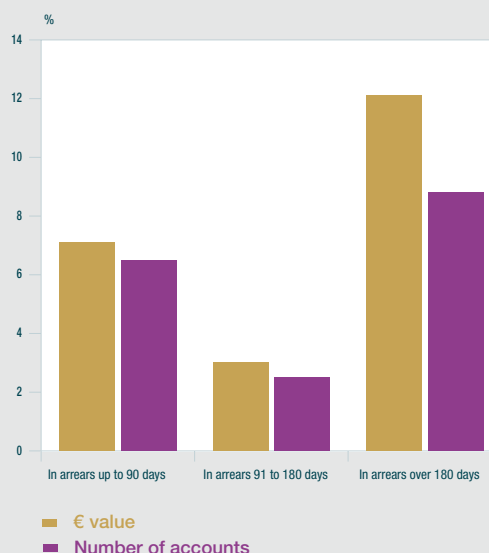
Looking across the distribution of mortgages by status (performing, arrears up to 90 days, arrears from 91-180 days, arrears over 180 days) we can see evidence for the mortgage categories that are experiencing the most difficulty. Comparing the average amount outstanding for each category of mortgage, it is clear that it is the larger mortgage accounts that are persistently in long-term arrears (greater than 180 days). The average outstanding amount on all other mortgages by performance category has declined over the three years from September 2009, except for those in long-term arrears (Box 1 Chart 2). It is also clear that the largest increases have been for longer-term arrears (Box 1 Chart 3(a) and 3(b)). These indicators suggest that it is typically larger, mid-to-late boom period mortgage accounts which are experiencing the most difficulty in terms of arrears.

Box 1 Chart 3(a): Arrears as a Percentage of Total PDH Mortgages, September 2009



Source: Residential Mortgage Arrears and Repossessions Statistics, Central Bank of Ireland.

Box 1 Chart 3(b): Arrears as a Percentage of Total PDH Mortgages, September 2012



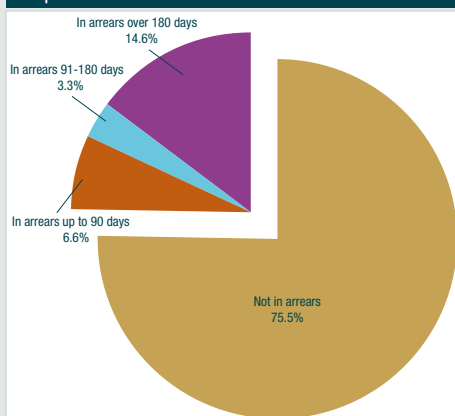
Source: Residential Mortgage Arrears and Repossessions Statistics, Central Bank of Ireland.

Box 1: Residential Mortgage Arrears*By Jean Goggin & Martin O'Brien*

In order to address the issue of mortgage debt overhang, the Central Bank has instructed mortgage providers to establish sustainable resolution strategies. At a high level it is possible to track the level of restructuring activity undertaken by mortgage providers during a particular quarter, to know what proportion of these accounts are in arrears¹⁸, and to know what proportion of accounts in arrears have not had any form of restructure. Overall, the pace of restructuring activity has been slower than the increase in arrears cases. Between Q4 2010 and Q3 2012, the number of PDH accounts in arrears increased by 52 per cent, while the number of restructured PDH accounts increased by 38 per cent. However, at end-Q3 2012, some 72 per cent of mortgages in arrears were not classified as restructured, with the majority of these accounts (64 per cent) being in arrears greater than 90 days. Meanwhile, the proportion of restructured accounts that were in arrears over 180 days increased from 11.2 per cent to 25.8 per cent. The restructuring activity being undertaken by mortgage providers over that time was for the most part short-term in nature, not targeted at the accounts in most distress, and was incapable of arresting the transition into arrears, or longer-term arrears.

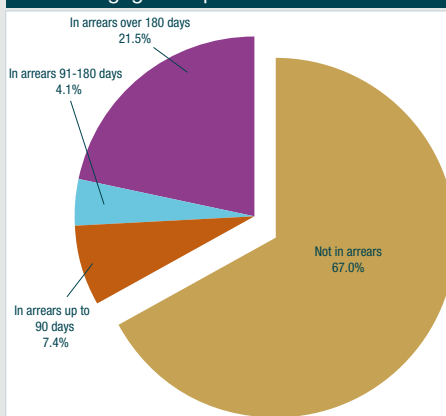
New loan modification options have, however, recently been introduced by mortgage lenders, with the aim of providing longer-term and more sustainable solutions for customers in financial difficulty. Current data collection does not capture information on mortgages that still have arrears outstanding but are meeting the terms of the restructure arrangement. New data will be collected in 2013 to distinguish between accounts that are meeting the terms of their new arrangement and those that have 're-defaulted'. Analysing this data alongside the numbers of accounts in arrears over 90 days which have been restructured will allow for progress in implementing resolution strategies to be monitored at a high level.

Box 1 Chart 4(a): Arrears as a Proportion of Total Number of BTL Mortgages: September 2012



Source: Residential Mortgage Arrears and Repossessions Statistics, Central Bank of Ireland.

Box 1 Chart 4(b): Arrears as a Proportion of Total Outstanding Balance on BTL Mortgages: September 2012



Source: Residential Mortgage Arrears and Repossessions Statistics, Central Bank of Ireland.

¹⁸ If a restructured account is in arrears, this does not necessarily imply that the terms of the restructure arrangement are not being met, as an arrears balance may have been carried forward into the new arrangement. Restructured accounts that are not in arrears may have previously had an arrears balance which has since been eliminated, or they could be 'pre-arrears' cases. 'Pre-arrears' refers to cases in which the account has not yet fallen into arrears but the borrower anticipates future difficulty and agrees a forbearance arrangement with the lender.

Box 1: Residential Mortgage Arrears

By Jean Goggin & Martin O'Brien

The Central Bank commenced publishing data on residential mortgage arrears for buy-to-let (BTL) properties in 2012. At end-September, the number of BTL mortgage accounts in arrears over 90 days was 26,770, equivalent to 17.9 per cent of the total stock of BTL accounts. The number of accounts in arrears of more than 180 days was 21,828, or 14.6 per cent of the total stock. This compares to 8.8 per cent of the stock of PDH mortgages that were in long-term arrears as of end-September 2012. The outstanding balance on BTL mortgage accounts in arrears of more than 90 days was €7.9 billion at end-September, equivalent to 25.5 per cent of the total outstanding balance on all BTL mortgage accounts. The relatively higher rate of arrears in value terms again highlights the fact that it is holders of larger mortgage accounts that are experiencing most difficulty in meeting their repayments (Box 1 Chart 4). The data on all BTL mortgage accounts outstanding at end-September 2012 indicates that the average outstanding balance at that time was just over €200,000. For those BTL mortgage accounts in arrears over 180 days, the average outstanding balance was just over €300,000.

With regard to resolution strategies, progress has been more limited in the BTL sector and restructuring activity remains heavily concentrated in short-term forbearance arrangements. The data on BTL arrears and restructures indicate that, of the total stock of BTL accounts that were in arrears at end-September 2012, only 22.6 per cent were classified as restructured at that time. Interest only arrangements and other reduced payment arrangements (interest plus some capital) accounted for approximately 76 per cent of all restructures.

Repossessions and voluntary surrenders of PDH properties have remained very low, amounting to a cumulative 1,652 properties over the period of data collection. After disposals, there remained 944 PDH properties and 414 BTL properties in the banks' possession at end-September 2012. Legal issues such as the implications of the Dunne Judgement and the implementation of the Code of Conduct on Mortgage Arrears, have undoubtedly impacted on the repossession process to date.

While some limited progress has been made in addressing the issue of mortgage arrears, this has been concentrated in short-term measures without implementing measures to deliver more longer-term sustainable arrangements.

Households' borrowing costs have remained broadly stable over the past year. The weighted average interest rate on outstanding mortgage loans with an original maturity over five years¹⁹ stood at 2.92 per cent at end-October 2012, representing a 14 basis points fall since end-December 2011. The corresponding interest rate in the euro area had fallen 28 basis points over the same period, standing at 3.61 per cent at end-October 2012. The average interest rate applicable to the outstanding volume of mortgage credit in Ireland typically reflects changes in the ECBs main refinancing rate, owing to the high proportion of tracker rate mortgage products in the domestic market. This relationship has weakened

somewhat in recent quarters, as the pricing of standard variable rate mortgages increasingly diverges from existing tracker products.

Interest rates on outstanding loans to households for consumption and other purposes continued to fall, with rates declining for the fifth consecutive month to stand at 5.61 per cent at end-October 2012. Interest rates on short-term loans for consumption & other purposes²⁰ with an agreed maturity up to one year were 8.99 per cent at end-October 2012, compared with 9.3 per cent at end-2011. The corresponding euro area interest rates on short-term loans for consumption & other purposes have fallen 36 basis points since

¹⁹ Mortgages with an original maturity of over five years account for over 99 per cent of total mortgage loans.

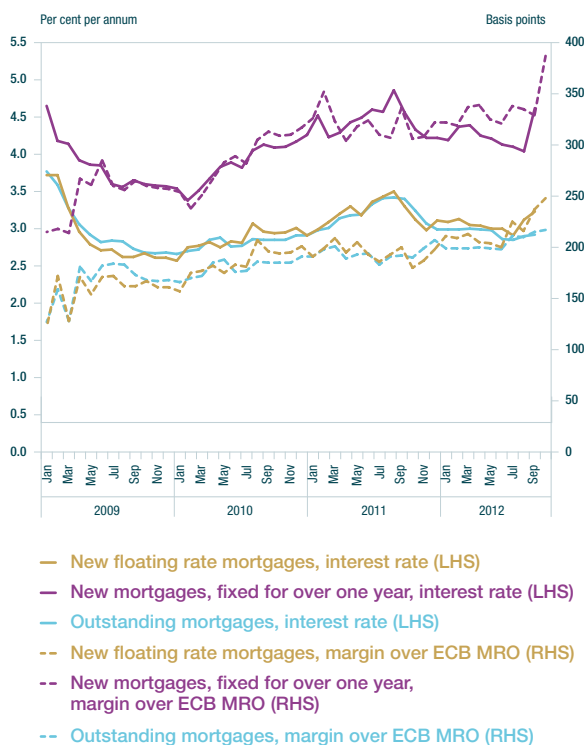
²⁰ Interest rates on short-term loans for consumption & other purposes include both overdrafts and credit card debt.

December 2011 to stand at 7.75 per cent at end-October 2012. In terms of interest rates on longer-term loans with an original maturity of over five years, the weighted average reported by Irish resident institutions was 3.92 per cent at end-October 2012, compared with a rate of approximately 4.97 per cent reported by all euro area credit institutions.

Regarding new business, the weighted average interest rate on new loans for house purchase with either a floating rate or up to one year initial rate fixation was 3.23 per cent in October 2012. Loans in this instrument category accounted for over 90 per cent of new mortgage business since the beginning of the year. Comparatively, loans with either a floating rate or up to one year initial rate fixation within the euro area accounted for just over 30 per cent of the volume of new mortgage business since the beginning of the year.

In relation to new business loans to households for non-housing purposes, the weighted average interest rate reported by Irish resident credit institutions on new business was 6.98 per cent at end-October 2012. However, new business volumes in this category have been particularly low over the past year, resulting in pronounced volatility in the corresponding interest rate series.

Chart 27: Mortgage Interest Rates to Households



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

Developments in the International and Euro Area Economy

Overview

The world economy continues to grow at a slow pace, with activity remaining muted compared with a more promising growth outlook this time last year. Since the last Bulletin, the major international economic institutions have further revised down their economic growth outturn projections for 2012, particularly for a number of advanced economies. For the coming year, the latest survey data suggest subdued global growth dynamics are set to continue as sentiment shows signs of stabilisation albeit at low levels. Global economic activity is expected to strengthen only gradually, with growth in the emerging market economies likely to be more solid than in the advanced economies, where growth has stalled and some countries are in recession. Risks surrounding the global economic outlook remain on the downside. These are mainly related to uncertainties about the resolution of sovereign debt and governance issues in the euro area, as well as fiscal policy decisions in advanced economies possibly dampening sentiment for an extended period. These risks could serve to delay further the recovery of private investment, employment and consumption. On the other hand, for the euro area some positive financial market developments have been driven by favourable views following from the ECB's September announcement of the modalities for undertaking Outright Monetary Transactions (OMTs). Further, advances in the design of the banking union together with other country-level developments have helped to improve the sentiment towards a positive solution of the euro area sovereign debt crisis. Inflationary pressures are generally contained in advanced economies, amid substantial excess capacity, but underlying pressures still remain more pronounced in the emerging economies.

The outlook for global growth is for the hesitant and uneven improvement noted in the second half of last year to persist into 2013 and for the recovery to improve gradually as the year progresses. This is evident in the latest OECD projections, as shown in Table 1. Uncertainty surrounding growth forecasts remains high but growth in emerging economies looks set to remain more solid than that of advanced economies. Emerging economies, despite their resilience, are not decoupled from developments in advanced economies. Nevertheless, monetary policies remain very accommodative and financial conditions should continue to improve gradually especially if sentiment for investment stabilises.

Turning to the advanced economies, recent hard and survey data in the United States have been consistent with a moderate recovery of

overall economic activity. The euro area economy is back in recession and indicators for the fourth quarter point to further recessionary pressures. The Japanese economy contracted during the third quarter of 2012 after the rate of real GDP growth was flat during the second quarter. In parallel, emerging economies, which had been the main drivers of global growth, have also slowed reflecting weak external demand, past policy tightening and a range of country-specific factors. As such, global trade growth remains sluggish. Recent global trade data have shown some stabilisation of world trade growth at low levels and reflect some rebalancing of growth between external and domestic demand in China and the US. Looking forward, the global PMI new export orders index has strengthened but confirms a continuation of weak global trade dynamics for early 2013.

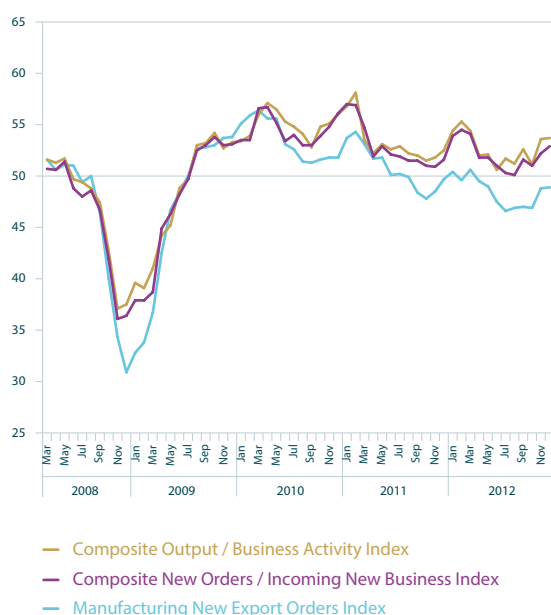
Table 1: Changes in forecasted real GDP in selected economies

	Percentage Change		
	2012 ^f	2013 ^f	2014 ^f
Global	2.9	3.4	4.2
United States	2.2	2.0	2.8
Euro Area	-0.4	-0.1	1.3
United Kingdom	-0.1	0.9	1.6
China	7.5	8.5	8.9
Japan	1.6	0.7	0.8

Source: OECD Economic Outlook no.92.

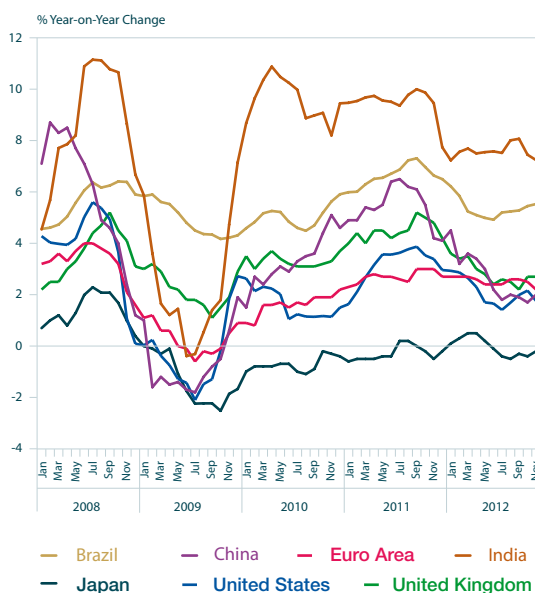
^f Forecast

Global inflation has been increasing steadily since August 2012, after having declined earlier in the year. Nonetheless, as 2012 drew to a close, it can best be described as contained, given abundant global spare capacity. Headline inflation in many regions is largely explained by underlying developments in energy prices. Annual inflation in the OECD area was 1.9 per cent in November. Food price inflation also contributed positively to the headline index, although the rate of change eased during the fourth quarter of 2012. Excluding food and energy, the annual rate of global inflation decreased slightly to 1.6 per cent in November. In the euro area, inflation is expected to remain on a gradual downward trend into 2013.

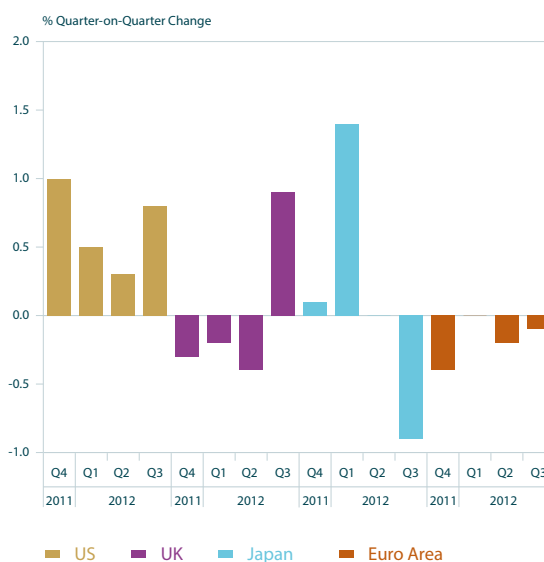
Chart 1: Global Purchasing Managers' Index

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.

Box A: Recent Developments in World Trade

By Neill Killeen¹

World trade was weak throughout 2012 and many short-term indicators of world trade are at or close to their lowest levels in over three years. Owing to the uncertain economic outlook for the global economy, international institutions have revised down their projections for world trade in recent months (Table 1). Nevertheless, world trade is expected to strengthen gradually over the course of 2013 with the latest forecasts pointing to growth of around 4.5 per cent. Against this background, this box assesses the recent slowdown in world trade and provides an overview of some of the hard and survey indicators used to analyse trade developments.

Box A Table 1: World Trade Growth Projections (Annual % change)

	2012	2013
OECD (Nov '12)	2.8	4.7
	(-1.3)	(-2.3)
IMF WEO (Oct '12) ²	3.2	4.5
	(-0.6)	(-0.7)
WTO (Sept '12)	2.5	4.5
	(-1.2)	(-1.1)

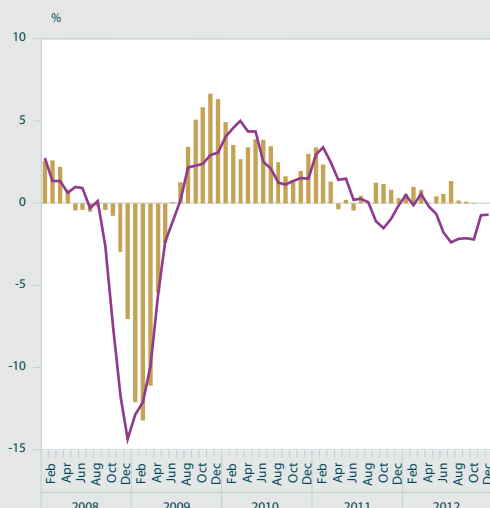
Note: Figures in brackets refer to revisions from previous forecast in percentage points.

In the third quarter of 2012, world merchandise trade increased by just 0.1 per cent quarter-on-quarter following subdued growth of 0.6 per cent in the second quarter of 2012 (Chart 1). Trade momentum, as measured by the three month on three month percentage change, has now been below its long-term average³ in nineteen of the last twenty months to October 2012. Furthermore, survey indicators of world trade such as the global new export orders Purchasing Managers' Index (PMI), at 48.9 in December, remain below the 50 neutral line which separates expansion from contraction and suggest that the slowdown in world trade continued in the fourth quarter of 2012. As depicted in Chart 2, the decline in world trade in the third quarter of 2012 was somewhat weaker than the deceleration in global economic activity, with world industrial production increasing by 0.4 per cent in the three months to September.

¹ Monetary Policy Division.

² IMF projections refer to world merchandise and services trade volumes. OECD & WTO projections refer to world merchandise volumes only.

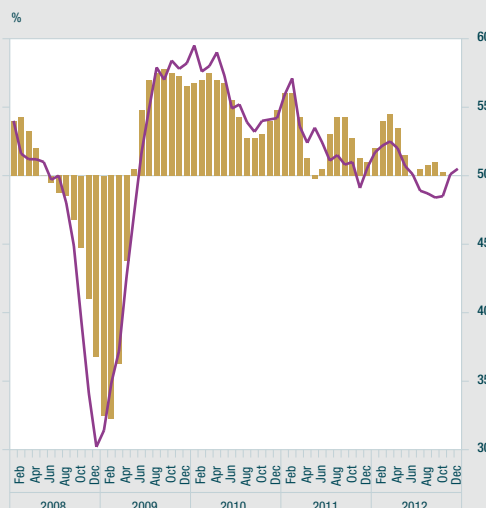
³ The long-term average is 1.4 per cent and is calculated using data from June 1991 to October 2012.

Box A: Recent Developments in World Trade*By Neill Killeen¹***Box A Chart 1: World Trade Developments
& Global New Export Orders Purchasing
Managers' Index**

■ World Trade (3-month on 3-month % change)
— Manufacturing New Export Orders PMI (RHS)

Source: Markit & World Trade Monitor (December 2012), CPB Netherlands Bureau for Economic Policy Analysis.

Note: The latest observation refers to October 2012 for world trade volumes and December 2012 for the global manufacturing new export orders PMI.

**Box A Chart 2: World Industrial Production
& Global Manufacturing Purchasing
Managers' Index**

■ World Industrial Production (3-month on 3-month % change)
— Global Manufacturing Output/Business Activity Index PMI (RHS)

Source: Markit & World Trade Monitor (December 2012), CPB Netherlands Bureau for Economic Policy Analysis.

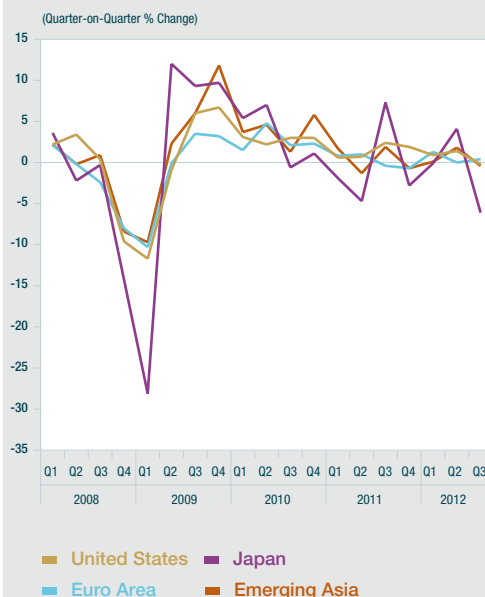
Note: The latest observation refers to October 2012 for world industrial production volumes and December 2012 for the global manufacturing output / business activity PMI.

Recent data point to weak trade dynamics globally with both advanced and emerging economies experiencing sluggish export growth throughout 2012. Reflecting the deteriorating global demand conditions, export volumes from advanced economies contracted by 1 per cent in the third quarter of 2012 after recording growth of 0.9 per cent in the second quarter of 2012. The decline in Japanese exports in particular was pronounced with export volumes falling by 6.1 per cent in the third quarter of 2012, representing the biggest fall since the March 2011 natural disaster. As depicted in Chart 3, US exports also fell in the third quarter of 2012 following growth of 1.4 per cent in the second quarter, while in the euro area, tepid third quarter growth in export volumes followed a stagnant second quarter. The downturn in trade has propagated globally with zero growth in export volumes from emerging economies in the third quarter of 2012 following growth of 1.6 per cent in the second quarter of 2012. Export volumes from emerging Asia, the manufacturing hub of the global economy, declined in the third quarter of 2012 having recorded modest growth in the first two quarters of the year.

Box A: Recent Developments in World Trade

By Neill Killeen¹

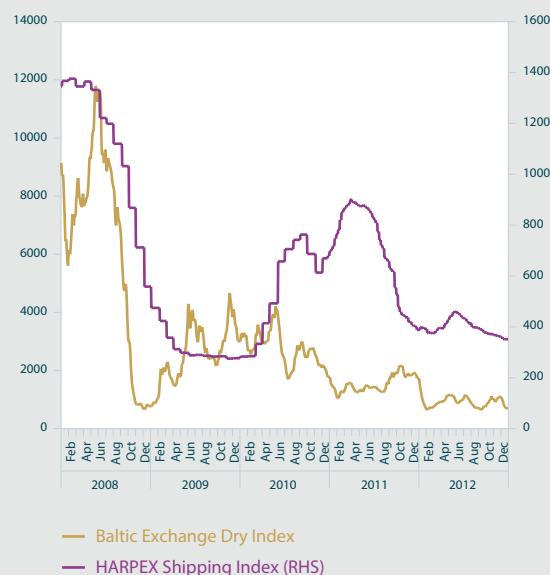
Box A Chart 3: Merchandise Exports by Selected Regions



Source: World Trade Monitor (December 2012), CPB Netherlands Bureau for Economic Policy Analysis.

Note: The latest observation refers to September 2012 for merchandise export volumes.

Box A Chart 4: Short-Term Indicators of World Trade



Source: Thomson Reuters Datastream.

Note: The latest observation refers to 31/12/2012.

Short-Term Indicators of World Trade

While the official data point to a slowdown in world trade in the third quarter of 2012 in particular, other short-term indicators⁴ of world trade deteriorated further in the fourth quarter and suggest a very fragile near term outlook. The Baltic Dry Index, which tracks worldwide shipping prices of various dry bulk cargoes, was very weak throughout 2012 and is close to levels recorded in late 2008 when world trade volumes dramatically collapsed (Chart 4). The index indirectly measures global supply and demand for commodities shipped aboard dry bulk carriers such as building materials, coals and grains. The index rises when demand for the shipment of commodities outweighs the inelastic supply of dry cargo ships. Since dry bulk consists of raw materials used as inputs in the production of intermediate and final goods, the index provides pertinent information for assessing world trade conditions.

⁴ For a review of the main monthly indicators used to monitor and forecast world trade developments, see, for example, Guichard, S. and E. Rusticelli (2011), "A Dynamic Factor Model for World Trade Growth", OECD Economics Department Working Papers, No. 874, OECD Publishing. <http://dx.doi.org/10.1787/5kg9zbvwwqq2-en>

Box A: Recent Developments in World Trade*By Neill Killeen¹*

In addition, the Harpex shipping index, which focuses on container freight and is regarded as a broader measure of global trade, declined steadily throughout the second half of 2012 and in December 2012 was at its lowest level in over two years (Chart 4). Meanwhile, other indicators used to proxy for world trade such as the Suez canal oil shipments and Taiwan exports, often cited as bellwethers of world trade given their sensitivity to the global export cycle, have also slowed in recent months.

Monthly indicators of the global technology cycle, which has a strong correlation to the global business cycle and hence world trade flows, also fell in the second half of 2012. For example, the US-Tech Pulse Index, a coincident indicator of activity in the US information technology (IT) sector, fell steadily throughout the third quarter reversing gains made earlier in the year. Overall, the index remains above the low levels recorded during the end of 2008 and start of 2009. Likewise, the Philadelphia Semiconductor Index, which tracks stocks of manufacturing firms that represent the semiconductor industry, has fallen from levels recorded earlier in the year but remains well above its historical low.

Overall, the decline in world trade was steady throughout 2012 with the latest hard data pointing to a further deterioration in trade conditions in the third quarter. Export volumes from advanced economies in particular, slowed in the third quarter with zero growth in export volumes from emerging economies. Looking ahead, short-term trade indicators and the latest global survey data such as the manufacturing new export orders PMI component, suggest that world trade remained weak in the final three months of 2012.

Section 1: Euro Area***Economic Growth – Recent Developments***

According to Eurostat, euro area real GDP contracted by 0.1 per cent in the third quarter of 2012, following a 0.2 per cent fall in activity during the previous quarter with signs that weakness is no longer limited to the periphery economies. While Germany and France provided most support to euro area growth, there were contractions in GDP in a number of core countries, most notably an unexpected fall in GDP in The Netherlands. Finland recorded two consecutive quarters of negative growth, while Belgium avoided a technical recession with GDP growth of zero per cent in the third quarter, following a decline of -0.5 per cent for the previous quarter. Another core country, Austria, also reported negative growth for the third quarter of 2012.

Domestic demand remained weak across the euro area. Investment continued to exert a significant downward impact on GDP growth in the third quarter, amounting to a sixth consecutive quarter of contraction. The reduction in investment was widespread

throughout the euro area, with positive growth only recorded in Germany, Estonia and Portugal. Private consumption stabilised somewhat, showing some improvement on earlier quarters of 2012, but remained weak. Net trade, while contributing positively to GDP growth, did not outweigh the negative impact of domestic demand components. Exports rose by 0.9 per cent in the euro area, primarily accounted for by increased exports in Germany and Spain, offsetting a sharp reduction of 1.7 per cent in exports of goods from The Netherlands.

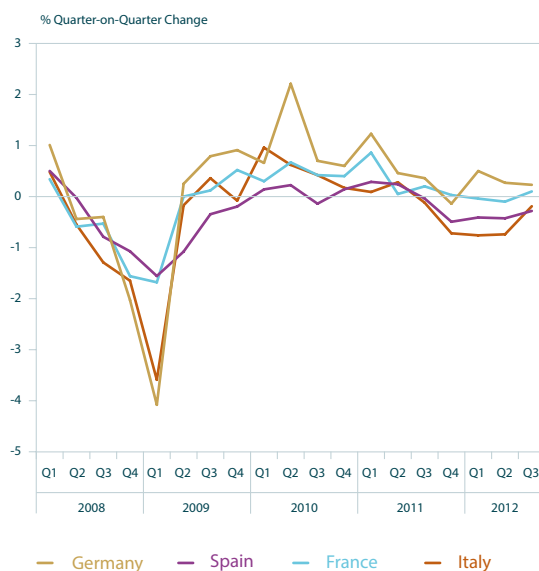
Indications from higher frequency data are that the weakness in domestic demand recorded in the third quarter continued into the fourth quarter of 2012. Industrial production and retail sales data showed a slowing of activity during October. The contraction in industrial production was broadly based. Four out of five of the largest economies recorded declines in industrial production although some pick-up in activity was evident in some of the periphery economies, notably Spain, Ireland, Portugal and Greece. The decline in industrial production reflected the dip in sentiment observed in October: according to the EU Commission's

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

	2011 Q4	2012 Q1	2012 Q2	2012 Q3
Consumption	-0.3	-0.2	-0.2	0.0
Government	0.0	0.0	0.0	0.0
Investment	-0.1	-0.2	-0.3	-0.1
Inventories	-0.5	0.0	0.0	-0.2
Exports	0.0	0.2	0.7	0.4
Imports	0.6	0.1	-0.3	-0.1
GDP	-0.4	0.0	-0.2	-0.1

Source: Eurostat.

Chart 4: Euro Area GDP Growth

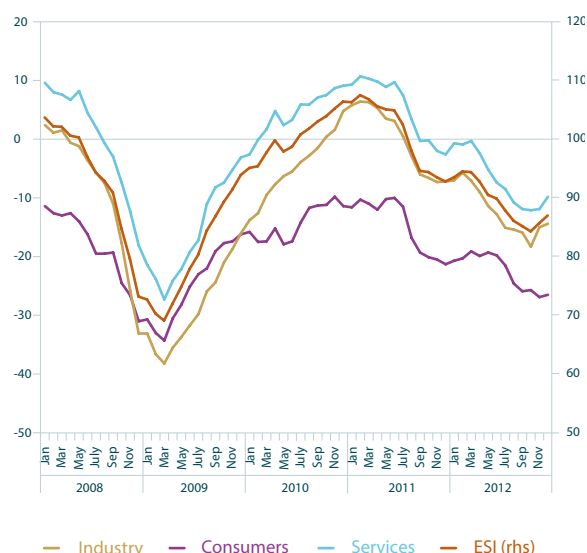


Source: Thomson Reuters Datastream

Economic Sentiment Indicator (ESI), sentiment deteriorated largely due to a significant fall in industry confidence that was particularly notable in Germany and France.

October appears to have been the weakest month in the fourth quarter. Thereafter, survey data point towards a milder slowdown towards year end. While still below long-term average values, the ESI increased by 1.4 percentage points during November and a further 1.3 percentage points during December. This uptick was driven largely by an increase in industry confidence, reflecting an improved outlook regarding production expectations and overall order books. A slight improvement in confidence is also reflected in the most recent PMI data.

Chart 5: Economic Sentiment Indicator & Selected Components



Source: European Commission.

While remaining below the neutral 50 mark, the composite output PMI rose from a three-year low of 45.7 in October to 47.2 in December. A significant contributor to the improvement is Germany, where the composite output PMI rose above the neutral 50 mark for the first time in eight months, reflecting improved conditions in the services sector which were sufficient to offset declines in manufacturing.

Conditions in the labour market continue to reflect the weakened GDP outturn. Euro area unemployment increased steadily month-on-month throughout 2012, standing at 11.8 per cent in November, reflecting declining employment across the euro area. Germany, Austria and Finland were the only countries

to record slight employment gains over the third quarter of 2012, according to Eurostat data, while survey data indicate continued negative employment prospects for the euro area into 2013. Youth unemployment continued to rise over the calendar year and long-term unemployment has increased as a share of the total in Greece, Spain, Italy and Portugal.

Economic Growth – Outlook

Euro area GDP is expected to decline further in Q4 2012 and perhaps also into the early part of 2013 as weak domestic demand continues to outweigh positive external demand effects. Any upturn in 2013 is likely to be led by Germany. While GDP growth in Germany is expected to be negative in Q4 2012, indicators suggest a levelling out in the first half of this year. Thereafter, expectations are tending towards a moderate upturn for the second half of the year.

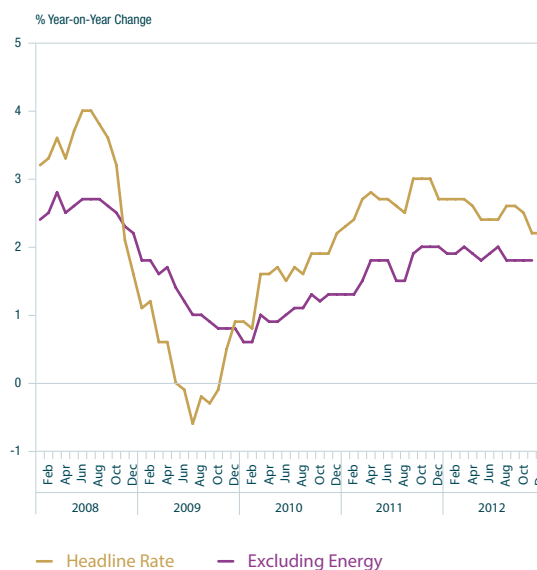
Private sector deleveraging combined with low levels of consumer and business confidence will persist into 2013, leading to a negative outlook for private sector consumption and, in particular, business investment for the full calendar year. Fiscal consolidation across euro area economies will also contribute to a slowing in growth. Net exports are expected to contribute positively to GDP growth during 2013 as dampened domestic demand holds imports back, while exports are expected to be solid on the basis of extra-euro area developments.

The ECB staff macroeconomic projections for euro area GDP growth for 2013 have been revised downwards recently against the background of on-going fiscal consolidation and moderating demand for exports in the near term. Their forecasts now lie at the lower end of the institutional forecasts spectrum for 2013, with a forecast range of -0.9 per cent to 0.3 per cent for GDP growth, followed by a projection of 0.2 per cent to 2.2 per cent for 2014. That said, the IMF and the OECD highlight downside risks to their forecasts, principally in relation to insufficient progress on policy aimed at resolving financial sector issues.

Inflation – Recent Developments

Euro area annual HICP inflation was 2.2 per cent year-on-year in both November and

Chart 6: Euro Area Inflation



Source: Thomson Reuters Datastream.

December 2012, having averaged 2.6 per cent over the previous three months. The recent decline in annual inflation rates is largely a result of a reduced contribution from the energy component, reflecting lower oil prices in euro terms. Core inflation, meanwhile, has been steady for some time, with HICP inflation excluding food and energy falling to 1.4 per cent year-on-year in November 2012, having been at 1.5 per cent since August 2012 and averaging 1.6 per cent over the previous 12-month period. Aside from the volatility in commodity prices, higher indirect taxes and administered prices in some countries have contributed to elevated inflation rates in the euro area for the past two years. Taxes alone contributed over 0.3 percentage points to the headline inflation rate on average in the two years up to November 2012.

Industrial producer price inflation (excluding construction) declined gradually from an early 2011 peak of 6.8 per cent year-on-year, reaching a trough in July 2012 of 1.6 per cent. Following a slight rebound in August, related to higher energy prices, growth in producer prices stabilised at around 2.6 per cent in the months up to October 2012 and declined to 2.1 per cent in November. PMI survey measures of prices, meanwhile, indicate weak price pressures in the manufacturing sector. Manufacturing input prices eased in the four months up to December, while selling prices

Table 3: US Contributions to GDP Growth

	2011 Q4	2012 Q1	2012 Q2	2012 Q3
Consumption	1.5	1.7	1.1	1.1
Government	-0.4	-0.6	-0.1	0.8
Fixed Investment	1.2	1.2	0.6	0.1
Inventories	2.5	-0.4	-0.5	0.7
Exports	0.2	0.6	0.7	0.3
Imports	-0.9	-0.5	-0.5	0.1
GDP	4.1	2.0	1.3	3.1

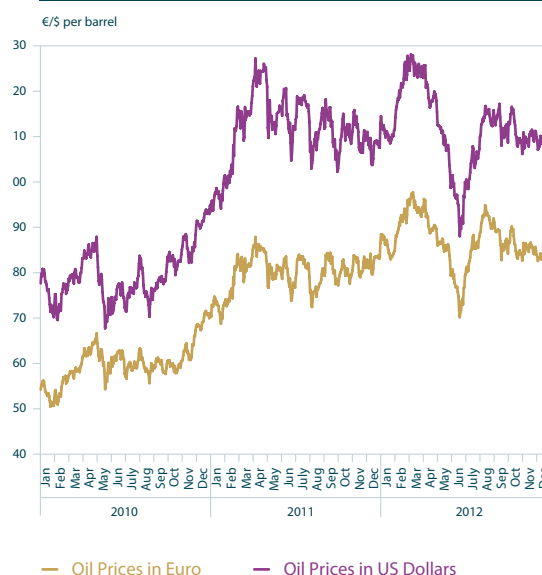
Source: Bureau of Economic Analysis (BEA)

were unchanged in December having been declining during the previous six months. Finally, domestic price pressures also remain subdued, as increased slack in the labour market weighs on labour costs. Total hourly labour costs increased by 2.0 per cent year-on-year in the third quarter, compared with 1.9 per cent the previous quarter. Meanwhile, unit labour costs increased by 1.5 per cent in the third quarter, up from 1.3 per cent in the second quarter, reflecting broadly unchanged productivity growth and a slight increase in compensation per employee.

Oil and Other Commodity Prices

The highest ever average annual price of Brent crude oil of over \$111 per barrel was recorded in 2012. In the final quarter of 2012, Brent crude oil traded in a range of between €106 and €117 per barrel, reflecting conflicting supply and demand factors. On the supply side, geopolitical concerns exerted upward pressure on prices while, on the demand side, a weaker global economic outlook put downward pressure on prices. Meanwhile, global food prices have largely reversed the summer 2012 drought induced price increases, largely due to an improvement in supply conditions.

Chart 7: Oil Prices – Brent Crude



Source: Thomson Reuters Datastream.

Box B: The US Federal Reserve's Forward Guidance and Quantitative Easing*By León Fernández Brennan¹*

Since cutting the target federal funds rate to a range of 0 - 0.25 per cent in December 2008, the US Federal Reserve (Fed) has been implementing monetary policy at the so called lower bound and has sought unconventional policies in an attempt to further ease monetary policy and add stimulus to the economy. This Box discusses two such policies: i) communication policies intended to change market expectations of the future course of official interest rates - commonly referred to as forward guidance and; ii) asset purchase programmes - commonly referred to as quantitative easing (QE).

Forward Guidance

Forward guidance was reintroduced by the Fed in December 2008 when the Federal Open Market Committee (FOMC) announced that “economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time”.² This or similar language was maintained until August 2011 when the language became more explicit, stating that economic conditions “are likely to warrant exceptionally low levels for the federal funds rate at least through mid-2013”. The January 2012 FOMC statement extended the period to “at least through late 2014”. It was extended once more in September 2012, this time to “at least through mid-2015”. This time, it was also added that the Committee expects “that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens”.

There is some debate in the academic literature over the impact of the Fed's forward guidance policy. Campbell et al. (2012)³ find that “forward guidance in monetary policy statements has had a significant effect on yields of Treasury notes and corporate bonds” since the Fed reached its lower bound. In relation to the August 2011 statement specifically, Crump et al. (2013)⁴ find that market participants' forecasts of the federal funds rate shifted significantly after the announcement and that their new forecasts were closely aligned with the FOMC's communicated path. Kool and Thornton (2012)⁵, find that forward guidance generally does not improve market participants' ability to correctly forecast future interest rates and that this has been the case recently. Diamond and Rajan (2011)⁶ highlight the risks associated with communicating that interest rates will remain low for an extended period of time, including encouraging bank risk taking and slowing down the process of balance sheet adjustment.

¹ Monetary Policy Division.

² Forward guidance had been used by the Fed in the past to influence market expectations, for example during 2003-2005. For an analysis of Fed announcements during this period see Mira Farka and Adrian R. Fleissig, 2012, “The effect of FOMC statements on asset prices”, *International Review of Applied Economics* 26(3), 387-416.

³ Campbell, Jeffrey R., Charles L. Evans, Jonas D. M. Fisher and Alejandro Justiniano, 2012, “Macroeconomic effects of FOMC forward guidance”, paper prepared for the Brookings Institution Spring Panel on Economic Activity, 22 March 2012.

⁴ Crump, Richard, Stefano Eusepi, and Emanuel Moench, 2013, “Making a Statement: How Did Professional Forecasters React to the August 2011 FOMC Statement?”, *Federal Reserve Bank of New York Liberty Street Economics blog*, 07 January 2013.

⁵ Kool, Clemens J.M. and Daniel L. Thornton, 2012, “How Effective is Central Bank Forward Guidance?”, *Tjalling C. Koopmans Research Institute, Discussion Paper Series* 12-05.

⁶ Diamond, Douglas W. and Raghuram Rajan, 2011, “Illiquid Banks, Financial Stability, and Interest Rate Policy”, *NBER Working Paper* 16994.

Box B: The US Federal Reserve's Forward Guidance and Quantitative Easing

By León Fernández Brennan¹

In December 2012, the Fed used “state contingent” forward guidance for the first time.⁷ A commitment was made to keep rates at current levels “at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee’s 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored”.

Large-Scale Asset Purchases / Quantitative Easing

The Fed launched its first QE or “Large-Scale Asset Purchase” programme (LSAP1) in November 2008. Its objective was to “improve conditions in private credit markets”. The asset purchases totalled \$1.75 trillion and consisted mainly of Federal agency debt and mortgage-backed securities, as well as \$300 billion of Treasury securities. This was followed by LSAP2 in November 2010 which aimed to “promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate”. It consisted of the purchase of a further \$600 billion of Treasury securities. In September 2011, the Fed unveiled its “Maturity Extension Program”, commonly referred to as “Operation Twist”, which involved the purchase of \$400 billion of long term Treasury securities funded by the sale of a similar amount of shorter term Treasuries.

In September 2012, an open ended asset purchase programme was announced, with no set limit on the amount of purchases to be made. The Fed stated that it would buy \$40 billion of agency mortgage-backed securities every month until the labour market improves “substantially”. It was further announced in December 2012 that the \$45 billion of long term Treasury securities purchased every month as part of “Operation Twist” would continue after the programme’s conclusion at the end of 2012. Unlike the “Operation Twist” purchases, however, these will not be sterilised by the sale of securities with shorter maturities.

There is widespread agreement in the academic literature that the Fed’s QE has succeeded at least in terms of lowering Treasury yields. Williams (2011)⁸ summarises the results of a number of studies that try to estimate its effect on asset prices. In order to facilitate comparison, the estimated effects in each analysis are normalised to correspond to the estimated effect on long term bond yields of a \$600 billion programme. The normalised effects are broadly similar: Krishnamurthy and Vissing-Jorgensen (2011)⁹ calculate a figure of 15 basis points, Hamilton and Wu (2011)¹⁰ are marginally higher at 17 basis points while Gagnon et al. (2011)¹¹ are slightly higher again at 18 basis points.

⁷ Such guidance, in which an explicit link is made to the levels of unemployment and inflation, had previously been proposed by FOMC member Charles Evans, amongst others. See Charles L. Evans, 2012, “Monetary policy communications and forward guidance”, speech given at the International Research Forum on Monetary Policy, Seventh Conference, Frankfurt am Main, 16 March 2012.

⁸ Williams, John C., 2011, “Unconventional Monetary Policy: Lessons from the Past Three Years”, Federal Reserve Bank of San Francisco Economic Letter 2011-31.

⁹ Krishnamurthy, Arvind, and Annette Vissing-Jorgensen, 2011, “The Effects of Quantitative Easing on Interest Rates: Channels and Implications for Policy”, NBER Working Paper 17555.

¹⁰ Hamilton, James, and Jing Cynthia Wu, 2011. “The Effectiveness of Alternative Monetary Policy Tools in a Zero Lower Bound Environment.” *Journal of Money, Credit, and Banking*, Vol. 4, pp. 3-46.

¹¹ Gagnon, Joseph, Matthew Raskin, Julia Remache and Brian Sack, 2011, “The Financial Market Effects of the Federal Reserve’s Large-Scale Asset Purchases”, *International Journal of Central Banking*, Vol. 7, pp. 3–43.

Box B: The US Federal Reserve's Forward Guidance and Quantitative Easing*By León Fernández Brennan¹*

QE is generally also thought to have had an effect on macro variables. Chen et al. (2011)¹² find the effect on GDP growth and inflation to be moderate but lasting. Chung et al. (2011)¹³ find that QE has resulted in US unemployment being 1.5 percentage points less than it would have been otherwise. They also suggest that it has probably prevented the US economy from falling into deflation. Similarly, Baumeister and Benati (2010)¹⁴ find that QE may have averted significant risks of both deflation and output collapse comparable to those that took place during the Great Depression. However, according to Stone et al. (2011)¹⁵, even with the most “state of the art” models, one must be aware that the nonlinearities associated with the depression counterfactual may lead to analytical problems. Furthermore, many of the costs and risks associated with QE are difficult to model. In this regard, Stone et al. note distributional consequences and possible damage to central bank independence.

The mechanism through which QE works is more ambiguous and has been a topic of debate amongst economists. Some believe that QE, like forward guidance, is primarily effective through the *signalling channel*. According to this theory, market participants interpret the announcement of QE as an indication that rates will be kept low for longer than previously thought.¹⁶ An alternative view is that in an environment of financial frictions and imperfect substitutability between asset classes, QE can put downward pressure on yields through what is known as the *portfolio balance channel*. Imperfect substitutability causes QE asset purchases to drive the price of the purchased assets up. Investors react by substituting these assets for less costly comparable alternatives and so the effects spill over into similar assets. However, some degree of imperfect price elasticity means that the rise in price (drop in yield) does not completely dissipate.¹⁷ The relative effectiveness of these two channels has an important bearing on policy design in this area and, as such, will likely remain subject to empirical investigation in the coming years.

¹² Chen, Han, Vasco Curdia and Andrea Ferrero, 2011, “The Macroeconomic Effects of Large Scale Assets Purchase Programs”, Federal Reserve Bank of New York Staff Report 527.

¹³ Chung, Hess, Jean-Philippe Laforge, David Reifschneider and John C. Williams, 2011, “Have We Underestimated the Probability of Hitting the Zero Lower Bound?”, Federal Reserve Bank of San Francisco Working Paper 2011–01.

¹⁴ Baumeister, Christiane and Luca Benati, 2010, “Unconventional Monetary Policy and the Great Recession—Estimating the Impact of a Compression in the Yield Spread at The Zero Lower Bound”, European Central Bank Working Paper 1258.

¹⁵ Stone, Mark, Kenji Fujita and Kotaro Ishii, 2011, “Should Unconventional Balance Sheet Policies be Added to the Central Bank Toolkit? A Review of the Experience So Far”, IMF Working Paper WP/11/145.

¹⁶ See Michael Woodford, 2012, “Methods of Policy Accommodation at the Interest-Rate Lower Bound”, speech at the Federal Reserve Bank of Kansas City Economic Symposium, Jackson Hole, Wyoming, 30 August 2012.

¹⁷ See Ben Bernanke, 2010, “The Economic Outlook and Monetary Policy”, speech at the Federal Reserve Bank of Kansas City Economic Symposium, Jackson Hole, Wyoming, 27 August 2010.

Inflation – Outlook

Euro area inflation is expected to remain on a gradual downward trend into 2013. According to the December 2012 Eurosystem staff macroeconomic projections for the euro area, annual HICP inflation is expected to lie between 1.1 per cent and 2.1 per cent for 2013 and between 0.6 per cent and 2.2 per cent for 2014.

Section 2: External Environment

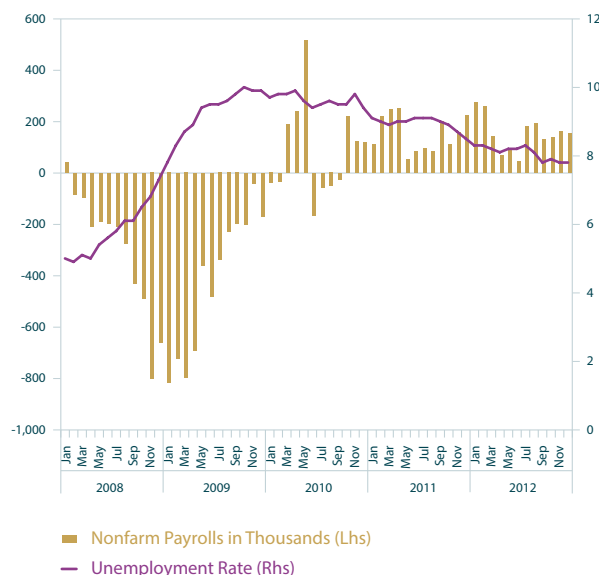
United States

For the United States, recent hard and survey data have been consistent with a moderate recovery of overall economic activity. The third estimate of real GDP, released by the Bureau of Economic Analysis (BEA), indicated that US growth grew at an annualised rate of 3.1 per cent in the third quarter of 2012, higher than previously reported and up from 1.3 per cent in the second quarter of 2012. The increase in real GDP primarily reflected positive contributions from personal consumption expenditures, inventories, government spending and net exports that were partly offset by a negative contribution from non-residential fixed investment. However, given positive residential investment, the contribution from overall fixed investment was also positive.

The labour market has been improving, with better than expected non-farm payroll readings in the fourth quarter. The unemployment rate remains elevated at 7.8 per cent in December 2012 having declined by 0.7 per cent in 2012. The housing market has also continued to show signs of improvement, with further increases in house prices and sales in recent months, despite the Northeast region being affected by Hurricane Sandy.

Business survey indicators have been positive with both the manufacturing PMI and non-manufacturing ISM now in expansion territory, with the composite ISM posting a particularly strong reading in November 2012. Core capital goods orders, a key indicator of future business investment, fell sharply in the third quarter of 2012 but showed some signs of improvement more recently with a modest

Chart 8: US Labour Market



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

pick-up in November. Consumer confidence indicators, which had been on an upward trend for much of the second half of the year, fell sharply in December, largely owing to the uncertainty arising from the so called “fiscal cliff”.

As regards price developments, the year-on-year gains in non-seasonally adjusted headline and core CPI were 1.8 per cent and 1.9 per cent, respectively, in November 2012. Private consumption expenditure (PCE) inflation has been subdued, as both the headline and core PCE deflators have been registering readings below 2 per cent year-on-year. Soft inflation readings have supported the Federal Reserve’s decision to implement a third round of quantitative easing in September. After its December meeting, the Federal Open Market Committee (FOMC) announced the extension of its open-ended asset purchases, including \$40 billion per month of mortgage-backed securities and \$45 billion in longer-term Treasury securities. The FOMC also announced that policy rates would remain low so long as 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.

In early January, US policymakers agreed a budget deal which eliminated most of the tax

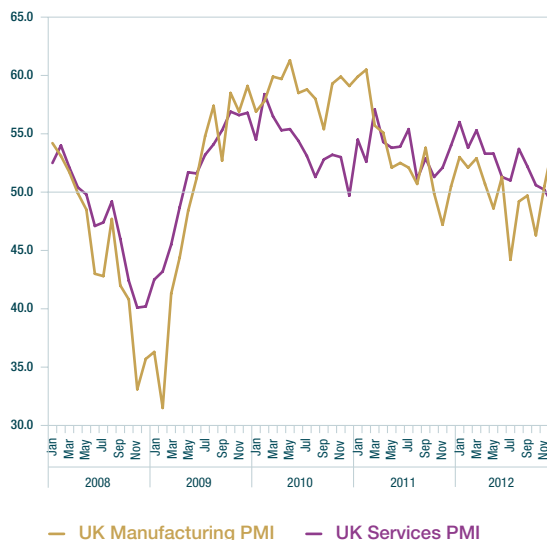
hikes that were due to come into law as part of the “fiscal cliff” on 1 January 2013. The deal extends tax cuts on incomes up to \$400,000 for individuals and \$450,000 for couples with earnings above these thresholds now subject to a taxation rate of 39.6 per cent, increased from 35 per cent. Other elements of the 1 January deal include an extension of jobless benefits for the long-term unemployed for one year while it also restores the payroll tax to 6.2 per cent. The automatic expenditure cuts also due to come into force have been postponed until 1 March 2013 and will coincide with debt ceiling negotiations expected to take place in the first quarter.

Looking ahead, the recovery is expected to continue on a moderate course, supported by a gradual upturn in domestic demand. According to the latest forecasts from the OECD Economic Outlook, real GDP is expected to expand by 2.0 per cent this year, before picking up gradually to 2.8 per cent in 2014.

United Kingdom

The UK economy expanded during the third quarter of 2012 with GDP increasing by 0.9 per cent quarter-on-quarter following contractions of 0.2 per cent and 0.4 per cent during the first and second quarters respectively. The expansion in domestic economic activity during the third quarter was supported by the hosting of the Olympic Games and an extra working day in the third quarter following the supplementary bank holiday in June owing to the jubilee celebrations. However, no official adjustment has been made for these factors by the Office of National Statistics. Data corresponding to the final quarter of 2012 should help to identify the underlying trend in the UK economy after the one-off factors of the jubilee celebrations and the Olympics during the second and third quarters respectively. Sentiment data relating to the final quarter point to a divergence in prospects for the manufacturing and services sector. The Purchasing Managers' Index (PMI) of Manufacturing Output increased from 50.5 in November to 54 in December - a twenty month high. In contrast, the PMI index of Business Activity in the services sector – the largest economic sector - decreased from 50.2

Chart 9: PMI Indicators for the UK



Source: Markit.

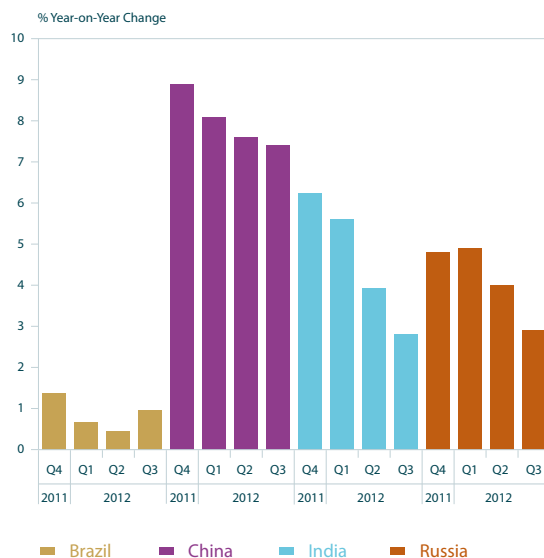
Note: For PMI indicators, above 50 represents expansion, below 50 represents contraction.

in November to 48.9 in December. The OECD's November Economic Outlook indicates that GDP growth in 2013 is now projected at 0.9 per cent, revised down from 1.9 per cent in the May Economic Outlook. Growth is expected to pick up only gradually during 2013 as exports and household spending pick up.

The Consumer Price Index (CPI) of annual inflation stood at 2.7 per cent in November, unchanged from October after increasing from 2.2 per cent in September. The increase in inflation during October was largely attributed to increased university tuition fees. During November, the cost of household services including domestic gas and electricity prices increased further. The recent increase in inflation disrupts the downward trend in price pressures that was evident during the second and third quarters of 2012.

Since the Bank of England increased its asset purchase programme by £50 billion to £375 billion in July 2012, no further changes have been made to the asset purchase programme. In addition, the bank rate has remained at 0.5 per cent since 2009. First data relating to the bank's Funding for Lending Scheme (FLS) that commenced in July 2012 show that 6 of the 35 participants borrowed £4.4 billion under the FLS scheme during the third quarter.

Chart 10: BRIC GDP Growth Rates



Source: Thomson Reuters Datastream.

BRIC Economies

Real GDP growth in the BRIC (Brazil, Russia, India and China) economies decelerated in the third quarter of 2012, as countries experienced weakening domestic demand, a more challenging trade environment and faced the lagged effects of policy tightening.

In China, real GDP growth slowed to 7.4 per cent year-on-year in the third quarter of 2012, from 7.6 per cent year-on-year recorded in the second quarter. This represented the seventh consecutive quarter that real GDP growth slowed in China although recent monthly hard indicators suggest a modest pick-up in growth in the fourth quarter. Industrial production and retail sales have increased steadily while export growth fell sharply in November and remains well below levels recorded in 2011. The weakness in exports is consistent with the survey data which shows that the manufacturing new export orders PMI has been in contraction territory in seven of the last eight months.

Meanwhile, inflationary pressures have eased in China, with annual headline CPI inflation at 2.0 per cent in November 2012, up from 1.7 per cent in October but well below levels recorded in 2011, when inflation peaked at 6.5 per cent. The Chinese authorities have kept interest rates and reserve requirements unchanged since easing monetary policy in the

first half of 2012 when the benchmark interest rate was cut to 6.0 per cent and the reserve requirement to 20 per cent. According to the latest forecasts from the OECD, the Chinese economy is expected to expand by 8.5 per cent this year and by 8.9 per cent in 2014.

Real GDP growth in India moderated to 2.8 per cent year-on-year in the third quarter of 2012 compared with 3.9 per cent in the previous three months. Real GDP growth has now decelerated for seven consecutive quarters and by over seven percentage points from the 10 per cent year-on-year growth recorded in the fourth quarter of 2010. With respect to price developments, India's wholesale price inflation index was 7.2 per cent in November, down from 7.5 per cent in October but remains stubbornly high. Looking ahead, real GDP is forecast to expand by 6.5 per cent this year, before picking up to 7.1 per cent in 2014, based on the latest OECD forecasts.

In Brazil, real GDP increased by 1 per cent year-on-year in the third quarter of 2012, following growth of 0.4 per cent in the second quarter. Economic activity in Brazil cooled throughout 2011 and 2012, mainly owing to the lagged effects of past monetary and fiscal policy tightening. The Brazilian authorities eased monetary policy throughout 2012 in an effort to re-stimulate growth with the official interest rate, the Selic, at a historic low of 7.25 per cent, following the 25 basis point cut announced in October. Real GDP in Brazil is forecast to grow by 4 per cent this year and by 4.1 per cent in 2014. In Russia, indicators of economic activity also point to slower growth, with real GDP decelerating to 2.9 per cent year-on-year in the third quarter of 2012, down from 4 per cent in the second quarter. The latest forecasts suggest that the Russian economy will expand by 3.8 per cent this year and 4.1 per cent in 2014.

Japan

The Japanese economy contracted by 0.9 per cent quarter-on-quarter during the third quarter of 2012 after the output of the economy was essentially unchanged during the second quarter. Exports of goods and services made the largest contribution to the contraction in third quarter GDP, decreasing

by 5.1 per cent quarter-on-quarter. Higher frequency data show the weakness in exports during the third quarter continued in October and was particularly acute vis-à-vis China. Elsewhere, private consumption contracted by 0.4 per cent quarter-on-quarter during the third quarter coinciding with the phasing out of schemes that were designed to incentivise car purchases. The OECD's Economic Outlook for November shows that GDP growth for 2013 is now projected at 0.7 per cent, revised down from 1.5 per cent in the May Economic Outlook.

Some recent sentiment indicators point towards a further contraction in GDP during the final quarter. The business climate survey, compiled for the quarterly business survey conducted by the Bank of Japan dropped from -3 in the third quarter to -12 in the fourth quarter, the biggest slide since the second quarter of 2011 which was just preceded by the earthquake and Tsunami.

With respect to price pressures, deflation was evident during the third quarter and this continued into the fourth quarter. However, the rate of deflation slowed down from -0.4 per cent on an annual basis in October to -0.2 per cent in November.

Following the December general election, the Liberal Democratic Party recently unveiled a new stimulus package estimated at ¥10.3 trillion (\$116 billion) in order to support economic activity.

Section 3: Financial Markets

Financial Sector Developments

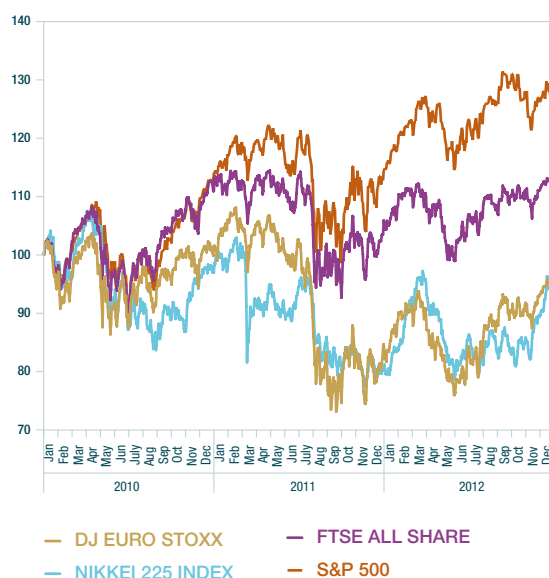
There was a general improvement in investor sentiment during the fourth quarter of 2012. This was driven by several factors, including ongoing positive sentiment following the ECB announcements on Outright Market Transactions (OMTs), some improved economic data from the US and China, a reduction in uncertainty following the US Presidential election, and further policy announcements by central banks. For the

euro area, sovereign bond yields in peripheral countries fell further, equities reported gains, and the euro appreciated against most major currencies during the final quarter. In December 2012, the US Federal Reserve announced that it would keep interest rates close to zero until unemployment falls below 6.5 per cent, on condition that "inflation between one and two years ahead is projected to be no more than a half percentage point above the [Federal Open Market] Committee's 2 per cent longer-run goal". At the same time, the Federal Reserve also increased its asset purchases from \$40 billion to \$85 billion per month.

Equity Markets

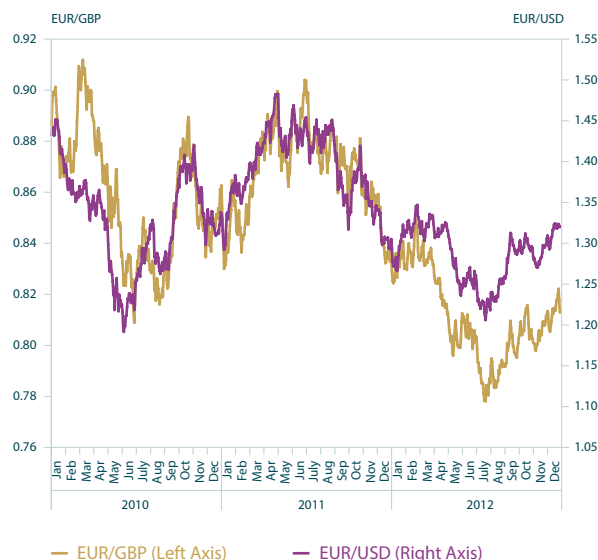
Euro area equity markets moved higher during the final quarter of 2012 on the back of several developments which helped improve overall investor sentiment. These included ongoing positive sentiment following the ECB's OMTs announcement on 6 September, Spain's request for aid for its banking sector, the Greek debt buyback deal, and the further progress made towards a banking union. In response to lower than expected inflation, market expectations of future interest rate cuts from the ECB contributed further to the improved sentiment. The DJ Euro Stoxx index increased by close to 7 per cent during the final quarter of 2012. The credit rating downgrades of Spain (by Standard & Poors in October) and France (by Moody's in November) had only a limited impact on euro area stock markets, as they had been broadly expected by market participants. In the US, the S&P 500 index fell around 1 per cent over the period with further monetary stimulus and positive economic data regarding labour and housing markets being counteracted by the uncertainty surrounding the US Presidential election in November and the "fiscal cliff" negotiations thereafter. The NIKKEI index for Japanese equities outperformed other major indices, gaining around 17 per cent over the quarter. These gains were due in part to a falling yen, with the well-anticipated election victory for the new, more monetarily-interventionist Shinzo Abe-led government being seen as the principal driver.

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



Source: Thomson Reuters Datastream.

Chart 12: Euro Exchange Rates



Source: Thomson Reuters Datastream.

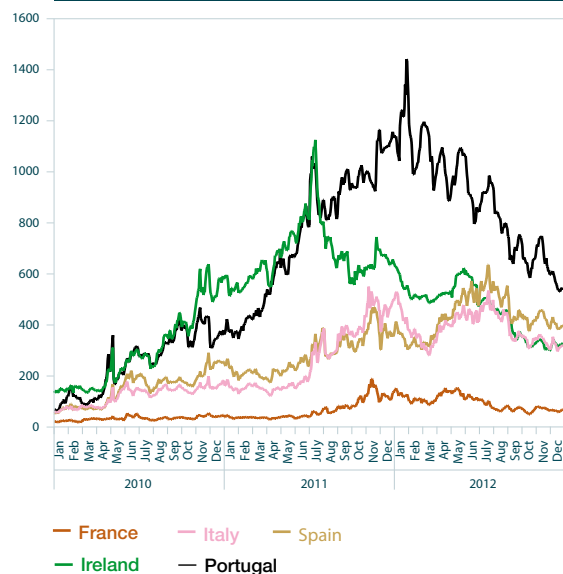
Foreign Exchange Developments

The euro appreciated against sterling and the US dollar during the fourth quarter. The euro in early October continued to appreciate on the back of the ECB's OMT announcement. These gains were then reversed in late October and early November as poor economic data weighed on investor sentiment. In the latter half of November and December, the euro appreciated against both sterling and the US dollar following a risk-positive mood due to various factors including Spain's formal request for aid for its banking sector, the Greek buyback programme and further agreement in December 2012 on the design of the banking union.

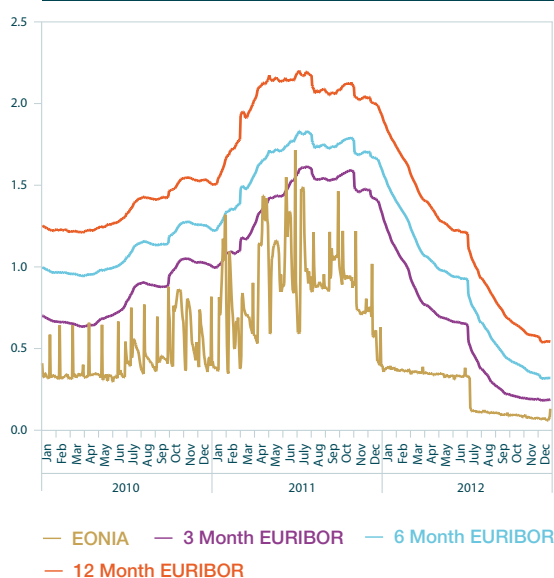
Sovereign Debt Markets

Yields on AAA-rated long-term government bonds in the euro area decreased slightly over the fourth quarter. The low yields on these high-rated bonds were in line with expectations of weak economic activity, confirmed by downward revisions of growth forecasts by institutions such as the IMF, the OECD, and the ECB during the fourth quarter. Despite

some increases in October, the yields on long-term government bonds issued by lower-rated euro area countries declined further in Q4, leading to a narrowing of spreads vis-à-vis Germany. The declines seen in yields followed on from the ECB's OMT announcement in September, while the progress made on the structure of the banking union added to this downward pressure. Over the fourth quarter, the spread between Greek and German long-term government bond yields contracted by more than 750 basis points. This was largely due to positive market reaction to changes in the terms of lending to Greece under the EU/IMF programme in late November, which included a reduction in interest rates and maturity extensions. Furthermore, a successful debt buyback scheme helped push yields on Greek long-term government bonds lower. Corresponding spreads of Irish and Portuguese government bond yields declined by around 40 and 220 basis points, respectively. Spanish and Italian long-term government bond yields also saw spreads vis-à-vis Germany decline over the fourth quarter mainly due to the perceived reduction in tail risk following the ECB's OMT announcement.

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

Source: Thomson Reuters Datastream

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

Source: Thomson Reuters Datastream.

Long-term government bond yields in the United States increased slightly over the period. The risks of the imminent “fiscal cliff” had depressed yields despite positive data releases in October and November while the Fed announcement of further treasury purchases also put downward pressure on yields. However, this pressure was reversed in December by risk positive sentiment regarding an agreement surrounding the “fiscal cliff”.

Money Markets

Unsecured money market rates continued their recent decline during the fourth quarter of 2012. EURIBOR rates fell to new all-time lows across the curve with market participants pricing in the possibility of further interest rate cuts by the ECB in 2013. Reflecting the very large amount of excess liquidity in the overnight money market, the EONIA rate fell to very low levels over the period, standing at around 0.07 per cent in December.

EU-IMF Financial Assistance Programme

– Eighth Review

Overview

The eighth review of Ireland's European Union/ International Monetary Fund (EU/IMF) Financial Assistance Programme took place from 16-25 October 2012, during which progress on the three main programme fronts - fiscal, financial sector and structural reform - was discussed. All Programme conditions and quantitative targets were met in the third quarter of 2012, and two structural benchmarks were observed.¹ Reflecting this, the External Partners² concluded that "policy implementation remains steadfast, despite the challenging external environment"³. This progress, together with market expectations of supportive European policy action⁴, has led to a notable decline in Irish sovereign yields, enabling Ireland to re-enter international capital markets in July 2012 and access significant market funding since then.⁵ However, the External Partners also cautioned that "significant risks remain", and stressed the need for "intensified efforts" to deal with mortgage arrears and banks' operating costs, and for a durable solution to health sector overspending to be found.

Discussions during the eighth review focused on the following issues:

- The macroeconomic situation and outlook.
- Mortgage and small and medium-sized enterprises' (SMEs) arrears resolution strategies.

- Refinement and operation of the personal insolvency Framework.
- Reform of the corporate sector insolvency framework for SMEs.
- Banks' future profitability, including moving banks off the Eligible Liabilities Guarantee (ELG) scheme.
- Spending developments and the fiscal targets for 2012 and 2013.

Compliance with Financial Sector Conditions

Work to repair the Irish financial sector was further advanced during the third quarter of 2012, as summarised below.

Monitoring and reporting on banks' deleveraging, based on existing nominal targets and the run-off of non-core assets, continued. Following agreement to adjust the focus of the deleveraging framework from loan-to-deposit ratios, an "advanced monitoring framework" is being implemented by the Central Bank. This will enable it to supervise the banks' progress towards the relevant Basel III liquidity requirements.

Work on bank restructuring also progressed. AIB submitted a revised restructuring plan to the European Commission in September 2012. The operational and financial restructuring of PTSB continued in the third quarter, with separate management accounts and quarterly

¹ The two structural benchmarks observed were to publish legislation to strengthen the credit union legislative framework (The Credit Union Bill was published on 28 September 2012), and to issue regulations for the Resolution Fund levy on credit institutions (signed on 28 September 2012). Note that a third benchmark scheduled for end-September – the Fiscal Responsibility Bill – was observed in July 2012.

² The European Commission (EC), European Central Bank (ECB) and International Monetary Fund (IMF).

³ <http://www.imf.org/external/np/sec/pr/2012/pr12398.htm>

⁴ For example, the Euro Area Leaders' Summit Statement of 29 June 2012 June included a commitment to "examine the situation of the Irish financial sector with the view of further improving the sustainability of the well-performing adjustment programme" (http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/131359.pdf).

⁵ The NTMA's engagements with the debt markets between July and December 2012 included bond switches (€4.5bn); the issuing of conventional bonds (€4.2bn); the issuing of a completely new debt instrument - Irish Amortising Bonds - tailored to meet the needs of the domestic pensions industry (€1.0bn); and a return to the short-term debt markets through regular Treasury Bill auctions (€1.0bn net). An additional €2.5 billion was raised in January 2013, through a syndicated bond tap, with an auction of Treasury Bills raising a further €0.5bn.

benchmarks established for each of the new strategic business units (SBUs).

Banks are in the process of rolling out loan modification options to address unsustainable debts in mortgages, while the Central Bank continues to monitor the implementation of mortgage arrears resolution strategies against key performance indicators. Regarding banks' implementation of arrears strategies for SMEs, the Central Bank has asked the main lenders to strengthen their strategies, focusing on more robust, longer-term solutions. Progress in this respect will be assessed against a set of key performance indicators.

Significant steps to restructure, improve the governance and regulatory framework, and repair the credit union sector were also taken. These included the publication of the Credit Union Bill in September,⁶ which was enacted in December.⁷ Regulations were also issued under the Deposit Guarantee Scheme (DGS), requiring credit unions to maintain a balance in the Central Bank's Deposit Protection Account (DPA).⁸ As a further improvement to the governance structure, regulations were issued in September to apply the Central Bank Reform Act 2010 to credit unions. This provides the Central Bank with the power to issue regulations and standards of fitness and probity for credit unions. A consultation paper was issued in December and the intention is to introduce new standards on a phased basis from mid-2013.

To advance the restructuring process of credit unions, a Restructuring Board (ReBo) was established on an administrative basis in August 2012. It was put on a statutory basis in January 2013. ReBo will lead and oversee the restructuring process, including bringing forward restructuring proposals, which will be subject to Central Bank approval. Meanwhile, the Central Bank continues to investigate the credit unions.

Regulations supporting a Resolution Fund levy were issued in September 2012.⁹ All authorised credit institutions will be required to contribute to this fund, including credit unions. The aim is to build up a fund over the medium to long term to be used for resolution purposes.

The draft Personal Insolvency Bill continued its passage through Dáil Éireann during the third quarter of 2012, and was signed into law in December.¹⁰ An implementation team has also been put in place to address operational matters necessary for the establishment of the Insolvency Service, while the Director-Designate took up his role in October. It is expected that the Service will be operational from early 2013.

Other actions carried out in the third quarter of 2012 included the following:

- Legislation to establish a statutory central credit register was presented to Dáil Éireann (i.e. the Credit Reporting Bill 2012 was published in September).
- A Mortgage Advisory Service was established to provide professional financial advisory services to distressed borrowers.

Future Financial Sector Commitments

Key financial sector reforms to be progressed over the coming months include two new structural benchmarks.

The first new structural benchmark will be to request, by end-March 2013, an external assessment (by the IMF) of the Central Bank's observance against Basel Core Principles for Effective Banking Supervision. It is envisaged that this assessment will be completed by the end of 2013.

The Central Bank intends to deepen its supervision of banks' implementation of resolution strategies for mortgage arrears over

⁶ This was a structural benchmark for end-September 2012.

⁷ On enactment, the Credit Union Bill became the Credit Union and Co-operation with Overseas Regulators Act 2012.

⁸ With effect from 30 November 2012, credit unions are required to contribute an amount equal to 0.2% of the deposits and shares held on behalf of members.

⁹ This was a structural benchmark for end-September 2012.

¹⁰ On enactment, it became the Personal Insolvency Act.

the coming months, paying particular attention to: (i) on-going efforts to put mortgage arrears on a downward path, including bank specific targets, (ii) improved loan collection systems, and (iii) the effectiveness of the engagement between lenders and borrowers in arrears. In addition, a review of the Code of Conduct on Mortgage Arrears – taking account of developments such as the personal insolvency legislation – will commence in the first quarter of 2013. A review of progress in addressing mortgage arrears will also be prepared for the end of June 2013 (this is the second of the new structural benchmarks).

The corporate sector insolvency framework for SMEs is being reviewed, with the objective of improving the efficacy of the process and reducing costs for companies seeking examinership. Amendments were prepared in December 2012 by the Department of Justice to designate the Circuit Courts, rather than the High Court, as competent for the examinership of companies that come within the EU small company thresholds. Separately, the Central Bank will monitor banks' management of their distressed SME loan portfolios, including progress against key performance indicators.

The Central Bank will publish the findings of a report on a review of developments in the Prudential Capital Assessment Review (PCAR) banks relative to PCAR 2011 in early 2013. The Central Bank is also undertaking annual model performance reviews of the PCAR banks,¹¹ assessing their risk weighted asset (RWA) calculations, and reviewing their approaches to RWA forecasting and stress testing.

Following approval by the European Commission under State Aid rules, the Eligible Guarantee Scheme (ELG) has been extended to end-June 2013, though the intention is to phase it out as soon as feasible.

The finalisation of the Supervision and Enforcement Bill is also on-going. When enacted, this will strengthen the Central Bank's investigation, direction and enforcement powers.

Other areas of work over the coming months include preparations for the 2013 stress tests (including for the loan loss forecasting exercise), and efforts to ensure prudent provisioning treatment of loan modifications. Preparations for the introduction of the European Capital Requirements Directive IV (CRD IV) - which will result in significant changes for institutions and supervisors - are also continuing.

Compliance with Fiscal Targets

Fiscal reform continued in the third quarter of 2012, with the publication in September of legislation – the Ministers and Secretaries (Amendment) Bill 2012 – to place the already operational multi-annual expenditure limits on a statutory basis.

The quantitative targets for the third quarter were achieved. The cumulative end-September exchequer primary deficit target was met by a margin of €1.3 billion (€10.1 billion, compared with an adjusted ceiling of €11.4 billion), or 0.8 per cent of GDP, and the outstanding stock of central government debt was met by a margin of 1.5 per cent of GDP (€130 billion, compared with a target of €132.5 billion). Likewise, the continuous performance criterion on the non-accumulation of external payment arrears was achieved.

While overspending was evident in two sectors - health and social welfare - this has been offset by better than expected tax revenues and expenditure restraint in a number of other areas.

Future Fiscal Targets

The General Government deficit remains on track, despite the expenditure overruns in some areas. At the current juncture, the expectation is that the Programme ceiling for 2012 (8.6 per cent of GDP) will be comfortably met, and that the 2013 ceiling of 7.5 per cent of GDP will also be achieved. The Medium-Term Fiscal Statement (MTFS), published in November 2012 by the Department of Finance, restates the Government's commitment to

reducing the deficit to below 3 per cent of GDP by 2015. Budget 2013 provided further detail on the measures to be adopted for this year.¹²

Compliance with Structural Reforms

The structural reform agenda was further advanced in the third quarter of 2012.

Work continued in bringing identified state assets to point of sale (at least half the proceeds will be used for public debt reduction, with the remainder to be re-invested in the economy). The External Partners were provided with an update on progress with this. The measures needed to implement the Irish water strategy were also further progressed.

On the labour market front, almost 90 per cent of the measures planned under the 'Action Plan for Jobs 2012' had been implemented by the end of September 2012. Work on reforming sectoral wage setting mechanisms also proceeded, for example, the Industrial Relations Act 2012, which aims to improve wage competitiveness, was published in August.

Implementation of the 'Pathways to Work' initiative continued in the third quarter of 2012. Monitoring of the performance of the activation system is on-going, with a progress report provided to the External Partners in

September. Over the coming months, it is intended to strengthen training services.

Notably, legislation to establish the new training and further education authority - SOLAS - will be enacted. In addition, the Department of Social Protection plans to prepare a detailed review of activation programmes by the end of January 2013.

The process to establish a new Housing Assistance Payment (HAP), which will replace the current rent supplement for persons with long-term housing needs, is underway, though legislative changes are required before it can be brought into effect. Once these amendments have been completed, the intention is to pilot the scheme during the second half of 2013 and to make it fully operational in 2014.

EU/IMF Loan Disbursements to Ireland

When the approval process for the eighth review of the Programme has been completed, a further €2.2 billion will be available for disbursement (€0.9 billion from the IMF¹³, €0.8 billion from the EFSM/EFSF and €0.5 billion from EU bilateral loans). On drawdown of this tranche, total disbursements to date will amount to some €57 billion, representing over 84% of the total external financing of €67.5 billion available under the Programme.

¹² <http://www.budget.gov.ie/Budgets/2013/2013.aspx>

¹³ <http://www.imf.org/external/pubs/ft/scr/2012/cr12336.pdf>.

The single euro payments area (SEPA): a brief overview

This article provides a high-level introduction to the Single Euro Payments Area (or SEPA) initiative and summarises the current state of the SEPA implementation and migration effort in Ireland. Readers requiring more detailed information on SEPA are referred to the [SEPA Migration Guide](#) for Ireland published on the Central Bank of Ireland's website.

What is SEPA, and why is it needed?

The way we pay for goods and services affects every citizen. We make on average four payments every day, for example when buying groceries, paying a train fare or booking an airline ticket. Businesses have to pay suppliers and staff, and must be able to receive payments from their customers. Government departments and agencies also have to pay suppliers and staff, make social welfare payments and collect taxes and other charges.

It was long recognised that to ensure a genuine [Single Market](#) that allows free movement of goods, services and capital, Europe needed a common way for people to make payments. As part of monetary union, a number of countries introduced euro banknotes and coins in January 2002, making it much easier for people to make cash payments for goods and services within and between those countries. However, electronic payments between the euro-area countries (for example, by credit transfer) could still be inconvenient and relatively expensive, because a number of technical, legal and market barriers remained between the different jurisdictions. For example, to pay rent on a Spanish apartment, an Irish citizen would have to set up an account in a Spanish bank from which to pay a direct debit, as Spain and Ireland had their own systems for processing

these payments and these systems were not compatible.

SEPA aims to overcome these barriers and extend the Single Market concept to the field of electronic payments. When fully implemented, SEPA will allow individual consumers and businesses in Ireland to make an electronic payment to someone in Munich in exactly the same way as they would make the same payment to someone in Mullingar¹. All payment services users in these countries will be able to use their existing current accounts to make and receive payments in euro, both within their own country and to and from anywhere else within the area covered by SEPA.

How is SEPA organised and structured?

(a) In Europe

The first stage in achieving SEPA was at a technical level, with the EU Commission and the ECB requiring the European banking community to agree a common way in which electronic payments in euro (credit transfers and direct debits) would operate, giving banks, consumers and businesses the same rights and responsibilities regardless of where they were located. SEPA is therefore being built by the European banks acting together through the [European Payments Council \(EPC\)](#), which was set up in 2002 mainly for this purpose. The EPC is composed of representatives of the national banking and payments industry bodies in the affected countries². These common payments are referred to as SEPA Credit Transfers (SCT) and SEPA Direct Debits (SDD). At a policy level, SEPA is being driven by the [European Commission \(EC\)](#) and the [European Central Bank \(ECB\)](#).

¹ The only proviso being that both payer and payee must be located within the 32 countries covered by the SEPA initiative – the 27 EU member states, together with Iceland, Norway, Switzerland, Liechtenstein and Monaco.

² The Irish banks are represented on the European Payments Council by the Irish Payment Services Organisation (IPSO).

This first phase of SEPA is now complete. SCT and SDD have been developed by the EPC and the underlying technical standards and rules have been agreed. SCT and SDD have actually both been operating for some time, the former since January 2008 and the latter since November 2009, although neither is being widely used at the moment.

(b) In Ireland

The second stage of achieving SEPA will be to move from using existing credit transfer and direct debit payments to using SCT and SDD. This 'migration' is currently underway across Europe. In Ireland, SEPA migration is being dealt with as part of a wider National Payments Plan (NPP) initiative. NPP, which is being led by the Central Bank, is a programme aimed at generally improving the country's retail payment systems and making them more efficient.

An NPP-SEPA Sub-group, led by the Central Bank, was formed last year to coordinate the implementation of SEPA in Ireland. The NPP-SEPA Sub-group is comprised of representatives of the following:

- The Central Bank;
- The Department of Finance;
- The banking community;
- Businesses; and
- Consumers.

What comes next?

The EU Commission has now set a mandatory deadline of 1 February 2014³ after which use of SCT and SDD will be legally required. From an Irish perspective moving to SEPA means that our existing credit transfer and direct debit

payments, which have been carried out on behalf of customers by their banks for many years using the schemes operated by the Irish Retail Electronic Payments Clearing Company (or IRECC), will have to be made using SCT and SDD from 1 February 2014 at the latest. After that date, IRECC will be closed down, having been replaced by a pan-European clearing system for electronic payments.

(a) SEPA for consumers

Once SEPA has been fully implemented, consumers will need only one bank account and one payment card to make and receive payments in euro to and from anywhere in the area covered by this initiative. Furthermore, the cost of making a euro payment to another SEPA country will continue to be the same as the cost of making the same payment within Ireland.

The main thing that consumers need to know is that the way in which their bank account will be identified for the purposes of making and receiving payments is going to change. Once the SEPA migration process has been fully concluded, consumers will need to use BIC (Bank Identifier Code) and IBAN (International Bank Account Number)⁴ to identify their bank and their account rather than the NSC (National Sort Code) and eight-digit account number that they currently use. A national information campaign in this regard will soon get underway.

Banks will let their account holders know about any changes to terms and conditions arising from SEPA implementation. Many of these changes benefit consumers, for example by providing improved protection around issues such as refund rights.

³ In Regulation 260/2012 (commonly referred to as the 'SEPA migration end-date Regulation').

⁴ BIC and IBAN have appeared on all bank statements for a number of years. The BIC is a unique address, similar to the current NSC, which is included in a payment instruction to identify the banks involved in a payment transaction. The IBAN identifies the specific accounts at these banks that are involved in the transaction. The IBAN, which can contain up to a maximum of 34 alphanumeric characters, is structured as follows:

- Two letters representing the home country of the account-holding bank (for example, IE for Ireland);
- Two numbers that act as check digits for security purposes; and
- A maximum of 30 alphanumeric characters that identify the bank and the account number.

(b) SEPA for the business world

Having to deal with many national payment systems has always been an obstacle to companies looking for opportunities to expand into markets outside their home country. Making and receiving cross-border payments will become much more straightforward using SCT and SDD, and this has the potential to open up new possibilities for companies to expand their business beyond national borders. It should also be possible for them to consolidate their payments activities in one location, eliminating the need for companies operating in several countries to operate a bank account in each one.

As is the case for individual consumers, businesses will in future need to use BIC and IBAN to identify their bank and their account rather than the NSC and account number information that they currently use. However, the implications of this change will be more significant for companies, given that many will have built internal systems (e.g., payroll and accounting) around the existing 'national only' standards. SCT and SDD use an international standard (known as ISO 20022 XML) rather than the 'national only' equivalent (known as

IPSO Standard 18). Businesses and their IT systems suppliers can obtain detailed information on these standards, and the implications of moving from one to the other, from their banks. Banks will also be able to provide businesses with further information in relation to all other aspects of SEPA.

Further communications about SEPA

The NPP-SEPA Sub-group is now finalising a public information campaign about SEPA, which will be run over the course of the coming year to explain the migration process to everyone who will be affected. The goal of this communications plan will be to make sure that everyone has all of the information that they will need to support them in moving into the new payments world.

Regular updates about SEPA will appear on the Central Bank and IPSO websites; additional information can also be found on the websites of the European Central Bank, the EU Commission and the EPC.

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.

Housing Equity Withdrawal Trends in Ireland

Reamonn Lydon¹ and Brídín O'Leary^{2, 3}

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Abstract

This article uses a unique data set to track changes in aggregate net housing equity withdrawal between 1978 and 2012. The analysis covers the peak years of the recent housing boom when it is estimated that net equity withdrawal reached a peak of €8 billion, or 10 per cent of disposable income. This was driven by three factors: first, there was a significant increase in the propensity for existing homeowners to take out top-up loans during this period; second, the combined effect of large numbers of transactions and booming house prices meant that sellers in the final link of a property-transaction chain, i.e. those not purchasing another property, withdrew substantial equity upon selling; and third, relative to equity withdrawals, the rate of equity injections declined due to a fall in deposits from first-time buyers and a decline in the rate of amortisation. The latter was driven by the increased prevalence of interest-only loans and significantly longer loan-terms. The dramatic collapse in the Irish property market means that all of these factors have been reversed, moving the household sector from one of net equity withdrawal to net equity injection.

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1. Introduction

Irish households have suffered large declines in net worth as a result of the bursting of the Irish property bubble, with net worth declining by 38 per cent since its peak at Q2 2007.⁴ The changes in housing market activity, both during the boom and since its collapse, are remarkable. As housing accounts for 51 per cent of Irish households total portfolio of assets in Q2 2012, the responses of Irish households throughout recent history to housing market developments are worthy of analysis. Trends in Housing Equity Withdrawal (HEW), which measures the equity released by households through mortgages, are of particular interest as it represents a source funds that are potentially available for investing in other assets or for private consumption.

This article presents a new series constructed by the Central Bank of Ireland, which estimates quarterly HEW trends from 1978 to 2012. It is the difference between mortgages transactions and investment in new housing assets. HEW can take either a positive or negative value. When HEW is positive, there is a *withdrawal* of aggregate housing equity; when it is negative, there is an *injection* or accumulation of aggregate housing equity.

This article identifies the main components of HEW over time, as well as the macro-economic factors that influence it. It focuses on the drivers of change over time in Ireland, including changes in housing market activity and changes to both the demand for and the supply of credit. Several Central Banks have developed similar methodologies to estimate aggregate or net HEW, to try and capture the cash flows arising from household transactions in housing stock and lending secured on dwellings. Both the Reserve Bank of Australia and the Bank of England used a similar approach for calculating HEW. In

essence, the series presented in this article is an attempt to replicate these methodologies. Section 2 provides a brief overview of the HEW concept and presents the calculation of the HEW series for Ireland. Section 3 discusses the main factors which drive the series. Section 4 concludes.

2. Housing Equity Withdrawal: Concept and Calculations

Housing Equity Withdrawal (HEW) is equal to the difference between total transactions of household mortgage debt and household investment in new housing assets. This paper constructs an estimate of HEW at the total household sector level, using aggregate transactions data.⁵ The HEW series for Ireland presented in this article is equal to the sum of the following items:

- (+) Mortgage transactions;
- (+) Capital grants for the household sector;
- (-) Additions to the housing stock;
- (-) Expenditure on home improvements;
- (-) Costs relating to housing transactions, such as legal and estate agents' fees.

There are details on the various components and assumptions involved in constructing the HEW series in Box 1.

⁴ Household net worth is calculated as the sum of household's housing and financial assets minus their liabilities. The Quarterly Financial Accounts, 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).

⁵ Another approach to estimating HEW involves surveying households and aggregating the gross flows which lead to injections and withdrawals. See Davey (2001) and Benito and Power (2004) for examples of this approach. As no suitable micro-data survey source exists for Ireland, it was not possible to estimate HEW using the bottom-up approach.

Box 1: Components of the HEW series

Net mortgage transactions — this component captures the net changes to the stock of mortgage debt secured against dwellings in each quarter from the resident offices of all credit institutions operating within the State. The variable also includes lending to other specialist mortgage lenders. It shows the net changes to house mortgage finance from Q1 1978 - Q4 2002 (from Central Bank of Ireland Quarterly Bulletins) and changes to flows-adjusted stock from Q1 2003 onwards (from Central Bank of Ireland Money and Banking Statistics). An increase in this variable corresponds to a withdrawal of housing equity.

Capital grants — this component shows quarterly estimates of annual Central and Local government grants relating to the purchase of housing, or improvements to existing houses, for households and non-profit institutions serving households. These grants to households include capital grants available under the Housing Acts, other housing grants to improve homes, for thatching, the Affordable Housing Scheme, the Sustainable Energy retrofitting programme, for houses in Gaeltacht areas and supplementary grants for housing for the elderly and disabled persons. The majority of these grants are used by households to repair, improve and adapt their homes. As capital grants fund household purchases of new houses or home improvements, an increase in this variable relates to a withdrawal of housing equity by the household sector.

From the sum of the preceding two components, the following series are subtracted to obtain the quarterly calculation of HEW.

Household investment in dwellings — this component is composed of Central Bank quarterly estimates of annual gross fixed capital formation (GFCF) in dwellings and home improvements from Q1 1978 to Q1 1994 and quarterly GFCF in dwellings and home improvements calculated by the CSO from Q1 1995 to Q2 2012. GFCF is calculated using the Dept. of the Environment housing statistics data, which states that the house completions data series are based on the number of new dwellings, connected by ESB Networks to the electricity supply and may not accord precisely with local authority boundaries. These represent the number of homes completed and available, and do not reflect any work-in-progress. GFCF for private dwellings shows the transactions in new houses that take place each quarter.

GFCF for home improvements is calculated by the CSO from Q1 1995 onwards using household responses to an ESRI survey up to 2008, followed since then with responses to the EU SILC Questionnaire on Major Improvements to houses. To avoid double counting of investment by local government in dwellings and home improvements for the household sector, local authority GFCF is subtracted from the household GFCF. Prior to Q1 1995, the estimates for the GFCF of improvements were included in the dwellings calculations. An increase in GFCF in private dwellings corresponds to an injection of housing equity.

Household net purchases of land — this component is valued at zero in the HEW series for Ireland. It is assumed that the purchase of land by a member of the household sector is equal to the value recorded for the sale of land by another member of the household sector. In other words, the net change for the sector as a whole is zero. In any case, there is no data available showing the amount spent by households on land in Ireland or the inter-sectoral transactions in land. In other countries where household purchases of land from the business or government sector are common, such as Australia, the calculations of HEW include an estimate for the net value of land transfers.

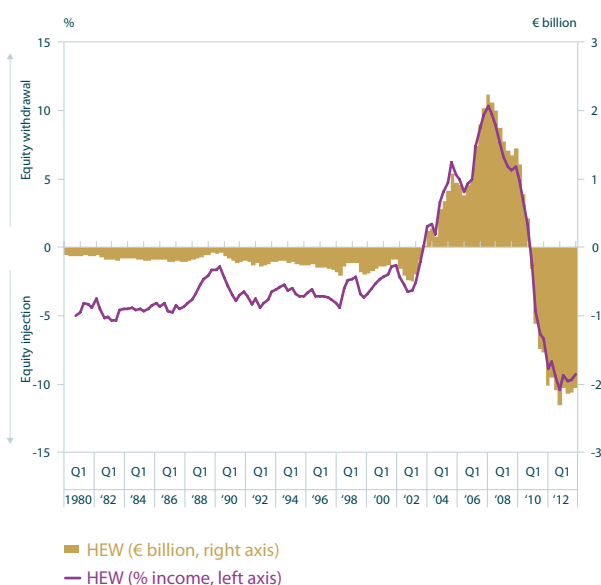
Box 1: Components of the HEW series

Household transfer costs — this component is based on CSO calculations of the costs incurred by households acquiring property, such as solicitors' fees, stamp duties and auctioneers' fees. The data is available from Q1 1995. Prior to this, there was no separate calculation of transfer costs as they were accounted for in the estimation of the GFCF of dwellings. As HEW aims to capture the difference between funds borrowed for investment in property less their investment in dwellings, all costs related to household expenditure in a house that do not increase their housing equity are excluded.

This article presents estimations of HEW over a thirty-four year period to show the changing patterns of Irish households' housing-secured borrowing, compared with their investment in housing, as seen in Chart 1⁶. The value of HEW can take either a positive or negative value. HEW has a positive value when mortgage loans exceed investment in new property or related expenditure. HEW has a negative value when households invest more in newly built properties and home improvements than the total amount borrowed for property related expenditure during that quarter.

Household equity withdrawals and injections can occur in many different ways. The main methods by which households can withdraw and inject in housing equity are summarised in Table 1.

Chart 1: Housing Equity Withdrawal Trends in Ireland



⁶ The series is reported as a four-quarter moving average to adjust for seasonality.

Table 1: Methods of Withdrawing and Injecting Equity

During a housing transaction	
Withdrawals	Injections
Seller in the final link of a housing chain The seller does not buy a new property. Equity withdrawal in this case equals the sale proceeds net of outstanding debt secured on the property, less transfer costs.	Buyers who are the first point in a housing chain (i.e. first-time buyers or buy-to-let purchasers) The deposit paid by these borrowers represents an injection of housing equity.
Over-mortgaging A mover-purchaser increases their mortgage debt by <i>more</i> than the difference between the prices of their old and new houses.	Under-mortgaging A mover-purchaser increases their mortgage debt by <i>less</i> than the difference between the old and new house-prices.
Trading-down A mover-purchaser moves to a lower-priced property, but decreases their mortgage debt by less than the difference in prices between the old and new properties.	
By existing homeowners	
Withdrawals	Injections
Top-up loans An existing homeowner takes out a top-up loan without carrying out home-improvements to the same value.	Repayments of mortgage debt Amortisation of the loan, through either regular or lump-sum payments, except through a transaction (i.e. a sale or a remortgage).
Over-mortgaging An existing borrower remortgages with a higher level of debt, while not improving the property to the same extent, i.e. an increase in the loan-to-value (LTV) ratio.	Under-mortgaging An existing borrower remortgages with a lower level of mortgage debt.
	Home improvements financed with unsecured debt Home improvements are carried out, but paid for either fully or partly from savings or personal loans.

Source: Schwarz et al. (2006) and Reinold (2011).

The trends in aggregate housing equity withdrawal largely reflect the changing fortunes of the housing market, as well as changes in the supply of and demand for mortgage credit, which will be examined in further detail in Section 3. From the beginning of 1980s through to Q3 2002, Irish households were injecting or accumulating housing equity. As a percentage of income, HEW ranged from 0.07 to -5.3 per cent during this period. There was prolonged inactivity in the housing market up to the mid-1990s, with real house prices virtually static from 1980 to 1995. It was also a period when credit supply for house purchases was dominated by a small number of building societies, with little competitive pressure from other providers.

From the mid-1990s through to the early-2000s, the pick-up in housing investment by households was broadly matched by the increase in housing-secured debt. During this period, banks also began to compete with building societies for mortgage business. As debt increased at broadly a similar rate as housing investment, this meant that HEW changed little from the earlier period.

There were changes from Q3 2002 onwards, as the pace of growth in household housing-secured debt began to outstrip the growth in their housing investment. This is the point in the series where households begin to withdraw housing equity in aggregate and HEW is positive. In total, there are 27 quarters of positive HEW during the peak years of the

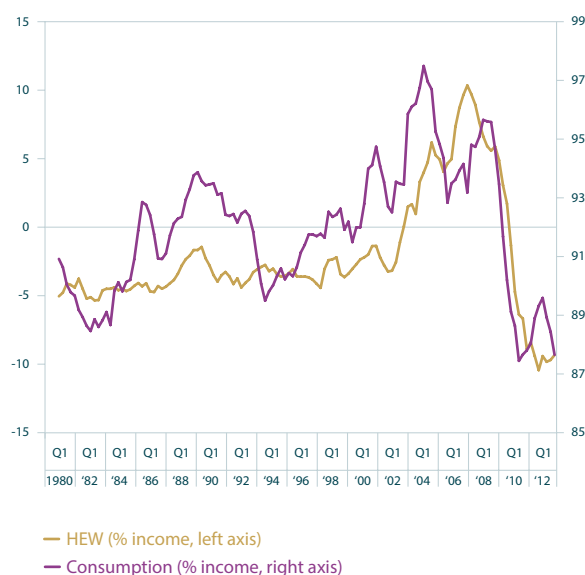
housing boom. Households withdrew €29.8 billion of housing equity between Q3 2002 and Q1 2009. The upswings in HEW during the peak years of the property boom are extremely large, in comparison with both historical standards and trends in other countries. HEW as a percentage of disposable income peaked at 10.3 per cent in Q3 2006. The Irish HEW follows a similar trend to the HEW calculated in the UK, where equity withdrawal is historically quite pro-cyclical. Reinold (2011) shows that HEW peaked at almost 9 per cent of post-tax income during the housing booms of the late 1980s and mid-2000s. It is, however, significantly higher than the levels seen in Australia during the 2000 to 2007 housing boom, where at the peak of the housing boom, HEW was only marginally above 5 per cent of disposable income (Schwarz *et al.* (2006)).

The collapse in the Irish property market coincided with HEW becoming significantly negative. Section 3 considers the macroeconomic reasons behind this shift, as well as the underlying gross flows leading to these changes. While HEW exceeded 10 per cent of disposable income during the boom, by mid-2011, it had dropped to almost minus 10 per cent of income, as households were repaying previously held mortgage debt. Relative to the UK, Australia and historical Irish comparators, this level of equity injection as a percentage of income is extremely high. For example, even when house prices in the UK fell by just over 4 per cent in real terms in 2008, HEW never fell below -3 per cent.

As noted by Davey (2001), the relationship between HEW and consumption partly derives from the accounting identity that links them. Consumption can be financed out of income, unsecured borrowing, HEW or the disposal of assets. Trends in HEW and final consumption expenditure are compared with each other, as a

proportion of income, in Chart 2.⁷ Changes in savings rates aside, it would be surprising not to observe a strong relationship between HEW and consumption over time, and this is indeed the pattern shown in Chart 2.⁸

Chart 2: HEW and Consumption



3. Factors that Influenced Housing Equity Withdrawal

This section examines the main factors that influenced HEW for Irish households. From the summary of the methods of withdrawing and injecting equity in Table 1, three important drivers of changes in HEW are evident. These are:

- i. Changes in the level of housing transactions, which leads to the creation of housing chains.

⁷ From 2002 onwards, data on consumption and disposable income is taken from the National Accounts. Prior to this, the back-cast series generated by the Central Bank of Ireland's Macroeconomic Model is used; see O'Donnell (2005) and McGuire *et al.* (2002).

⁸ Anecdotal evidence suggests that Irish households used equity withdrawal to fund property purchases abroad. However, no data exists that would allow quantification of this.

- ii. Changes in the supply of credit, both in terms of the overall volume and the conditions attached to that credit supply, such as changes to interest rates (affecting affordability), loan maturities (affecting amortisation rates), the prevalence of interest-only offers (also affecting amortisation rates) and deposit requirements (affecting the equity injections at the time of purchase).
- iii. Changes in individual households' preferences for housing equity withdrawal, such as changes to amounts borrowed.

The remainder of this section considers how the first two factors in particular affected HEW trends in recent years. The third factor, analysis of changes to individual households' preferences for HEW requires household or borrower level data. Lydon and O'Hanlon (2012) used loan-level data to analyse trends in top-up loans from 2005 to 2011.

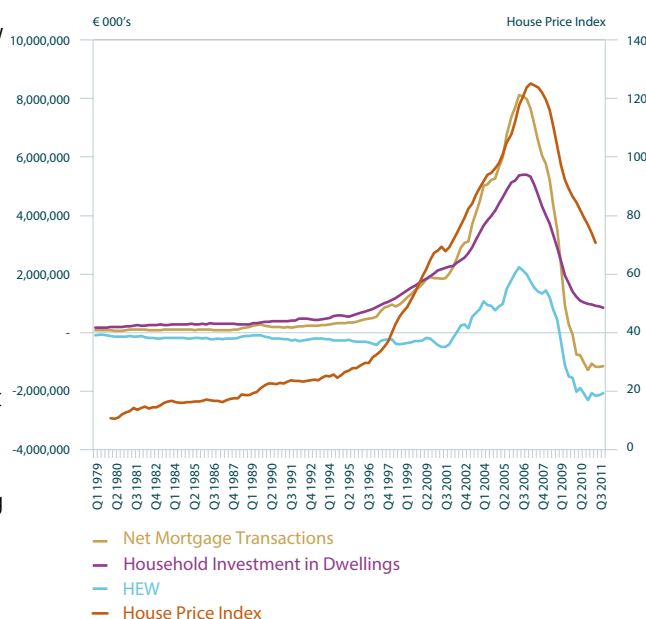
3.1. The Role of Housing Market Developments

Housing market developments are an important determinant of the positive or negative flows that can impact on the HEW and the overall stock of equity. The two main housing market-related factors are changes in house prices and housing transactions, both of which are inter-related.

House price developments will have an impact on HEW via the effect on the value of the stock of housing assets, and consequently, household net worth. Cussen et al. (2011) show how the overheating of the property market in Ireland and the subsequent collapse in property prices impacted negatively on household net worth. Irish household net worth declined by €270 billion from the peak in Q2 2007 to Q2 2012, largely as a result of falling house prices effecting the valuation of housing stock, which from 2009 coincided with reduced and then negative HEW transactions. A decrease in the value of housing equity, will generally

reduce HEW. This is because households need to have dwellings with a positive equity value in order to withdraw equity. Estimates have shown that approximately 31 per cent of mortgaged properties, 47 per cent of the value of outstanding mortgage loans, were in negative equity at the end of 2010 (Kennedy and McIndoe-Calder, 2012). Since 2008, the drop in house prices has contributed towards the reduction in housing equity as a proportion of housing wealth and HEW, as shown in Chart 3. From 2002 onwards in particular, the house price series and HEW are closely correlated (correlation coefficient of 0.77).

Chart 3: HEW, Net Mortgage Transactions, Housing Investment and House Price Index⁹, Q1 1979 - Q1 2012

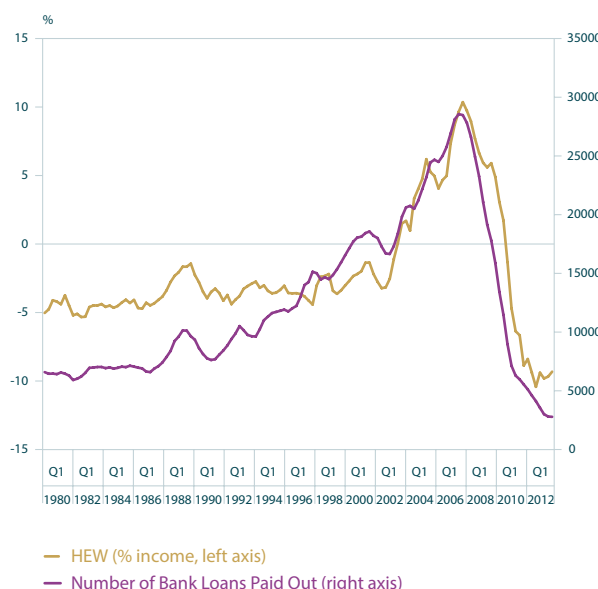


First-Time Buyers (FTB), are the starting point in a housing chain transaction that typically ends with a withdrawal of housing equity, such as when the final seller does not buy another property, (Reinold (2012), and summarised in Table 1). Therefore, it is expected that trends in the number of housing transactions and HEW are positively correlated. Schwarz et al. (2006) showed that during the mid-2000s housing boom in Australia, the vast majority of housing equity withdrawal came from housing

⁹ Data for housing equity withdrawal, net mortgage transactions and household investment in dwellings are presented on a four-quarter moving average basis.

transactions. Similar evidence is provided for the UK, in Davey (2001). A comparison of trends in the HEW measure (as a percentage of income) against data on the total number of new housing secured loans paid out by banks is shown in Chart 4. The latter is sourced from the CSO, using the Department of Environment, Community and Local Government (“DoE”) Housing Statistics, and is used as a proxy for housing transactions.¹⁰

Chart 4: HEW (% income) and Number of Bank Loans Paid Out



As expected, the two series moved closely together over time, with both quarter-on-quarter and long-run changes in the number of bank loans paid out reflected in the HEW series. As the number of bank loans increased during the property boom, this initiated growing numbers of housing chains, which contributed to the large increase in equity withdrawals. Conversely, the fall in the number of bank loans since early 2007 is one factor driving the reversal from housing equity withdrawal (positive HEW) to housing equity

injection (negative HEW). In this context, it is worth highlighting the scale of the collapse in the number of loans paid: the number peaked at approximately 31,000 in Q4 2005, whereas in Q2 2012 fewer than 3,000 loans were paid out, a drop of over 90 per cent.

3.2. The Role of Changes in Credit Supply

Changes to credit supply which make it easier for households to extract housing equity will also affect HEW trends. For example, changes to credit standards can make it easier to remortgage or take out a top-up loan. This will increase the gross flow of equity withdrawals. Similarly looser credit standards, such as lower deposit requirements by lenders or longer loan terms, will reduce the gross flow of equity injections, all other factors held constant.

The changes in credit standards in Ireland during the property boom are well documented; see, for example, McCarthy and McQuinn (2011) and Kennedy and McIndoe-Calder (2012). Increased competition during the early- to mid-2000s played a significant role in reducing mortgage interest rates, allowing for greater household leverage by lowering the debt repayment burden, (Goggin *et al.* (2012)). The trend in the ratio of average loans to average house prices for new and second-hand houses, from 1978 to 2011, is presented in Chart 5. Up to the early 2000s, the ratio hovered around 60 per cent, implying that the typical house purchase required a substantial deposit by the purchaser. From 2000 onwards, the ratio began to climb, reaching a peak of just over 90 per cent in 2009. Mortgages with no-deposit down (“100 per cent mortgages”) became increasingly common during this period. In 2004, DoE statistics showed that just 6 per cent of first-time buyer loans had a 100 per cent LTV. By 2008, this proportion had risen to 34 per cent.

¹⁰ The CSO notes that “[t]his data contains an unquantified element of refinancing of existing mortgages (e.g. involving the redemption of an existing mortgage and its replacement with a mortgage from a different lender)” (see www.cso.ie). This is a particular issue with the data prior to 2005. From 2005 onwards, the Department of Environment statistics on “Number of Loans Paid” uses Irish Banking Federation Charts which *exclude* re-mortgages and top-up loans.

This represented a substantial decrease in the number of first-time borrowers injecting equity at the time of purchase, thereby contributing to an increase in HEW.

Two other changes to credit standards contributed to a reduction in housing equity injections during the property boom. Firstly, the number of interest-only mortgages (at origination) grew from a tiny share of originating loans, to account for between 4 and 12 per cent of owner-occupier mortgages loans for first-time buyers and mover-purchasers, respectively, by 2006, as shown in Chart 6. All other factors being equal, an increase in the proportion of interest-only mortgages will contribute to an increase in HEW, as fewer borrowers are injecting equity through regular mortgage repayments, thereby paying off their loans. Secondly, there was a gradual increase in loan-terms throughout this period. At the end of the 1990s, the average loan term for a first-time buyer in Ireland was 21.5 years. By 2008, this had risen to 31.5 years (Chart 7). These changes have a profound impact on the rate at which a home-owner can “accumulate” housing equity through regular

mortgage payments. For example, for a loan of €200,000 on a fixed rate of 4 per cent, the difference in amount of principal repaid after 10 years on a 20 versus a 30 year loan is almost €38,000.

Chart 6: Interest Only Loans at Origination as a Percentage of All Loans



Chart 5: Ratio of Average Mortgage Loans to Average House Prices

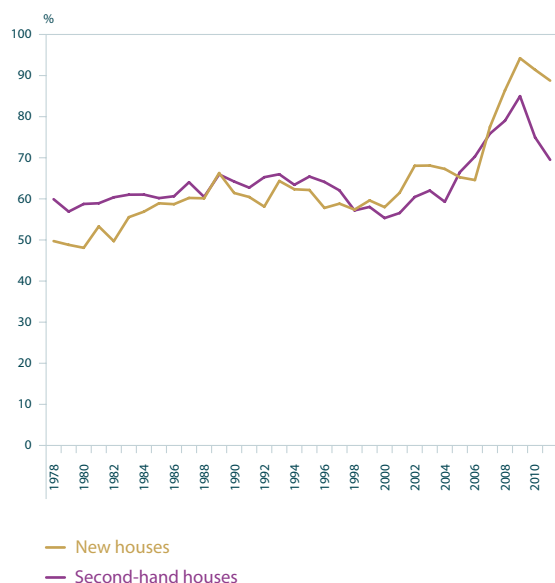
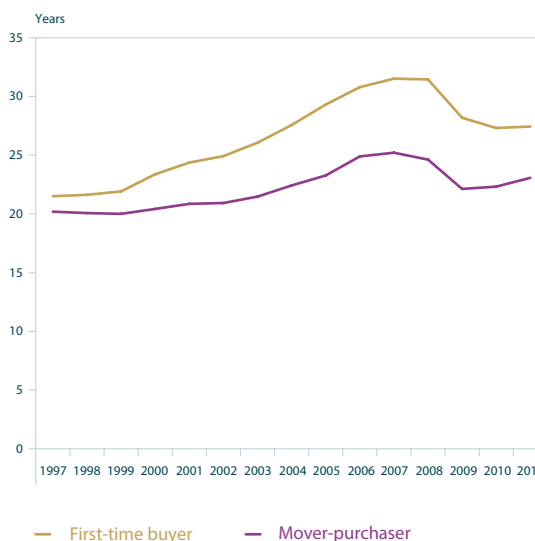


Chart 7: Loan term at origination



The trends discussed in this section suggest that housing market activity and changes in credit standards, both of which are inter-related, are important factors in determining HEW trends.

3.3. Gross Flows

Aggregate net HEW is the sum of many individual households' withdrawals and injections of housing equity. This section considers the underlying gross flows of withdrawals and injections, which contribute to the net HEW series. Box 2 describes how the components that form the gross flows estimates are calculated, as illustrated in Chart 8¹¹.

The most striking feature of Chart 8 is the shift from aggregate equity withdrawal to aggregate equity injection since the property market collapse. This has been driven almost entirely by the large reduction in gross equity withdrawals (the bars representing 'Second Mortgages and Top-Up Loans' and 'Last-Time Seller, Trade-Down and Remortgages' in Chart 8), and not by increases in mortgage repayments over and above the level observed historically (the bars representing 'Mortgage Repayments' in Chart 8). The implication of this is that, *at an aggregate level*, lump sum mortgage repayments appear to play a small role in household deleveraging. The deleveraging is mainly driven by a combination of regular mortgage repayments and households taking out very little new housing secured debt.

Between 2005 and 2007, it is estimated that gross equity withdrawal by last-time sellers, during a trade-down or remortgages averaged €16 billion per annum¹². In 2011, the same category accounted for just over €1 billion. This result serves to reiterate the relationship between housing market activity and housing equity withdrawal. With very few transactions taking place in recent years relative to the peak of the boom, the opportunities for last time sellers to realise housing equity are reduced. Gross equity withdrawals via second mortgages and top-up loans have also fallen considerably in recent years from an average of €5 billion per annum between 2005 and 2007 to €200 million in 2011. Given the large increase in the number of borrowers in negative equity since 2007 (McIndoe-Calder and Kennedy, 2012), a collapse of this magnitude is to be expected.

The main driver of gross housing equity injections is mortgage repayments, which averaged €8 billion per annum, in nominal terms, up to 2008. The impact of the mortgage crisis is evident from 2009 onwards, with increasing mortgage arrears, as well as numerous forbearance arrangements such as term extensions, interest-only agreements and payment holidays. This has reduced the level of repayments relative to previous years. The estimates imply a fall in mortgage repayments of approximately 10 per cent since 2009, in line with recent mortgage arrears trends. As noted above, there is little evidence in the aggregate data to suggest that lump sum repayments of mortgage debt are playing a major role in household deleveraging.

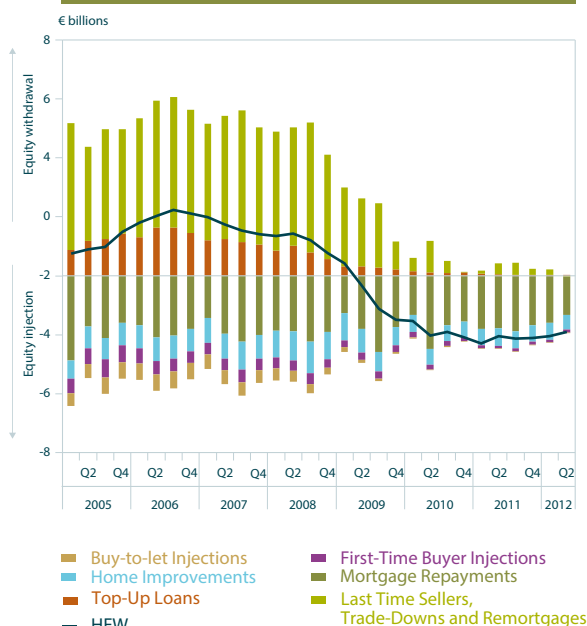
¹¹ The series of data for loans issued to first-time buyers and loans to buy-to-let investors are only available from 2005 onwards. Hence the disaggregation of the net HEW into the gross flows starts from this point.

¹² A remortgage is defined by the IBF as "a loan which is issued by one lender to refinance an existing mortgage with another lender. This may or may not include further equity release". No data exists that would allow quantification of aggregate equity withdrawal by remortgages. However, the IBF data shows that €6bn of lending per annum between 2005 and 2007 was for remortgages.

Equity injections in the form of home improvements peaked in 2008, at just under €4 billion per annum, and have since halved in size. The rise and fall in expenditure on home improvements partly reflects trends in equity withdrawal from top-up loans. This is consistent with the evidence presented in Lydon and O’Hanlon (2012), which showed that the majority of this borrowing is spent on home improvements.

Equity injections by first-time buyers and buy-to-let investors in the form of deposits, averaged €1.8 billion per annum up to 2008. The collapse in housing market activity has seen both types of equity injection fall significantly in value. In 2011, it was estimated that total deposits from first-time buyers and buy-to-let buyers were €400 million and €70 million respectively. This reflects not only the collapse in the number of housing transactions, but also results from the fall in loan-to-value ratios, as shown in Chart B1.

Chart 8: Gross Flows of Housing Equity Withdrawal and Injections



Box 2: Estimating the Gross Flows which Form HEW

This box and Table B1 explains the methodology used to calculate the HEW gross flows. The estimates utilise raw data from several different sources, and incorporate certain assumptions regarding this data.

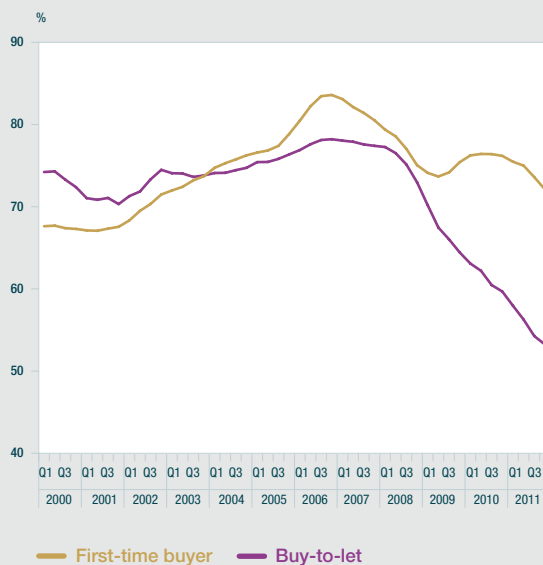
The gross flows estimates require data on the proportion of new residential mortgage loans that are first-time buyers (FTB), buy-to-let (BTL), mover-purchaser, re-mortgage or top-up loans. The most comprehensive market-level data available is the Irish Banking Federation’s (IBF) Mortgage Market Profile, which has been published on a quarterly basis since 2005.^a

Box 2: Estimating the Gross Flows which Form HEW

Table B1: Estimates of gross flows

Flow	Methodology and Sources
<i>Injections</i>	
Home improvements (H_t)	CSO quarterly GFCF. See Box 1.
Regular mortgage repayments (M_t)	This is estimated by the Central Bank. M_t is equal to the difference between the total value of new residential mortgage loans issued in a quarter (L_t from the IBF) and the change in the stock of lending secured on dwellings (ΔS_t from the Central Bank): $M_t = L_t - \Delta S_t$
Deposits by first-time buyers (FTB_DEP _t)	This is estimated by the Central Bank. FTB_DEP _t is equal to the total value of FTB loans issued per quarter (FTB_LOAN _t from the IBF) divided by the average loan-to-value ratio at origination for FTBs (LTV_FTB _t from Central Bank of Ireland loan level data), minus the total value of loans issued per quarter: $FTB_DEP_t = (FTB_LOAN_t / LTV_FTB_t) - FTB_LOAN_t$ (see Chart B1).
Deposits by buy-to-let buyers (BTL_DEP _t)	This is estimated by the Central Bank. BTL_DEP _t is equal to the total value of BTL loans drawn down (BTL_LOAN _t from the IBF) divided by the average loan-to-value ratio at origination for BTL buyers (LTV_BTL _t from Central Bank of Ireland loan level data), minus the total value of loans issued per quarter: $BTL_DEP_t = BTL_LOAN_t / LTV_BTL_t - BTL_LOAN_t$ (see Chart B1).
<i>Withdrawals</i>	
Value of top-up loans (T_t)	Quarterly data from 2005 Q1, from the IBF's Mortgage Market Profile.
Gross value of equity withdrawn during a housing transaction or remortgage:	This is estimated by the Central Bank. No survey or market-level data exists that allows for the direct estimation of these gross flows separately. They are therefore estimated as a group (Z_t) as follows:
$\left. \begin{array}{l} L_t = \text{Last time sellers} \\ D_t = \text{Trade-down} \\ R_t = \text{Remortgage} \end{array} \right\} = Z_t$	$\begin{aligned} HEW_t &= \text{Sum}(\text{Gross withdrawals}) - \text{Sum}(\text{Gross injections}) \\ &= (T_t + Z_t) - (H_t + M_t + FTB_DEP_t + BTL_DEP_t) \\ Z_t &= HEW_t - T_t + (H_t + M_t + FTB_DEP_t + BTL_DEP_t) \end{aligned}$

(a) The IBF estimates that the data covers in excess of 95 per cent of the mortgage market and includes residential mortgage lending data from 10 institutions over the period 2005 to 2012.

Box 2: Estimating the gross flows which make up HEW**Box 2 Chart 1:** Loan to Value Ratios for First-Time Buyer and Buy-to-Let

4. Conclusion

This article presents a new series on aggregate net housing equity withdrawal (HEW) for Ireland for the period, 1978 to 2012. It shows that HEW peaked at just over €8 billion in 2006, during the property boom. This level of HEW represents a significant departure from borrowing behaviour of households during the 1980s and 1990s, when aggregate equity injection was the norm. The main drivers of equity withdrawal are shown to be changes in the supply of, and demand for credit, and developments in the housing market.

The collapse in housing market activity since 2008 has moved the household sector back to a position of aggregate equity injection. A number of factors contribute to this current period of aggregate equity injection including a reduction in the number of mortgage transactions, a tightening of credit conditions and the reduction by households of their financial liabilities, including mortgage debt. As a proportion of disposable income, the level of injections observed since the property market collapse is significantly higher than

historic trends in Ireland. It is also significantly higher than aggregate injections observed elsewhere, such as in Australia or the UK. The main reason for the current low levels of equity withdrawal is the lack of housing market transactions, after a number of years of falling house prices, which in turn means fewer opportunities for sellers to realise housing equity. Irish households have suffered large declines in net worth as a result of the drop in valuations of their properties. This has also contributed towards households reducing aggregate equity withdrawals.

References

- Bank of England, Explanatory Notes for Estimating Aggregate Housing Equity Withdrawal: http://www.bankofengland.co.uk/statistics/Pages/iadb/notesiadb/hew_notes.aspx.
- Benito, A and J. Power (2004). "Housing equity and consumption: insights from the Survey of English Housing", Bank of England Quarterly Bulletin: Autumn 2004, pages 302-309.
- Cussen, Mary, O'Leary, Brídín and Donal Smith (2012). "The Impact of the Financial Turmoil on Households: A Cross Country Comparison", Central Bank of Ireland Quarterly Bulletin Article 02 / April 12.
- Davey, Melissa (2001). "Mortgage equity withdrawal and consumption", Bank of England Quarterly Bulletin: Spring 2001, pages 100-103.
- Goggin, Jean & Holton, Sarah & Kelly, Jane & Lydon, Reamonn & McQuinn, Kieran (2012). "The financial crisis and the pricing of interest rates in the Irish mortgage market: 2003-2011," Research Technical Papers 01/RT/12, Central Bank of Ireland.
- Kennedy, Gerard & McIndoe-Calder, Tara, (2012). "The Irish Mortgage Market: Stylised Facts, Negative Equity and Arrears," Quarterly Bulletin Articles, Central Bank of Ireland, pages 85-108, February.
- Lydon, Reamonn and O'Hanlon, Niall (2012). "Housing equity withdrawal in Ireland: 2000 - 2011," Economic Letters, Vol. 2012, No. 6, Central Bank of Ireland.
- McGuire, M., O'Donnell, N., and Ryan, M. (2002), "Interpolation of Quarterly Data for ECB/NCB Multi-Country Modelling Exercise – Data Update to 1999Q4", 1/ RT/02, Central Bank of Ireland Research Paper.
- McCarthy, Yvonne and Kieran McQuinn (2011). "Decomposing Irish house price movements: 2000 – 2010," Paper presented at Central Bank of Ireland conference on The Irish Mortgage Market in Context, October 2011.
- O'Donnell, Nuala (2005). "Overview of Recent Progress in Macroeconomic Modelling in the Central Bank," Quarterly Bulletin Articles, Central Bank of Ireland, pages 115-131, October.
- Reinold, Kate, (2011). "Housing equity withdrawal since the financial crisis," Bank of England Quarterly Bulletin, Bank of England, vol. 51(2), pages 127-133.
- Schwartz, Carl, Tim Hampton, Christine Lewis and David Norman (2006). "A Survey of Housing Equity Withdrawal and Injection in Australia". Reserve Bank of Australia Research Discussion Paper, 2006-08.

Why are Irish Non-Financial Corporations so Indebted?

Mary Cussen and Brídín O’Leary¹

Abstract

Based on debt-to-GDP ratio which is the most cited measure of non-financial corporation (NFC) debt, Ireland has one of the most indebted NFC sectors in Europe. This article examines the specific characteristics of the Irish economy to analyse elevated debt levels of NFCs relative to GDP and their continued rise despite the economic downturn. The article finds that Irish NFCs have a high debt-to-GDP ratio when compared with many EU countries. However, they are relatively less indebted when compared with the size of their balance sheets. The article concludes that these trends reflect the large and increasing activities of multi-national corporations (MNCs) in Ireland in recent years. While NFCs have significantly reduced borrowing from credit institutions through net loan repayments and loan write-downs, their borrowing from non-residents has increased substantially by 160 per cent between Q1 2008 and Q2 2012. Results also show that aggregate indicators can mask some of the underlying dynamics in the data.

¹ The authors are Senior Economist and Economist, respectively, in the Central Bank of Ireland’s Statistics Division. The views expressed 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 comments and suggestions of Patrick Honohan, Lars Frisell, Joe McNeill, John Flynn, Gillian Phelan, Derek Stynes (CSO) and Jennifer Banim (CSO). We would also like to thank our colleagues in the Statistics Division for assistance pre-publication.

1. Introduction

Concerns about the sustainability of debt are at the heart of the ongoing crisis in the euro area. Irish non-financial corporation (NFC) indebtedness has increased significantly in recent years despite reduced consumer demand, the bursting of the property bubble and the financial crisis. Between Q3 2008 and Q2 2012, Irish NFC debt in terms of GDP increased by 58 per cent of GDP. As a result of the rapid increase in NFC debt in the years preceding the crisis and the continued increase in debt since the crisis began, Ireland now has one of the most highly indebted NFC sectors relative to GDP in the EU. By Q2 2012, Ireland had a NFC debt-to-GDP ratio of 204.5 per cent, the second highest in the EU, after Luxembourg. This article examines Ireland's elevated NFC debt levels and why this continues to increase. Identifying the underlying dynamics for this rise in NFC debt is crucial for interpreting such macroeconomic measures of indebtedness.

The continued increase in NFC debt despite the economic downturn is not in line with empirical evidence. Historically, countries usually reduce debt in the aftermath of a financial crisis. McKinsey (2010) found that a long period of deleveraging generally follows a major financial crisis. They find that total debt reduction on average lasted six to seven years and reduced the ratio of debt-to-GDP by 25 per cent. Reinhart and Rogoff (2009) found a similar result. Furthermore, a panel data econometric exercise carried out by Ruscher and Wolff (2012) showed that NFC balance sheet adjustment periods are triggered by macroeconomic downturns as well as by balance sheet stress due to high debt, low liquidity, and negative equity price shocks. While Irish households have reduced debt by 15 per cent of GDP since Q4 2008, the ratio for NFCs has increased by 21 per cent over the same period.

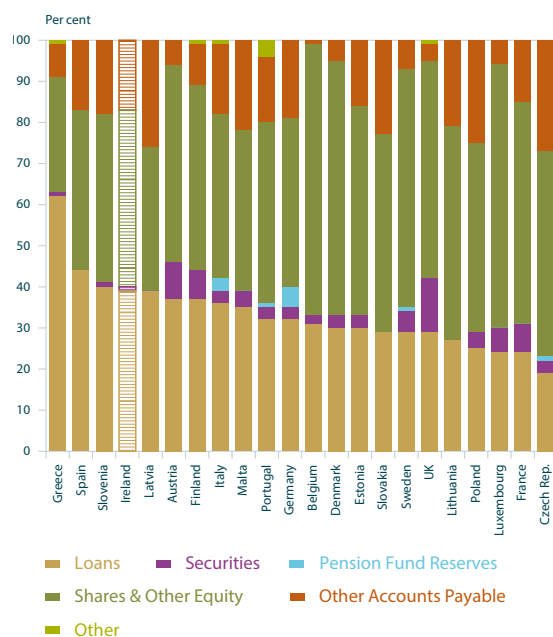
This analysis of NFC debt is important for a number of reasons. Firstly, high levels of indebtedness can make NFCs more

vulnerable to interest rate increases, shocks or unexpected economic events. Secondly, if NFC debt is impaired, this can negatively impact the balance sheets of those that lend to NFCs. Finally, when NFCs with high debt burdens seek to deleverage, this can act as a drag on economic growth. Buiter and Rahbeir (2012) find that the 'GDP loss' relative to trend in the aftermath of financial crises is almost twice as large in countries which had a large pre-crisis increase in debt compared with countries that did not. In the case of Japan, Koo (2008) found that the corporate demand lost, as a result of NFC debt reduction between 1990 and 2003, equated to 20 per cent of GDP. Consequently, when debt ratios rise above a certain level, financial crises tend to become more likely and more severe (Tang and Upper, 2010).

This article focuses on analysing Ireland's NFC indebtedness in the context of the financial crisis. Section 2 provides a brief overview of the analytical framework and NFC data sources employed. Section 3 compares Irish NFC debt with other EU countries based on a number of different indicators. Section 4 decomposes NFC debt by funding source to analyse why it continues to increase despite the current economic environment and Section 5 concludes.

2 Analytical Framework and Data Sources

Public and private debt is of crucial importance for real economic performance and intersectoral funding is a key part of the story. Therefore, when considering relative debt levels of NFCs and assessing the need to deleverage, it is instructive to start at the sectoral level. National accounts provide a range of internationally comparable data to analyse developments in sectoral balance sheets at the macroeconomic level. In particular, the framework for Quarterly Financial Accounts (QFA), which describes the portfolio of assets and liabilities and traces flows between sectors, is particularly relevant in this context.

Chart 2.1: Decomposition of Total Liabilities by Country, Q2 2012

Source: ECB.

QFA² presents the balance sheets and financial flows of the total economy broken down by seven main institutional sectors: NFCs; monetary financial institutions; other financial intermediaries and financial auxiliaries; insurance corporations and pension funds; general government; households and non-profit institutions serving households; and rest of the world. These data are available for all EU countries. This article will primarily focus on the NFC sector.³ This sector includes companies of all sizes from small retail businesses to large multi-national corporations (MNCs) located in a reporting country.⁴

Debt is comprised of the stock of debt securities issued and loan liabilities incurred,

which are both part of NFC total liabilities. NFCs liabilities are decomposed according to their categories, as a proportion of total liabilities, in Chart 2.1. While this article focuses on the debt financing of NFCs, it is important to recognise that funding can also be attained from other sources, such as 'shares and other equity'; 'pension fund reserves'; and 'other accounts payable'. NFCs are heterogeneous in their choice of funding across countries.

In Ireland, QFA results for the NFCs are compiled using Central Statistics Office (CSO) data; the CSO data for NFCs are generated from Balance of Payments surveys, the CSO Central Business Register, corporation tax returns filed with the Revenue Commissioners and company accounts filed with the Companies Registration Office (CRO).

3 NFC Debt: A Cross-Country Perspective

NFC debt increased significantly in many countries, including Ireland, in the years preceding the financial crisis. Although debt is necessary for growth, excessively high private sector indebtedness can "imply significant risks for growth and financial stability and increase overall vulnerability of a country" (EU Commission, 2011). This section assesses the aggregate debt levels of Irish NFCs compared with other EU countries. An important aspect of NFC indebtedness relates to the high degree of heterogeneity across euro area countries, reflecting in part, country-specific factors. Therefore, a number of different measures of NFC debt are used in this analysis.

The European Commission uses the ratio of NFC and household debt to GDP to assess and compare the private-sector debt⁵ of EU

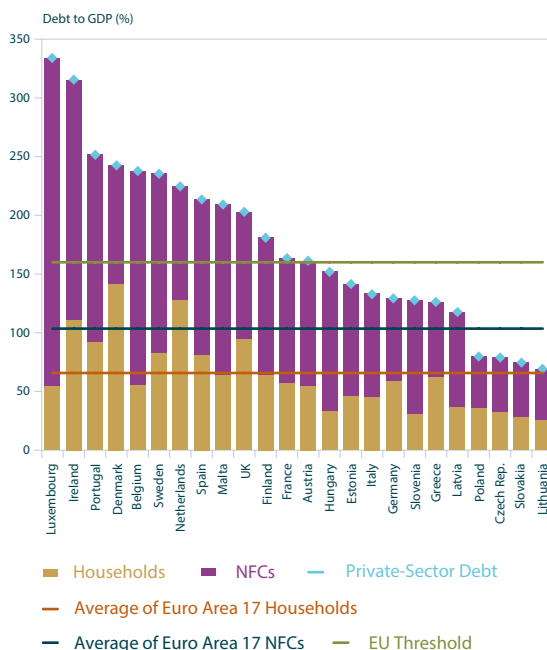
² QFA data for Ireland is published on the Central Bank of Ireland's website: <http://www.centralbank.ie/polstats/stats/qfaccounts/Pages/Data.aspx>. QFA data for all EU countries is published on the ECB's website in the ECB Statistical Data Warehouse, <http://sdw.ecb.europa.eu/>.

³ According to the European System of Accounts (ESA) 1995, NFCs consists of "institutional units whose distributive and financial transactions are distinct from those of their owners and which are market producers, whose principal activity is the production of goods and non-financial services".

⁴ As the NFC sector is composed of only incorporated companies, it excludes non-incorporated enterprises such as sole traders and self-employed businesses, which are classified as households.

⁵ Private sector debt, according to MIP, is the stock of debt securities issued and loan liabilities of NFCs and households.

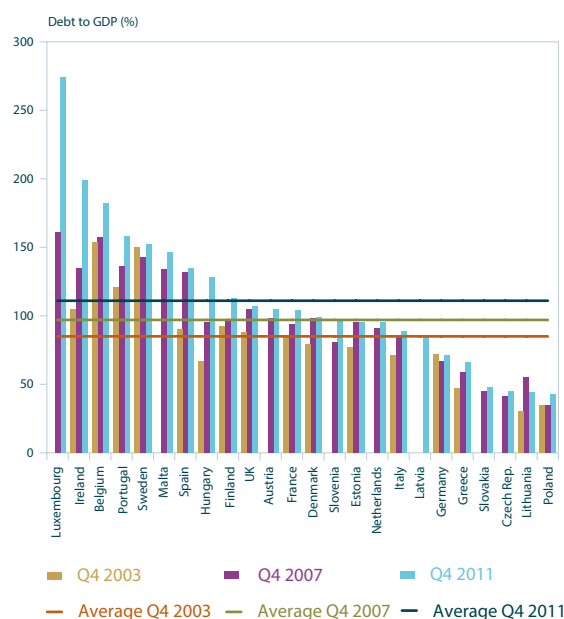
Chart 3.1: Private-Sector Debt to GDP, Q2 2012



Source: ECB.

member states, as part of the Scoreboard for the Surveillance of Macroeconomic Imbalances Procedure (MIP)⁶. The indicative threshold for this indicator is 160 per cent of GDP. The MIP uses annual data, with the latest report presenting 2011 data. Ireland has received considerable attention for having the second highest level of private sector indebtedness to GDP levels, after Luxembourg, at 310 per cent in 2011⁷. Recent QFA data for Q2 2012 shows that Ireland continues to have the second-highest level of private sector indebtedness to GDP, at 315 per cent, as shown in Chart 3.1. The Irish private-sector debt-to-GDP ratio is therefore almost double the EU threshold. In Q2 2012, 65 per cent of Irish private-sector debt is attributable to NFCs. While 11 other countries have NFCs that contribute a greater proportion of total private sector debt than Ireland, it is the overall level which could cause concern about the credit worthiness of the non-financial corporate sector.

Chart 3.2: NFCs' Non-Consolidated Debt to GDP, Q4 2003, Q4 2007, and Q4 2011.



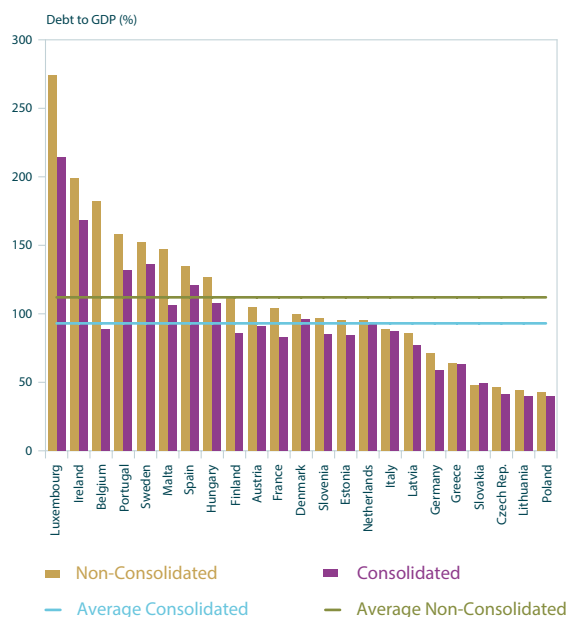
Source: ECB.

The financial crisis has increased concerns about high levels of debt. Comparing NFC debt in the period prior to the escalation of the property bubble (2003) with current levels, highlights how developments in Ireland differed relative to the other EU countries over the period. A comparison of NFCs' non-consolidated debt to GDP for three points in time: Q4 2003; Q4 2007; and Q4 2011 are shown in Chart 3.2⁸. Irish NFCs exceeded the average debt-to-GDP ratio for all countries analysed for each of the three dates examined: by 19 per cent in Q4 2003, increasing to 38 per cent in Q4 2007 and to 88 per cent in Q4 2011. This growth in debt to GDP coincided with an expansion of MNC activity in Ireland. NFCs also increased debt levels as a result of construction-related borrowing during the property boom, in particular through 2007 and 2008. By 2011, the level of Irish NFC debt was almost double the size of GDP.

⁶ The MIP was introduced in December 2011, as part of the so-called 'six-pack' legislation, which reinforced the monitoring and surveillance of macroeconomic policies in the EU and the euro area. There are ten headline indicators in the MIP with indicative thresholds, covering the major sources of macroeconomic imbalances. The indicators help identify if macroeconomic imbalances are indicative of vulnerabilities in the economy.
http://ec.europa.eu/economy_finance/economic_governance/macroecomic_imbalance_procedure/index_en.htm.

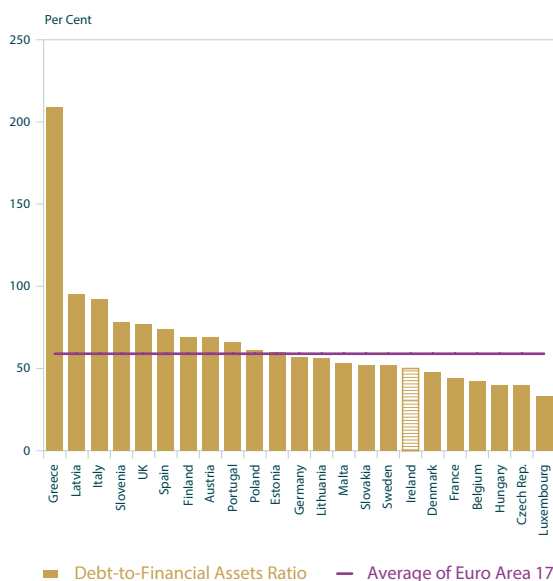
⁷ While Ireland is not one of the 12 countries identified for analysis under the MIP, the indicators relating to Ireland are included in the Commission's reports as it is one of the EU loan programme countries.

⁸ Data was not available for some countries for all time periods.

Chart 3.3: NFCs' Non-Consolidated and Consolidated Debt to GDP, End-2011

Sources: ECB and Eurostat.

While the MIP has given prominence to the private-sector debt-to-GDP ratio, it is important to recognise the value of using a wider range of macroeconomic indicators to assess the capacity of NFCs in different countries to manage their debt. The debt-to-GDP ratio adopted by the MIP uses a non-consolidated measure of sectoral debt. This measure is composed of all loan liabilities, including inter-company loans. In some countries, inter-company loans are a significant element of financing for large NFCs. The inclusion of loans between companies within the same corporate group may form a large part of the NFC debt. Bloomberg, Hokkanen and Kahre (2012) find that in the case of Sweden, the non-consolidated debt measure gives an “exaggerated picture of the level of debt in the private sector in countries” where inter-company loans are common. Their research also showed that group loans “are often motivated by an endeavour to keep taxes as low as possible”. This trend reflects, in part, differing tax regimes which may lead to high inter-company lending for NFCs in a particular country, consequently distorting the NFC debt when measured on a non-consolidated basis. By comparing non-consolidated and consolidated measures of debt to GDP, as in Chart 3.3, it is possible to exclude inter-company lending which may be high in countries where MNCs find it beneficial to undertake such activity.

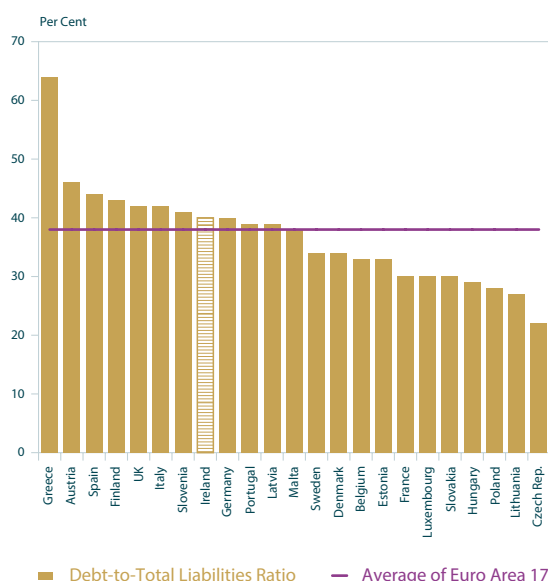
Chart 3.4: NFC Ratio of Debt as a Percentage of Financial Assets, Q2 2012

Source: ECB.

In 2011, Irish NFCs had the second-highest level of debt to GDP, both when measured on a non-consolidated and a consolidated basis. Chart 3.3 shows that though Irish NFC debt declined by 31 per cent when measured on a consolidated basis, Irish NFCs continued to be the second most indebted of the countries analysed. Luxembourg and Belgium also have a significant MNC population in their countries engaged in intra-group lending, thereby contributing towards the large difference between consolidated and non-consolidated debt ratios. However, consolidated data does not exclude inter-company NFC debt with non-residents affiliates, which is significant for MNCs resident in Ireland. The impact of MNC activity on NFC debt is further explored in section 4.

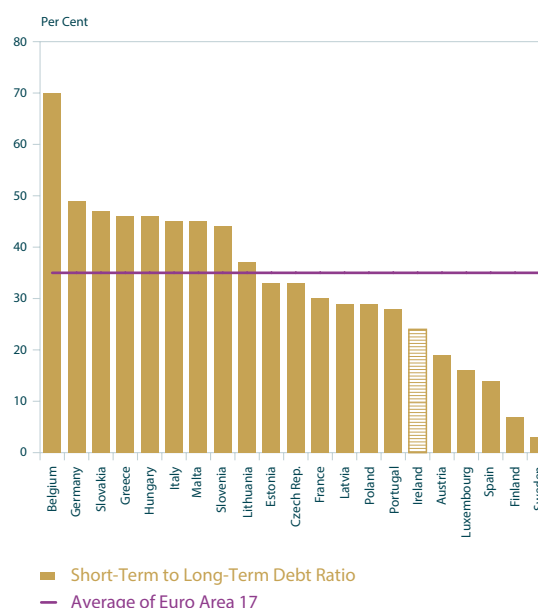
International comparisons of debt have most frequently applied a debt-to-GDP ratio at sectoral level. However, in the Irish case, this approach is problematic, primarily due to the large size of MNCs relative to the overall Irish economy. The ECB (2012) used a range of indicators to provide detailed analysis of developments of corporate indebtedness in the EU area, including the ratio of NFC debt to financial assets. NFCs can employ financial assets to produce income or to repay debt in the case of liquid assets. An analysis of debt relative to financial assets provides a more complete understanding of the NFC balance

Chart 3.5: NFC Ratio of Debt to Total Liabilities, Q2 2012



Source: ECB.

Chart 3.6: Ratio of Short-Term to Long-Term Debt of NFCs, Q2 2012



Source: ECB.

sheet and their capacity to service debt. The ratio of NFC debt⁹ to total financial assets in Q2 2012 is depicted in Chart 3.4. Under this measure, Irish NFCs had a ratio of 50 per cent, which is the seventh lowest among the 23 countries examined. This implies that the debt levels are half the sector's stock of financial assets. It should also be noted that the NFCs also have significant non-financial assets¹⁰, although the value of these may have decreased substantially in recent years. While Luxembourg's NFCs were the most indebted when measured as a proportion of GDP, they, in fact, had the lowest debt ratio according to this measure. The average debt-to-total financial assets ratio for the 17 countries in the euro zone was 59 per cent. The application of this indicator of NFC indebtedness provides a much more favourable result for Ireland.

NFC financing and investment decisions impact both sides of the balance sheet. It is important to recognise that NFCs in many countries also reacted to the financial crisis

by reducing their debt levels or changing the type of debt obtained. "Ongoing deleveraging in the banking sector is likely to render bank financing durably more expensive", as Ruscher and Wolff (2012) noted, resulting in increased use of alternative sources of finance such as equity. Comparing NFC debt to total liabilities allows an assessment of how reliant NFCs are on debt financing compared with other forms of funding such as quoted equity, unquoted equity and other accounts payable¹¹. The ratio of NFC debt to total liabilities is depicted in Chart 3.5. A lower ratio indicates a reduced reliance by NFCs on funding from loans and debt securities, compared with funding from equity and other accounts payable. NFCs in Ireland were joint eighth highest alongside Germany, with a ratio of 40 per cent. This ratio was just 2 per cent higher than the average for the euro area countries. Similar to the financial assets to GDP ratio, this indicator also shows Ireland to be more in line with European norms. It should be noted, however, that Irish indigenous companies and MNCs may have different funding sources,

⁹ Debt here is defined as the sum of debt securities, loans and pension fund reserves. In contrast with the MIP, the ECB and the European Systemic Risk Board measures NFC debt by adding in pension fund reserves with loans and securities. The definition of debt does not differ for NFCs in Ireland with the inclusion of pension fund reserves, as they are negligible. There are seven countries in the EU where NFCs report reserves: Belgium, Czech Republic, Germany, Italy, Luxembourg, Portugal and Sweden.

¹⁰ Non-financial assets include land, buildings, vehicles, machinery and inventory.

¹¹ See Chart 2.1 for a description of the categories of NFC liabilities.

with indigenous companies more reliant on debt financing than multinationals. Therefore, the debt to total liabilities indicator may look quite different for Ireland if calculated excluding MNCs.

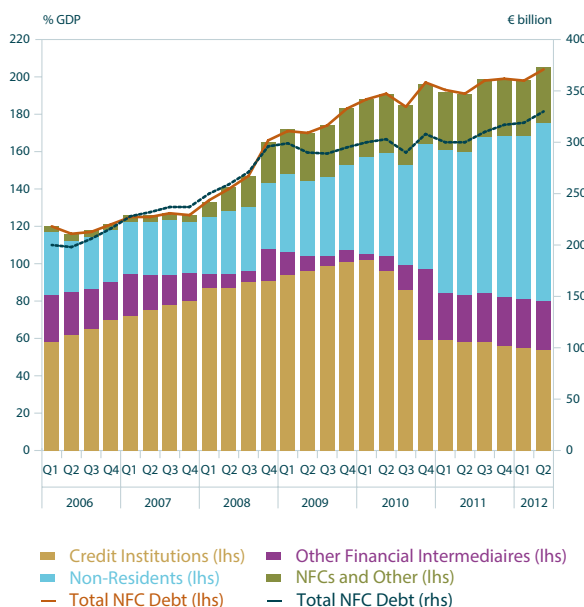
Another approach to assessing NFC debt is to compare the maturity of the types of debt used by the sector. If companies rely on short-term loans or securities, this may result in higher liquidity risks and greater sensitivity to increases in interest rates (ECB, 2012). The ratio of short-term to long-term NFC debt for 21 countries in Q2 2012 is shown in Chart 3.6¹². Lower ratios may be an indication of reduced vulnerabilities of NFCs to debt repayments. NFCs in Ireland had the sixth lowest ratio at 24 per cent out of 21 countries. Belgium had the highest ratio of 70 per cent, while Sweden had the lowest ratio of 3 per cent in Q2 2012.

Excessive NFC debt levels can increase risks to financial stability and adversely impact economic growth. NFC debt levels in Ireland can appear striking compared with other EU countries when applying a debt-to-GDP ratio. Under this measure, Ireland records the second-highest level of private sector indebtedness in Europe. This section has shown that this single measure may be misleading and it is also useful to assess the complete balance sheet for the sector. Furthermore, the structure of NFCs is heterogeneous across countries – in Ireland's case, the data are heavily influenced by the large MNC presence. It is, therefore, important to analyse debt using a range of indicators to get a better understanding of the sector's financial position. Even where aggregate indicators appear favourable, they may conceal vulnerabilities at sub-sector level. In Ireland there is evidence of difficulties for indigenous enterprises, which is at odds with aggregate data.

4 Irish NFC Debt: A Decomposition

This section examines NFC debt by funding source to explain the continued rise in Irish NFC debt, in the context of the economic downturn. Although most countries do

Chart 4.1: Decomposition of Irish NFC Debt



Sources: CSO, Central Bank of Ireland and internal estimates.

not publish NFC debt by funding source, it is available for Greece, Spain, Italy and Portugal¹³. The availability of these data allows a comparison of the impact of the financial crisis on NFC indebtedness for some of the countries which have been most severely impacted. This more granular NFC data also further highlights the factors which have led to the continued increase in Irish NFC debt. While Section 3 used a number of metrics to analyse NFC debt-to-GDP levels, this section primarily focuses on the composition of the NFC debt-to-GDP ratio, with a view to explaining why it is heterogeneous across countries.

4.1 Irish NFC Debt Funding Sources

Irish NFC primary funding sources over time are illustrated in Chart 4.1. It highlights the considerable increase in NFC debt-to-GDP in recent years. Since Q4 2008 the NFC debt-to-GDP ratio increased by 57 per cent. It should be noted, however, that part of the increase in this ratio is attributable to a decline in GDP. The chart shows that when measured in euro billions, the increase in NFC debt is significantly less, than when measured as a proportion of GDP.

¹² Short-term debt includes short-term loans and short-term securities while long-term loans and long-term securities are summed to give long-term debt.

¹³ In the case of Portugal, NFC debt funding is not explicitly available. The funding of NFC loans is calculated using data on NFC funding from financial corporations and private corporations' funding from government and non-residents.

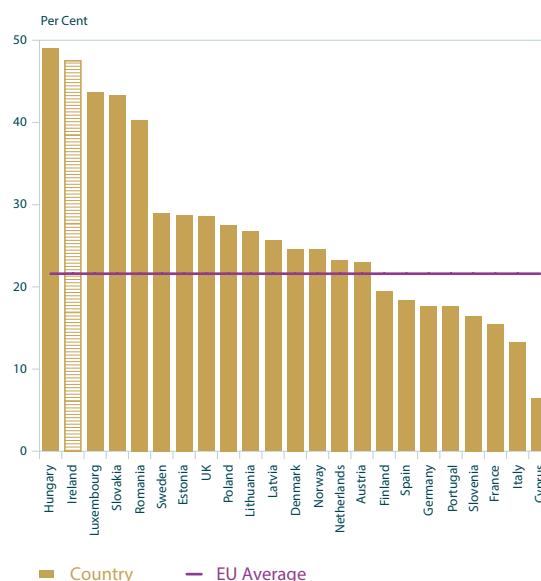
The chart also reveals that financing from non-residents and Irish credit institutions are by far the most dominant forms of funding for NFCs. Sections 4.2 and 4.3 analyse the developments of these sources of funding over time. The other primary sources of funding for NFCs were financing from other financial intermediaries (OFIs) and inter-NFC loans. The increase in NFC debt with OFIs from 2010 onwards largely reflected the transfer of impaired loans from credit institutions to NAMA. Chart 4.1 also reveals that domestic debt with resident NFCs and other (government and the insurance sector), increased during 2008 and 2009, but has since remained largely unchanged.

4.2 NFC Debt with Non-Residents

The dominant role of the foreign-owned MNCs within the Irish NFC sector is illustrated by the importance of non-resident funding. These MNCs tend to source funding on international markets or through corporate treasuries, rather than from the domestic sources. Funding from non-residents has increased by 160 per cent between Q1 2008 and Q2 2012, as shown in Chart 4.1. This includes significant intra-group funding between resident companies and non-resident affiliates.

Although it is currently not possible to decompose NFC debt between indigenous companies and MNCs, the significant increase in non-resident debt funding in recent years would indicate that the MNC sector, which has maintained strong levels of investment in Ireland over the period, is primarily responsible. Everett (2012) outlined that changes in UK and US legislation in recent years have encouraged increasing numbers of companies to locate in Ireland. The role of MNC activity is also explored by Creedon, Fitzpatrick and Gaffney (2012). They find that IFSC entities and, to a lesser extent, non-IFSC MNCs contribute significantly to the size of Ireland's External Debt. The CSO (2012) found that even though foreign-controlled enterprises¹⁴ accounted for around 2 per cent of all enterprises in Ireland during 2010, they represented €162 billion or 58 per cent of total turnover of all enterprises and €44 billion or 56 per cent of gross value added.

Chart 4.2: Contribution of Foreign-Controlled Enterprises to Gross Value Added, 2009



Source: Eurostat.

The MNC sector is particularly large in Ireland relative to the size of the economy. Ireland was ranked fifth in the world in terms of success in attracting FDI over a three-year period from 2009 to 2011 (UN World Investment Report, 2012). Belgium and Luxembourg were the only other euro area member states to be included in the top ten FDI recipients and were ranked second and fourth, respectively. Chart 4.2 illustrates that during 2009, the latest period for which a comparison with other European countries is available, the contribution of foreign-controlled enterprises to Gross Value Added was the second highest in Ireland, after Hungary.

4.3 Funding From Domestic Credit Institutions

In contrast to MNCs, the major source of funding for smaller domestic companies (principally SMEs) is domestic credit institutions. As Chart 4.1 shows, funding from this source has been declining since early 2010, highlighting the different patterns in indebtedness between foreign-owned MNCs and indigenous SMEs. In the years preceding the financial crisis, NFC borrowing from credit institutions increased substantially, rising from

¹⁴ 'Control' means the ability to determine strategy, guide activities and appoint directors.

Table A: Decomposition of the Change in Stock of NFC Loans with Credit Institutions, € millions

Time period	Change in stock	Transactions	Revaluations excluding NAMA (largely due to loan write-downs)	Transfers to NAMA	Other (including reclassifications and loan securitisations)
Dec 2010 – Oct 2012 (gross basis)	-9,014	-5,163	-1,519	-11,720	9,387
Sept 2008 – Nov 2010 (net basis)	-75,858	-4,710	-34,398	-26,216	-10,534
Feb 2003 – Aug 2008 (net basis)	123,344	124,892	-338	0	-1,210

Source: Central Bank of Ireland.

38.8 per cent of GDP at Q4 2003 to 92.4 per cent of GDP at Q3 2008. The substantial rise in NFC debt during this period largely reflected increased property-related investment. By 2006, housing completions in Ireland had risen to 93,019 units from 49,412 units in 2000. In addition, the proportion of the workforce employed in construction had increased from about 7 per cent in the early and mid-1990s to over 13 per cent by 2007 (Honohan, 2009). Consequently, property-related¹⁵ lending to NFCs from financial institutions rose from 21 per cent of GDP at Q4 2003 to 69 per cent of GDP at Q3 2008. From late-2008 onwards – against a background of falling property prices, economic recession and an escalation of the financial crisis – NFC lending from financial institutions has reduced significantly as a percentage of GDP. By Q2 2012, total NFC borrowings from financial institutions¹⁶ had fallen to 79 per cent of GDP, while, property-related borrowing by NFCs had fallen to almost 63 per cent of GDP.

Table A quantifies the impact of the various debt reduction channels on the stock of NFC loans held by credit institutions according to the methodology used in McElligott and O' Brien (2011). This encompasses repayments, write-downs and transfers to NAMA. The reduction in NFC debt with credit institutions has occurred through a number of channels since the financial crisis began. Table A shows that

since September 2008, Irish NFCS have been redeeming debt with credit institutions. In total, NFCs have repaid €9.9 billion, or 6 per cent of outstanding debt. However, the decrease in NFC debt with domestic credit institutions is much larger than the net debt repayments as a result of loan write-downs or write-offs and transfers of NFC loans to NAMA. Considerable write-downs and write-offs have been applied by credit institutions on loans not transferred to NAMA since the financial crisis began. This is reflected in the table which shows that between September 2008 and November 2010 revaluations (mainly provisions, write-downs and write-offs) accounted for €34.4 billion of the decline in loans to NFCs. A further €1.5 billion took place between December 2010 and October 2012¹⁷. In addition Irish NFC loans with a nominal value of nearly €38 billion were transferred from credit institutions to NAMA¹⁸. It should be noted that while significant haircuts were applied to these loans, NFC debt is recorded within QFA at nominal or gross value. Therefore until these loans are sold, written-down or written-off by NAMA, the full nominal value will be included in NFC debt. The NAMA transfers resulted in a decrease in NFC loans from credit institutions of €38 billion and an equivalent increase in loans from NAMA, which is classified as an other financial intermediary. The overall debt of NFCs to financial institutions within the QFA framework is, therefore, unchanged by the NAMA transfers.

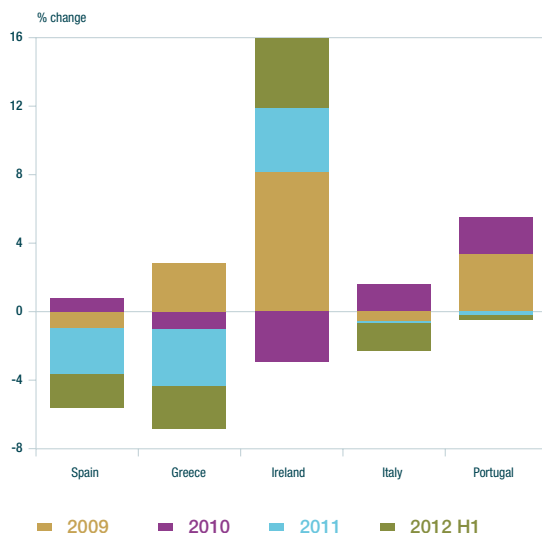
¹⁵ This article defines property-related investment as lending for construction, hotels and restaurants, and real estate land and development activities.

¹⁶ Financial institutions include NAMA.

¹⁷ It should be noted that methodological changes were introduced in December 2010. Prior to this, loans were reported on a net basis with revaluations including provisions as well as write-downs. From December 2010, loans were reported on a gross basis, with provisions excluded.

¹⁸ The remaining loans transferred to NAMA related to households and non-resident NFCs.

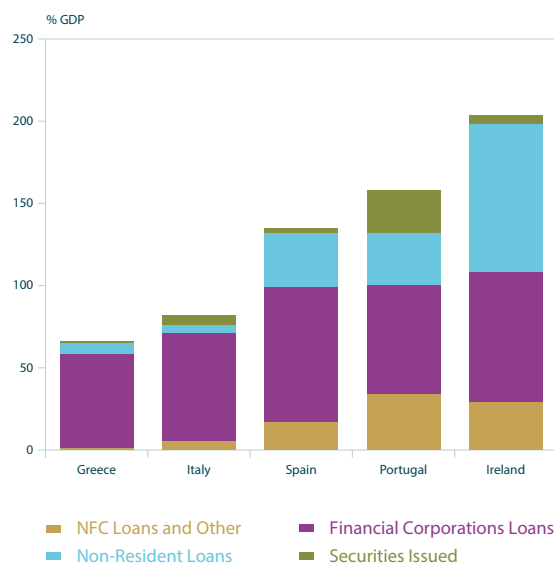
Chart 4.3: Percentage Change in NFC Debt Levels



Source: ECB.

Note: It should be noted that changes in NFC debt may also be the result of reclassifications. In the case of Greece, this article adjusted the data for a large reclassification which occurred during 2011.

Chart 4.4: Decomposition of NFC Debt by Euro Area Peripheral Countries, Q2 2012



Sources: National Central Banks and internal estimates.

4.4 Decomposing NFC Debt across the Euro Area Peripheral Countries

The increases in Irish NFC debt levels since the start of 2009 have by far exceeded those of the other euro area peripheral countries. Chart 4.3 shows that Portugal was the only other country where NFCs increased debt since 2008. This increase occurred in 2009 and 2010, followed by a marginal reduction in 2011 and the first half of 2012. The largest decline in NFC debt over the period occurred in Greece, followed by Spain. This section decomposes the aggregate debt levels of NFCs in the euro area peripheral countries, to analyse further why debt-to-GDP levels in Ireland are so elevated, and why they have continued to increase in contrast to the other countries examined.

The Irish NFC debt-to-GDP ratio by funding source is compared with the rest of the peripheral euro area countries in Chart 4.4. The chart reveals that NFC funding sources are quite heterogeneous across the countries examined. Portuguese NFCs are much more reliant than the other peripheral countries on funding from the securities markets. At

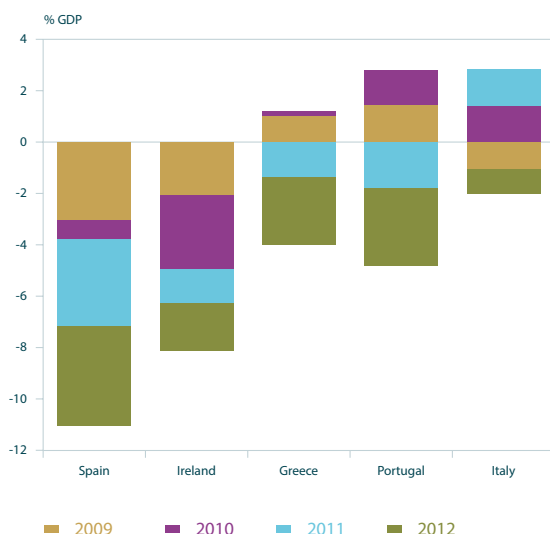
Q2 2012, funding from securities issued by Portuguese NFCs represented 26 per cent of GDP. For the other countries examined, securities issued by NFCs accounted for less than 7 per cent of GDP.

The impact of MNCs' activities on NFC debt in Ireland compared with the other peripheral euro area countries is evidenced in Chart 4.4 by the scale of non-resident funding. Irish NFC financing from non-residents was 90 per cent of GDP, by far the highest of the countries examined. Spanish NFCs had the second largest level of funding from non-residents at 33 per cent of GDP. For Italian and Greek NFCs, funding from non-residents was 5 and 7 per cent of GDP, respectively.

Irish NFC lending from financial corporations was more in line with the other euro area countries, as depicted in Chart 4.4. Irish NFC funding from financial corporations was 79 per cent of GDP, the second largest of the five countries examined.¹⁹ Spanish and Greek NFCs had the highest and lowest levels of financing from financial corporations at 82 and 57 per cent of GDP, respectively, in Q2 2012. Developments in Spanish NFC debt

¹⁹ Financial corporations include credit institutions and OFIs, which in Ireland's case includes NAMA.

Chart 4.5: NFCs' Loan Transactions with Credit Institutions by Country



Sources: ECB and Eurostat.

Note: This time series is adjusted for securitisations.

mirrored those in Ireland in the years preceding the crisis, with property-related sectors in Spain becoming highly leveraged. The Spanish construction and real estate sector borrowings from credit institutions represent a relatively high 10 per cent of GDP and 30 per cent of GDP, respectively (IMF 2012). While high by international standards, this scale of indebtedness remains low when compared with equivalent levels for Ireland.

The growth in loan liabilities for NFCs in Ireland appears to conflict with recent evidence that the Irish SME sector is having difficulties obtaining credit, compared with SMEs in other countries (Holton & McCann, 2012). However, the difficulties faced by small domestically-owned companies in accessing credit would again highlight the predominant role of MNCs in explaining the increased indebtedness of the NFC sector. Access to credit for SMEs across peripheral countries is further elaborated in Box A.

As shown in Table A, debt reduction can take place through a number of different channels. Chart 4.5 depicts the extent to

which countries have reduced debt through net loan repayments with credit institutions since February 2009²⁰. The chart does not include loans, which have been written-down, or in the case of Ireland transferred to NAMA. The chart reveals that Spanish and Irish NFCs made net repayments of loans every year since February 2009. As is the case in Ireland, most of the reduction in debt by Spanish NFCs has occurred in the construction and real estate sectors (Banco de Espana, 2012). Credit for construction has decreased by 32.5 per cent from September 2008 to June 2011 (Ministerio de Economia y Hacienda, 2011). In contrast, NFCs in Portugal and Greece only began to reduce debt in 2011 and 2012. Italian NFCs only reduced debt in 2009 and 2012. In overall terms, NFCs in Spain reduced loans with credit institutions the most, followed by Ireland.

In line with domestically-owned Irish NFCs, the other euro area peripheral NFCs are likely to deleverage through write-downs and write-offs, as well as through net debt repayments. Though it is not possible to compare the extent to which the peripheral euro area credit institutions have written-down debt or made provisions for doubtful debt, the somewhat limited available data suggests that this may be important, in terms of NFC debt reduction in some countries. Central Bank of Portugal reported that the non-performing loans recorded in the construction sector have already risen to over 19 per cent of these total loans as of November 2012, compared with 11 per cent during 2011. In the case of Spain, provisions for bad or doubtful debts for loans related to real estate and construction amounted to 26.5 per cent of these total loans at Q3 2012 (Banco de Espana, 2012). For Italian credit institutions over 9 per cent of the NFC loan book was impaired at October 2012. Construction companies accounted for 12 per cent of these impairments (Banca D'Italia, 2012). In the case of Greek NFCs, write-downs of bad debt have so far been rather limited, amounting to €2.1 billion in total, or 1 per cent of GDP, since September 2008 (Bank of Greece).

²⁰ This data source is only available from February 2009 to September 2012.

In summary, although Irish NFCs continued to increase debt by far more than the other euro area peripheral countries since 2009, this trend largely reflects the continued increase in MNC activity in Ireland in recent years. Credit institutions have decreased loans issued to

Irish NFCs considerably since September 2008 through net debt repayments, debt write-downs and write-offs, loan transfers and securitisations. This is in line with developments in other peripheral countries.

Box A: Credit Supply and Demand Factors in the Euro Area Peripheral Countries

In relation to small- and medium-sized enterprises (SMEs), loans from banks are particularly important, as their “access to market-based funding is limited” (ECB, February 2012). The ECB/ European Commission’s ‘survey of access to finance of small and medium-sized enterprises’ (SAFE) facilitates a comparison of the supply and demand factors across the euro area peripherals for SMEs. Some of the key results of these surveys are summarised in charts A.1 to A.4. Chart A.1 shows that euro area peripheral country SMEs all reported a higher proportion of loan rejections than for the total euro area between 2011 and 2012 H1. This was particularly true for Greece, but also for Portugal and Ireland. Peripheral countries also reported that the loan size or credit line available to them has decreased in the past six months, particularly in Spain, Ireland and Greece, as illustrated in Chart A.2. The proportion of SMEs who did not apply for finance for fear of rejection was considerably higher than the euro area average for Greece and Ireland, as shown in Chart 4.8. The results from charts 4.6 to 4.8 indicate that the net loan repayments in the euro area peripheral countries may be influenced to some extent by credit supply factors. Furthermore, SMEs in Portugal, Ireland and Greece all reported lower proportional levels of loan applications than the euro area as depicted in Chart 4.9, indicating that credit demand by SMEs may also be a factor in these countries.

Chart A.1: Proportion of SME Loan Applications Rejected

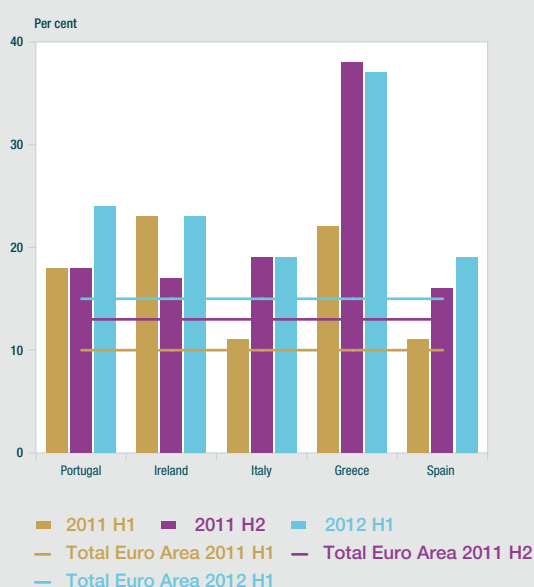
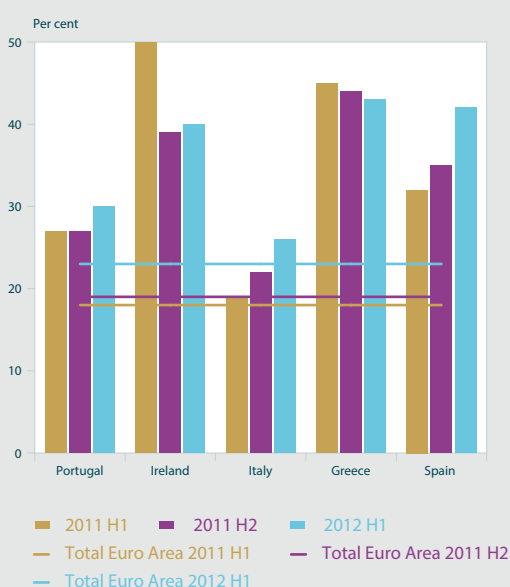
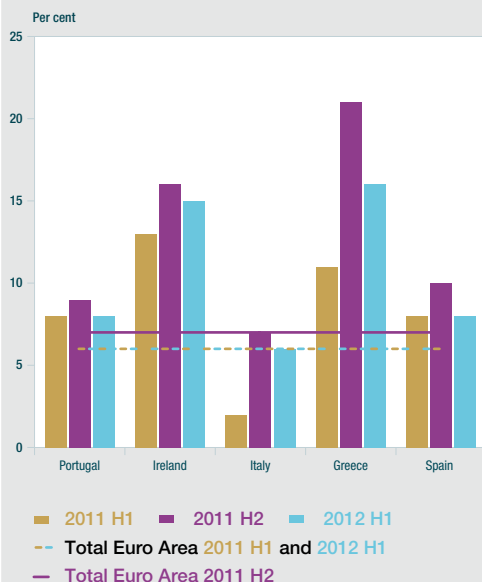
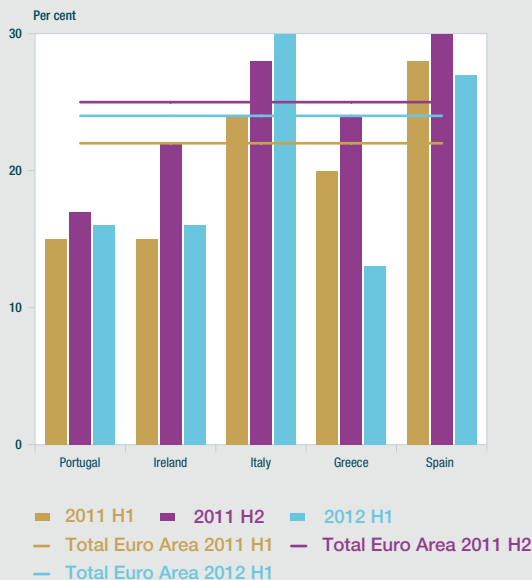


Chart A.2: SME Loan or Credit Line Size Reduced



Box A: Credit Supply and Demand Factors in the Euro Area Peripheral Countries**Chart A.3: SMEs That Did Not Apply for Loans Because of Possible Rejection**

Source: SAFE.

Chart A.4: SME Loan Applications

Source: SAFE.

Conclusion

In the years preceding the financial crisis Irish NFCs increased their debt levels significantly. Given that after almost every financial crisis countries have reduced debt levels, the continued rise in Irish NFC debt after 2008 seems counter-intuitive. This article shows that the aggregate NFC debt levels can mask the underlying dynamics at sub-sectoral level. In the Irish case, developments in overall NFC indebtedness also conceal the very different trends between foreign-owned MNCs and smaller domestic companies. The former have access to international markets and group funding and have increased indebtedness in line with the continued growth in inward direct investment. The substantial impact of MNC activity on Irish debt developments is underlined by the significant increase in funding from non-residents since 2008. Conversely, indigenous enterprises are dependent on

the domestic banking system and have been deleveraging following rapid increases in indebtedness prior to the financial crisis. Consequently, Irish NFC debt is inflated by the MNC presence and by the gross reporting of intra-company positions. While Irish NFCs had the second highest debt to GDP levels in the EU at Q2 2012, different metrics show Ireland in a relatively less indebted position, particularly when balance sheet size is taken into account. However, even where aggregate indicators appear favourable, they may conceal vulnerabilities at sub-sector level.

To assess the heterogeneity of the NFC sector for Ireland and the peripheral countries, an assessment of the underlying dynamics in the funding sources was undertaken. Results showed that funding from non-residents and Irish credit institutions are by far the most dominant. However a clear dichotomy exists between indigenous companies and MNCs,

with the former largely reliant on domestic credit institutions, whereas MNCs have access to international sources of finance. Results also showed that since September 2008, Irish NFCs have repaid loans of almost €10 billion. Most of the reduction in NFC since 2008 however, has occurred through loan write-downs or write-offs.

To further understand the trends in the aggregate NFC debt levels, an analysis of more granular data is needed. It would be beneficial to disaggregate the NFC balance sheets by functional category and would allow for a more detailed analysis of the debt sustainability of these companies. It would also allow for an examination of the extent to which entities have substituted debt financing for other forms of funding, such as trade credits or reliance on their own funds, since the financial crisis began.

References

- Banca D'Italia (2012), 'Supplements to the Statistical Bulletin: Monetary and Financial Indicators', www.bancaditalia.it, December.
- Banco de Espana (2012), Statistics Bulletin, www.db.e.es, October.
- Bank of Greece (2012), 'Credit Aggregates: Write-downs and write-offs' www.bankofgreece.gr, November.
- Blomberg, G., J. Hokkanen and S. Kahre (2012), 'Tax planning may have contributed to high indebtedness among Swedish companies', Sveriges Riksbank, Economic Commentaries, No. 3.
- Buiter, W. and E. Rahbeir (2012) 'Debt, Financial Crisis and Economic Growth', presented at the Conference on Monetary Policy and the Challenge of Economic Growth at the South Africa Reserve Bank, Pretoria, South Africa, November 1-2.
- Creedon, C., T. Fitzpatrick and E. Gaffney (2012), 'Ireland's External Debt: Economic and Statistical Realities', Economic Letter Series, No. 12.
- CSO (2012), 'Business in Ireland 2010', Chapter 2, 'An Overview of the Business Economy in Ireland', November.
- ECB, (2007), 'Corporate finance in the euro area', Occasional Paper Series No. 63, June.
- ECB (2012), 'Corporate Indebtedness in the euro area', ECB Monthly Bulletin, February.
- EU Commission (2011), 'Scoreboard for the surveillance of macroeconomic imbalances: envisaged initial design', Commission Staff Working Paper, November.
- Everett M. (2012) 'Box 3: The Statistical Implications of Multinational Companies Corporate Structures', Central Bank of Ireland, Quarterly Bulletin No. 2.
- Holton, S. and F. McCann (2012), 'Irish SME credit supply and demand: comparisons across surveys and countries', Central Bank of Ireland Economic Letter Series, Vol. 2012, No. 8.
- Honohan, P. (2009), 'Resolving Ireland's Banking Crisis' The Economic and Social Review, Vol. 40 No. 2, Summer.
- IMF (2012), 'Spain: Vulnerabilities of Private Sector Balance Sheets and Risks to the Financial Sector: Technical Notes', IMF Country Report No. 12/140, June.
- Koo, R. (2008), 'The Holy Grail of Macroeconomics: Lessons from Japan's Great Recession', John Wiley and Sons.
- Lawless, M. and F. McCann (2011), 'Credit Access for Small and Medium Firms, Survey Evidence for Ireland', Central Bank of Ireland, Research Technical Paper 11RT 11.
- McElligott, R. and M. O'Brien (2011), 'Irish Money and Banking Statistics: A New Approach', Central Bank of Ireland, Quarterly Bulletin No. 1.
- McKinsey Global Institute (2010), 'Debt and deleveraging: The global credit bubble and its economic consequences'.
- McKinsey Global Institute (2012), 'Debt and deleveraging: Uneven progress on the path to growth'.
- Ministerio de Economia y Hacienda (2011) 'Private Indebtedness: Some Highlights', http://www.thespanisheconomy.com/SiteCollectionDocuments/en-gb/Financial%20Sector/111215_Private_debt.pdf
- Reinhart, C. and K. Rogoff (2009), 'The Aftermath of Financial Crises', NBER Working Paper No. 14656.
- Ruscher, E. and G.B. Wolff (2012), 'Corporate balance sheet adjustment: stylized facts, causes and consequences', European Commission, Economic Papers 449, February.
- Tang, G. and C. Upper (2010) 'Debt reduction after crises', BIS Quarterly Review, September.

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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

	Credit Advanced to Irish Private Sector						
	Households				Non-financial corporations		
		Loans for house purchase	Consumer credit	Other loans		Loans	Securities
	1	2	3	4	5	6	7
Outstanding amounts – € million							
2011							
November	110,832	80,723	17,009	13,101	88,354	88,208	147
December	110,287	80,396	16,617	13,275	88,344	88,185	159
2012							
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	109,149	81,031	14,928	13,190	87,210	87,059	150
May	108,947	80,819	14,960	13,169	87,211	87,056	154
June	108,082	80,012	14,941	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
Transactions – € million							
2011							
November	- 363	- 221	- 142	- 1	40	39	1
December	- 65	37	- 15	- 88	- 652	- 665	13
2012							
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	- 642	- 188	- 403	- 51	- 326	- 326	-
May	- 264	- 242	21	- 44	- 334	- 338	4
June	55	94	- 15	- 24	- 401	- 399	- 2
July	- 471	- 157	- 225	- 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
Growth rates – per cent							
2011							
November	- 4.1	- 2.7	- 12.9	- 2.0	- 1.7	- 1.5	- 59.5
December	- 3.6	- 2.5	- 6.9	- 8.9	- 1.9	- 1.8	- 50.1
2012							
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	- 12.2	- 3.4	- 1.9	- 1.8	- 54.3
May	- 3.9	- 2.5	- 11.3	- 3.5	- 2.1	- 2.1	- 50.6
June	- 3.7	- 2.2	- 11.1	- 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	- 10.7	- 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

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.
- 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.
- 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.
- 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.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	
							Outstanding amounts – € million
							2011
124,914	41,980	82,934	162,137	90,734	31,559	39,844	November
124,950	42,163	82,787	162,584	91,314	30,870	40,401	December
							2012
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
120,436	40,171	80,264	167,107	91,882	30,099	45,127	April
120,794	40,665	80,129	167,173	91,991	30,328	44,854	May
118,128	40,747	77,381	163,846	92,094	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
							Transactions – € million
							2011
- 481	- 531	49	- 1,319	- 1,210	- 155	46	November
- 215	- 271	56	133	540	- 68	- 339	December
							2012
- 622	- 349	- 273	- 485	- 56	- 1,079	650	January
- 423	- 252	- 171	155	25	62	67	February
- 223	193	- 415	799	761	18	20	March
- 2,864	- 1,397	- 1,466	3,795	- 271	291	3,775	April
- 257	- 166	- 91	- 57	48	44	- 149	May
- 2,318	257	- 2,574	- 3,199	120	- 38	- 3,282	June
174	428	- 254	1,892	- 159	465	1,585	July
- 273	- 124	- 149	1,568	268	273	1,028	August
- 967	- 532	- 435	- 946	393	- 629	- 710	September
45	- 240	285	1,539	- 81	1,328	292	October
- 419	- 218	- 201	- 1,603	- 314	- 1,137	- 153	November
							Transactions – € million
							2011
- 5.2	- 19.7	4.2	- 9.0	- 3.4	- 7.7	- 20.3	November
- 10.1	- 16.6	- 6.3	- 7.3	- 3.4	- 6.0	- 15.4	December
							2012
- 9.9	- 16.0	- 6.3	- 6.9	- 3.0	- 9.1	- 12.6	January
- 9.8	- 16.5	- 6.0	- 5.9	- 2.2	- 8.0	- 10.8	February
- 9.6	- 15.3	- 6.3	- 4.3	- 0.9	- 5.3	- 9.6	March
- 9.9	- 14.4	- 7.3	- 3.4	- 1.3	- 3.5	- 7.5	April
- 9.4	- 14.3	- 6.5	- 3.0	- 0.5	- 3.3	- 7.8	May
- 11.8	- 13.0	- 11.0	- 2.5	- 0.4	- 1.1	- 7.8	June
- 10.6	- 10.0	- 11.0	- 0.8	- 0.1	0.1	- 2.9	July
- 9.6	- 9.1	- 9.9	0.7	0.8	- 0.5	1.4	August
- 8.7	- 10.1	- 7.8	1.8	0.7	- 1.2	6.4	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

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

Assets									
		Gold and Receivables	Lending to euro area credit institutions relating to monetary policy operations in euro						
				Main refinancing operations	Longer- term refinancing operations	Fine- tuning reverse operations	Structural reverse operations	Marginal lending facility	Credits related to margin calls
Outstanding amounts – € million									
2011									
30 December	176,258	233	107,236	30,520	76,286	-	-	430	-
2012									
27 January	164,054	235	92,616	23,060	69,556	-	-	-	-
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	-	-	-	-
Liabilities									
		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	
Outstanding amounts – € million									
2011									
30 December	176,258	12,978	6,029	3,734	2,295	-	-	-	-
2012									
27 January	164,054	12,282	6,059	2,299	2,360	1,400	-	-	-
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	-	-	-	-

Notes:

- For a full set of explanatory notes see:
<http://www.ecb.int/press/pr/wfs/html/wfs-userguide.en.html>
- 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 denominated 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
449	1,174	1,233	1,075	20,697	-	44,161
461	2,108	1,101	1,082	20,997	-	45,454
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

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
-	15,574	23	20	-	897	291	1,723	138,723
-	18,615	35	-	-	920	303	1,723	124,117
-	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

Table A.4: Credit Institutions – Aggregate Balance Sheet

	Total Assets								
		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
Outstanding amounts – € million									
2011									
November	1,028,538	390,602	119,989	29,593	241,020	113,931	18,571	12,279	83,081
December	1,025,896	383,645	113,322	29,687	240,636	113,613	17,638	13,029	82,946
2012									
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	940,084	362,896	98,196	28,321	236,380	116,492	18,486	17,591	80,415
May	953,834	363,399	98,683	28,048	236,669	116,020	18,616	17,121	80,283
June	953,108	362,509	99,316	28,031	235,162	114,069	19,009	17,527	77,534
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	910,248	330,698	71,683	28,046	230,970	115,309	19,734	19,154	76,421
November	899,529	331,361	73,407	28,007	229,947	114,735	18,967	19,620	76,148

	Total Liabilities							
		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
Outstanding amounts – € million								
2011								
November	1,028,538	282,550	117,899	2,514	162,137	33,047	20,486	45,115
December	1,025,896	277,536	112,228	2,725	162,584	30,503	20,446	44,536
2012								
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	940,084	265,094	95,659	2,328	167,107	26,387	16,786	38,852
May	953,834	266,674	96,833	2,668	167,173	26,395	15,564	38,570
June	953,108	264,153	97,718	2,589	163,846	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	910,248	242,189	70,491	3,562	168,136	23,519	17,337	39,948
November	899,529	244,181	72,719	4,957	166,504	22,087	18,568	40,872

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](#)
- Credit Unions entered the reporting population for Money and Banking Statistics in January 2009.
- 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.
- 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 – 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	
								Outstanding amounts – € million
								2011
111,347	192,918	68,832	76,391	6,659	-	26,445	41,412	November
114,759	190,513	69,336	78,010	6,765	-	27,517	41,739	December
								2012
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	7,798	-	18,559	34,470	April
74,360	184,466	70,315	76,982	7,839	-	21,144	39,309	May
82,292	184,682	69,976	74,359	8,037	-	21,625	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	-	22,700	34,261	October
73,134	172,245	70,089	72,249	7,807	-	22,928	34,981	November
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	
								Outstanding amounts – € million
								2011
143,452	156,460	109,570	18,561	103,925		66,492	48,880	November
141,710	157,376	109,522	17,828	108,407		67,869	50,164	December
								2012
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	111,125	17,556	89,759		60,981	40,555	April
125,423	153,121	112,182	17,174	88,010		64,973	45,748	May
130,596	150,800	116,946	16,901	90,244		63,264	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	117,765	17,373	84,371		63,999	41,880	October
116,170	136,136	117,832	17,812	77,973		65,129	42,771	November

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

	Total Assets								
		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
Outstanding amounts – € million									
2011									
November	643,321	343,225	97,649	29,292	216,284	110,335	17,627	12,179	80,528
December	634,241	337,119	92,265	29,389	215,465	110,110	16,694	12,927	80,488
2012									
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	602,589	321,843	80,067	28,083	213,693	113,265	17,706	17,487	78,072
May	602,870	321,177	79,869	27,816	213,492	112,805	17,850	17,019	77,937
June	605,698	320,703	80,912	27,805	211,986	110,846	18,195	17,422	75,228
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	565,439	289,774	54,024	27,826	207,924	112,001	18,638	19,048	74,315
November	561,570	290,369	55,668	27,778	206,922	111,103	17,558	19,514	74,031

	Total Liabilities							
		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
Outstanding amounts – € million								
2011								
November	643,321	249,971	106,120	2,486	141,366	32,590	8,070	14,458
December	634,241	243,349	99,425	2,455	141,469	30,031	7,949	13,623
2012								
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	602,589	234,438	85,843	2,322	146,273	25,925	7,265	8,861
May	602,870	234,915	86,372	2,645	145,898	25,903	7,268	8,737
June	605,698	231,865	86,937	2,551	142,378	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	565,439	208,633	60,010	3,534	145,089	23,120	7,171	7,781
November	561,570	211,353	62,173	4,932	144,247	21,684	7,851	7,289

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	
								Outstanding amounts – € million
								2011
8,520	103,597	9,192	26,988	4,908	–	19,081	17,475	November
8,546	101,142	9,207	28,507	4,385	–	18,769	16,456	December
								2012
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	5,903	–	12,324	12,364	April
8,187	93,930	8,190	26,827	5,458	–	13,105	13,190	May
7,619	98,434	7,840	26,267	6,351	–	14,810	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	–	15,700	11,657	October
7,733	86,233	7,591	25,018	6,118	–	15,452	11,953	November
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	
								Outstanding amounts – € million
								2011
11,978	82,536	89,405	2,397	73,090		59,178	19,646	November
12,760	85,129	89,243	1,742	71,986		58,994	19,435	December
								2012
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	90,936	2,125	76,958		54,334	13,502	April
11,043	76,641	90,704	2,203	75,444		56,139	13,874	May
10,913	78,843	94,878	1,932	77,764		55,726	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	95,740	1,658	65,742		56,759	13,040	November

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				
		Sep-11	Dec-11	Mar-12	Jun-12	Sep-12
1. Primary Industries	1,226	5,323	5,069	5,114	5,057	5,110
1.1 Agriculture	1,227	4,435	4,260	4,290	4,252	4,277
1.1.1 Growing of crops, market gardening, horticulture	301	473	482	474	482	482
1.1.2 Farming of animals	302	2,853	2,730	2,761	2,761	2,760
1.1.3 Other agricultural activities	303	1,110	1,048	1,055	1,009	1,034
1.2 Forestry, logging, mining and quarrying	304	566	490	505	497	538
1.3 Fishing and aquaculture	305	322	320	319	307	295
2. Manufacturing	306	4,947	5,248	5,066	5,244	5,148
2.1 Manufacture of food, beverages and tobacco products	307	2,094	2,348	2,225	2,432	2,429
2.2 Wood, pulp, paper, paper products, printing and reproduction of recorded media	308	646	669	698	670	690
2.3 Chemicals, rubber/plastic products, other non-metallic mineral products	309	740	713	624	651	647
2.4 Pharmaceutical products and preparations, medical and dental instruments and supplies	310	92	74	69	64	76
2.5 Fabricated metal products, except machinery and equipment	311	86	92	96	90	87
2.6 Computer, electronic and optical products	312	75	93	101	78	81
2.7 Production, installation and repair of commercial machinery/equipment, not including computers	313	389	432	436	460	408
2.8 Other manufacturing	314	825	827	818	799	730
3. Electricity, Gas, Steam and Air Conditioning Supply	315	795	785	773	774	575
4. Water Supply, Sewerage, Waste Management and Remediation Activities	316	142	143	138	124	125
5. Construction	317	3,266	3,005	2,948	2,891	2,877
5.1 Construction of buildings carried out on contract	318	1,596	1,470	1,447	1,393	1,385
5.2 Civil engineering activities carried out on contract	319	700	689	673	670	672
5.3 Other construction activities	320	969	846	828	828	820
6. Wholesale/Retail Trade & Repairs	321	9,267	9,430	9,274	9,129	8,859
6.1 Sale, maintenance/repair of motor vehicles, retail sale of fuel	322	1,640	1,761	1,716	1,674	1,600
6.2 Wholesale trade and commission trade (except vehicles)	323	1,606	1,843	1,777	1,688	1,647
6.3 Retail trade (except vehicles), repair of personal/household goods	324	5,088	4,898	4,866	4,848	4,853
6.4 Other wholesale/retail	325	933	928	914	919	759
7. Transportation and Storage	326	1,495	1,469	1,545	1,580	1,395
7.1 Land, water and air transport	327	902	824	907	936	760
7.2 Postal, courier, warehousing and support activities for transportation	328	304	324	316	323	302
7.3 Other transportation and storage	329	288	321	323	320	333
8. Hotels and Restaurants	330	7,906	7,720	7,709	7,678	7,688
8.1 Hotels	331	4,328	4,248	4,321	4,363	4,398
8.2 Restaurants	332	589	607	606	599	585
8.3 Bars	333	2,632	2,535	2,449	2,385	2,382
8.4 Other accommodation and catering	334	357	331	332	330	322

Notes:

* For metadata and explanatory notes see:

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.				
Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12
71	-243	34	-58	53	-46.8	-4.1	-3.3	-3.7	-4.0
19	-158	20	-38	24	-3.1	-4.5	-3.6	-3.6	-3.4
-14	9	-8	8	1	..	0.2	-3.1	-1.2	1.9
-3	-119	33	0	-1	..	-4.8	-3.3	-3.1	-3.0
36	-48	-6	-45	25	..	-5.8	-4.4	-5.9	-6.7
67	-83	15	-8	41	18.8	3.1	2.2	-1.5	-6.2
-15	-2	-1	-12	-12	-7.4	-9.1	-7.7	-8.7	-8.3
-54	123	-243	106	-82	-5.5	-1.3	-5.7	-1.3	-1.8
-21	189	-158	154	6	..	-1.8	-0.6	7.6	9.0
-14	10	29	-28	19	..	3.7	7.8	-0.4	4.6
-12	-46	-111	22	-1	..	-0.6	-22.0	-19.5	-18.3
0	-20	-4	-6	11	..	-9.1	-37.4	-32.7	-21.2
-28	6	4	-5	-3	..	22.2	-23.7	-20.9	2.0
-8	14	9	-24	3	..	16.1	6.2	-11.2	2.3
-3	19	-4	22	-50	..	-1.4	-4.9	8.1	-2.9
32	-49	-7	-26	-68	..	-6.5	-9.2	-6.0	-17.3
39	-17	-11	-8	-222	51.0	-10.3	-17.0	0.4	-31.9
21	1	-5	-15	2	19.3	19.1	14.4	0.9	-12.0
1	-30	-32	-14	-14	-43.1	2.3	-2.5	-2.4	-2.9
81	-26	-1	-11	-8	..	17.8	9.0	2.3	-2.9
-39	-8	-14	-4	2	..	-14.0	-12.1	-9.1	-3.4
-42	4	-18	0	-8	..	-9.4	-13.8	-5.8	-2.7
58	68	-196	-158	-270	-8.3	-3.4	-3.8	-2.4	-5.9
42	120	-44	-40	-74	-0.1	4.8	4.6	4.9	-2.3
-62	209	-110	-93	-41	-14.0	2.8	2.0	-3.1	-1.7
18	-246	-32	-16	5	-6.3	-8.2	-8.4	-5.4	-5.7
61	-16	-10	-10	-159	-19.3	-3.1	-2.3	3.1	-20.5
-173	-57	68	33	-184	-3.4	-4.0	-8.0	-7.9	-9.2
-90	-73	75	28	-176	..	-8.7	-8.8	-6.0	-16.0
-4	14	-8	6	-21	..	7.0	1.2	3.1	-2.5
-79	1	1	-2	13	..	-0.9	-13.5	-21.5	4.2
-62	-35	-5	-45	9	-4.1	-2.0	-2.0	-1.9	-1.0
-19	2	75	19	35	-5.8	-1.0	0.6	1.8	3.1
-16	-13	-6	-5	-15	-2.6	-6.3	-7.3	-6.6	-6.4
-18	-24	-76	-59	-3	0.0	-2.7	-5.2	-6.9	-6.3
-8	0	2	0	-8	-13.5	-2.6	-1.8	-1.4	-1.7

Table A.14 – continued

	Series Code	Outstanding amounts – € million				
		Sep-11	Dec-11	Mar-12	Jun-12	Sep-12
9. Information and Communication	335	599	583	567	463	440
9.1 Publishing of printed material	336	177	174	174	175	172
9.2 Audio-visual production and publishing, programming and broadcasting activities	337	48	49	49	28	32
9.3 Telecommunications and information service activities	338	262	248	230	145	124
9.4 Software publishing, computer programming, consultancy and related activities	339	111	111	113	114	113
9.5 Other information and communication	340	1	1	1	1	1
10. Financial Intermediation (Excl. Monetary Financial Institutions)	1,228	107,739	124,188	122,387	117,397	115,892
10.1 Financial leasing	342	1,639	1,536	1,496	1,485	1,464
10.2 Non-bank credit grantors, excluding credit unions	343	17,983	16,196	15,787	15,587	15,743
10.3 Investment funds, excluding financial vehicle corporations and money market funds	344	461	520	544	592	623
10.4 Financial vehicle corporations (FVCs)	345	69,389	87,458	86,440	82,635	81,337
10.5 Life insurance	346	2,781	2,778	2,701	1,368	1,434
10.6 Pension funding	347	78	69	69	69	69
10.7 Non-life insurance	348	169	167	231	240	195
10.8 Security broker/fund management	349	3,159	2,850	367	363	394
10.9 Other financial intermediation/Unallocated	1,229	12,079	12,615	14,751	15,058	14,632
11. Real Estate, Land and Development Activities	351	55,570	54,907	54,462	54,103	53,559
11.1 Property investment/development of residential real estate	1,230	16,288	18,221	18,296	18,622	19,020
11.2 Property investment/development of commercial real estate	1,231	17,122	14,246	14,187	14,532	14,664
11.3 Property investment/development of mixed real estate	1,232	17,826	18,276	17,928	16,938	15,802
11.4 Investment in unzoned land	358	1,004	894	863	849	843
11.5 Other real estate activities	359	3,330	3,269	3,187	3,161	3,230
12. Business and Administrative Services	360	5,014	5,138	5,020	4,692	4,748
12.1 Legal, accounting and management consultant activities	361	1,229	1,314	1,294	1,197	1,225
12.2 Architectural and engineering activities, technical testing and analysis	362	185	173	178	176	174
12.3 Scientific research and development	363	30	29	33	29	29
12.4 Rental and leasing activities, services to buildings and landscape activities	364	104	92	90	86	87
12.5 Employment, office administration and business support activities	365	280	268	268	249	279
12.6 Other business and administrative services	366	3,186	3,262	3,157	2,955	2,954
13. Other Community, Social and Personal Services	367	2,207	2,160	2,124	2,109	2,088
13.1 Recreational, cultural and sporting activities	368	908	895	869	865	867
13.2 Membership organisations (business, employers, professional, trade unions, religious, political)	369	306	304	300	296	291
13.3 Other service activities	370	994	960	955	948	930
14. Education	371	589	565	495	500	553
15. Human Health and Social Work	372	2,006	1,999	1,937	1,895	1,837
15.1 Hospitals and medical practice activities	373	1,347	1,336	1,277	1,251	1,183
15.2 Residential care activities	374	313	312	313	310	309
15.3 Other health and social work	375	346	351	347	333	345
16. Extra-Territorial Organisations and Bodies	376	0	0	0	0	0
17. Total	378	206,864	222,409	219,558	213,634	210,894
17.1 Total ex Financial Intermediation	1,233	99,126	98,221	97,171	96,238	95,002
17.2 Total ex Financial Intermediation and Property Related Sectors	1,234	40,290	40,309	39,761	39,244	38,566

Table A.14 – continued

Transactions – € million					Growth rates – per cent.				
Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12
-11	-11	-17	-103	-32	16.2	-6.9	-9.0	-23.4	-27.4
-4	-3	0	1	-18	..	-14.8	-1.7	-3.4	-11.4
0	7	0	-21	9	..	0.0	6.9	-33.7	-13.8
8	-16	-17	-84	-21	..	-4.8	-10.8	-42.8	-52.7
-15	0	1	2	-1	..	-1.2	-20.6	-10.2	1.0
0	0	0	0	0	..	-3.8	-1.9	-4.7	-19.9
-4,739	-2,926	-1,177	-5,463	-983	6.8	-10.1	-9.8	-11.8	-8.7
-85	-106	-38	-15	-24	..	2.7	-11.3	-14.2	-11.2
-237	-1,780	-364	-371	192	..	-28.9	-19.9	-15.1	-12.9
-75	54	26	43	33	..	22.6	-35.4	8.6	33.5
-2,982	-499	-642	-3,900	-626	..	-4.7	-4.7	-9.8	-6.6
-153	-13	-73	-1,353	71	..	-7.9	-11.0	-53.4	-49.1
-6	8	0	-1	1	..	13.2	26.9	2.1	10.4
24	-6	67	2	-43	..	-27.7	58.9	59.9	12.2
-406	-400	-17	-6	31	..	-39.4	-37.3	-24.7	-7.3
-820	-184	-135	138	-618	..	-11.6	-15.8	-7.9	-5.7
329	-581	-182	-599	-537	1.4	0.5	0.0	-1.9	-3.4
126	-358	185	-76	71	..	-1.2	2.1	-0.9	-1.2
-91	-49	-384	-101	12	..	-0.5	-3.2	-4.2	-3.6
280	-72	30	-372	-681	..	4.0	1.3	-0.8	-6.2
-1	-54	-27	-13	-9	..	-3.3	-7.8	-9.6	-10.5
15	-49	14	-37	69	..	0.0	-1.4	-1.7	0.0
-91	-276	-19	-232	41	-3.0	-14.3	-8.7	-11.8	-9.4
-45	10	-9	-98	12	..	-22.0	-6.6	-10.8	-6.6
7	-12	6	-3	-2	..	6.7	19.1	-1.3	-5.9
-3	0	3	-4	0	..	1.2	12.2	-10.5	-3.3
-2	-12	0	-4	0	..	-35.7	-32.3	-16.6	-14.9
-11	-11	0	-21	30	..	4.3	-17.0	-15.4	-1.0
-37	-250	-18	-103	0	..	-12.2	-9.2	-12.4	-11.3
-33	-35	-33	-16	-21	-68.8	-45.6	-6.1	-5.3	-4.8
-3	-1	-24	-4	1	..	-53.3	-6.2	-3.6	-3.2
-6	-8	-4	-5	-4	..	-25.8	-7.3	-7.1	-6.7
-24	-26	-5	-8	-18	..	-42.8	-5.7	-6.1	-5.7
-50	-32	-70	6	52	-36.1	-22.8	-27.6	-22.8	-7.5
-11	10	-61	-40	-58	-7.5	0.4	-2.9	-5.1	-7.5
-11	15	-58	-29	-68	..	-1.1	-4.6	-6.2	-10.6
-4	-15	1	1	-2	..	-22.2	-1.7	-5.4	-4.6
4	11	-4	-12	12	..	42.0	2.2	-0.7	1.7
0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
-4,704	-4,042	-1,950	-6,605	-2,246	0.2	-6.6	-6.2	-7.8	-6.7
34	-1,116	-773	-1,143	-1,263	-4.5	-2.6	-2.1	-3.0	-4.3
-296	-505	-558	-530	-712	-9.1	-7.1	-4.8	-4.6	-5.7

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

	Series Code	Outstanding amounts – € million				
		Sep-11	Dec-11	Mar-12	Jun-12	Sep-12
1. Primary Industries	900	2,760	2,986	2,873	2,794	2,563
2. Manufacturing	901	4,173	4,413	3,827	3,891	4,018
3. Electricity, Gas, Steam and Air Conditioning Supply	902	517	524	495	487	504
4. Water Supply, Sewerage, Waste Management and Remediation Activities	903	60	49	47	53	58
5. Construction	904	1,925	1,965	1,835	1,747	1,720
6. Wholesale/Retail Trade & Repairs	905	4,313	4,348	3,603	3,765	3,684
7. Transportation and Storage	906	2,665	2,397	2,461	2,480	2,451
8. Hotels and Restaurants	907	668	615	568	632	695
9. Information and Communication	908	974	1,106	1,039	1,001	982
10. Financial Intermediation (Excl. Monetary Financial Institutions)	1,240	40,937	40,303	41,227	41,521	44,042
11. Real Estate, Land and Development Activities	910	3,993	3,782	3,590	3,676	3,647
12. Business and Administrative Services	911	7,143	7,035	7,481	7,683	7,772
13. Other Community, Social and Personal Services	912	4,401	4,168	4,239	4,345	4,287
14. Education	913	1,768	1,714	1,832	1,763	1,882
15. Human Health and Social Work	914	1,168	1,024	1,113	1,125	1,161
16. Extra-Territorial Organisations and Bodies	915	3	0	0	0	0
17. Total	917	77,469	76,429	76,230	76,964	79,466

Notes:

* For metadata and explanatory notes see:

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.				
Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12
24	227	-61	-88	-229	8.7	-1.3	6.0	3.7	-5.7
12	308	-567	19	142	-10.8	-4.3	-15.5	-5.7	-2.5
-7	14	-27	-10	17	-23.3	-30.7	-11.9	-5.9	-1.3
2	-12	-1	6	4	-70.4	7.4	-18.8	-9.1	-5.4
-100	57	-130	-89	-27	-21.4	-13.2	-3.1	-13.0	-9.9
-10	344	-687	147	198	1.9	5.7	-4.5	-5.6	-0.4
82	-280	75	-10	-25	-11.9	-15.7	6.6	-5.1	-9.0
18	-53	-46	63	64	-18.8	-6.3	-9.4	-2.9	4.1
5	141	-65	-46	-18	-25.4	0.3	0.8	3.5	1.1
-4,250	-404	747	414	1,879	-25.4	-17.0	-11.5	-7.8	6.5
-65	-42	-190	82	-29	-8.6	-13.9	-21.9	-5.4	-4.6
153	-141	473	126	114	-5.9	5.0	3.2	8.7	8.0
19	-236	16	99	-59	-8.5	-8.9	-3.1	-2.3	-4.1
42	-50	118	-70	119	1.5	-6.6	-4.8	2.3	6.7
38	-109	-3	8	37	-29.5	-4.6	-3.3	-5.9	-6.0
3	-3	0	0	0	0.0	0.0	0.0	0.0	0.0
-4,034	-239	-348	649	2,187	-17.9	-11.7	-8.5	-4.9	2.9

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

Series Code	Total Lending									
	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
Outstanding amounts – € million										
2011										
September	117,872	97,964	85,002	31,764	52,026	1,212	12,963	6,498	4,991	1,473
December	99,955	80,396	69,117	28,154	39,599	1,363	11,279	5,995	4,060	1,223
2012										
March	98,713	79,874	69,496	28,810	39,403	1,284	10,377	5,411	3,783	1,184
June	97,945	80,012	70,969	30,522	39,135	1,311	9,043	4,503	3,384	1,156
September	96,939	79,355	71,379	31,242	38,721	1,417	7,976	3,787	3,052	1,137
Transactions – € million										
2011										
September	-1,489	-659	20	687	-607	-60	-679	-274	-318	-87
December	-916	-503	-177	1,142	-1,445	127	-326	-202	-203	79
2012										
March	-1,143	-500	402	657	-175	-80	-902	-586	-278	-39
June	-728	-335	982	1,041	-52	-8	-1,317	-864	-425	-27
September	-721	-298	764	875	-214	103	-1,062	-726	-315	-21
Growth rates – per cent.										
2011										
September	-1.5	-2.4	..	..	..	..	..	..	..	..
December	-3.1	-2.4	-2.5	1.7	-5.1	-1.5	-1.6	2.4	-7.2	1.3
2012										
March	-4.1	-2.4	0.0	8.1	-4.9	-1.8	-16.2	-16.0	-19.0	-5.6
June	-3.9	-2.2	1.8	12.3	-4.4	-1.6	-25.6	-29.5	-25.4	-5.9
September	-3.4	-1.9	2.9	13.0	-3.9	11.5	-30.9	-38.4	-28.1	-2.1

Notes:

* For metadata and explanatory notes see:

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

Total Lending			Total Deposits	
Other personal				
	Finance for investment	Finance for other purposes		
1,252	1,253	1,254	962	Series Code
Outstanding amounts – € million				
2011				
19,908	2,800	17,108	86,523	September
19,559	2,794	16,765	86,155	December
2012				
18,839	2,725	16,114	86,910	March
17,933	2,748	15,186	86,882	June
17,584	2,556	15,029	87,216	September
Transactions – € million				
2011				
-830	-66	-763	-497	September
-413	-100	-313	-390	December
2012				
-643	-61	-582	826	March
-393	-41	-352	-89	June
-423	-82	-341	342	September
Growth rates – per cent.				
2011				
3.3	1.1	3.4	-5.0	September
-6.3	-7.6	-6.2	-3.3	December
2012				
-11.6	-7.6	-12.2	-0.7	March
-11.0	-9.3	-11.3	-0.2	June
-9.5	-9.9	-9.4	0.8	September

Table A.19.1: All Credit Institutions: International Business: Analysis by Currency and Sector

€ million	Jun-12	Sep-12
Assets		
1. Analysis by currency		
<i>Irish residents in non-euro</i>	30,820	29,701
US Dollar	15,369	14,809
Sterling	13,487	12,999
Other	1,965	1,893
<i>Non-residents in non-euro</i>	218,584	213,796
US Dollar	89,983	88,836
Sterling	103,860	98,749
Other	24,740	26,211
<i>Non-residents in euro</i>	179,708	177,056
2. Analysis by sector		
<i>Irish residents in non-euro</i>		
Monetary financial institutions	4,738	4,279
Non-monetary financial institutions	26,082	25,422
<i>Non-residents in non-euro</i>		
Monetary financial institutions	112,402	110,374
Non-monetary financial institutions	106,182	103,422
<i>Non-residents in euro</i>		
Monetary financial institutions	108,551	103,703
Non-monetary financial institutions	71,157	73,353
3. Total international business	429,112	420,554

Table A.19.1 – continued

€ million	Jun-12	Sep-12
Liabilities		
1. Analysis by currency		
<i>Irish residents in non-euro</i>	22,910	23,741
US Dollar	14,541	15,042
Sterling	5,722	6,175
Other	2,646	2,524
<i>Non-residents in non-euro</i>	157,820	155,746
US Dollar	65,491	66,423
Sterling	68,140	65,157
Other	24,189	24,166
<i>Non-residents in euro</i>	177,035	166,688
2. Analysis by sector		
<i>Irish residents in non-euro</i>		
Monetary financial institutions	9,541	8,684
Non-monetary financial institutions	13,369	15,057
<i>Non-residents in non-euro</i>		
Monetary financial institutions	98,365	95,624
Non-monetary financial institutions	59,455	60,122
<i>Non-residents in euro</i>		
Monetary financial institutions	132,886	124,391
Non-monetary financial institutions	44,149	42,297
3. Total international business	357,765	346,174

Table A.19.2: All Credit Institutions: International Business: Analysis by Geographic Area

	Liabilities			Assets			Net external liabilities ^a
	Euro	Non-euro	Total	Euro	Non-euro	Total	
€ million	Jun-12						
1. EU Countries	168,202	144,666	312,868	169,182	185,454	354,636	- 33,858
MU Countries	110,395	59,070	169,465	128,926	52,290	181,215	- 3,840
Austria	1,235	96	1,331	1,633	351	1,984	- 653
Belgium	23,954	5,607	29,560	4,384	1,020	5,404	24,157
Luxembourg	833	1,471	2,303	4,197	1,087	5,284	- 2,981
Finland	22	-	22	829	174	1,004	- 982
France	27,132	9,945	37,077	21,053	5,525	26,579	10,498
Germany	37,710	5,196	42,906	17,638	2,910	20,548	22,358
Greece	7	14	22	128	82	210	- 188
Ireland	-	22,910	22,910	-	30,820	30,820	-
Italy	11,749	395	12,144	42,727	5,258	47,985	- 35,841
Netherlands	6,493	13,291	19,784	12,817	2,635	15,452	4,333
Portugal	22	9	31	1,539	-	1,539	- 1,508
Spain	1,089	53	1,142	20,455	2,058	22,513	- 21,371
Other MU ^b	149	83	232	1,525	369	1,894	- 1,662
Other EU	57,807	85,596	143,403	40,256	133,165	173,421	- 30,018
Denmark	7,052	251	7,304	7,778	1,025	8,803	- 1,499
Sweden	21	278	300	444	1,205	1,649	- 1,350
United Kingdom	50,697	84,995	135,693	29,338	128,088	157,426	- 21,734
Other EU	36	71	107	2,696	2,846	5,543	- 5,436
2. Other Europe	1,769	3,900	5,669	1,756	8,809	10,564	- 4,895
Switzerland	1,642	3,470	5,112	545	4,605	5,149	- 37
Other Europe	127	430	557	1,211	4,204	5,415	- 4,858
3. Other Industrial Countries	2,942	23,474	26,416	7,173	42,197	49,370	- 22,954
Australia, New Zealand, South Africa	234	40	274	443	1,733	2,176	- 1,903
Canada	65	7,974	8,038	1,188	2,754	3,942	4,096
Japan	99	45	144	108	3,434	3,542	- 3,398
United States	2,545	15,415	17,960	5,434	34,277	39,710	- 21,750
4. Offshore Centres	3,591	7,158	10,749	149	6,254	6,403	4,345
5. Other	532	1,531	2,063	1,449	6,689	8,138	- 6,075
Grand Total	177,035	180,730	357,765	179,708	249,404	429,112	- 63,437

^a 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.

^b Positions vis-a-vis Slovenia, Cyprus, Malta, Slovakia and Estonia are not statistically significant.

Table A.19.2 – continued

Liabilities			Assets			Net external liabilities ^a
Euro	Non-euro	Total	Euro	Non-euro	Total	
Sep-12						
161,580	145,396	306,976	165,938	181,463	347,401	- 34,465
107,493	61,804	169,297	127,975	51,556	179,531	- 4,274
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
823	1,560	2,384	3,471	1,125	4,596	- 2,213
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
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
54,087	83,592	137,679	37,962	129,907	167,870	- 30,191
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
1,593	4,068	5,662	1,578	8,806	10,384	- 4,722
1,436	3,383	4,819	491	4,580	5,071	- 252
157	686	843	1,087	4,226	5,312	- 4,470
1,345	22,209	23,554	7,680	41,260	48,940	- 25,386
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
1,603	6,414	8,016	353	5,329	5,681	2,335
567	1,400	1,967	1,508	6,640	8,148	- 6,181
166,688	179,487	346,174	177,056	243,498	420,554	- 68,419

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

Assets								
	Total	Deposits and loan claims	Securities other than shares				Money market fund shares/units	Other assets including shares and other equities
			Issued by Irish residents	Issued by other euro area residents	Issued by non-euro area residents			
					MFIs	Other		
Outstanding Amounts – € million								
2011								
November	382,485	126,616	2,807	69,487	129,039	52,585	875	1,077
December	287,600	75,266	1,561	51,552	109,527	48,411	-	1,283
2012								
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
Liabilities								
	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				
Outstanding amounts – € million								
2011								
November	382,485	17,436	53,721	303,948	7,380			
December	287,600	13,317	36,529	235,427	2,327			
2012								
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			

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

	Assets								
	Total	Loans				Securities other than shares			
						Issued by Irish residents			
		Euro	Sterling	USD	Other	Euro	Sterling	USD	Other
Outstanding Amounts – € million									
2010									
June	345,479	8,795	9,923	17,999	373	2,199	1,945	669	20
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
2011									
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
2012									
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
		Securities other than shares							
		Issued by other euro area residents				Issued by non-euro area residents			
		Euro	Sterling	USD	Other	Euro	Sterling	USD	Other
2010									
June		48,317	21,015	14,463	437	17,682	85,703	114,646	1,293
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
2011									
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
2012									
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

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 €114 billion of funds previously classified as MMFs 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.

Section B

Interest Rates

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

	Households				Non-financial corporations		
	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
Rates (per cent per annum)							
2011							
October	0.66	2.43	3.40	2.09	0.23	3.10	1.21
November	0.65	2.32	3.44	2.28	0.24	3.13	1.33
December	0.62	2.33	3.49	2.35	0.23	3.27	1.29
2012							
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
Volumes (€ million)							
2011							
October	35,251	12,824	28,989	3,733	16,391	12,994	546
November	34,059	12,482	28,868	3,908	16,572	13,311	535
December	34,353	12,246	29,055	4,021	15,830	12,559	474
2012							
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

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

Households							
	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
Rates (per cent per annum)							
2011							
October	13.32	3.73	3.59	3.40	9.27	6.36	4.49
November	13.33	3.68	3.52	3.23	9.25	6.34	4.47
December	13.36	3.60	3.31	3.06	9.30	6.32	4.41
2012							
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
Volumes (€ million)							
2011							
October	4,538	535	686	79,163	6,663	7,825	10,719
November	4,404	527	666	79,110	6,502	7,853	10,671
December	4,540	470	608	78,888	6,555	7,707	10,582
2012							
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

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	
Rates (per cent per annum)				
2011				
5.32	3.95	3.82	3.66	October
5.23	3.92	3.81	3.66	November
5.17	3.85	3.82	3.60	December
2012				
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
Volumes (€ million)				
2011				
9,811	23,209	24,545	40,811	October
10,205	23,657	24,431	40,826	November
9,907	23,435	24,506	40,801	December
2012				
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

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

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)**2011**

October	3.30	4.56	3.46	4.95	10.96	6.40	4.89
November	3.12	4.33	3.25	4.86	10.70	6.19	5.55
December	2.98	4.22	3.12	5.04	9.83	5.72	5.32

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	4.04	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

Volumes (€ million)**2011**

October	772	108	-	158	50	-	85
November	957	114	-	179	52	-	81
December	752	95	-	200	32	-	54

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	90	-	123	26	-	36
October	810	162	-	86	28	-	44

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			
Rates (per cent per annum)						
2011						
3.92	6.16	3.17	3.19	2.40	2.20	October
5.29	6.06	3.38	3.03	2.40	2.02	November
4.69	5.99	3.68	3.96	2.55	2.17	December
2012						
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
Volumes (€ million)						
2011						
432	38	1,083	26	7,859	4,878	October
326	43	1,118	11	7,747	4,638	November
341	44	963	19	7,822	4,707	December
2012						
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

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								
2011								
October	2.25	0.75	1.50	0.94	1.37	1.59	2.12	1.65 - 2.90
November	2.00	0.50	1.25	0.81	1.21	1.47	2.04	1.70 - 2.80
December	1.75	0.25	1.00	0.63	1.02	1.36	1.95	1.63 - 2.70
2012								
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

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.

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		
Outstanding amounts – € million									
2011									
March	649,414	4,506	2,041	19,858	5,286	39,446	178,724		
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		
2012									
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		
Transactions – € million									
2011									
March	18,479	414	273	1,146	-497	1,869	-5,796		
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		
2012									
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		
		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
Outstanding amounts – € million									
2011									
March	649,414	6,658	25,170	31,828	38,347	144,957	183,305	392,790	607,923
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
2012									
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
Transactions – € million									
2011									
March	18,479	-3,601	-13,613	-17,214	-1,989	-7,517	-9,506	41,903	15,184
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
2012									
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

Note 1: Investment fund shares/units data has been revised to smooth the year-on-year changes arising from the Fund Annual Survey of Liabilities over four quarters for each survey.

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
14,174	44,708	226,522	32,901	7,322	24,864	10	0	134	48,917
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
2,228	5,814	2,220	112	511	3,561	0	0	15	6,608
-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
Loans and deposits received	Other liabilities								
Total	Total								
4,792	36,700								
5,419	41,936								
5,626	50,165								
6,094	43,887								
12,292	53,810								
8,383	59,707								
19,787	72,821								
1,038	2,258								
566	4,684								
-141	5,509								
428	-7,637								
6,278	10,529								
-4,423	712								
11,584	13,133								

Note 2: 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.2.1: Securities Issues Statistics: Debt Securities

€ million

Debt securities: All currencies

Short-term securities

	Total	MFIs	OFIs	IC&PF	NFCs	Govt
Outstanding amounts						
2011						
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
2012						
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
Transactions						
2011						
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
2012						
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

Table C.2.1 – continued

Debt securities: All currencies

Long-term securities

Total	MFIs	OFls	IC&PF	NFCs	Govt
983,253	99,327	787,741	2,277	3,734	90,174
976,238	99,508	780,791	2,261	3,596	90,081
960,277	94,511	770,128	2,197	3,549	89,892
952,915	93,242	765,026	2,108	2,867	89,673
953,544	92,760	766,046	2,167	2,906	89,666
949,508	91,083	763,843	2,152	2,719	89,711
953,672	90,892	768,009	2,182	2,816	89,773
941,799	90,407	756,549	2,167	2,806	89,870
944,346	89,300	760,078	2,294	2,990	89,684
937,762	88,370	754,435	2,245	2,939	89,773
941,747	88,896	762,151	2,328	2,993	85,380
948,454	86,035	771,566	2,400	3,044	85,410
938,509	83,110	764,567	2,382	3,032	85,419
931,945	79,955	761,207	2,346	3,008	85,429
939,447	76,399	777,910	2,382	3,012	79,745
939,251	74,291	776,586	2,364	2,774	83,237
959,745	74,484	796,651	2,516	2,859	83,234
951,585	73,453	789,620	2,457	2,825	83,230
966,229	73,468	804,179	2,537	2,832	83,214
953,550	72,078	788,796	2,482	2,798	87,397
948,964	71,581	783,747	2,424	2,606	88,606
947,526	70,794	783,969	2,406	2,002	88,356
947,346	69,695	785,034	1,829	2,400	88,389
218	-1,792	3,872	-1,909	68	-21
-7,010	181	-6,945	-17	-137	-92
-15,940	-4,997	-10,643	-64	-47	-189
-7,333	-1,269	-5,074	-89	-683	-219
610	-482	1,001	59	40	-7
-2,653	-1,677	-819	-15	-188	45
2,776	-192	2,778	30	97	62
-11,868	-484	-11,455	-15	-10	96
2,507	-1,108	3,488	127	184	-185
-6,568	-930	-5,626	-50	-51	89
3,958	526	7,688	84	53	-4,393
6,684	-2,861	9,392	72	51	30
-9,945	-2,924	-6,999	-18	-12	9
-6,564	-3,155	-3,360	-36	-25	11
7,502	-3,557	16,703	36	5	-5,685
-196	-2,108	-1,324	-18	-239	3,492
20,494	193	20,065	152	85	-3
-8,159	-1,031	-7,031	-59	-34	-4
14,644	15	14,559	80	7	-16
-12,679	-1,390	-15,383	-55	-34	4,183
-4,586	-497	-5,049	-58	-192	1,209
-1,438	-787	222	-19	-604	-250
-180	-1,099	1,065	-577	398	33

Table C.2.1 – continued

€ Million

Debt securities: Euro denominated

Short-term securities

	Total	MFIs	OFIs	IC&PF	NFCs	Govt
Outstanding amounts						
2011						
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
2012						
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
Transactions						
2011						
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
2012						
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	-3,990	-3,078	-1,273	0	0	361

Table C.2.1 – continued

Debt securities: Euro denominated

Long-term securities

Total	MFIs	OFls	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
-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
-180	-1,099	1,065	-577	398	33

Table C.2.2: Securities Issues Statistics: Equities

€ million

Equity Securities**Quoted securities**

	Total	MFIs	OFIs	IC&PF	NFCs	Govt
Outstanding amounts						
2011						
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	..
2012						
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	..
Transactions						
2011						
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	..
2012						
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	..

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

Outstanding Amounts - € billions

	2010Q3	2010Q4	2011Q1	2011Q2	2011Q3	2011Q4	2012Q1	2012Q2	2012Q3
Assets									
Deposits and loan claims	71.9	87.3	80.0	83.3	77.9	76.5	74.2	72.7	72.9
<i>To euro area FVCs</i>	17.6	35.0	35.6	36.2	38.4	38.4	38.6	35.9	36.1
Securitised loans	225.9	266.2	259.2	254.3	244.2	231.4	227.5	226.4	222.6
Originated by euro area MFIs	151.9	194.6	189.6	187.3	158.4	145.7	144.4	143.6	141.8
By borrowing sector									
<i>Domestic households</i>	70.8	74.8	69.6	69.4	59.6	59.2	60.2	59.6	58.4
<i>OMUM households</i>	10.2	11.7	10.5	9.9	8.5	3.7	3.2	2.7	2.3
<i>Domestic non-financial corporations</i>	20.8	44.5	54.9	41.9	54.0	56.5	54.4	54.8	54.5
<i>OMUM non-financial corporations</i>	29.4	31.3	28.4	34.1	13.1	6.7	6.8	6.3	7.1
<i>Euro area residents (*)</i>	1.6	1.0	0.9	4.7	4.3	0.5	0.5	0.4	0.4
<i>Non euro area residents</i>	19.1	31.3	25.4	27.3	18.9	19.1	19.3	19.9	19.1
Originated by euro area residents (*)	16.0	15.8	12.1	12.1	14.7	14.6	14.5	14.4	14.3
Originated by euro area non-financial corporations	18.7	17.3	16.9	16.5	17.8	18.5	18.1	17.7	18.0
Originated by non-euro area residents	39.3	38.4	40.5	38.5	53.3	52.7	50.5	50.7	48.6
Securities other than shares	157.6	153.0	149.5	138.5	135.4	132.6	121.2	120.6	111.9
<i>Issued by euro area FVCs</i>	22.1	20.6	19.0	18.5	17.0	15.7	14.9	14.7	13.2
Other securitised assets	13.3	12.0	11.7	12.0	11.5	11.3	10.4	9.6	9.3
<i>Originated by euro area general government</i>	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1
<i>Originated by euro area non-financial corporations</i>	3.6	3.3	3.1	3.1	3.0	2.7	2.3	2.2	1.9
Shares and other equity	34.0	34.9	30.1	29.0	27.9	26.1	25.2	19.4	17.5
<i>Issued by euro area FVCs</i>	30.6	31.4	27.1	26.2	24.9	23.3	22.7	17.0	15.0
Other assets	18.4	22.7	13.3	16.5	19.9	21.6	22.4	20.5	22.3
Liabilities									
Loans and deposits received	48.9	65.4	63.2	63.0	62.6	64.1	63.3	65.4	64.2
<i>From euro area FVCs</i>	21.5	39.0	39.4	38.8	39.0	39.0	39.0	37.0	37.0
Debt securities issued	436.9	444.2	416.9	408.5	386.8	369.2	350.0	333.7	324.7
<i>Up to 1 year original maturity</i>	25.0	24.5	24.8	25.2	23.6	24.7	19.6	16.6	15.9
<i>1 to 2 years original maturity</i>	5.3	7.0	5.5	5.1	5.4	6.0	5.5	4.3	5.4
<i>Over 2 years original maturity</i>	406.7	412.7	386.6	378.3	357.8	338.6	324.9	312.8	303.4
Capital and reserves	1.8	1.8	0.0	0.1	0.1	0.0	0.0	- 0.4	- 0.2
Other liabilities	33.5	64.7	63.6	62.2	67.2	66.3	67.6	70.6	67.8
Total	521.1	576.1	543.8	533.7	516.6	499.6	480.9	469.2	456.4

(*) 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

	2010Q3	2010Q4	2011Q1	2011Q2	2011Q3	2011Q4	2012Q1	2012Q2	2012Q3
Assets									
Deposits and loan claims	-1.8	15.4	-6.6	3.4	-5.9	-1.3	-2.0	-1.6	0.5
<i>To euro area FVCs</i>	2.7	17.5	0.4	0.9	1.9	-	0.1	-2.8	0.2
Securitised loans	-0.9	13.6	-7.1	-3.9	-12.9	-15.0	-3.4	-1.6	-3.8
Originated by euro area MFIs	3.1	15.4	-6.2	-1.1	-4.8	-13.3	-0.6	-1.3	-2.1
By borrowing sector									
Domestic households	3.3	3.5	-3.5	-2.8	-1.5	0.3	0.8	-1.1	-1.4
OMUM households	-0.8	1.2	-1.2	-0.6	-1.0	-4.9	-0.5	-0.5	-0.4
Domestic non-financial corporations	0.4	9.1	-0.4	-1.9	1.5	2.0	-1.1	-	-0.4
OMUM non-financial corporations	0.6	-0.5	-0.6	4.0	-0.5	-6.5	0.1	0.5	0.9
Euro area residents (*)	-	-0.7	-0.1	3.7	-	-3.9	0.2	-0.1	0.1
Non euro area residents	-0.3	2.8	-0.4	-3.5	-3.4	-0.4	0.1	-	-0.9
Originated by euro area residents (*)	0.1	-0.1	-3.6	-	-0.1	-0.1	-0.2	-	-0.1
Originated by euro area non-financial corporations	0.3	-1.3	-0.1	-0.4	0.1	0.8	-0.3	-0.4	0.2
Originated by non-euro area residents	-4.4	-0.4	2.9	-2.4	-8.2	-2.3	-2.3	0.1	-1.8
Securities other than shares	-9.4	-3.0	-2.8	-10.0	-3.5	-3.2	-11.5	-1.6	-9.5
<i>Issued by euro area FVCs</i>	-2.0	-2.0	-0.7	-0.2	-0.4	-0.9	-0.5	-0.8	-1.3
Other securitised assets	-	-1.2	0.1	0.3	-0.6	-0.1	-1.1	-0.9	-0.3
<i>Originated by euro area general government</i>	-	-	-	-	-	-	-	-0.1	-0.1
<i>Originated by euro area non-financial corporations</i>	0.1	-0.3	-	-	-0.1	-0.3	-0.4	-0.1	-0.3
Shares and other equity	-0.7	-0.1	-4.7	-0.9	-1.2	-1.7	-0.8	-5.9	-2.0
<i>Issued by euro area FVCs</i>	-0.5	-0.4	-4.2	-0.9	-1.3	-1.6	-0.7	-5.7	-2.0
Other assets	1.8	3.6	-12.2	-2.8	-6.9	-1.2	-2.0	-4.2	0.6
Liabilities									
Loans and deposits received	2.6	16.6	-1.7	0.2	-0.8	1.4	-0.3	1.9	-1.1
<i>From euro area FVCs</i>	2.4	17.6	0.2	-0.2	0.2	-0.1	-	-2.1	-
Debt securities issued	-11.1	10.5	-26.0	-11.6	-21.8	-17.7	-18.9	-17.6	-9.6
<i>Up to 1 year original maturity</i>	-	0.2	0.1	-3.7	-2.8	1.0	-5.6	-3.0	-0.7
<i>1 to 2 years original maturity</i>	-3.0	1.9	-1.5	-0.4	0.4	0.7	-0.6	-1.1	0.7
<i>Over 2 years original maturity</i>	-8.2	8.4	-24.6	-7.5	-19.4	-19.4	-12.7	-13.5	-9.6
Capital and reserves	0.2	-1.5	-1.6	0.6	-1.1	-0.7	-0.1	-0.4	0.3
Other liabilities	-2.6	2.5	-4.1	-3.2	-7.3	-5.6	-1.5	0.1	-3.8
Total	-11.0	28.2	-33.3	-14.0	-30.9	-22.6	-20.8	-15.9	-14.3

(*) 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, Q2 2012

	Total Assets	Total Liabilities	Net Financial Wealth	Total Assets Transactions	Total Liabilities Transactions	Net Financial Borrowing/ Lending
€ million						
Non-financial corporations	640,528	820,149	-179,621	9,509	20,020	-10,511
Financial corporations	3,590,018	3,623,759	-33,741	10,727	350	10,377
Monetary financial institutions	1,396,629	1,410,359	-13,730	2,389	9,814	-7,425
Other financial intermediaries and financial auxiliaries	1,900,007	1,915,695	-15,688	7,770	-10,238	18,008
Insurance corporations and pension funds	293,382	297,705	-4,323	568	775	-207
General government	68,710	192,694	-123,985	1,432	5,617	-4,186
Households and non-profit institutions serving households	312,941	187,894	125,047	1,226	-1,670	2,896
Rest of the world	3,252,406	3,039,089	213,317	464	-1,006	1,470

Table D.1.1: Financial Balance Sheet By Sector, Q2 2012

	Total Assets								
		Gold & SDRs	Currency & Deposits			Securities other than shares			
				Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives
€ million									
Non-financial corporations	640,528	0	50,521	20,291	30,231	3,114	524	2,288	301
Financial corporations	3,590,018	1,018	607,320	100,518	506,802	1,252,776	331,873	861,261	59,642
Monetary financial institutions	1,396,629	1,018	492,992	74,862	418,130	521,966	209,629	279,504	32,834
Other financial intermediaries and financial auxiliaries	1,900,007	0	87,648	22,098	65,549	651,188	117,980	509,178	24,031
Insurance corporations and pension funds	293,382	0	26,680	3,558	23,123	79,621	4,265	72,579	2,777
General government	68,710	0	20,439	0	20,439	8,513	0	7,332	1,181
Households and non-profit institutions serving households	312,941	0	123,753	54,548	69,205	470	0	170	300
Rest of the world	3,252,406	0	412,136	58,527	353,609	600,064	18,208	527,605	54,251

	Total Liabilities								
		Gold & SDRs	Currency & Deposits			Securities other than shares			
				Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives
€ million									
Non-financial corporations	820,149	0	0	0	0	11,344	0	9,701	1,643
Financial corporations	3,623,759	0	829,780	130,076	699,704	650,461	42,048	546,080	62,333
Monetary financial institutions	1,410,359	0	829,780	130,076	699,704	125,030	9,869	77,142	38,019
Other financial intermediaries and financial auxiliaries	1,915,695	0	0	0	0	522,975	32,179	466,481	24,314
Insurance corporations and pension funds	297,705	0	0	0	0	2,457	0	2,457	0
General government	192,694	0	16,191	679	15,513	85,713	4,056	80,630	1,026
Households and non-profit institutions serving households	187,894	0	0	0	0	0	0	0	0
Rest of the world	3,039,089	0	368,197	103,128	265,069	1,117,419	304,501	762,245	50,673

Table D.1.1 – continued

Total Assets

Loans			Shares and other equity				Insurance technical reserves				Other accounts receivable/payable	€ million
	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		
187,952	82,751	105,201	268,409	2,040	262,895	3,474	4,745	0	0	4,745	125,787	Non-financial corporations
1,000,008	224,011	775,998	632,212	n.a.	n.a.	158,499	31,257	0	0	31,257	65,427	Financial corporations
346,901	63,600	283,300	22,698	9,512	9,844	3,342	0	0	0	0	11,054	Monetary financial institutions
648,152	158,521	489,631	476,071	355,539	35,163	85,369	0	0	0	0	36,948	Other financial intermediaries and financial auxiliaries
4,956	1,890	3,066	133,443	63,654	0	69,789	31,257	0	0	31,257	17,425	Insurance corporations and pension funds
8,071	240	7,831	23,258	7,013	14,573	1,671	0	0	0	0	8,429	General government
0	0	0	46,744	9,178	37,567	0	134,561	65,348	67,383	1,830	7,413	Households and non-profit institutions serving households
525,053	218,858	306,195	1,495,890	104,115	297,880	1,093,895	109,718	84,023	0	25,695	109,545	Rest of the world

Total Liabilities

Loans			Shares and other equity				Insurance technical reserves				Other accounts receivable/payable	€ million
	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		
319,825	63,716	256,108	349,601	156,541	193,060	0	0	0	0	0	139,380	Non-financial corporations
415,210	261,681	153,528	1,401,459	20,777	223,583	1,157,098	251,625	149,371	67,383	34,870	75,224	Financial corporations
0	0	0	438,656	8,251	125,250	305,155	0	0	0	0	16,893	Monetary financial institutions
409,531	260,336	149,195	939,173	12,258	74,972	851,943	0	0	0	0	44,017	Other financial intermediaries and financial auxiliaries
5,679	1,345	4,334	23,630	268	23,362	0	251,625	149,371	67,383	34,870	14,315	Insurance corporations and pension funds
82,418	994	81,424	1,710	0	1,710	0	0	0	0	0	6,662	General government
178,545	6,920	171,625	0	0	0	0	0	0	0	0	9,349	Households and non-profit institutions serving households
725,086	192,547	532,539	713,743	373,734	239,568	100,441	28,656	0	0	28,656	85,987	Rest of the world

n.a. not available.

Table D.1.2: Financial Transactions By Sector, Q2 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
€ million									
Non-financial corporations	9,509	0	1,270	771	499	203	83	-13	132
Financial corporations	10,727	45	23,071	12,083	10,988	-5,079	-12,914	5,307	2,527
Monetary financial institutions	2,389	45	23,247	12,219	11,028	-11,509	-3,800	-7,737	28
Other financial intermediaries and financial auxiliaries	7,770	0	-976	-233	-743	6,879	-8,240	12,818	2,301
Insurance corporations and pension funds	568	0	800	97	703	-449	-874	227	198
General government	1,432	0	445	0	445	-135	0	-135	0
Households and non-profit institutions serving households	1,226	0	330	-319	649	6	0	6	0
Rest of the world	464	0	3,913	-1,381	5,294	2,531	-625	2,889	267

Total Liabilities Transactions									
		Gold & SDRs	Currency & Deposits			Securities other than shares			
				Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives
€ million									
Non-financial corporations	20,020	0	0	0	0	-156	0	-253	97
Financial corporations	350	0	-76,311	-1,607	-74,704	-3,891	-438	-3,434	-19
Monetary financial institutions	9,814	0	-76,311	-1,607	-74,704	-7,447	0	-7,190	-256
Other financial intermediaries and financial auxiliaries	-10,238	0	0	0	0	3,404	-438	3,604	238
Insurance corporations and pension funds	775	0	0	0	0	152	0	152	0
General government	5,617	0	416	-23	439	3,356	463	2,893	0
Households and non-profit institutions serving households	-1,670	0	0	0	0	0	0	0	0
Rest of the world	-1,006	0	25,482	13,079	12,403	-4,397	-13,480	6,473	2,610

Table D.1.2 – continued

Total Assets Transactions

Loans			Shares and other equity				Insurance technical reserves				Other accounts receivable/payable	€ million
	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		
4,936	4,842	94	5,924	37	5,953	-65	-4	0	0	-4	-2,820	Non-financial corporations
1,415	11,543	-10,128	-3,197	n.a.	n.a.	-1,064	710	0	0	710	-6,237	Financial corporations
-8,864	-538	-8,326	-195	-153	0	-42	0	0	0	0	-335	Monetary financial institutions
10,084	12,146	-2,061	-2,088	-2,109	-209	230	0	0	0	0	-6,129	Other financial intermediaries and financial auxiliaries
194	-65	259	-915	337	0	-1,252	710	0	0	710	227	Insurance corporations and pension funds
-846	-879	33	1,668	354	1,300	13	0	0	0	0	300	General government
0	0	0	205	64	141	0	750	616	154	-20	-66	Households and non-profit institutions serving households
9,629	-5,606	15,235	24,691	-1,345	6,492	19,545	-437	-586	0	149	-39,863	Rest of the world

Total Liabilities Transactions

Loans			Shares and other equity				Insurance technical reserves				Other accounts receivable/payable	€ million
	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		
11,304	3,899	7,405	10,333	494	9,839	0	0	0	0	0	-1,462	Non-financial corporations
-6,400	-9,337	2,937	19,935	0	-1,021	20,957	461	29	154	278	-26,543	Financial corporations
0	0	0	7,344	0	-1,705	9,049	0	0	0	0	-6,871	Monetary financial institutions
-6,332	-9,426	3,093	12,585	0	677	11,908	0	0	0	0	-19,895	Other financial intermediaries and financial auxiliaries
-68	88	-156	7	0	7	0	461	29	154	278	223	Insurance corporations and pension funds
2,220	403	1,817	-79	0	-79	0	0	0	0	0	-295	General government
-2,017	-73	-1,944	0	0	0	0	0	0	0	0	347	Households and non-profit institutions serving households
10,027	15,008	-4,982	-4,932	-3,588	912	-2,256	558	0	0	558	-27,744	Rest of the world

n.a. not available.

Section E

Public Finances and Competitiveness Indicators

Table E.1: Government Debt^a

€ million	2011	2012		
End-quarter	30 Dec.	30 Mar.	29 Jun.	30 Sep.
Government Debt				
Amount outstanding (gross)				
Euro-denominated debt				
Government stock	85,310	79,651	83,131	88,506
Exchequer Bills/Notes, Central Treasury Notes	2,572	1,421	1,764	4,004
Saving Certificates/Stamps, National Solidarity Bonds	4,841	5,015	5,209	5,416
Prize Bonds	1,449	1,501	1,539	1,584
Savings Bonds	4,781	4,956	5,084	5,228
National Instalment Savings	473	469	469	472
Ways and means	1,697	2,232	2,183	1,233
Borrowings from Central Bank, etc.	-	-	-	-
Local loans funds	5	5	5	5
Short-term paper	1,285	719	699	1,169
FX contracts	3,042	604	1,357	654
EIB loans	-	-	-	100
Public bond issues	-	-	-	-
Private placements	602	602	602	602
IMF ^b	4,674	5,853	6,357	6,677
EFSM	13,900	18,400	18,400	20,700
EFSF	6,664	9,409	12,209	12,214
Bilateral loans	-	100	250	250
Medium-term notes	-	-	-	-
Swaps	5,416	10,992	11,476	12,907
Total euro-denominated debt	136,712	141,928	150,734	161,722
Non-euro-denominated debt				
EIB loans	-	-	-	-
Public bond issues	-	-	-	-
Private placements	-	-	-	-
Medium-term notes	100	91	100	100
IMF ^b	8,437	10,220	11,766	12,153
EFSM	-	-	-	-
EFSF	-	-	-	-
UK Bilateral Loan	483	1,451	1,500	2,022
Swaps	-5,949	-11,266	-12,429	-13,694
Short-term paper	49	120	418	68
FX contracts	-3,059	-605	-1,351	-651
Total non-euro-denominated debt	60	12	3	-3
Gross debt	136,773	141,940	150,737	161,719
Residual Maturity Profile				
Amounts due to mature in:				
– ≤ 1 year	12,309	7,181	7,194	7,227
– Over 1 year but ≤ 5 years	44,156	45,863	46,479	45,739
– Over 5 years but ≤ 10 years	66,422	70,241	72,016	79,831
– Over 10 years	13,889	18,655	25,050	28,922
Total	136,773	141,940	150,737	161,719

a The term Government debt refers to central government debt. An advance release calendar for central government debt is shown on the IMF Special Data Dissemination Standards (SDDS) Bulletin Board.

b 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).

Source: NTMA.

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

€ million	2011	2012		
	30 Dec.	30 Mar.	29 Jun.	28 Sep.
End-quarter				
1. Resident ^a	18,865	18,755	22,447	24,212
– MFIs and Central Bank	15,666	17,158	20,083	21,285
– General government	806	349	841	1,558
– Financial intermediaries	2,157	1,043	1,339	1,179
i) Financial auxiliaries	337	445	501	313
ii) Insurance corporations and pension funds	1,192	453	452	447
iii) Other financial intermediaries	627	146	386	419
– Non-financial corporations	12	10	8	5
– Households	224	195	176	184
2. Rest of world	66,445	60,896	60,684	64,295
Total	85,310	79,651	83,132	88,507
3. Amounts due to mature in:				
– Less than 3 years	23,461	17,908	17,903	16,949
– 3 or more years but less than 5 years	10,209	10,176	10,176	10,188
– 5 or more years but less than 10 years	43,356	43,283	43,300	48,603
– 10 or more years but less than 15 years	8,284	8,284	11,753	11,780
– 15 or more years	0	0	0	986
Total	85,310	79,651	83,132	88,507

^a 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)
2006			
January	102.78	113.33	104.29
February	102.14	113.12	104.68
March	102.65	113.58	104.72
April	103.52	114.51	105.62
May	104.67	115.97	107.25
June	104.82	116.04	107.12
July	104.93	116.30	106.58
August	104.97	116.65	107.32
September	104.73	116.21	107.97
October	104.30	115.84	105.53
November	104.96	116.43	105.55
December	105.83	117.57	106.78
2007			
January	105.06	116.78	106.75
February	105.35	117.13	105.63
March	106.08	118.00	105.62
April	106.74	118.74	106.77
May	106.67	118.69	107.19
June	106.22	118.17	107.62
July	106.81	118.91	107.83
August	106.69	118.76	108.81
September	107.58	119.72	108.35
October	108.39	120.38	109.73
November	109.79	121.90	109.92
December	109.80	121.72	111.41
2008			
January	110.55	122.27	110.53
February	110.50	122.37	111.41
March	113.03	125.56	113.37
April	114.12	126.34	115.88
May	113.56	125.68	114.63
June	113.54	125.48	114.00
July	113.98	125.26	113.70
August	111.99	122.88	114.20
September	110.73	121.61	110.83
October	108.14	118.80	109.31
November	107.56	118.62	108.58
December	111.59	122.95	110.78
2009			
January	111.28	122.39	110.30
February	109.76	119.81	109.65
March	111.70	121.74	111.21
April	111.10	120.86	110.86
May	111.67	120.78	111.25
June	112.23	121.03	111.52
July	112.36	120.58	113.24
August	112.67	120.51	111.35
September	113.93	121.35	113.42
October	114.91	122.00	113.66
November	114.77	121.52	112.73
December	113.87	119.91	111.72
2010			
January	112.25	117.96	109.84
February	110.26	115.13	108.94
March	110.05	114.41	107.53
April	108.78	112.80	107.33
May	105.95	109.93	105.26
June	104.15	107.87	102.34
July	105.91	109.93	104.20
August	105.76	109.45	104.17
September	106.34	109.66	105.11
October	109.33	112.58	106.67
November	108.15	110.85	106.29
December	106.52	109.17	103.55
2011			
January	106.66	109.33	103.30
February	107.56	110.06	104.11
March	108.99	111.30	105.30
April	110.46	112.54	107.03
May	109.88	111.64	107.70
June	110.15	111.54	106.66
July	109.47	110.73	105.87
August	109.56	110.54	106.00
September	108.33	109.09	104.49
October	108.43	109.39	103.95
November	107.83	108.67	103.94
December	106.40	107.29	103.01
2012			
January	104.94	105.71	102.16
February	105.68	106.72	102.73
March	105.81	107.33	102.49
April	105.45	106.53	102.88
May	104.13	105.14	102.14
June	103.51	104.38	101.28
July	102.08	103.04	99.00
August	102.24	103.34	99.44
September	103.83	104.63	100.41
October	104.34	104.84	100.83
November	103.89	104.21	100.38

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.

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)
1999		
Q1	100.00	100.00
Q2	97.76	98.73
Q3	99.79	96.54
Q4	99.44	95.21
2000		
Q1	96.81	92.50
Q2	96.21	90.94
Q3	95.61	90.10
Q4	94.77	88.87
2001		
Q1	99.13	92.55
Q2	98.77	92.24
Q3	100.34	94.86
Q4	101.00	94.91
2002		
Q1	102.44	93.44
Q2	103.14	94.79
Q3	106.68	96.24
Q4	108.92	97.33
2003		
Q1	113.09	102.89
Q2	116.09	106.38
Q3	116.66	107.78
Q4	117.54	106.96
2004		
Q1	118.21	112.08
Q2	117.78	111.00
Q3	118.15	112.80
Q4	120.22	112.80
2005		
Q1	119.97	115.81
Q2	120.08	114.25
Q3	117.40	116.40
Q4	116.66	114.43
2006		
Q1	118.96	115.95
Q2	119.31	119.18
Q3	121.87	117.00
Q4	119.95	119.00
2007		
Q1	120.20	115.76
Q2	121.67	121.98
Q3	119.57	127.71
Q4	121.82	128.80
2008		
Q1	119.46	128.86
Q2	120.35	134.97
Q3	119.09	132.51
Q4	115.53	132.44
2009		
Q1	112.35	126.47
Q2	111.91	123.47
Q3	113.31	122.97
Q4	112.79	121.41
2010		
Q1	108.99	116.16
Q2	104.27	111.23
Q3	103.15	108.95
Q4	100.76	110.76
2011		
Q1	102.44	108.41
Q2	104.77	108.82
Q3	103.41	107.45
Q4	101.14	104.45
2012		
Q1	100.61	102.96
Q2	99.49	100.48

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