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Central Bank Quarterly Bulletin

Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Contents

Notes

1. The permission of the Government has been obtained for the use in this Bulletin of certain material compiled by the Central Statistics Office and Government Departments. The Bulletin also contains material which has been made available by the courtesy of licensed banks and other financial institutions.

2. Unless otherwise stated, statistics refer to the State, i.e., Ireland exclusive of Northern Ireland.

3. In some cases, owing to the rounding of figures, components do not add to the totals shown.

4. The method of seasonal adjustment used in the Bank is that of the US Bureau of the Census X-11 variant.

5. Annual rates of change are annual extrapolations of specific period-to-period percentage changes.

6. The following symbols are used:

e estimated	n.a. not available
p provisional	. . no figure to be expected
r revised	– nil or negligible
q quarter	f forecast

7. As far as possible, data available at end-February 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

	2009	2010	2011	2012[f]	2013[f]
Real Economic Activity					
(% change)					
Personal consumer expenditure	-6.9	-0.8	-2.7	-1.5	0.2
Public consumption	-4.5	-3.8	-3.7	-4.2	-2.0
Gross fixed capital formation	-28.7	-24.9	-10.6	-3.3	-0.9
of which: Building and construction	-31.1	-30.3	-15.7	-9.9	-5.5
Machinery and equipment	-19.7	-14.5	-2.6	5.0	4.0
Exports of goods and services	-4.2	6.3	4.1	3.6	4.7
Imports of goods and services	-9.3	2.7	-0.7	1.6	3.2
Gross Domestic Product (GDP)	-7.0	-0.4	0.7	0.5	2.1
Gross National Product (GNP)	-9.8	0.3	-2.5	-0.7	1.0
External Trade and Payments					
Balance-of-Payments Current Account (€ million)	-4,697	761	127	1,307	3,176
Current Account (% of GNP)	-3.6	0.6	0.1	1.1	2.5
Prices, Costs and Competitiveness					
(% change)					
Harmonised Index of Consumer Prices (HICP)	-1.7	-1.6	1.1	1.5	0.9
of which: Goods	-4.1	-2.4	1.5	2.2	0.6
Services	1.2	-0.7	0.8	0.8	1.2
HICP excluding energy	-1.0	-2.7	0.0	0.4	1.2
Consumer Price Index (CPI)	-4.5	-1.0	2.6	1.2	0.7
Nominal Harmonised Competitiveness Indicator (Nominal HCI)[a]	1.0	-4.2	0.8	-1.7	n.a.
Compensation per non-agricultural employee	-1.4	-3.3	-0.4	0.2	0.6
Labour Market					
(% change year-on-year)					
Total employment	-8.1	-4.2	-2.1	-0.8	0.4
Labour force	-2.4	-2.2	-1.2	-0.7	-0.1
Unemployment rate (ILO)	11.8	13.6	14.4	14.4	14.0
Technical Assumptions[b]					
(Annual average)					
EUR/USD exchange rate	1.39	1.33	1.39	1.32	1.32
EUR/GBP exchange rate	0.89	0.86	0.87	0.83	0.84
Oil price ($ per barrel)	61.74	79.61	111.26	120.71	115.14
Interbank market – Euribor[c] (3-month fixed)	1.22	0.81	1.39	0.81	0.90

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

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

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

The external environment has shown signs of limited improvement over the last two months. There have been declines in sovereign bond spreads within the euro area, although with some exceptions. There are also indications that the growth slowdown in the second half of last year in the euro area has not gathered pace. In addition, data from the US signal the possibility that growth may be slightly stronger there than previously expected, though still far from robust. Policy measures have played some role in bringing about this greater stability, most notably measures by the ECB to provide longer term liquidity, along with further progress in enhancing European economic governance. Overall, however, while the international environment is somewhat calmer, the momentum needs to be maintained behind European policy initiatives in order to underpin this improved climate.

The latest domestic data suggests that, for last year, as a whole there was an increase of 0.7 per cent in GDP, alongside a fall of 2.5 per cent in GNP. The latter may reflect a partly technical correction from unexpectedly strong GNP data in 2010. The underlying narrative behind the data has not changed, however, with the positive impulse to growth coming exclusively from the external side and being largely offset by a continuing drag on demand from domestic sources. The external slowdown in the latter part of last year did impact on the performance of exports, although perhaps not by quite as much as might have been expected. Taken together, the international backdrop, combined with the most recent data on the domestic economy, suggest broadly unchanged growth projections from those published in the last Bulletin. As a result, the volume of GDP is expected to increase by 0.5 per cent this year, although GNP may decline further, perhaps by up to 0.7 per cent. This is likely to be followed by a pick-up in growth in GDP and GNP to 2.1 and 1 per cent, respectively, in 2013.

Progress continues to be made on the major policy issues. Banks are following deleveraging plans as part of the adjustment process. Private sector deposit flows for domestic banks have been broadly stable for some time now and the dependence of the domestic banking sector on central bank funding has tended to decline, although it remains at a high level. Banks are also making other adjustments to take account of the reduced size of the sector compared with the pre-crisis levels. Despite the high levels of intervention in the banking sector and this on-going adjustment process, the sector has not yet reached a new equilibrium. This will take some further time to achieve as the effects of the deflation of the property bubble on the sector fully unfold. In the meantime, it is important to ensure that an adequate flow of credit to households and the SME sector is provided, while banks continue to work through the legacy of the boom. Policy makers have, of course, taken steps to try to ensure this through the establishment of lending targets and the Credit Review Office, as well as the announcement of partial loan guarantees.

Fiscal developments remain broadly on track. Growth seems set to be lower than estimated at Budget time but the monthly Exchequer Returns have to date remained broadly in line with the projected profile. Despite the likely slower pace of activity, there are a number of reasons why the Budget targets for 2012 remain within reach. First, the nominal value of output is not projected to be that much lower than previously projected as price increases have been stronger than expected, partly reflecting the lower exchange rate. Second, the fiscal outturn for last year proved to be better than targeted, so the starting position for this year is also better. Third, the linkages between growth rates and the fiscal outturn are always subject to considerable uncertainty. As a result, no overall adjustment to the scale of the fiscal measures announced in the Budget seems to be required at this time, although continued monitoring of the situation is necessary, especially in light of the exposure of the economy to external developments.

Competitiveness improvements are a key factor in returning the economy to steady growth. The performance of the external trading sector is the only likely source of growth in the short term. Indeed, a rebalancing of the economy towards a greater concentration on the productive traded goods sector is, in any case, a necessary development. Competitiveness has improved substantially since the onset of the crisis but, on most measures, it has not yet returned to the levels that obtained in the early part of the last decade. Many of the structural elements that favoured Ireland as a place to do business remain in place, such as a well-educated labour force, a location within the euro area and a favourable tax regime. The levels of relative unit labour costs and prices within the economy overshot sustainable levels during the boom years, however, and these are now adjusting. This is a necessary process to restore growth and, indeed, much of the required adjustment has taken place.

As noted in previous Bulletins, however, further progress is needed and could be assisted by reforms on two fronts, namely improved competition in certain private sector services and maintaining the momentum behind changes in the public sector designed to increase flexibility and efficiency. If the challenges in these areas are met then the prospects are good for a further strengthening of the economy's competitiveness position and its trading performance. This should gradually encourage greater confidence and a subsequent pick up in the overall pace of growth to levels that will permit unemployment to be steadily reduced and living standards to rise again at modest but sustainable rates.

The Domestic Economy

Overview

- *The Irish economy recorded modest growth in GDP terms last year following three consecutive years of decline. Preliminary National Accounts show an increase in real GDP of 0.7 per cent while GNP recorded a decline of 2.5 per cent. The divergence between the two measures was accounted for by a significant increase in net factor outflows, reversing the exceptional decline in net outflows in the previous year. Although export volume growth moderated significantly compared to the previous two years, it continued to make a significant positive contribution to overall GDP growth. This more than offset a continued but moderating negative contribution from domestic demand with fixed investment consumer expenditure and public consumption all declining in real terms.*
- *The forecasts for output growth in 2012 and for next year are broadly similar to the projections in the previous Bulletin. Growth in GDP terms is projected to slow to about 0.5 per cent this year with GNP contracting by about 0.7 per cent reflecting a significant slowdown in external demand. Growth is projected to recover next year to about 2.1 per cent in GDP terms and 1 per cent in GNP terms. This pick-up in growth is predicated on an assumed recovery in world demand from the second half of 2012 which strengthens during the course of 2013.*
- *Domestic demand is likely to continue to contract in both 2012 and 2013, but may come close to bottoming out in 2013 reflecting more limited scope for further declines in a much diminished construction sector and the prospect of some stability in disposable incomes and a very gradually improving labour market supporting a marginal increase in private consumption. As noted in the previous Bulletin, the outlook is subject to a high degree of uncertainty mainly relating to the prospects for external demand.*
- *The labour market remained weak overall last year with employment declining by 2.1 per cent on average. However, the year-on-year rate of decline in employment slowed appreciably by the final quarter to 0.8 per cent from an annual decline of 3.4 per cent in the final quarter of 2010. This was the slowest annual rate of decline in employment since the first half of 2008. Furthermore, there was a 0.6 per cent increase in seasonally adjusted employment during the fourth quarter – the first increase since the final quarter of 2007. Further moderation in the rate of decline in employment is projected for 2012, although output growth is unlikely to support a sustained increase in employment before next year.*
- *Declining labour supply continued to mitigate the impact of declining employment on the unemployment rate which nonetheless increased last year to an average rate of 14.4 per cent. With the projected contraction in labour supply expected to match the decline in employment this year, the unemployment rate is projected to remain unchanged at about 14.4 per cent before declining to about 14 per cent next year on foot of modest employment growth.*
- *The annual rate of HICP inflation for 2012 is projected to be 1.5 per cent. This represents a downward revision from the previous Bulletin, mainly reflecting a weaker than anticipated pass-through of the increase in the standard VAT rate. Abstracting the influences of budgetary measures and highly volatile components such as energy and unprocessed food, underlying inflation will likely be subdued during this year reflecting continued weak disposable incomes and cautious spending behaviour.*
- *The annual average CPI inflation rate for 2012 is projected to be lower than the HICP annual rate at about 1.2 per cent, largely reflecting the negative carryover due to recent cuts in the ECB policy rates and the assumed trend in mortgage interest costs. In 2013, a stabilisation in consumer demand will be reflected in annual average HICP inflation of 0.9 per cent while annual CPI inflation may be slightly lower at 0.7 per cent.*

- *The overall competitiveness of the Irish economy continued to improve throughout 2011 but at a more moderate pace than previously experienced. Altogether, the latest competitiveness developments continue to remain reasonably favourable, which should provide an on-going boost to exporters this year, although the less favourable external demand environment places extra emphasis on the need for further competitiveness improvements. A continued improvement in cost competitiveness along with broader competitiveness enhancements will enhance the resilience of the exporting sectors in the face of a more challenging external environment.*

Demand

Consumer spending

Personal consumption fell by a cumulative 11.1 per cent in real terms over the four years since the peak in 2007. An important driver of the fall in consumption was a large decline in real disposable incomes, but personal sector savings also rose sharply. Households factored in a marked reduction in both wealth and future income prospects and adjusted spending downwards in order to put their finances back on a more sustainable footing. In addition, the level of uncertainty about labour income jumped, with the unemployment rate about 10 percentage points higher compared to 2007, and this was reflected in elevated precautionary savings. Finally, and in the context of greater uncertainty generally, credit conditions for consumer loans tightened so consumers were more often obliged to accumulate savings in order to purchase big-ticket items.

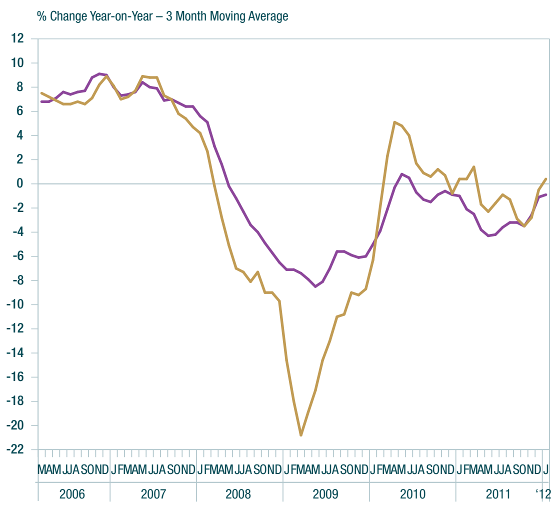
In spite of this background, according to the latest Quarterly National Accounts, personal consumption rose by 0.5 per cent on a seasonally adjusted basis in the final quarter of 2011. There were strong increases in purchases of certain big-ticket items during November and December although this may be partly attributable to the frontloading of purchases before the introduction of the 2 percentage point VAT increase. Sterling appreciated by almost 5 per cent against the euro during the second half of last year, which may have helped to mitigate cross-border shopping flows and provide some support to domestic spending. Additionally, the cumulative cut of 50 basis points in the ECB policy rate during the closing months of the year boosted disposable incomes.

More recently, core retail sales fell by 1.6 per cent on a seasonally adjusted basis in January as the impact of the anticipated VAT increase was unwound, although a preliminary analysis suggests that the pass-through to prices may have in the event been relatively weak. Higher international oil prices and other Budget measures, such as higher carbon taxes and education costs, will further erode real purchasing power this year. The savings rate will remain elevated as households continue to pay down debt. Also, consumer sentiment is likely to keep well below historical averages against a backdrop of a persistently high unemployment rate. Taking into account a modest positive carryover from 2011, personal consumption is forecast to record an annual average fall of about 1.5 per cent this year. The retrenchment in consumer spending may have run its course by next year as real disposable incomes begin to stabilise.

Table 1: Expenditure on Gross National Product 2011, 2012[f], 2013[f]

	2011	Percentage change in		2012[f]	Percentage change in		2013[f]
	EUR millions	volume	price	EUR millions	volume	price	EUR millions
Personal Consumption Expenditure	81113	-1.5	1.5	81104	0.2	1.0	82062
Public Consumption	25111	-4.2	0.3	24140	-2.0	0.5	23782
Gross Domestic Fixed Capital Formation	15915	-3.3	-0.3	15354	-0.9	0.3	15264
Building and Construction	8822	-9.9	-1.1	7862	-5.5	0.0	7426
Machinery and Equipment	7093	5.0	0.6	7492	4.0	0.6	7838
Value of Physical Changes in Stocks	530			275			300
Statistical Discrepancy	184			184			184
GROSS DOMESTIC EXPENDITURE	122853	-2.5	1.0	121057	-0.4	0.8	121592
Exports of Goods & Services	165277	3.6	1.0	172900	4.7	1.0	182927
FINAL DEMAND	288130	1.0	1.0	293957	2.6	1.0	304519
Imports of Goods & Services	-131692	1.6	1.7	-136086	3.2	0.9	-141703
GROSS DOMESTIC PRODUCT	156438	0.5	0.5	157871	2.1	1.0	162816
Net Factor Income from Rest of the World	-32559			-34503			-36961
GROSS NATIONAL PRODUCT	123879	-0.7	0.3	123368	1.0	1.0	125855

Chart 1: Index of Volume of Retail Sales



Source: CSO.

Investment

Provisional outturns for 2011 suggest that a contracting construction sector continued to act as a squeeze on domestic demand. The building and construction sector registered a decline of 15.7 per cent for the year, while investment in machinery and equipment decreased by 2.6 per cent. Within construction, all sectors – residential, non-residential and civil engineering – experienced a decline, falling by 19.8 per cent, 3.7 per cent and 27.6 per cent, respectively. The construction sector now accounts for less than 6 per cent of output – down from a peak of almost 15 per cent in 2007.

For this year, available indicators for the housing sector suggest further declines in output, with completions expected to fall to approximately 8,000 units – an historic low. Output of new houses is anticipated to remain at around this level next year, although there may be some upside risk to this given the mismatch between supply and demand. The majority of new residential units will be one-off houses with very little developer activity in the pipeline.

On the non-residential side, available evidence suggests that commercial sector building and construction work may have bottomed out. Activity in the office, retail and industrial sectors is unlikely to increase substantially over the forecast time horizon, although with some positive FDI inflows, the balance between supply and demand may start to erode the overhang. The removal of uncertainties in relation to rent review reform, the reduction in the rate of stamp duty for commercial properties from 6 per cent to 2 per cent and a capital gains tax waiver on all properties purchased before 2013 are unlikely to impart too much impetus to the market in terms of new building in the immediate future but are important factors in securing a return to activity in the medium term. Civil engineering is set to act as a considerable drag on non-residential investment as the government adheres to cuts in capital expenditure in accordance with agreed fiscal commitments. Combined with agreed reductions in government investment, the 'other building and construction' component of investment is forecast to decline by 12 per cent and 11 per cent, respectively in 2012 and 2013 – with risks on the downside. The latest Ulster Bank Construction PMI points to continued contraction in all building and construction sectors, with civil engineering activity experiencing the largest declines. Combined with the above housing forecasts, building and construction investment is anticipated to decline by 11.7 per cent and 6.4 per cent, respectively in 2012 and 2013.

On the machinery and equipment side, on foot of recent investment announcements in the IT and pharmaceutical sectors and an anticipated expansion in aircraft purchases, investment is forecast to rise by 5 per cent in 2012 and 4 per cent in 2013. Overall, investment is expected to decline by 3.3 per cent and 0.9 per cent in 2012 and 2013, respectively.

External Demand and the Balance of Payments

Merchandise Trade

A muted increase in the volume of merchandise exports of 1 per cent was recorded year-on-year in the final quarter of 2011 to yield an average annual increase of 3.4 per cent for 2011 as a whole. The CSO's Goods Exports and Imports release provides some insight into the sectoral composition of merchandise export activity in value terms during 2011. Most notable was the performance of the broad chemicals sector, which accounted for all of last year's 4.2 per cent increase in the value of merchandise exports. The strength of the broad chemicals sector was somewhat boosted by a positive, albeit modest, contribution from the food and beverage sector. This growth was, however, partially offset by weakness amongst other merchandise exporting sectors such as the ICT sector.

There have been tentative signs that the performance of merchandise exports softened somewhat during the early part of 2012. The new export orders index of the Manufacturing Purchasing Managers' Index registered a modest contraction in February, with a reading of 49.7 in seasonally adjusted terms; 50 marks the boundary between expansion and contraction. Following the marked downward revision to the external environment outlined in the previous Bulletin, the outlook for external demand has since weakened further, albeit modestly. Demand for merchandise exports is nevertheless expected to be supported by competitiveness gains arising from the lowering of the cost base. On balance, some loss of momentum in merchandise export activity is expected in 2012, with projected growth of 2.6 per cent in volume terms. A modest recovery in merchandise exports is expected in 2013, with a volume increase in the region of 3.8 per cent currently projected. There is, however, some downside risk surrounding the short-term outlook for merchandise exports. Such risk notably relates to the highly concentrated nature of Irish merchandise exports and specifically the dominance of the broad chemicals sector, which accounts for approximately 60 per cent of goods exports. While output from the chemicals sector is by its nature volatile, a number of patents attached to high profile drugs manufactured in Ireland are due to expire in the near-term. The potential impact of this is subject to considerable uncertainty in the absence of detailed firm-specific information.

Turning to developments in merchandise imports, a fall of 5.9 per cent in volume terms was recorded year-on-year in the final quarter of 2011 resulting in an average annual decline of 2.8 per cent for 2011 as a whole. A somewhat subdued increase in merchandise imports of 0.4 per cent is projected in 2012 largely reflecting the downward pressure arising from a deceleration in export-induced demand for imports and a further, albeit moderating, contraction in domestic demand. Looking ahead to 2013, merchandise imports are expected to be supported by a pick-up in export-related demand together with some stabilisation in domestic demand. Accordingly, merchandise import volumes are expected to gain momentum next year, with an increase of around 1.1 per cent currently expected.

Services, Factor Incomes and International Transfers

In contrast to merchandise exports, the performance of services exports proved resilient during the final quarter of 2011, to yield an average annual increase of 4.9 per cent in volume terms for the year as a whole. At a sectoral level, much of the growth in services export activity during 2011 emanated from the computer services sector, which accounted for 5.2 percentage points of the 7.1 per cent increase in the value of services exports in average annual terms. In contrast, the performance of the business services sector, Ireland's second largest services export sector, was however somewhat muted over the same period, with exports in value terms broadly unchanged in average annual terms. The new export orders index of the Services Purchasing Managers' Index provides tentative evidence to suggest that the pace of services export growth has remained relatively robust during the first quarter of 2012 – the average seasonally adjusted read for January and February of 54.0 compares favourably with an average of 51.5 in the final quarter of 2011. As with merchandise exports, the impact of the deteriorating outlook for external demand is set to weigh somewhat upon the performance of services exports over the projection horizon. Nevertheless, it is envisaged that services exports will continue to outperform the merchandise side. The impact upon services exports of weakened external demand is expected to be mitigated to some extent by further improvements in cost competitiveness together with a healthy pipeline of services-related foreign direct investment projects. Moreover, the performance of computer services exports, which accounts for 40 per cent of overall services exports, proved relatively robust amid the collapse in world trade volumes during 2009.

The volume of services imports fell by 2.3 per cent annually in the final quarter of 2011, producing an increase of 0.6 per cent for 2011 as a whole. At a sectoral level, much of the growth in services import flows during 2011 stemmed from the business services sector together with royalties/licenses, with average annual increases of 3.8 per cent and 2.8 per cent, respectively, in value terms. The sizable services import flows of these two sectors largely related to the buoyant activities of foreign multi-national companies located in Ireland and specifically the payment of royalties and management fees for the use of foreign-owned patents and products. Some upward momentum in services imports is projected in 2012 and 2013.

Despite the sizable widening of the trade balance, a modest reduction in the current account surplus was recorded during 2011. The improvement in the trade balance was more than offset by a dramatic increase in net factor outflows, which increased by 65.1 per cent annually in the final quarter of 2011, to yield an average annual increase of 17.3 per cent for the year as a whole. It is noteworthy that the dramatic rise in net factor outflows year-on-year in the fourth quarter of 2011 partly related to sizable upward base effects arising from weak profit outflows in the corresponding quarter of 2010. Looking ahead, it is envisaged that export growth will outpace that of imports in both forecast years and as a result, the trade surplus is expected to expand further in 2012 and 2013. As regards net factor outflows, some moderation in the rate of increase is anticipated in 2012 and 2013 in line with the projections for nominal exports. It is envisaged that the negative contribution to the current account from the international transfer component will continue throughout the projection period. Reflecting the projected trends of its various components, an improvement in the current account balance is expected during 2012 and 2013. Following a current account surplus of 0.1 per cent of GNP in 2011, the surplus is set to widen to around 1.1 per cent in 2012 and further to around 2.5 per cent in 2013.

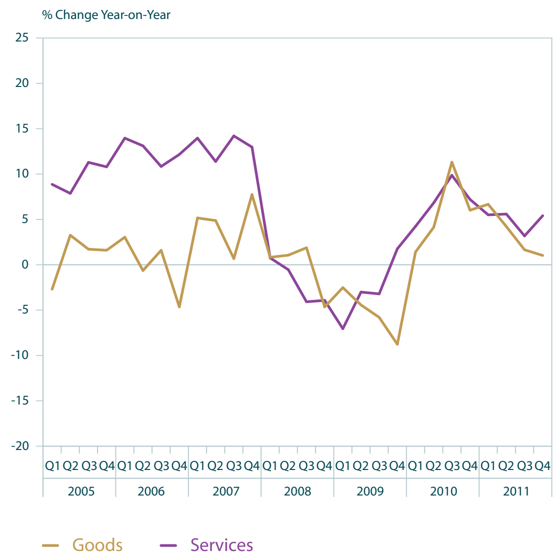
Table 2: Merchandise Trade (Adjusted) 2011, 2012f, 2013f

	2011	Percentage change in		2012f	Percentage change in		2013f
	EUR millions	volume	price	EUR millions	volume	price	EUR millions
Merchandise Exports	85258	2.6	0.6	88040	3.8	0.7	91989
Merchandise Imports	-48862	0.4	2.5	-50305	1.1	0.6	-51152
Merchandise Trade Balance (Adjusted)	36396			37735			40837
%GNP	29.4			30.6			32.4

Table 3: Balance of Payments 2011, 2012f, 2013f

Current Account Items	2011	2012f	2013f
Merchandise Trade Balance	36396	37735	40837
Services	-3207	-1370	-95
Net Factor Income from Rest of the World	-32164	-34108	-36566
Current International Transfers	-898	-950	-1000
Balance on Current Account	127	1307	3176
(% of GNP)	0.1	1.1	2.5

Chart 2: Volume of Exports



Source: CSO Quarterly National Accounts.

Supply

Industry and Services Output

Manufacturing data for 2011 suggest a marked slowdown in the pace of expansion from last year, yet the volume of output in the sector remains above previous peak levels registered in 2007 prior to the recent downturn. Modest annual growth of 0.5 per cent was predominantly driven by an improved performance as the year progressed. This followed a poor first quarter and came as the resilience of the modern sector was combined with an exceptional third quarter boost to the traditional sector. A pronounced weakening in the final two months of 2011, however, served to limit the overall annual expansion.

Production volumes in the modern sector were effectively flat for 2011 as a whole, registering a modest contraction of 0.1 per cent. This compares to a marked expansion in 2010 of 10.5 per cent. The failure to carry forward the momentum from 2010 in the modern sector owes much to a sharp slowdown in the large chemicals and pharmaceuticals subsectors, where year-on-year growth slowed to a modest rate of expansion of just 0.9 per cent.

Table 4: Industry and Manufacturing Output, Annual Percentage Change

	Modern	Other	Manufacturing	Total Industry
2000	19.1	5.5	14.6	14.3
2001	16.3	1.9	11.4	11.0
2002	13.0	-1.4	8.5	8.2
2003	7.0	2.1	5.6	5.7
2004	0.3	2.5	1.1	1.2
2005	5.2	0.5	4.1	4.0
2006	4.1	1.6	3.3	3.1
2007	6.9	3.0	5.6	5.2
2008	-0.8	-4.1	-2.6	-2.2
2009	2.2	-14.1	-4.1	-4.5
2010	10.5	2.4	8.1	7.5
2011	-0.1	0.3	0.5	0.0
2012[f]	2.2	-0.2	1.5	1.4
2013[f]	3.1	0.5	2.6	2.2
Average 2000-2011	7.0	0.0	4.7	4.5

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).

This follows considerably stronger growth in 2009 and 2010 of 16.7 per cent and 18.4 per cent, respectively. The modern sector continues to benefit from a moderation in declines arising from the computers subsector, however. Turning to the traditional sector, marginal year-on-year growth in 2011 of just 0.3 per cent resulted as the sector finished on a more modest note, particularly during the fourth quarter of 2011, when compared to earlier in the year. Third quarter results were boosted by an exceptional increase in August stemming from the food products subsector. Without this once-off increase, a marginal contraction would have occurred during the second half of 2011, when compared to the same period of 2010.

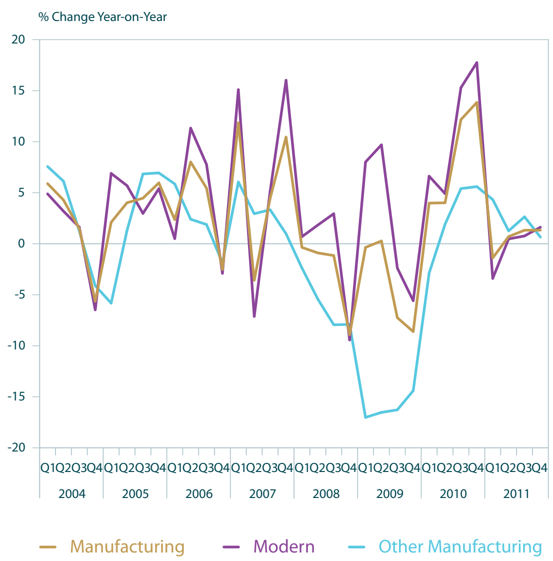
Preliminary National Accounts data for 2011 (not directly comparable with the industrial output data in table 4) indicate that, in terms of volume of output, the broad industry sector expanded by 2.7 per cent, when compared to an increase of 5.2 per cent in 2010. These figures are inclusive of building and construction output, which declined by 13.5 per cent and 30.1 per cent in 2011 and 2010, respectively, thus implying a stronger outturn for the remaining components of industry in both years. The higher levels of activity reported by the National Accounts measure are largely due to the use of the older classification for industry, which includes some services activities, including publishing/ software activities. These are excluded in the newer classification employed in the monthly industry figures.

Evidence from qualitative data for the manufacturing sector suggests that, for the first two months of 2012, the sector remains within modest contractionary territory following a similar end to last year. This is despite the fact that the latest NCB PMI data for manufacturing reveal that both the output and new orders components have returned to just above the no-change mark (i.e. just above a reading of 50.0). As a consequence of the contractions over recent months, significant reductions in the backlogs of work in manufacturing firms have arisen, signalling on-going issues with spare capacity.

While signs of weakness re-emerged in the final months of last year, data for early 2012 suggest that prospects in the sector may improve somewhat as uncertainties relating to the euro area and broader economic conditions ease. On the basis of some modest recovery in demand, the manufacturing sector as a whole is expected to grow by 1.5 per cent in 2012 and by 2.6 per cent in 2013 as conditions improve further. Growth is expected to be driven primarily by the modern sector, where persistant weaknesses relating to subsectors outside of the large and volatile chemicals and pharmaceuticals areas are expected to continue to moderate.

Services sector activity contracted further in 2011, albeit at a slower pace than in the previous two years. Output volumes in the other services sector contracted by 2.1 per cent year-on-year according to Preliminary National Accounts data, with declines concentrated in the second half of the year. The relatively smaller distribution, transport and communication sectors and the public administration sector contracted in 2011, posting similar declines to the previous year, decreasing by 1.6 per cent and 3.3 per cent year-on-year, respectively. Looking to more recent data, the NCB PMI for Services (excluding retail and wholesale) indicates that services activity remains relatively unchanged from the marginally expansionary levels recorded over the past twelve months. Business sentiment continues to improve, however, with confidence levels in early 2012 the highest registered since early last year, while both overall new orders and orders relating to export markets have also picked up from levels in late 2011.

Chart 3: Volume of Industrial Production



Source: CSO.

Agricultural Output

Preliminary estimates of the operating surplus in agriculture for 2011 recently published by the CSO reveal an increase of 32.5 per cent in farming incomes (as measured by operating surplus) for the year, when compared to an increase of 28.7 per cent in 2010. Although the second consecutive annual improvement represents another favourable outcome for the agricultural sector, it obscures the fact that incomes have only just surpassed nominal levels previously seen in 2008. Incomes also remain short of their most recent peak recorded in 2007 as a sharp cumulative downward adjustment of 44 per cent over the course of 2008 and 2009 eroded much of the previous advances made by the sector. Furthermore, a delay in subsidy payments helped to overstate the rise in incomes during 2011, with the underlying annual increase falling to roughly 20 per cent when accounting for this impact.

The margin between farm-gate prices and farming costs widened further last year, albeit at a slower pace compared to 2010, according to CSO data on agricultural prices, with rising cereal, cattle and milk prices, in particular, prompting gains on the output-side. These were tracked by smaller increases on the input-side, however, most notably in relation to fertilizer, feed and energy costs. The net result was a more favourable terms of trade outcome for farmers in 2011, with a rise in the order of 3.3 per cent.

Preliminary National Accounts data for the whole of 2011 suggest that the broader agricultural, fishing and forestry sector expanded by 2 per cent in volume terms when compared to the previous year, further emphasising the recent vitality in the sector. This year is expected to be a more challenging one, however, with the increase in output volumes slowing slightly and output prices reversing as global supply picks up. Incomes are therefore expected to deteriorate somewhat from last year, decreasing by close to 9 per cent in 2012, although a substantial portion of this decrease will arise due to the impact of the aforementioned subsidy deferral. Incomes are expected to continue to fall in 2013, but the scale of the decline should be softened by a reduction in input costs. As ever, several

Table 5: Summary of Agricultural Output and Income 2011[e], 2012[f], 2013[f]

	2011[ab]	% change in			2012[f]	% change in			2013[f]
	€ million	Value	Volume	Price	€ million	Value	Volume	Price	€ million
Goods Output at Producer Prices[a]	6,242	-1.5	0.9	-2.4	6,148	-0.8	0.8	-1.6	6,099
Intermediate Consumption	4,755	1.1	0.4	0.7	4,807	-0.9	0.4	-1.3	4,764
Net Subsidies plus Services Output less Expenses	1,841	-4.9			1,751	0.0			1,751
Operating Surplus	2,463	-9.1			2,238	-1.1			2,214

a Including the value of stock changes.
b CSO estimates.

caveats apply to these forecasts, with potential downside risks of note including adverse oil price and exchange rate developments in addition to commodity price volatility and demand frailties.

The Labour Market

There was a pronounced deceleration in the annual rate of employment contraction in the final quarter of 2011, as illustrated by the fact that the year-on-year decline of 0.8 per cent represented the slowest such rate of decline since the second quarter of 2008. Such an outturn followed a sharp acceleration in the employment fall in the previous quarter, to yield an average annual reduction of 2.1 per cent for the year as a whole. When seasonal factors are taken into account, employment expanded in the final quarter of 2011 by 0.6 per cent quarter-on-quarter; this represents the first such increase since the final quarter of 2007. This seasonally adjusted increase was quite broadly based, with employment in seven of the fourteen economic sectors rising quarter-on-quarter in the final quarter of 2011. The single largest quarterly increase in the numbers employed was recorded in the manufacturing sector, which accounted for almost 60 per cent of seasonally adjusted employment growth in the final quarter of 2011. Sizable increases were also recorded in the financial, insurance and real estate sector and in the accommodation and food services sector.

The contraction in labour demand continued to have a dampening, albeit moderating, effect on the size of the labour force during 2011, with an average annual decline of 1.2 per cent for the year as a whole. While the contraction in labour supply during the first three quarters of 2011 was largely driven by a decline in labour force participation, it is noteworthy that the labour supply falloff year-on-year in the final quarter of 2011 was solely driven by demographic factors and specifically net outward migration. It is estimated that the negative demographic effect, largely relating to the 20-24 and 25-34 age cohorts, contributed approximately 16,200 persons to the overall labour force decline of 12,400 persons over this period. The contribution of participation was slightly positive over the year to the fourth quarter of 2011, totalling to 3,800 persons. When adjusted for seasonal factors, the unemployment rate was unchanged quarter-on-quarter at 14.6 per cent in the final quarter of 2011. A further deterioration in terms of the duration of unemployment was, however, evident in the fourth quarter of 2011 - the long-term unemployment rate rose by 1.3 percentage points to 8.6 per cent, year-on-year.

Live Register data for the first two months of 2012 are suggestive of a further improvement in labour market performance during the early part of this year. In seasonally adjusted terms, the number of persons on the Live Register declined by an average of 2,300 persons per month during both January and February 2012; this compares with an average monthly decline of 230 persons in the final quarter of 2011. Factors other than a pick-up in labour demand are, however, likely to have been partially responsible for the acceleration in the fall in the number of Live Register claimants during the first two months of 2012. As regards the labour demand outlook for 2012 as a

Table 6: Employment and Unemployment 2010, 2011, 2012[f] and 2013[f]

	2010	2011	2012[f]	2013[f]
Agriculture	85	83	84	85
Industry (including construction)	360	342	336	338
Services	1,403	1,385	1,375	1,380
Total Employment	1,848	1,810	1,795	1,802
Unemployment	291	304	303	294
Labour Force	2,140	2,114	2,098	2,095
Unemployment Rate (%)	13.6	14.4	14.4	14.0

Note: Figures may not sum due to rounding.

whole, aggregate employment is expected to continue to contract, with a decline in average annual terms of 0.8 per cent. Such an outlook is partly based upon the assumption of further job losses in the financial, insurance and real estate sector given the on-going restructuring of the banking system. Another development set to place downward pressure upon employment levels in 2012 and further into 2013 is redundancies and incentivised early retirements within the public sector in view of the moratorium on recruitment. Employment levels are expected to bottom out during 2013, with a relatively modest increase of around 0.4 per cent currently projected.

Amid a further reduction in employment, the falloff in the labour force is expected to continue into 2012, with an average annual decline in the size of the labour force of 0.7 per cent currently projected. In terms of the composition of this decline, it is envisaged that demographic factors driven largely by net outward migration will dominate the downward movement in labour supply in both 2012 and 2013. It is, however, important to note that the outlook for migratory flows is surrounded by a considerable degree of uncertainty. The size of the labour force is expected to be broadly unchanged in 2013, with an average annual decline in the region of 0.1 per cent.

The envisaged decline in the labour force in 2012 will largely offset the impact on the unemployment rate of the projected further contraction in employment, with the unemployment rate unchanged in average annual terms at 14.4 per cent. Taking account of the outlook for employment and the labour force in 2013, the unemployment rate is expected to decline somewhat to average around 14 per cent.

Box A: Long-term Unemployment and the Vacancy Rate

By Suzanne Linehan and Mary Ryan[1]

Long-term unemployment[2] has soared over recent years as economic weakness has persisted. The long-term unemployment rate reached a 19-year high of 8.6 per cent in the final quarter of 2011, while long-term unemployment now accounts for 60.3 per cent of total unemployment. Moreover, the average duration of unemployment almost doubled between the first quarter of 2009 and the corresponding quarter of 2011, rising from 10.4 months to 20.2 months[3]. The evolution of long-term unemployment has varied somewhat since total unemployment began to rise in the first quarter of 2008 (see **chart 1**). This box provides an overview of recent developments in long-term unemployment together with some insight into the relationship between unemployment and the vacancy rate.

1 Economic Analysis and Research Department.

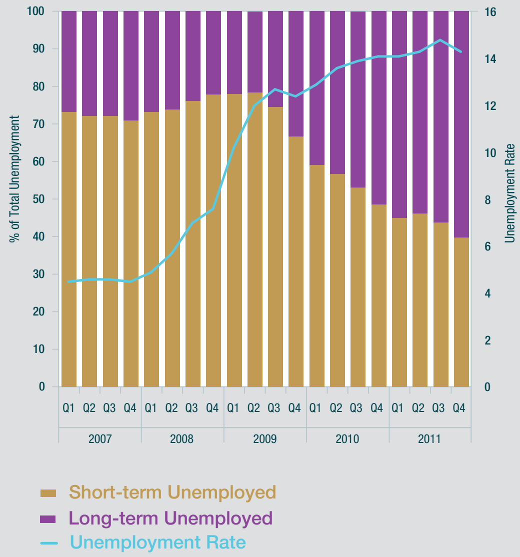
2 The standard definition of long-term unemployment includes all individuals with continuous periods of unemployment lasting one year or more.

3 Quarterly National Household Survey - Unemployment Thematic Report 2011 (CSO).

Box A: Long-term Unemployment and the Vacancy Rate

By Suzanne Linehan and Mary Ryan[1]

Box A Chart 1: Unemployment by Duration



Developments in the duration of unemployment are determined by flows into and out of unemployment. It is to be expected during the initial stages of a recession that, as the size of unemployment inflows rise relative to outflows, increases in short-term unemployment tend to dominate. During the period between the first quarter of 2008 and the second quarter of 2009, the rise in short-term unemployment (+125,300 persons) substantially outpaced that of long-term unemployment (+28,000 persons). Since the third quarter of 2009, a pronounced fall-off in short-term unemployment has been evident while the number of persons classified as long-term unemployed has expanded rapidly.

Therefore the transition from short-term unemployment to long-term unemployment has been largely concentrated between the third quarter of 2009 and the final quarter of 2011, accounting for in excess of 70 per cent of the increase in long-term unemployment since the first quarter of 2008. The build-up of long-term unemployment during this phase reflects the upward pressure arising from a falloff in the unemployment outflow rate. There are many factors which affect the outflow rate from unemployment, such as effective and successful job search and the matching of available skills to employers' requirements. In addition, changes in labour force participation will result in outflows from unemployment, as education and re-training opportunities arise and as individuals become discouraged and stop looking for work. Of primary relevance, however, is the demand for labour. The vacancy[4] rate is a leading indicator of labour demand and is defined as the number of vacancies relative to the sum of vacancies and employment. The probability of exiting unemployment is positively related to the vacancy rate (or the vacancy to unemployment rate), as noted by Elsby[5] et al (2010) and Shimer[6] (2005). This implies that a low vacancy rate is related to rising long-term unemployment: Valletta and Kuang[7] (2012) found that the rise in the duration of unemployment in the US was well explained by the ratio of vacancies to unemployment.

A classic inverse statistical relationship exists between the vacancy rate and the unemployment rate, as depicted by the so called Beveridge Curve. **Chart 2** presents a Beveridge-style scatter plot of vacancy and unemployment rates for the UK and euro area countries, where available[8]. In comparison to most other countries, Ireland currently has one

4 A job vacancy is defined as a newly created, unoccupied, or about to become vacant post on a specific reference date. Data are available for Ireland from 2009 Q1 onwards, with a full NACE Rev. 2 sectoral breakdown and are marked "provisional", primarily due to some uncertainty regarding vacancies in the public sector.

5 Michael W. L. Elsby, Bart Hobijn, and Ayşegül Şahin (2010)."The Labor Market in the Great Recession". Brookings Papers on Economic Activity, Spring 2010.

6 Robert Shimer (2005). "The cyclical behaviour of equilibrium unemployment and vacancies", AER 95, number 1:25-49.

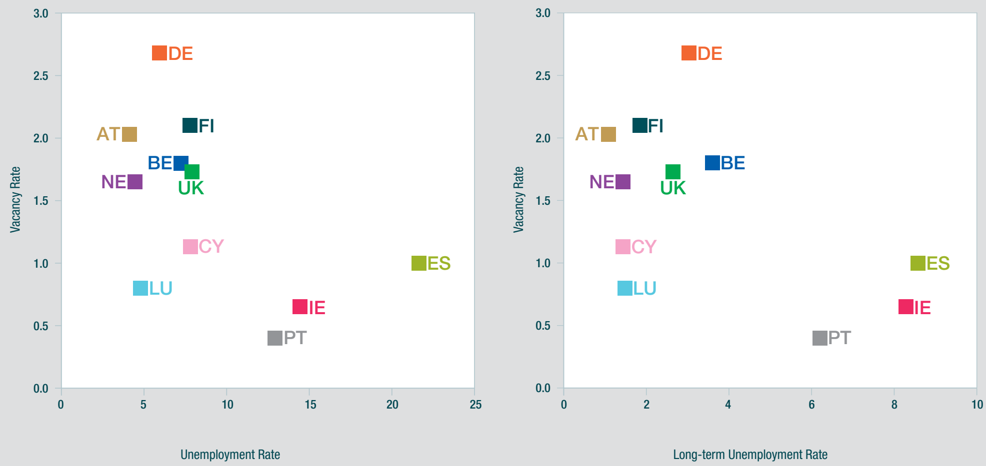
7 Rob Valletta and Katherine Kuang (2012). "Why is unemployment duration so long?" FRBSF Economic Letter 2012:-03, January 2012.

8 Chart 2 uses the average of the 4 most recently available quarterly observations.

Box A: Long-term Unemployment and the Vacancy Rate
By Suzanne Linehan and Mary Ryan[1]

of the lowest vacancy rates in conjunction with one of the highest unemployment rates. This is particularly evident in relation to long-term unemployment.

Box A Chart 2: Vacancy and Unemployment Rates for selected countries, 2011e



Available sectoral data for Ireland indicate that quite a low vacancy rate applies across all sectors, with the exception of the ICT and the financial services sectors (see **table 1**). The comparatively high vacancy rate of the former reflects in the first instance the strength of ICT exports and consequently a solid number of vacancies, albeit in proportion to a small labour base relative to other sectors. It is important to note that low vacancy rates prevail in the larger, labour intensive sectors, which have experienced significant reductions in employment. This suggests that a considerable level of sectoral mismatch exists between the (small) number of vacancies which do exist and the (large) pool of unemployed labour, which may raise skills mismatch issues in the future when labour demand recovers. Re-training opportunities will thus be important in facilitating labour re-allocation across sectors and should encompass occupational-specific training that meets labour market needs[9].

Table 1: Sectoral Vacancy Rates, 2011e

	2011e
Manufacturing	0.48
Construction	0.33
Wholesale and retail trade; repair of motor vehicles and motorcycles	0.45
Transportation and storage	0.53
Accommodation and food service activities	0.33
Information and communication	1.70
Financial and insurance activities	1.85
Real estate activities	0.55
Professional, scientific and technical activities	0.88
Administrative and support service activities	0.63

Source: Eurostat.

9 In this light, the OECD (October 2011), "OECD Economic Survey of Ireland", recommends the temporary closure of construction apprenticeships, given the declining activity in the housing market. They also note that job creation schemes should be used as a last resort.

Box A: Long-term Unemployment and the Vacancy Rate
By Suzanne Linehan and Mary Ryan[1]

Much of the policy recommendations to date have been centred on supply-side issues, with welfare reform, effective activation policy and continued competitiveness improvements recommended as necessary for addressing our high unemployment levels (e.g. OECD, 2011). In addition, vacancy data suggests that unemployment is also a demand-side issue, with the probability of moving from unemployment to employment depending on the vacancy rate. In this respect, the recently published "Action Plan for Jobs", which aims to improve support for job creation and remove existing barriers to employment creation, represents an important move toward facilitating a recovery in labour demand. As noted by Elsby et al (2010), factors which affected the recovery of the vacancy rate in the US included improved economic activity, the restoration of access to credit and improved confidence arising from the resolution of the financial crisis. These factors are similarly pertinent to Ireland.

Pay

The pattern of declining wages at a whole economy level resumed in the final quarter of 2011 to yield an average annual reduction in average weekly earnings of 0.7 per cent for 2011 as a whole. A decomposition of the 0.7 per cent decline in whole economy weekly earnings reveals that it reflected to varying degrees both a fall in average hourly earnings and average weekly hours worked – average hourly earnings declined by 0.1 per cent while average weekly paid hours fell by 0.6 per cent. A downward adjustment in average weekly earnings of 0.8 per cent took effect across both the public and private sector in average annual terms during 2011.[10] The composition of this 0.8 per cent falloff in weekly earnings differed somewhat across the public and private sector. While a fall in hours worked was the sole driver of the decline in average weekly earnings in the public sector, a fall in hourly earnings dominated in terms of the private sector. It is noteworthy that the 1.4 per cent year-on-year decline in average hourly earnings in the private sector during the final quarter of 2011 represented the single largest such decline since the series began in 2008. At a sectorial level, the sharpest reduction in average hourly earnings during the fourth quarter occured within the construction sector, with an annual decline of 11.8 per cent.

As regards the outlook for wages, muted growth in compensation per non-agricultural employee is expected in 2012 as weak economic activity and contracting labour demand continue to exert downward pressure. The average annual growth in compensation per non-agricultural employee is projected to pick-up modestly in 2013 supported by the strengthening of economic activity and the gradual stabilisation of the labour market. Accordingly, compensation per non-agricultural employee is expected to increase by 0.2 per cent and 0.6 per cent in 2012 and 2013, respectively. When the outlook for wages is combined with that for non-agricultural employees, it suggests that the non-agricultural pay bill will decline by 0.6 per cent in 2012 followed by an increase of 0.9 per cent in 2013.

Inflation

The CSO introduced new expenditure weights for the harmonised index of consumer prices (HICP) and the consumer price index (CPI) from January 2012, with the new weights based on the Household Budget Survey conducted in 2009/2010. Reflecting the sharp economic downturn, the survey indicated a shift towards more non-discretionary spending since the previous survey in 2004/2005, evidenced by the reduction in the weight of recreation and culture in the CPI from 10.1 per cent to 8.1 per cent. There were some other notable changes in weights. For example, the greater use of rental accommodation

10 Public and private sector rates of change in weekly earnings do not sum to whole economy due to rounding.

Table 7: Inflation Measures – Annual Averages, Per Cent

Measure	HICP	HICP excluding Energy	Services[a]	Goods[a]	CPI
2008	3.1	2.6	3.4	2.9	4.1
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]	1.5	0.4	0.8	2.2	1.2
2013[f]	0.9	1.2	1.2	0.6	0.7

a Goods and services inflation refer to the HICP goods and services components.

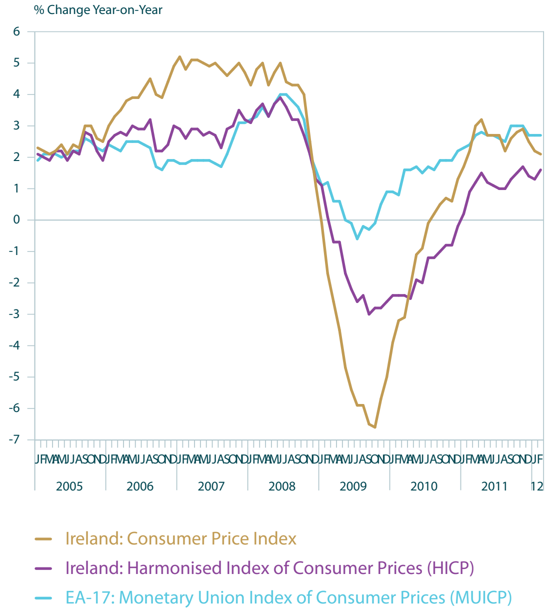
was reflected in an increase in the weight of rents from 3.8 per cent to 6.1 per cent, the mortgage interest component fell from 6.7 per cent to 5.7 per cent and the weight of health insurance increased from 1.8 per cent to 2.9 per cent reflecting higher prices. The CSO also introduced an enhanced methodology for measuring the mortgage interest component of the CPI. Tracker rates, which account for close to 50 per cent of the mortgage market, and fixed rates, are now taken into account along with changes in standard variable rates.

The HICP recorded a monthly increase of 1.1 per cent in February, which followed a 0.4 per cent decline in January. Except for the energy, tobacco and alcohol components of the HICP, the pass-through of the two percentage point increase in the standard VAT rate was relatively weak during January. Indeed, the fall in prices was larger than a year previous when there was no change to the standard VAT rate. To a certain degree, retailers may have chosen to hold off passing on all or part of the VAT increase until after the winter sales and this may explain the stronger than usual increase in the HICP during February. The pass-through over the two months was still weak and may reflect particularly subdued demand, partly accounted for by the frontloading of purchases during the close of the year. Indeed, core retail sales fell by 1.6 per cent during January. In the event, retailers were forced to absorb a large part of the VAT increase by squeezing margins further or by introducing offsetting cost efficiencies.

Non-energy industrial goods prices fell by 1.2 per cent on a cumulative basis during January and February, despite the VAT increase, higher commodity prices and the depreciation of the euro. Also, the latest available wage data indicate that average hourly earnings in the retail and wholesale sector were up by 1.1 per cent annually in the final quarter of last year based on a four quarter moving average. Prices for processed food excluding alcohol and tobacco increased by only 0.1 per cent during the first two months of the year, notwithstanding a significant appreciation of sterling against the euro during the second half of last year. Additionally, supply chain inflationary pressures were also evident in Irish farm-gate prices, which were up over 10 per cent annually in January this year.

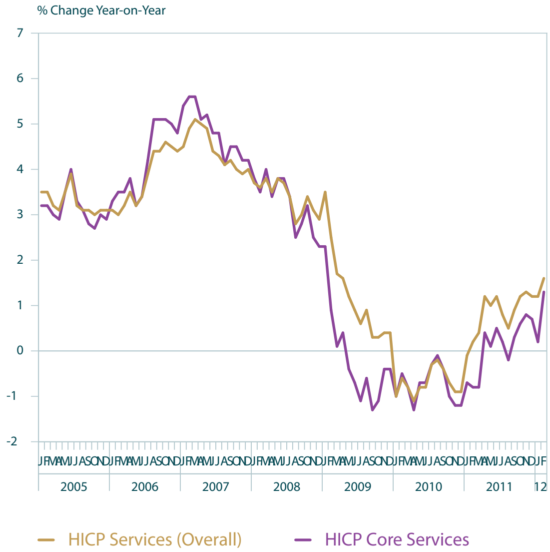
The annual average HICP inflation rate for 2012 has been revised downwards to 1.5 per cent mainly due to a weaker than anticipated pass-through of the VAT increase and to a lesser extent by the introduction of new expenditure weights. There will be continued upward pressure from higher energy and other commodity prices. However, core inflation, as measured by the HICP excluding energy and unprocessed food, will be subdued reflecting weak disposable income growth and cautious spending behaviour. The annual average CPI inflation rate for 2012 is projected to be lower than the HICP annual rate at about 1.2 per cent, largely reflecting the negative carryover due to recent cuts in the ECB policy rates and the underlying assumption for mortgage interest costs. Note that the Bank uses a purely technical assumption for interest rates that is based on market expectations for the path of ECB policy rates. Turning to next year, oil futures suggest that energy prices may fall back modestly but this may be offset by some positive carryover from higher education costs. Overall, a stabilisation in consumer demand will be reflected in annual average HICP inflation of 0.9 per cent in 2013 while annual CPI inflation may be slightly lower at 0.7 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.

Property Prices

Residential property price declines continued apace in January of 2012, as evidenced by month-on-month declines of 1.5, 1.7 and 1.9 per cent in the CSO's Residential Property Price Index for November 2011, December 2011 and January 2012, respectively. In the year to January, residential property prices fell by 17.4 per cent at a national level, an acceleration from a rate of decline of 10.7 per cent recorded in the twelve months to January 2011. Overall, the national index is down 48 per cent from its peak in 2007. There remains considerable disparity between regions and markets, however, with prices in Dublin and apartment prices generally experiencing the greatest falls. House prices in Dublin are now 55 per cent lower than their peak in early 2007, while apartments in the capital are 59 per cent lower. Prices in the rest of Ireland have reportedly fallen by a lesser 43 per cent.

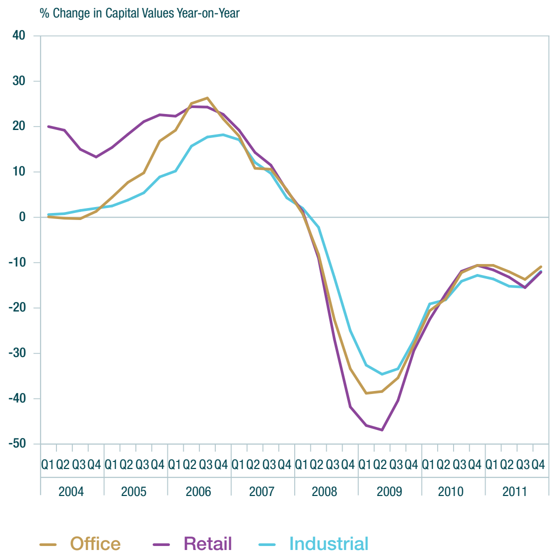
Recent surveys from MyHome.ie would suggest that there is some pent up demand in the market with half of first-time buyers suggesting that they would purchase a house this year, but that potential buyers are withholding due to a negative financing climate and expectations of further house price falls throughout the course of this year. The continued falls in property prices have led to improvements in affordability, however, with the EBS DKM Affordability Index suggesting that the proportion of net income required to fund a mortgage by a first-time buyer couple fell to 12.4 per cent in November 2011, down from a peak of over 26 per cent at end-2006. Changes in mortgage interest relief for first-time buyers in Budget 2012 may impart some stimulus to the market this year, although mortgage financing difficulties and continued house price falls are likely to continue to deter some buyers. Reflecting the reluctance of potential buyers to enter the property market, private sector rents increased marginally in the latter half of 2011. There are signs, nevertheless, that this upward trend has begun to stabilise this year with the CSO's rental index pointing to a monthly increase of just 0.2 per cent in January 2012; changes in rent supplements in Budget 2012 may renew downward pressure in the rental market in the months ahead. Overall, the housing market continues to be characterised by a high degree of uncertainty, with increasing polarisation and market segmentation meaning that some sectors are likely to stabilise before others.

On the commercial front, the latest available indices point to marginal increases in capital values in the fourth quarter of 2011. The Society of Chartered Surveyors/ Investment Property Databank's Commercial Property Index reported a 0.2 per cent quarter-on-quarter capital value increase in Q4 2011. This is corroborated by the Jones Lang LaSalle index for Q4 2011, which recorded an increase of 1.2 per cent in capital values for the final quarter of 2011. Both sources, however, note the change in Budget 2012 to the commercial stamp duty rate from 6 per cent to 2 per cent that technically triggered a 3.8 per cent increase in reported capital values. The underlying picture is that the overall commercial capital values are still in decline, although at a moderating rate. There are some positive signs emanating from the sector with an increase in uptake in prime office areas by large multinationals. The removal of uncertainties related to upward only rent reviews may also boost activity in the market and bring a halt to declines this year. Capital values, according to the Jones Lang LaSalle Index, have fallen by 63.8 per cent from their peak. The Jones Lang LaSalle rental index points to a decline of 0.5 per cent in the quarter to December 2011 and 10.2 per cent for the year as a whole.

Chart 6: Residential Property Price Indices

Source: CSO.

Chart 7: SCS/IPD Irish Commercial Property Index



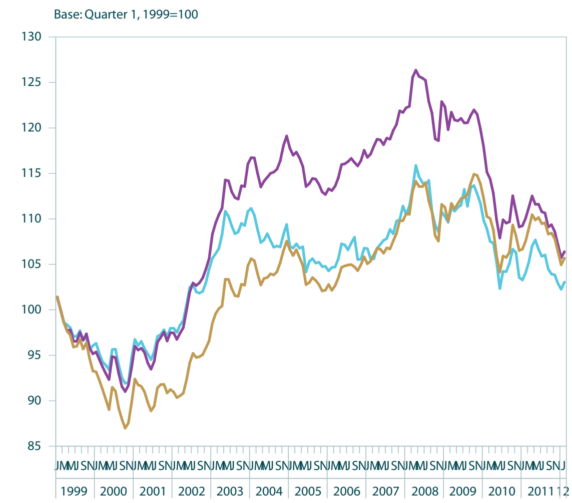
Source: SCS/IPD.

Competitiveness

Exchange Rate Developments

The euro exchange rate continues to be characterised by elevated volatility as uncertainty surrounding the efforts to resolve the Eurozone debt crisis continue. The euro weakened considerably against the dollar towards the end of last year but partly reversed this trend in January 2012, as financial markets reacted more positively to Eurozone fiscal prospects. Euro weakness vis-à-vis the dollar resumed, however, in the beginning of March and it remains to be seen if political and economic measures are enough to engender a more resilient and stable euro. Fluctuations in the exchange rate with the UK's Sterling, an important market for Ireland's indigenous exporters, were less pronounced, although a slight reversal of some of last year's depreciation was evident in the opening months of 2012. Overall, following significant depreciations last year, the general trend for the euro in the first quarter of 2012 has been a moderate strengthening on foot of a tentative improvement in optimism surrounding debt consolidation efforts. The latest available Harmonised Competitiveness Index (January 2012) indicates that following a deterioration in competitiveness in the first half of 2011, competitiveness improved in the second half of 2011 and into January of 2012. The real HCI (deflated by consumer prices) recorded an improvement in competitiveness of almost 2.4 per in the three months to January compared to the previous three months. The improvement in the nominal HCI for the same 3 month period was slightly less at approximately 2.3 per cent, suggesting that while almost all of the competitiveness gain came from favourable currency movements, price increases in Ireland were slightly less than those of our main trading partners.

Chart 8: Harmonised Competitiveness Indicators

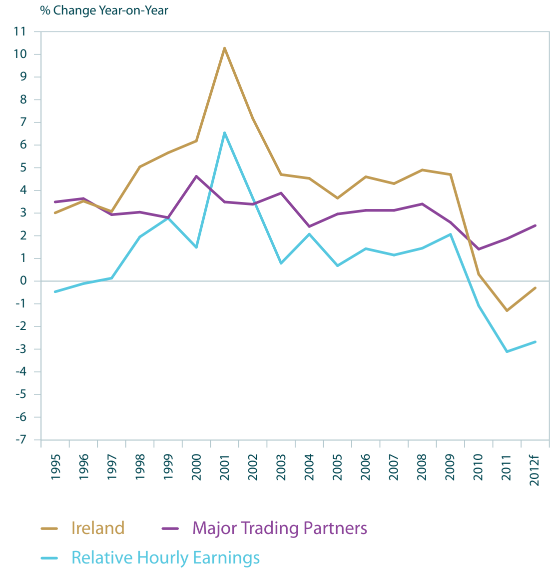


Source: Central Bank of Ireland and ECB.

Productivity and Cost Competitiveness

Provisional productivity estimates for 2011 point to further improvements on 2010, with productivity on a GDP basis increasing annually by 2.8 per cent and by 0.4 per cent on a GNP basis (this figure was weakened by higher net factor income outflows). As highlighted in previous Bulletins, there were likely two factors at play here: 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 this year and next these compositional effects are likely to play less of a role, with much of the sharp contraction in the construction sector having occured - it now accounts for a much smaller share of output (approximately 6 per cent). In light of the overall economic and labour market outlook set out above, average annual productivity growth of 1.3 per cent on a GDP basis is projected for this year, increasing to 1.7 per cent in 2013. On a GNP basis, progress is likely to be more modest with an increase of just 0.1 per cent projected for this year and a moderate increase of 0.6 per cent forecast for 2013.

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

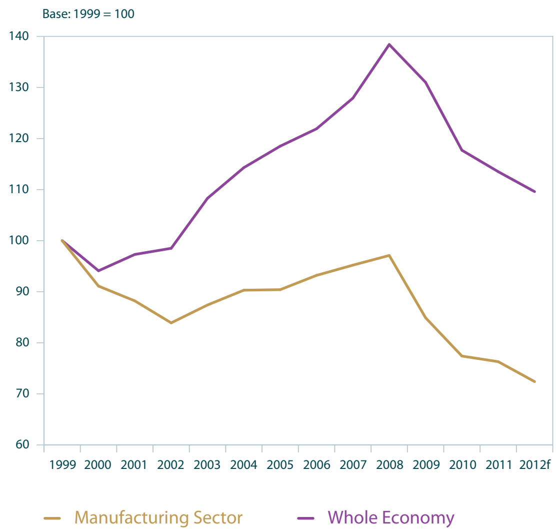


Source: Central Bank of Ireland calculations.

In light of the more modest increase projected for productivity, and a deceleration in cuts to compensation of employees, the large declines in unit labour costs experienced in recent years are forecast to moderate over the projection period. Unit labour costs on a GDP basis are estimated to have declined 3.2 per cent in 2011, with further more moderate declines of 1.1 per cent forecast for both 2012 and 2013. Much of the improvement in unit labour costs is set to come increasingly from the productivity side rather than the compensation side, as many firms have completed their rounds of wage reductions and, indeed, the forecast includes modest compensation increases this year and next. According to European Commission projections, labour cost competitiveness in Ireland relative to the euro area is set to improve this year and next.

In terms of the other competitiveness indicators, the CSO's experimental Services Producer Price Index continued to point to downward pressure on business-to-business services prices in Ireland, with prices down 1.3 per cent in the year to the fourth quarter of 2011. There were, however, significant increases in transportation costs, but these were offset by decreases in employment and human resource services and architecture and engineering services. The National Competitiveness Council's 2011 Annual Competitiveness Report highlights areas of concern in regard to competitiveness, including: reducing commercial rates, investment in alternative forms of energy, greater emphasis on mathematics and science in education, improved funding for infrastructure projects, a broadening of the tax base, more tax credits for R&D, continued extension of Ireland's tax treaty network and improved access to bank lending.

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 2011 1.

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

The Public Finances

End year data revealed an Exchequer deficit of €24.9 billion in 2011, compared to a deficit of €18.7 billion in the previous year. The annual increase reflected banking related expenditures - promissory note payments and the cost of recapitalising the banking sector – excluding which the deficit fell by €2.7 billion, highlighting the success of underlying consolidation efforts. The final deficit outturn for 2011 was around €300 million lower than anticipated in Budget 2012; the disparity would have been greater but for the delayed receipt of €260 million in corporation tax payments, which were not received in time to benefit 2011 tax revenues. Reflecting these factors the General Government Deficit (GGD) outturn in 2011 is also expected to be better than was estimated at Budget time. The recent EU-IMF Programme review documentation estimated a GGD of 9.9 per cent of GDP last year, well below the 10.6 per cent deficit target set by the ECOFIN Council. The Budget, by comparison, had estimated a deficit of 10.1 per cent of GDP.

Revised Estimates for 2012

The 2012 Revised Estimates for Public Services Volume (REV) was published in February. The REV provides additional detail for planned expenditure in the coming year alongside revised outturns for the previous year. It shows a targeted 2.9 per cent reduction in total gross expenditure[11] to €55.9 billion in 2012, from €57.5 billion in 2011. Within this it is expected that current expenditure will fall by 1.8 per cent to €51.9 billion. This partly reflects a 1.7 per cent decline in the Exchequer pay bill to €15.4 billion, with numbers employed in the public sector[12] expected to decline by 0.8 per cent to 294,400. Capital spending, meanwhile, is forecast to fall by 14.4 per cent to €4 billion. The process of budgetary reform continued with a move to performance budgeting. For the first time expenditure for each Government department was divided into strategic programmes, with output targets for

11 This includes voted expenditure plus expenditure from the Social Insurance Fund and the National Training Fund.

12 The public service numbers presented here are in whole term equivalents.

each of these programmes outlined. The move will make the public sector more accountable.

Exchequer Returns

The latest data reveal an Exchequer deficit of €2.1 billion in the first two months of the year, up from €2.0 billion in the same period of 2011 (see Table 8). The annual deterioration of €127 million occurred despite a strengthening of revenues, as expenditure – and interest expenditure in particular – recorded an even stronger increase. Combined tax revenues, non-tax revenues and capital receipts were up by a significant €1.4 billion to end-February, but voted expenditure increased by around €500m and non-voted spending by just over €1 billion.

Taking a closer look at the revenue side, tax receipts amounted to €5.9 billion in the first two months of the year - a substantial annual increase of 21.8 per cent – and were €656 million ahead of profile. Two specific factors played a key role in driving the over performance, however. Firstly, around €260 million of corporation tax receipts originally due for payment in December 2011 were not received into the Exchequer account until January. As they did not form part of the original Budget 2012 estimate of corporation tax, they are not included in the tax head's profile for this year. Corporation tax was also higher than expected in February, although the Department of Finance has noted that this partly reflects lower than anticipated levels of repayments, some of which have been delayed and will be paid in later months instead. Secondly, following work undertaken by the Revenue Commissioners a portion of the receipts from employers which had previously been returned as PRSI have now been reclassified as income tax. As a result, income tax was up €643 million year-on-year and was €289 million ahead of profile. The impact of this reclassification is offset on the expenditure side, however – PRSI income is correspondingly behind target with the result that the Exchequer has had to pay a higher subsidy to the Social Insurance Fund (SIF) - and the overall Exchequer impact is neutral. In net terms the other tax heads were broadly in line with expectations, increasing on an annual basis. The Department of Finance estimates that, adjusting for the delayed corporation tax payment and the reclassification issue, tax revenues increased by 12 per cent year-on-year, and were a more modest €180 million or 3.5 per cent ahead of target.

On the spending side, net voted expenditure was €7.5 billion at end-February, 6.8 per cent higher year-on-year and €289 million ahead of profile. Voted current spending recorded an annual increase of 7.4 per cent, while voted capital expenditure was 5.7 per cent lower at €336 million. Higher current spending primarily reflected the reclassification outlined above; expenditure at the Department of Social Protection – which includes the subsidy to the SIF – was €253 million higher than expected, accounting for 85 per cent of total over-spend. Non-voted expenditure, at €1.6 billion in the first two months of the year, recorded an even stronger increase. This was mainly driven by higher interest payments, although it is important to note the published increase of €787 million in debt servicing costs overstates the pace of acceleration significantly. In the first two months of 2011, €522 million was used from the Capital Services Redemption Account (CSRA) for debt servicing purposes, which did not impact on the Exchequer. Including the CSRA, the full debt service cost to end-February 2011 was €626 million, resulting in an actual increase of €265 million year-on-year.

Exchequer Financing

The Exchequer returns revealed that the deficit of €2.1 billion to end-February was financed by government borrowing of €7.4 billion in the first two months of the year. Accordingly there was an increase in Exchequer cash balances which will be rundown as the year progresses. Government borrowing was primarily sourced from the EFSF/EFSM (€3.2 billion), the IMF's Extended Fund Facility (€3.2 billion) and a bilateral loan agreement with the United Kingdom (€480 million). An additional €5.8 billion was drawn down from the EFSF/EFSM in March following the successful completion of the fifth review of Ireland's EU-IMF Programme. For the year as a whole it is anticipated that the financing needs of the public sector – the anticipated Exchequer deficit of €18.9 billion coupled with maturing short and long term securities - will be financed by €22.9 billion in external loans and a €2.5 billion run-down of cash balances (from the end-2011 position). As a result, by the end of the year €57.3 billion – or 85 per cent – of the total Programme allocation of €67.5 billion will have been disbursed.

EU-IMF Programme Compliance and Forthcoming Targets

As noted in the last Quarterly Bulletin, the fiscal performance criteria underpinning the EU-IMF Programme were fully met in the fourth quarter of 2011. Following on from this, February's revised Technical Memorandum of Understanding (TMU) has outlined updated quarterly performance criteria for the current year. A floor of -€7.5 billion has been set for the Exchequer primary balance in the first quarter of the year, with a floor of -€10.9 billion for the year as a whole. This floor will be adjusted downward to take account of payments for bank restructuring carried out under the Programme's banking sector support and restructuring strategy, and for Exchequer outlays for the resolution of credit unions. The floor will also be adjusted downward (upward) for the full amount of any under-performance (over-performance) of Exchequer tax revenue and other receipts relative to a baseline of €9.7 billion at end-Q1 and €43.8 billion by the end of the year. The targeted ceiling on the outstanding stock of central government debt, meanwhile, has been set at €125 billion in the first quarter and €133.3 billion for 2012 as a whole. As in the case of the Exchequer primary balance, these targets will be revised to take account of debt arising from payments for bank restructuring, and to take account of any revision to the stock of end-December 2011 central government net debt.

In February the Government agreed with the EU-IMF the sale of state assets up to a value of €3 billion. Sales will include Bord Gais Eireann's (BGE) Energy business (but not its gas transmission or distribution systems or the two gas interconnectors, which will remain in State ownership) and some of ESB's non-strategic power generation capacity. Consideration will also be given to the sale of some assets of Coillte and the sale of the State's remaining shareholding in Aer Lingus when market conditions are favorable. The sales will be based on the guiding principles that there will be no fire sales, integral transmission and distribution systems will be retained in State ownership and full value will be derived for the State. It has been agreed that one-third of the proceeds raised can be used for reinvestment in the economy, with the remaining amount going directly towards debt reduction.

Table 8: Exchequer Returns, End-February 2012

	2011 Outturn €m	2011 End-Feb €m	2012 End-Feb €m	End-Feb % Annual Change
Current Expenditure				
– Voted[13]	41,419	6,664	7,159	
– Non-voted[14]	6,606	581	1,346	
Total	**48,025**	**7,244**	**8,505**	**17.4**
Current Revenue				
– Tax revenue	34,027	4,840	5,893	
– Non-tax revenue[15]	2,774	61	394	
Total	**36,801**	**4,901**	**6,286**	**28.3**
Current Budget Balance	**-11,224**	**2,343**	**2,218**	
Capital Budget Balance	**-13,693**	**398**	**146**	
Exchequer Balance	**-24,917**	**-1,945**	**-2,072**	
General Government Balance (% of GDP)[16]	**-9.9**			
Source and Application of Funds				
Total Borrowing/Repayments	-27,046	-11,464	-7,442	
Total Increase in Exchequer Deposits	2,129	9,519	5,370	
Exchequer Balance	**-24,917**	**-1,945**	**-2,072**	

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

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

15 Includes items such as income from Eligible Institutions Guarantee, Central Bank surplus income, National Lottery surplus, interest and dividends.

16 Estimate taken from EU-IMF Programme review documentation.

An Timpeallacht Gheilleagrach

Tá roinnt comharthaí feabhais le brath ar an timpeallacht sheachtrach le dhá mhí anuas. Tháinig laghdú ar raon difríochta na mbannaí ceannasacha laistigh den limistéar euro cé is moite de roinnt eisceachtaí. Maidir leis an moilliú fáis a tharla le linn an dara leath den bhliain sa limistéar euro, tá comharthaí ann nach bhfuil sé imithe in olcas. Ina theannta sin, tugtar le fios le sonraí ó na Stáit Aontaithe go bhfuil féidearthacht ann go mbeidh an fás ansin beagáinín níos láidre ná mar a bhíothas ag súil leis roimhe seo, ach ní bheidh sé urrúnta. Rannchuidigh bearta beartais le cobhsaíocht a thabhairt i réim, go háirithe bearta an BCE chun leachtacht níos fadtéarmaí a sholáthar, mar aon le dul chun cinn breise ar fheabhsú rialachas eacnamaíoch na hEorpa. Ar an iomlán, cé go bhfuil an timpeallacht idirnáisiúnta níos socra anois, ní foláir an luas faoi thionscnaimh beartais na hEorpa a choinneáil suas d'fhonn taca a chur faoin timpeallacht fheabhsaithe seo.

Leis na sonraí intíre is déanaí, tugtar le fios gur tháinig méadú 0.7 faoin gcéad ar OTI agus laghdú 2.5 faoin gcéad ar OTN an bhliain seo caite. Leis an bhfigiúr deireanach sin, léirítear ceartú teicniúil ar shonraí láidre OTN nach raibh súil leo don bhliain 2010. Ar a shon sin, níl aon athrú tagtha ar an mbunscéal atá taobh thiar de na sonraí seo, is é sin le rá gur ón taobh seachtrach amháin atá an spreagadh fáis ag teacht agus go bhfuil sé sin á fhritháireamh ag an sracadh ar éileamh ó fhoinsí intíre. Maidir leis an moilliú seachtrach sa dara leath den bhliain seo caite, bhí tionchar aige sin ar fheidhmíocht onnmhairí, ach tá seans ann nach raibh an tionchar sin chomh mór agus a bheifí ag súil leis. Leis an gcúlra idirnáisiúnta i dteannta na sonraí is déanaí maidir leis an ngeilleagar intíre, moltar meastacháin fáis atá gan athrú, a bheag nó a mhór, ó na meastacháin a foilsíodh san Fheasachán deireanach. Dá bhrí sin, meastar fós go dtiocfaidh fás 0.5 faoin gcéad i mbliana ar OTI ach tá seans ann go dtiocfaidh laghdú breise go feadh 0.7 faoin gcéad ar OTN. Tá dóchúlacht ann go leanfar é seo le méadú fáis 2.1 agus 1 faoin gcéad, faoi seach, ar OTI agus ar OTN in 2013.

Tá dul chun cinn leanúnach á dhéanamh ar na príomh-shaincheisteanna beartais. Tá pleananna díghiarála á leanúint ag na bainc mar chuid den phróiseas um choigeartú. Tá an sreabhadh taiscí san earnáil phríobháideach socair, a bheag nó a mhór, le tamall anuas agus tá laghdú tagtha ar spleáchas na hearnála baincéireachta intíre ar mhaoiniú ón mbanc ceannais cé go bhfuil leibhéal an mhaoinithe sin fós ard. Tá coigeartuithe eile á ndéanamh ag na bainc freisin chun go gcuirfear i gcuntas méid laghdaithe na hearnála i gcomparáid leis na leibhéil a bhí ann roimh an ngéarchéim. D'ainneoin leibhéal ard na hidirghabhála san earnáil baincéireachta agus d'ainneoin phróiseas leanúnach an choigeartaithe seo, níl cothromaíocht bainte amach go fóill ag an earnáil sin. Beidh níos mó ama ag teastáil chun an chothromaíocht sin a bhaint amach de réir mar a thiocfaidh éifeachtaí dhíbhoilsciú an bholgáin réadmhaoine ar an earnáil chun cinn. Idir an dá linn, tá sé tábhachtach a chinntiú go gcuirfear sreabhadh leordhóthanach creidmheasa ar fáil do theaghlaigh agus d'earnáil GBM, fad a leanfaidh na bainc de bheith ag dul i ngleic le hiarmhairt an bhorrtha. Ar ndóigh, tá bearta glactha de láimh ag lucht déantais beartais chun é sin a áirithiú trí spriocanna iasachta a leagan síos agus tríd an Oifig um Athbhreithniú Creidmheasa a bhunú, mar aon le ráthaíochtaí páirteacha iasachta a fhógairt.

Leanann na forbairtí fioscacha de réir mar a bhí beartaithe, a bheag nó a mhór. Is dealraitheach go mbeidh an fás níos ísle ná mar a tuaradh tráth an Bhuiséid ach tá tuairisceán an Státchiste ag teacht, tríd is tríd, leis an gcuntas a tuaradh. D'ainneoin luas moillithe na gníomhaíochta, féadfar na spriocanna Buiséid do 2012 a bhaint amach go fóill ar na cúiseanna seo a leanas. Ar an gcéad dul síos, ní mheastar go mbeidh luach ainmniúil an aschuir mórán níos ísle ná mar a tuaradh cheana féin ó tharla go raibh na harduithe ar phraghsanna ní ba láidre ná mar a bhíothas ag súil leo, rud a léiríonn go páirteach an ráta malairte is ísle. Ar an dara dul síos, bhí an toradh fioscach ní b'fhearr ná mar a tuaradh agus, dá bhrí sin, is fearr an staid tosaigh don bhliain seo freisin. Ar an tríú dul síos, bíonn na naisc idir na rátaí fáis agus an toradh fioscach i gcónaí faoi réir éiginnteachta suntasaí. Dá bhrí sin, ní gá coigeartú iomlán a dhéanamh anois ar scála na mbeart fioscach a fógraíodh sa Bhuiséad, ach is gá monatóireacht leanúnach a dhéanamh ar an staid, go háirithe i bhfianaise neamhchosaint an gheilleagair ar fhorbairtí seachtracha.

Tá feabhsuithe san iomaíochas ríthábhachtach chun an geilleagar a chur ar ais ar chonair an fháis chothroim. Is í feidhmíocht na hearnála trádála seachtraí an t-aon fhoinse ionchasach fáis sa ghearrthéarma. Go deimhin, tá sé riachtanach ar aon chaoi go ndéanfar an geilleagar a athchothromú i dtreo chomhchruinniú méadaithe na hearnála earraí trádála táirgiúla. Tá feabhas suntasach tar éis teacht ar an iomaíochas ó thosach na géarchéime, ach i gcomhthéacs fhormhór na mbeart, níl sé ar ais ag na leibhéil a bhí ann sa chéad chuid den deichbhliain seo caite. Tá go leor de na gnéithe struchtúracha lenar cuireadh Éire chun cinn mar áit ghnó fós ann, amhail lucht saothair oilte, suíomh laistigh den limistéar euro agus réimeas fabhrach cánach. Le linn thréimhse an bhorrtha, áfach, ghabh leibhéil na gcostas coibhneasta aonad saothair agus na leibhéil praghsanna sa gheilleagar thar leibhéil inmharthana agus tá coigeartú á dhéanamh orthu sin anois.

Is próiseas riachtanach é seo chun fás a athspreagadh agus, go deimhin, tá cuid mhór den choigeartú seo déanta.

Mar a tugadh le fios i bhFeasacháin roimhe seo, áfach, is gá dul chun cinn breise a dhéanamh agus féadfar cuidiú leis na hathchóirithe ar dhá bhealach, eadhon iomaíochas feabhsaithe i seirbhísí áirithe de chuid na hearnála príobháidí agus an luas faoi na hathruithe san earnáil phoiblí a choinneáil suas, ar athruithe iad atá ceaptha solúbthacht agus éifeachtúlacht a mhéadú. Má théitear i ngleic leis na dúshláin sna réimsí seo, beidh na hionchais go maith ó thaobh suíomh iomaíochais agus feidhmíocht trádála an gheilleagair a neartú. Leis seo, ba cheart go spreagfaí níos mó muiníne de réir a chéile agus go méadófaí luas foriomlán an fháis chun go bhféadfaí an dífhostaíocht a laghdú go rianúil agus na caighdeáin mhaireachtála a ardú arís de réir rátaí a bheidh neamhthoirtéiseach ach inmharthana.

Financing Developments in the Irish Economy

Overview

Following the turbulence in the closing months of 2011, tensions in financial markets eased somewhat in the early stages of 2012. This partly reflected measures undertaken by central banks to enhance dollar liquidity in the market, and more particularly the implementation of two longer-term refinancing operations by the ECB. Bond yield spreads relative to Germany narrowed slightly for most euro area sovereigns, despite the downgrading of the debt of some Member States in February 2012. Market sentiment was improved by a number of other developments, including agreement on a second programme for Greece, the bringing-forward of the European Stability Mechanism and further austerity measures in several euro area countries. Somewhat stronger than expected data on the US economy, and signs of stabilisation in activity in Europe may also have had a positive impact.

Sentiment towards Ireland was positive, with yields on ten-year government bonds falling to under 7 per cent at end-February 2012, and the NTMA returning to the market in January, for the first time since September 2010, with a €3.53 billion bond swap. The fall of 160 basis points on ten-year Irish government bond yields over the first two months of 2012 was further evidence of Ireland decoupling from the other Programme countries.

While overall borrowing by resident credit institutions from the Eurosystem fell in January, this was largely due to IFSC banks, with domestic market credit institutions[1] showing a much smaller fall of €1.8 billion. The funding difficulties of resident credit institutions continued in early 2012, characterised by some further outflows of deposits, albeit at lower levels than before, as noted below. There was a particularly sharp fall in NFC deposits in the two months to January 2012, although this was somewhat offset by an increase in household deposits. Continuing inflows into longer-term deposits, at the expense of shorter-term products, reflected the attractive interest rates offered to customers, as banks resident in Ireland continued their efforts to secure deposit funding. The annual rate of change in non-resident private-sector deposits remains negative, but the pace of contraction has slowed in recent months. There was an average net monthly outflow of €435 million in 2011, compared to €2.2 billion for 2010.

Lending to Irish households by resident credit institutions continued to decline, both for housing and other loan categories. Households experienced a reduction in borrowing costs for outstanding loans, following two 25 basis point cuts in the ECB refinancing rate in November and December 2011. However, interest rates on new business loans for housing edged upwards in January 2012, after declining in the previous two months. Household net worth fell again in Q3 2011 as a result of further falls in the value of housing assets and a smaller decline in financial assets. Following the pattern started in early 2009, the household sector remained a net lender in Q3 2011, as the process of deleveraging continues.

Government liabilities rose in Q3 2011, reflecting increases in the market value of government securities, and the receipt of further funding under the EU/IMF programme. The deficit, measured on a four-quarter moving

1 Domestic market credit institutions are those with a significant retail presence in the State, including both Irish and foreign-owned institutions. This category excludes the activities of more internationally focused credit institutions such as those in the IFSC. A list of domestic market credit institutions is available at http://www.centralbank.ie/polstats/stats/cmab/Documents/Credit%20Institutions%20resident%20in%20the%20Republic%20of%20Ireland.pdf.

average, amounted to €3.9 billion in Q3 2011, but this does not take account of the capital injected into the banks in July 2011, the impact of which is still under consideration.

Irish resident investment funds increased in value as equity and bond markets recovered, although investor caution remained evident with negative transactions of €2.3 billion for Q4 2011. This quarter also saw improved investor sentiment towards euro area bonds, which recorded substantial net transactions inflows. Money market funds (MMFs) data, now compiled according to a narrower definition, also recorded sizeable inflows and positive revaluations. The annual growth rate for Irish resident MMF shares/units in issue has been positive since mid-2009, in contrast to the euro area as a whole, which has seen negative annual change since late 2009. This reflects different asset portfolios, with a much higher proportion of non-euro area securities being held by Irish resident MMFs.

Monetary Financial Institutions

Credit Institutions' Funding

The three months up to end-February 2012 saw fluctuating requirements by credit institutions for Eurosystem refinancing operations, against the backdrop of the continuing difficulties in obtaining deposit and non-deposit sources of funding. Borrowing from the Eurosystem by all resident credit institutions increased in December 2011, but fell by €20 billion in January and February 2012, giving a net decline of €15.8 billion over the three months, and an outstanding amount of €87.1 billion at end-February. Based on latest available data, most of the decrease recorded in January was accounted for by credit institutions not closely linked to the domestic economy. Domestic market credit institutions reduced their recourse to Eurosystem funding by just €1.8 billion over the two months to end-January 2012. The outstanding stock of borrowings from the Eurosystem by domestic market credit institutions was €71.3 billion at end-January 2012.

The downward trend in the outstanding amount of debt securities issued by the Irish banking sector, witnessed throughout much of 2011, continued in recent months with the value of outstanding debt securities falling to €113 billion by end-2011 (compared to €119.5 billion at end-2010 and €118.1 billion at end-September 2011). This was driven by net redemptions of €5.1 billion over the course of Q4, with redemptions of long-term securities accounting for some 64 per cent of the total. This compares with net redemptions of €5.3 billion in Q3. However, the rate of net redemptions has slowed considerably, when compared to, for example, Q4 2010 (€28.6 billion).

By end-December 2011, listed equity for the Irish banking sector had an outstanding value of approximately €15.2 billion; this represents a rise of 4.7 per cent since end-September 2011. This outstanding value is 62 per cent higher than at end-2010. This reflects the impact of inflows into the MFI sector, arising from the ongoing recapitalisation of the banking system, the issuance of new shares, and positive changes in market valuation. This outstanding value had risen further to €16.4 billion by January 2012.

Recent months have been characterised by further outflows of deposits from Irish resident credit institutions. Deposits held by the Irish private sector fell by an average annual rate of 7.2 per cent for the two months ending January 2012.[2] The monthly net flow of deposits averaged minus €187 million in these two months. While deposits from households increased by €483 million over the two months, deposits from NFCs fell over the same period by €1.1 billion, including a particularly sharp fall in January. This trend was reflected across almost all resident credit institutions.

Private-sector overnight deposits declined at an average annual rate of 9.1 per cent in the two months ending January 2012. This compares with an average annual decline of 3.6 per cent for the two months ending January 2011.The average net monthly decline in overnight deposits during these two months was €910 million. Overnight deposits from NFCs fell by €591 million over the two months to January 2012, while term deposits with

2 The flows and growth rates for deposits and loans are fully adjusted to exclude the impact of non-transaction related effects, such as changes in the reporting population and valuation changes due to fluctuations in exchange rates.

an agreed maturity of up to two years from the Irish private sector recorded an average monthly inflow of €761 million. Household term deposits with agreed maturity up to two years increased by an average of €369 million over the period, reflecting an uptake of attractive term deposit products. NFC deposits with agreed maturity up to two years fell by €245 million, based on the average for the two months ending in January 2012. However, other financial intermediaries (OFIs) and insurance corporations and pension funds (ICPFs) deposits in this category rose over the same period, by a monthly average of €124 million and €513 million, respectively.

Outflows of deposits held by the non-resident private sector have slowed in recent months. Based on the average for the two months ending January 2012, deposits from the non-resident private sector fell by an annual rate of 6.7 per cent. This compares to an average annual decline of 23.9 per cent for the same two-month period to January 2011. Outflows of deposits held by the non-euro area private sector in particular, have not been as pronounced throughout 2011, as those recorded in 2010. Outflows for this category averaged €435 million on a monthly basis in 2011, compared to an equivalent figure of minus €2.2 billion in 2010.

Chart 1: Monthly Net Flows of Private-Sector Deposits in All Irish Resident Credit Institutions

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

Continued outflows of deposits have resulted in a further decline in both Irish resident M1 and M2. Currency in circulation increased at an annual rate of 6.1 per cent, based on the average for the two months ending January 2012. However, this was more than offset by the decline in overnight deposits outlined above, resulting in an annual rate of decline in Irish resident M1 of 7.3 per cent, based on the average for these two months. Developments in term deposits with agreed maturity up to two years have contributed to an easing of the pace of decline in Irish resident M2 in recent months. The average annual rate of decline in these term deposits was 5.4 per cent in the two months ending January 2012. The Irish contribution to euro area M3 fell at an annual rate of 4.7 per cent, based on the average annual rate for the same period. In contrast, during this two-month period, the equivalent measure for the euro area M3 on a whole is an annual increase of 2 per cent.

It is worth noting that the cost of borrowing on inter-bank markets has eased moderately in recent months, following significant increases in the first half of 2011. At end-February 2012, the one-month, three-month and twelve-month EURIBOR were 91, 63 and 59 basis points lower, respectively, than their 2011 peaks recorded during July 2011. Domestic banks are generally unable to obtain funding on these markets at reasonable rates, and therefore, remain reliant on central bank funding. Meanwhile, retail interest rates on deposits in Ireland have generally moved upwards during 2011, as the domestic banks in particular have increased their efforts to secure deposit funding. The weighted average interest rate on outstanding household deposits with agreed maturity up to two years was 3.49 per cent at end-December 2011, having increased by 69 basis points since end-December 2010. The equivalent rate for NFC deposits was 3.27 per cent – an increase of 101 basis points since end-December 2010.

Aggregate Credit Developments

Credit advanced to the Irish Government by resident credit institutions has remained broadly stable in recent months, both in terms of loans to government and holdings of government securities by resident credit institutions. The outstanding amount of loans to government was €29.7 billion at end-January 2012, compared to €29.4 billion at end-July 2011. Holdings of Irish government securities have increased to €14.3 billion at end-January 2012, a rise of €3.8 billion, compared to end-July 2011.

The amount of outstanding loans to the private sector on the balance sheets of Irish resident credit institutions fell by an annual rate of 5.3 per cent based on the average for the two months ending January 2012. The results of the Bank Lending Survey on credit conditions for resident business and households are outlined in Box 1.

Meanwhile, growth in holdings of securities issued by the private sector, which has been the main driver of growth in private-sector credit over the last two years, has moderated considerably in recent months, and turned negative in December 2011. Growth in credit institutions' holdings of private-sector securities has been largely related to holdings of debt securities issued by OFIs, including special-purpose vehicles (SPVs) such as NAMA. The pace of growth has eased considerably in recent months as the process of transferring loans to NAMA in return for bonds has largely ended. Credit institutions' holdings of Irish private-sector securities decreased at an annual rate of 8.1 per cent, based on the average for the two months ending January 2012. This compares to an average growth rate of 68.5 per cent for the same two-month period twelve months earlier, largely reflecting NAMA transfers.

Credit advanced to non-residents continued to fall sharply in recent months, albeit at a declining pace in the two months to January 2012. Total lending to all non-resident sectors by resident credit institutions declined at an annual rate of 12.5 per cent, based on the average for these two months. Lending to the non-resident private sector fell by an average annual rate of 12.9 per cent during the same period, with the net monthly flow of private-sector loans averaging minus €2.8 billion. This decline largely reflects developments in lending to non-euro area residents.

Box 1: Irish Results of the Euro Area Bank Lending Survey

By Bernard Kennedy

The January 2012 Bank Lending Survey (BLS) was completed between 16 December 2011 and 9 January 2012. The Survey examined changes in credit market conditions during the final quarter of 2011 and expectations regarding changes in credit standards, as well as loan demand, during the first quarter of 2012. In addition, four ad-hoc questions were included.

Credit Standards:

During the final quarter of 2011, credit standards were unchanged on loans to enterprises across all loan categories examined (Box 1 Table 1). Most of the factors impacting credit standards that banks were asked to evaluate were unchanged although heightened risk perception and, in particular, less favourable expectations regarding economic activity were recorded in the survey responses. In addition, more restraining price and non-price terms and conditions including higher loan margins, reduced loan-to-value ratios, and an increased occurrence of non-interest rate charges were also recorded.

In contrast, credit standards tightened somewhat in respect of loans to households for house purchases and were unchanged in respect of consumer credit and other lending during the fourth quarter of 2011. Consistent with this, most of the factors impacting credit standards on loans to households along with loan terms and conditions were unchanged, although less favourable expectations regarding economic activity and deteriorating housing market prospects were reported.

During the first quarter of 2012, credit standards are forecast to remain unchanged on loans to enterprises and to tighten in respect of household lending.

Box 1 Table 1: Change in Credit Standards on Loans to Enterprises

		Actual		Expected
		Q3 2011	Q4 2011	Q1 2012
Enterprises:	Overall	3	3	3
	Small/medium enterprises	3	3	3
	Large enterprises	3	3	3
	Short-term loans	3	3	3
	Long-term loans	3	3	3
Households:	House purchases	2.8	2.8	2.4
	Consumer credit	3	3	2.75

Key: 1 = tightened considerably; 2 = tightened somewhat; 3 = basically unchanged; 4 = eased somewhat; 5 = eased considerably.

Source: Bank Lending Survey, Central Bank of Ireland.

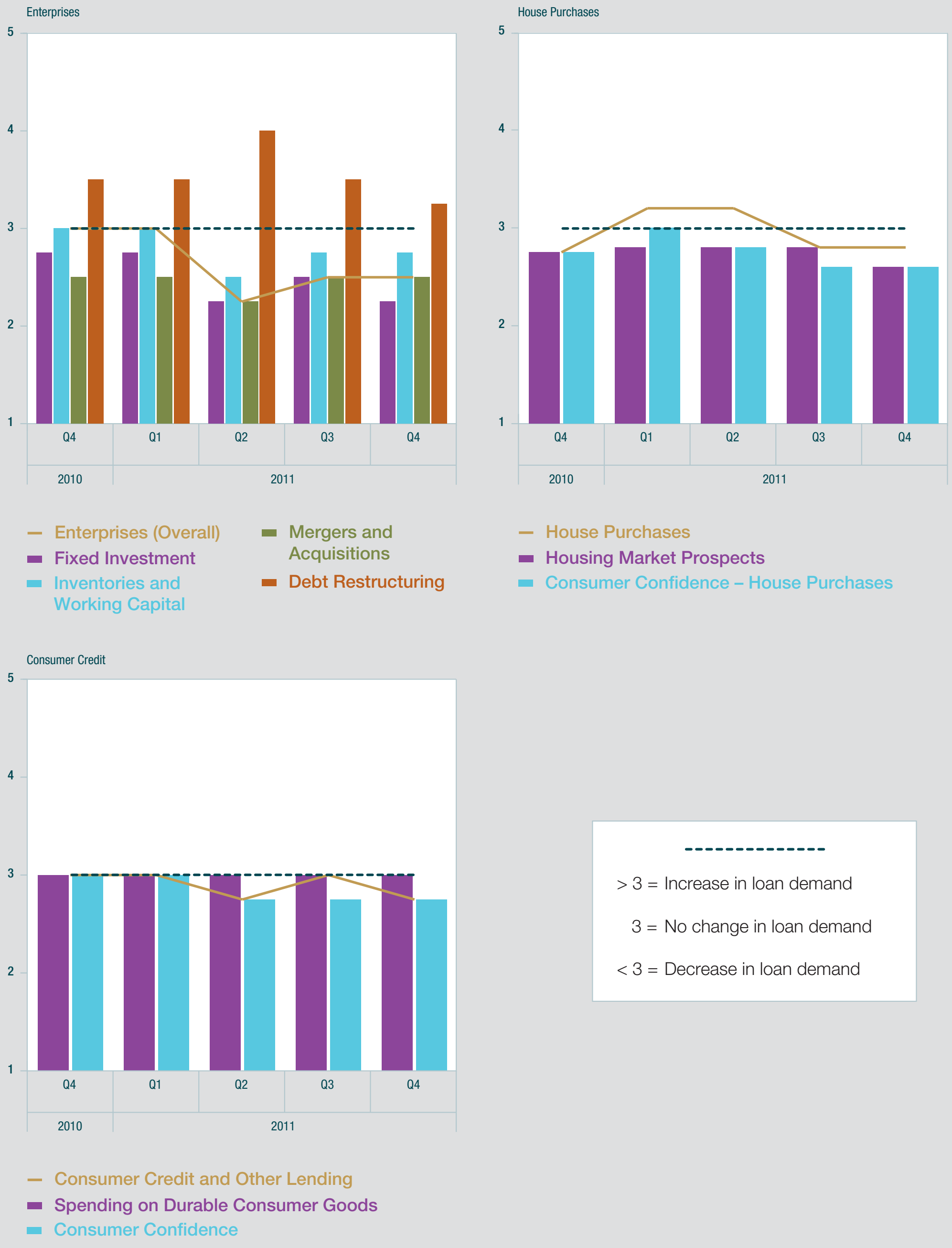
During the final quarter of 2011, the demand for loans from enterprises and households decreased (Box 1 Chart 1). In the case of enterprises, the drop in loan demand was the third successive decline and was entirely attributed to a reduction in the financing needs of businesses, with lower levels of fixed investment, falling outlays on inventories and working capital, and diminishing volumes of mergers and acquisitions activity all contributing to this decline. However, the restructuring of existing loans to NFCs in part counteracted the overall decline in demand.

Regarding loan demand from households, the drop in mortgage demand was the second successive quarterly decline, whereas the decline in demand for consumer and other lending contrasts with the unchanged demand reported for the third quarter of 2011. Less favourable housing market prospects, coupled with lower levels of consumer confidence, were cited by banks when accounting for the drop in household demand across both categories.

Box 1: Irish Results of the Euro Area Bank Lending Survey

By Bernard Kennedy

Box 1 Chart 1: Changes in Loan Demand and Contributing Factors



Source: Bank Lending Survey, Central Bank of Ireland.

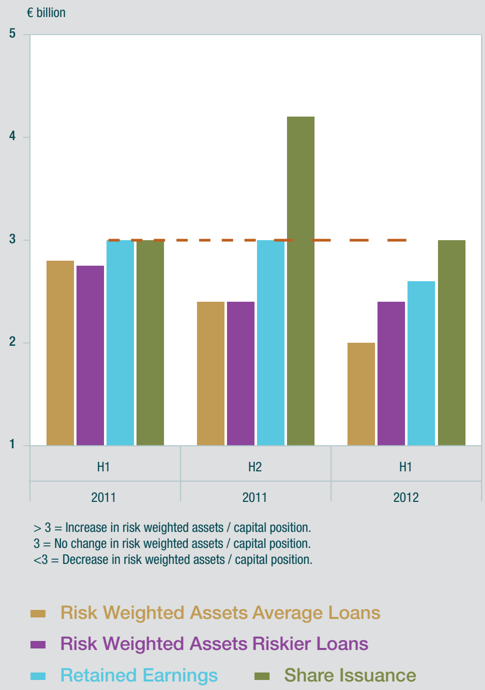
During the first quarter of 2012, loan demand from enterprises is expected to decrease further with loan demand from households forecast to remain unchanged.

Ad-Hoc Questions:

The January 2012 round of the BLS included four ad-hoc questions examining: (i) access to funding sources; (ii) the impact of Basel III on banks' risk weighted assets and capital position; (iii) the realised and expected impact of Basel III and other national regulations regarding changes in bank capital on banks' credit standards; and (iv) the impact of the sovereign debt crisis on banks' funding conditions and credit standards.

Box 1: Irish Results of the Euro Area Bank Lending Survey
By Bernard Kennedy

Box 1 Chart 2: Changes in Risk Weighted Assets and Capital Position



Source: Bank Lending Survey, Central Bank of Ireland.

For the first time, the ad-hoc question examining access to wholesale funding markets was expanded to include retail funding sources. During the final quarter of 2011, access to retail and wholesale funding markets deteriorated with the exception of loan securitisation and the market for credit risk transfer. A further deterioration in access to very short-term deposits is anticipated during the first quarter of 2012, with an easing in the market for securitisation of loans for house purchases also expected. Otherwise, market access is expected to remain unchanged.

During the second half of 2011, a decrease in banks' risk weighted assets together with an increase in their capital position was recorded with a further decrease in risk weighted assets anticipated for the first half of 2012 (Box 1 Chart 2)

Banks reported that ongoing adjustments in preparation for Basel III had no direct impact on their credit standards during the second half of 2011, with no impact expected during the first half of 2012. Finally, recent tension in the European sovereign debt market is reported to have had no direct impact on banks' funding conditions or credit standards, although some indirect transmission was cited.

Money Market Funds

The Central Bank of Ireland, in line with new European Central Bank Regulations, introduced a new definition of money market funds (MMFs) in December 2011[3]. In light of this, the ECB adopted new identification criteria for MMFs for statistical purposes in August 2011, aligned to supervisory definitions, which the Bank implemented with reference to end-December 2011 data. The new definition uses stricter criteria to identify a fund that wishes to market itself as a MMF.[4]

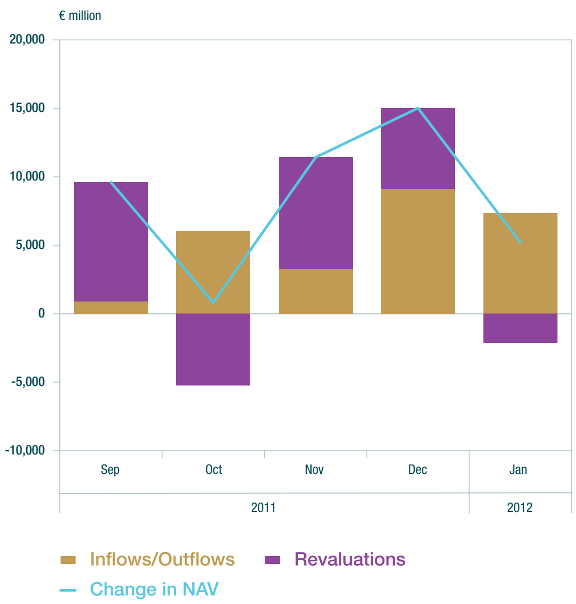
The revised reporting population causes a break in the series in Tables A.20.1 and A.20.2 in December 2011, with total assets of MMFs declining to €287 billion in the month. However, by applying the new reporting population to September 2011, it is possible to monitor

3 The guidelines on a common definition of European money market funds (MMFs) issued on 19 May 2010 by the Committee of European Securities Regulators (CESR), the predecessor of the European Securities and Markets Authority, set out criteria to be applied by any fund that wishes to market itself as a MMF.

4 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.

changes resulting from transactions, as distinct from changes arising from the application of the definition.

Chart 2: Monthly Change in Money Market Funds' Net Asset Value

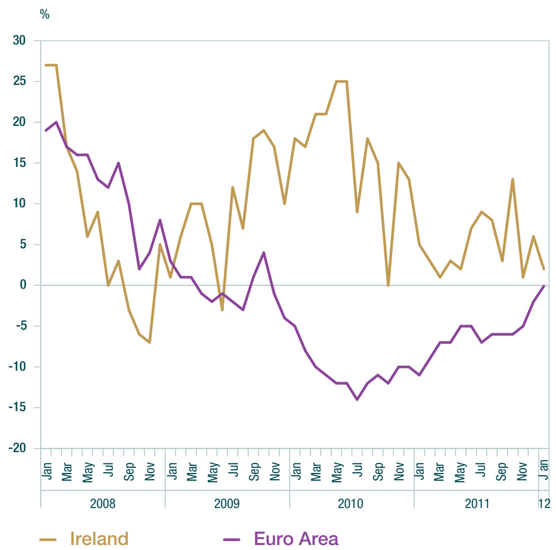


Source: Central Bank of Ireland.

There were sizeable inflows into money market funds (MMFs) resident in Ireland over the four months to end-January 2012, bringing the total net asset value (NAV) to €292 billion. This was accompanied by an aggregate positive revaluation of MMF shares/units of €6.7 billion over the same period. The NAV of MMFs can fluctuate depending on transactions in shares, or the revaluation of assets. Over the four months to January 2012, there were net purchases of €26 billion, but strong positive revaluations recorded in November and December 2011 were somewhat offset by negative revaluations in October 2011 and January 2012.

Euro area data is also impacted by the new definition of MMFs. Chart 3 shows the annual growth rate of the value of euro area MMF shares/units in issue, adjusted for reclassifications, including the change in definition. Therefore, the removal of just over €100 billion from the Irish data in December 2011 is taken into account in the growth rate. The annual growth rate of euro area MMF shares/units in issue has been negative since November 2009. In contrast, the annual growth rate for MMF shares/units in issue in Ireland has been positive since July 2009, and has been above the euro area aggregate in general since February 2009.

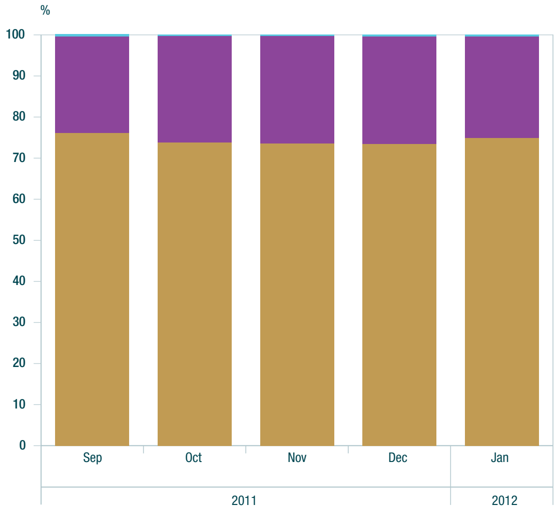
Chart 3: Annual Growth Rate of MMF Shares/Units



Sources: Central Bank of Ireland and European Central Bank.

In Ireland, MMFs primarily invest in money market instruments, repurchase agreements or bank deposits, or pursue a rate of return that approaches the interest rates of money market instruments. Irish resident MMFs invest mostly in debt securities or bonds issued by residents outside the euro area, with short maturities of up to one year. The balance sheet of the new population of MMFs shows that they mostly invest in securities other than shares, and deposits, which include repurchase agreements. Just under 75 per cent of outstanding assets under management (AUM) were invested in securities other than shares in January 2012. Just over one half of investments in securities were in non-euro securities issued by monetary financial institutions (MFIs) resident outside the euro area. It can be seen from the data that Irish registered MMFs are reducing their exposure to euro area private-sector securities, in particular euro area MFIs. In the euro area as a whole, the annual growth rate of holdings of securities issued by resident MFIs and the non-MFI sector was negative at end-2011, but positive for holdings of securities issued by the euro area government sector. For Irish resident MMFs, there was a €5 billion increase in holdings of securities issued by euro area governments since September 2011.

Chart 4: Money Market Funds' Assets



Securities other than shares
Remaining Assets
Loans to MFIs/Deposits

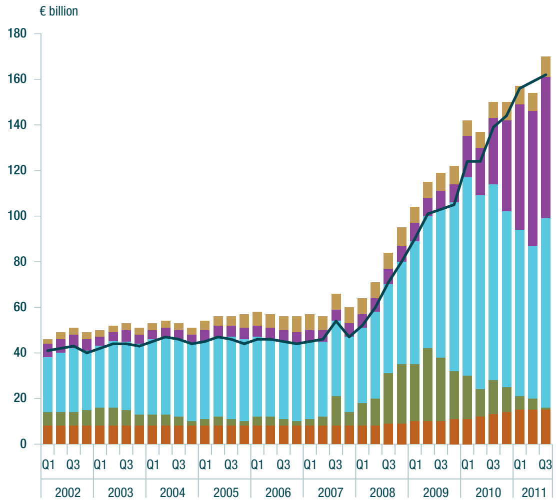
Source: Central Bank of Ireland.

Government

Debt and Deficit Developments

Government liabilities resumed an upward trend during Q3 2011, reaching €169.3 billion, their highest level to date. This represented an increase of €16.4 billion or 10.7 per cent on the previous quarter, as depicted in Chart 5. This chart also shows that the Quarterly Government Debt (QGD), which is the standard quarterly measure of debt consistent with Excessive Deficit Procedure (EDP) methodology[5], followed a similar upward trend over the quarter. The increase in government liabilities largely reflected an increase in the market value of government securities over the quarter. From Q3 2010 to Q2 2011, the market value of government securities declined, due to the sovereign debt crisis. During Q3 2011 however, the value of long-term government securities began to recover, thereby increasing the market value of liabilities. The increase in government liabilities during Q3, also reflects funds received by the State as part of the EU/IMF programme in the quarter. This funding is the primary reason for the increase in debt, as measured by the QGD mentioned above. At end-September 2011, State borrowing from the EU/IMF programme stood at €26.5 billion, equivalent to 15.7 per cent of total government liabilities.

Chart 5: Government Liabilities



Other
Loans
Long-Term Securities
Short-Term Securities
Deposits
QGD

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

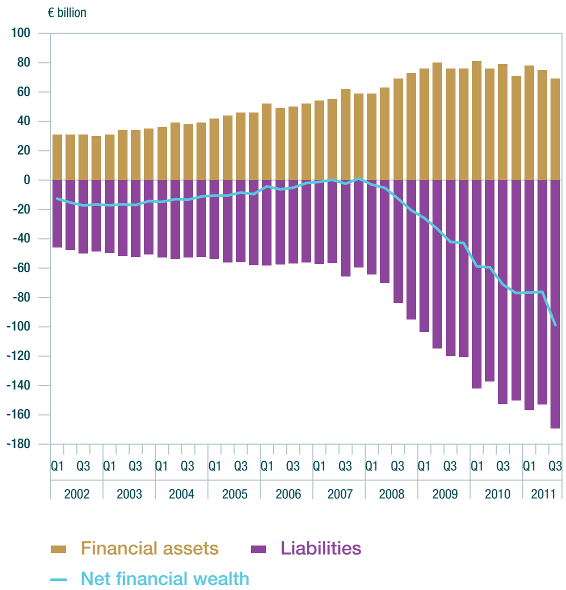
During July 2011, the State injected €17.6 billion into the banking sector. The impact of this injection on debt is dependent on whether existing resources were used to fund the injection. As the National Pensions Reserve Fund (NPRF) provided €10 billion, the impact on the Q3 debt is €7.6 billion.

The government sector's net financial wealth, the difference between government's financial assets and liabilities, fell to minus €100.6 billion during Q3, as depicted in Chart 6. The decline

5 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.

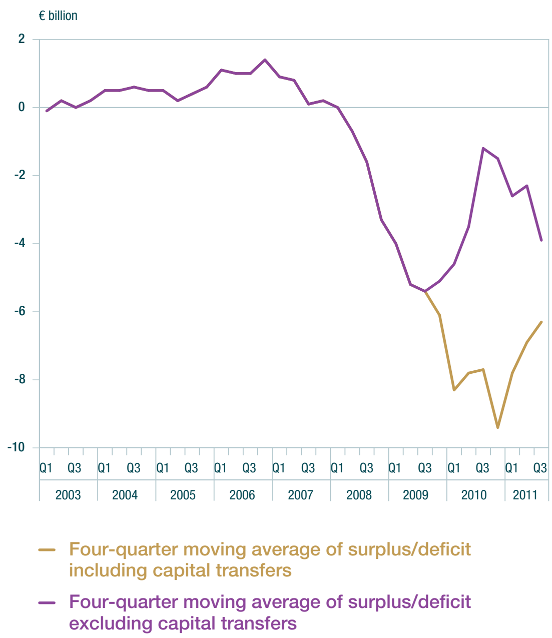
reflected the increase in State liabilities over the quarter, as well as the decline in State assets. Net financial wealth declined by €22.7 billion, or 29.2 per cent, over the quarter.

Chart 6: Government Net Financial Wealth



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

Chart 7: The Four-Quarter Moving Average of the Government Surplus/Deficit



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

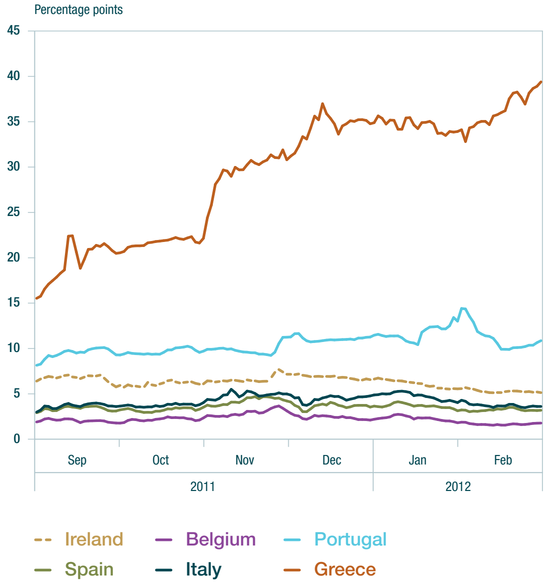
The evolution of the government surplus/deficit as a four-quarter moving average is depicted in Chart 7. This deficit increased from €2.3 billion in Q2 2011 to €3.9 billion during Q3 2011, when capital injections are excluded. The deficit including capital transfers declined further during Q3 2011, as no capital transfers have been recorded in the accounts since Q4 2010. During July 2011, the Government injected €17.6 billion into Allied Irish Bank/ Educational Building Society, Bank of Ireland and Irish Life & Permanent. The deficit impact of the July 2011 capital injections are still being assessed.

Sovereign Debt Market

Investor uncertainty about bond market developments fell back in early 2012 from the peaks reached in November 2011, although it remains high by historical standards. This has been reflected in reduced bond market volatility and a moderation in investors' risk aversion as the tensions in the sovereign debt markets eased on foot of recent developments. These included measures jointly undertaken by the ECB and other central banks to increase dollar lending, and more significantly, the provision of €489 billion to 500 credit institutions in December through the implementation of the first of two longer-term refinancing operations (LTROs) by Eurosystem central banks. A further €530 billion was provided to 800 credit institutions in a second longer-term refinancing operation in February. Nevertheless, although bond market sentiment has improved it does still remain fragile and this was most clearly seen in the sharp decline in the yields on AAA-rated long-term euro area government bonds at the start of 2012 which reflected ongoing flight-to-safety flows.

In December 2011 and January 2012, the sovereign bond yield spreads relative to German Bunds for most euro area countries narrowed slightly as upward pressure on spreads arising from disappointing fiscal data and the threat of sovereign downgrades was alleviated, at least partially, by the announcement of additional austerity measures (Chart 8). This narrowing of sovereign bond spreads continued into February despite a series of ratings downgrades, including the decision of Fitch and S&P to downgrade some euro area countries including France, Italy, Spain, Austria, Belgium and Portugal. This continued downward trend in yields might suggest that not withstanding the measures outlined above, markets may already have priced in the downgrades.

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



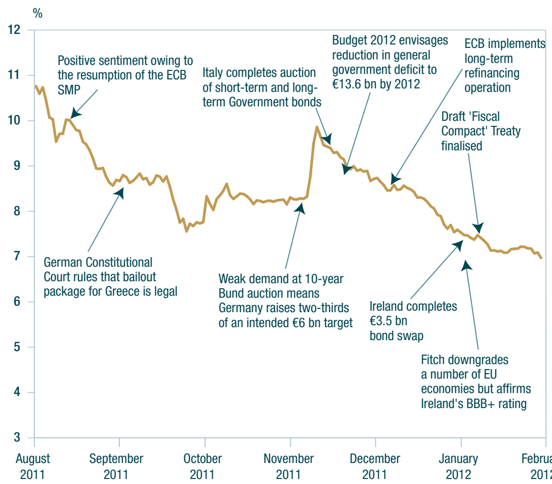
Source: Thomson Reuters Datastream.

Market sentiment in early-2012 was further enhanced by a conflux of factors including the conclusion of negotiations around a second programme for Greece, decisions undertaken on the finalisation of the *Treaty on Stability, Coordination and Governance in the Economic and Monetary Union* (the 'Fiscal Compact') and the bringing-forward of the permanent crisis mechanism (the European Stability Mechanism).

The fall in the yields on ten-year Irish government debt witnessed up to October 2011 re-emerged towards the end of Q4 2011 with yields falling by 83 basis points in December (from 9.4 per cent at end-November to 8.6 per cent at the close of the year). This downward trend continued into 2012 with yields falling a further 160 basis points since the turn of the year. This brought these yields to just under 7 per cent by end-February 2012, their lowest level since October 2010.

In the aftermath of the announcement of the first of the ECB's longer-term refinancing operations (LTRO) in late-December 2011, sovereign bond yield spreads relative to German Bunds for a number of EU countries (including Ireland, Italy, Spain and Belgium) narrowed as January progressed. In the case of Ireland, the yield spread narrowed by 149 basis points over the opening six weeks of the year and have remained steady at close to 5.2 per cent since early-February. In contrast, the yield spread for Portugal increased sharply from mid-January onwards and had risen by almost 400 basis points by the end of that month before beginning to ease back again in February. Similarly, the yield spread for Greece remained volatile since the turn of the year and had risen by a further 375 basis points by end-February (Chart 8), as discussions with private-sector holders of the debt continued.

Chart 9: Irish Government Ten-Year Bond Yields

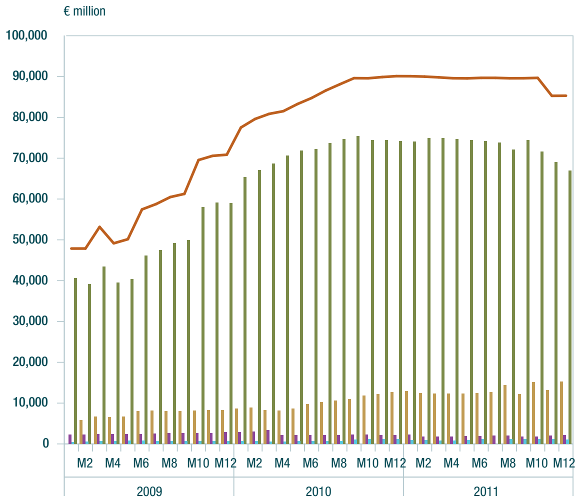


Source: Thomson Reuters Datastream.

In the case of Ireland, the positive momentum was sustained by the announcement that the NTMA had completed a €3.53 billion bond swap in mid-January; this exchange of existing 2014 debt for new bonds due for repayment in 2015 marked the NTMA's first engagement with the market since September 2010. Moreover, Ireland's sovereign credit rating remained unchanged during the round of downgrades to euro area countries announced by both Fitch and S&P in January with both of these ratings agencies re-affirming Ireland's investment grade (BBB+) status.

The outstanding nominal volume of existing Irish government long-term bonds in issue was €85.3 billion at end-2011 (down from €89.6 billion in September). By end-December, the holders of government bonds continued to be predominantly non-resident, with 78 per cent of government bonds in issue held by foreign investors. Resident holders are predominantly banks (18 per cent), with financial intermediaries holding a further 3 per cent.

Chart 10: Holders of Irish Government Bonds



Irish Banks and Central Bank
Irish Financial Intermediaries
Irish NFCs + H'holds + General Govt
Non-Residents
Total Government Bonds

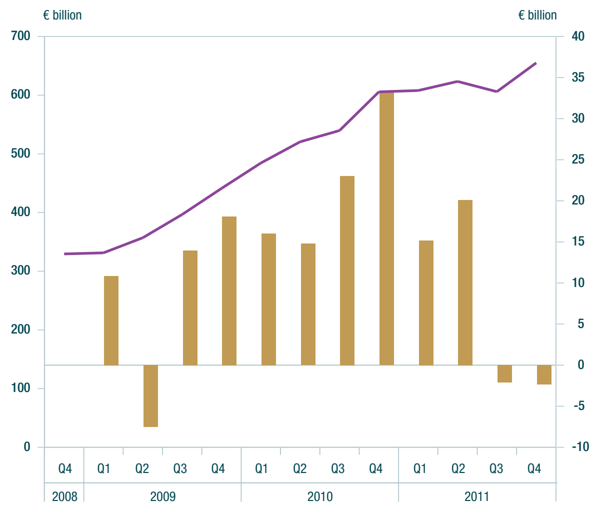
Source: Securities Holdings Statistics, Central Bank of Ireland.

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

Investment Funds

Irish resident investment funds expanded strongly in Q4 2011, driven by a broad-based recovery in asset valuations despite signs of on-going investor caution. It is important to note that aggregate data was significantly impacted by a change in the definition of money market funds (MMFs), which saw MMFs to the value of just over €100 billion reclassified as investment funds, almost all of which were added to bond funds, while a small number moved into the remaining funds category. The overall value of the Irish investment funds industry, measured by total shares/units in issue, increased to €768.7 billion by end-2011, (based on the new definition), up from €606 billion at end-Q3 2011. When changes arising from the reclassification are excluded, the overall value rose to €654.7 billion, driven entirely by a recovery in asset revaluations amounting to €51.1 billion across the range of fund types. Positive revaluations were most apparent in equity prices, where declines had been relatively marked in previous quarters. Nevertheless, investor caution was evident in a second successive decline in net transactions, amounting to €2.3 billion in Q4 2011, which was concentrated among domestic and other euro area investors in equity funds. Though small in absolute terms, this marked a significant break in a trend of strong net transaction inflows into the Irish funds industry from mid-2009 to mid-2011, as shown in Chart 11. Interestingly, in Q2 2009, a recovery in market valuations also coincided with a decline in net transactions, as investors waited for further momentum before committing new funds.

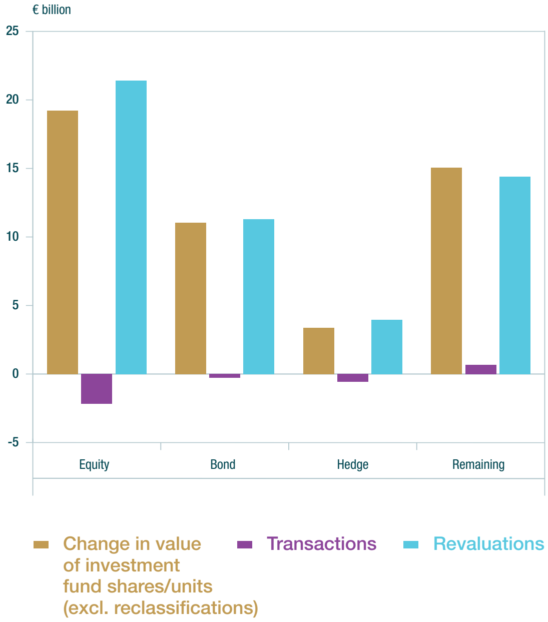
Chart 11: Change in Value of Investment Funds Shares/Units Q4 2008 - Q4 2011



Transaction Net Inflows (RHS)
Value of Investment Funds (LHS)

Source: Investment Funds Statistics, Central Bank of Ireland.

Chart 12: Change in Value of Shares/Units by Investment Fund Category, Q4 2011



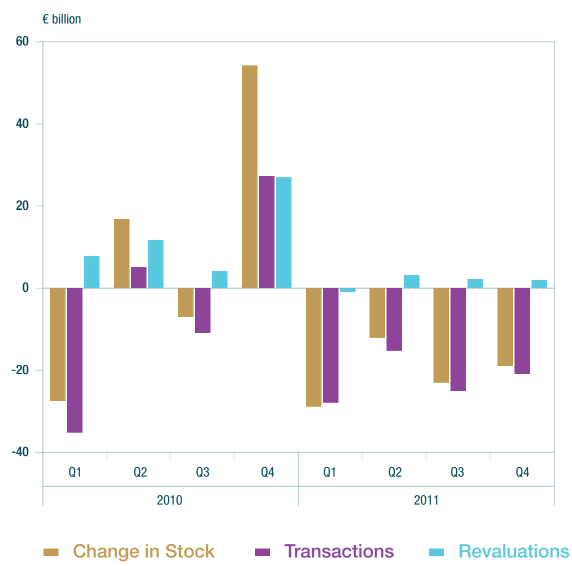
Source: Investment Funds Statistics, Central Bank of Ireland.

Across the various fund types there was a broad-based pattern of strong positive revaluations coinciding with weak net transaction flows. Within equity funds, the pattern was most apparent, with net transactions declining by €2.2 billion despite positive revaluations of the order of €21.4 billion, or 9.1 per cent. This may reflect the impact on investor sentiment of significant losses in previous quarters, with negative revaluations of €31.9 billion in the first three quarters of 2011, and €28.6 billion in Q3 alone. Within bond funds, positive revaluations (excluding reclassifications) amounted to €11.3 billion, largely accounted for by security assets in the rest of the world, with US Treasury bills notably recording significant gains and the euro depreciating against other major currencies. Within euro area holdings, negative revaluations in some peripheral securities were offset by valuation gains in perceived safer options, such as German debt. Net transaction flows were close to flat but there was a shift within security holdings towards the euro area from the rest of the world in a reversal of flows over the previous two quarters. This occurred in advance of significant gains in the securities of banks and sovereign peripheral countries in the euro area in early 2012. Hedge funds recorded revaluation gains of €4 billion, or 6 per cent, amid significant performance variation as positive market movements impacted on short positions, while transaction inflows were mildly negative. Remaining funds, which include mixed, real estate and other funds, recorded particularly strong revaluation gains (excluding reclassifications) of €14.4 billion, or 11.8 per cent, partly reflecting an ability of mixed funds to shift flows between various equity and bond assets, though net transactions were weak.

Financial Vehicle Corporations

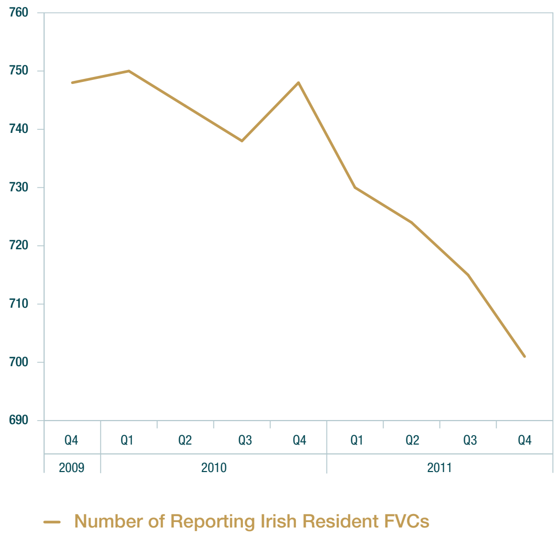
Total assets for financial vehicle corporations (FVCs) resident in Ireland continued to decline over the quarter, falling to €491.9 billion, reflecting the trend seen since the start of 2011. In Q4 2011, this fall was due to a large outflow of €20.9 billion. This outflow was mainly attributable to large negative transactions in securitised loans and securities other than shares on the asset side of the balance sheet of €14.6 billion and €4.9 billion, respectively. The decline in securitised loans was driven by loans originated by euro area MFIs with the largest falls in loans to Other Monetary Union Member (OMUM) non-financial corporations of €6.5 billion; OMUM households of €4.9 billion and other euro area residents of €3.9 billion. On the liabilities side, this decline was reflected in a large outflow of €19.8 billion in debt securities issued over two years. These large outflows were partially offset by a positive revaluation of €1.8 billion over the quarter, mainly due to increases in value of securitised loans of €0.8 billion and other assets of €0.7 billion.

Chart 13: Quarterly Change in Total Assets of Resident FVCs



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

Chart 14: Number of Reporting Irish Resident FVCs



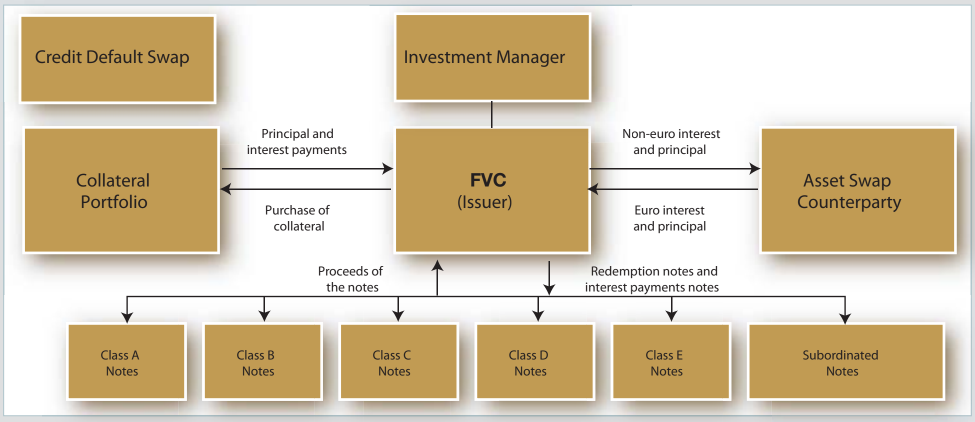
Source: Financial Vehicle Corporation Statistics, Central Bank of Ireland.

For the first three quarters of 2011, the decline in net Irish transactions of €68.2 billion was in line with euro area trends, where net outflows of €160.2 billion were recorded. However, this diverged in Q4 2011 with the euro area as a whole showing net inflows of €67 billion, while Ireland had net outflows of €20.9 billion. These large negative transactions in the Irish data reflect a decline in the number of reporting FVCs, which have fallen by 47 to 701 by end-2011. This reduction is mainly attributable to a fall in residential mortgage backed securities of 11 and multi-issuance vehicles of 16. Collateral Debt Obligations (CDOs) represent the largest vehicle-type by number in Ireland, and their activities are further explored in Box 2. The decline in Irish assets has brought Ireland's share of total euro assets to 21.7 per cent, down from 24.5 per cent at the start of the year.

Box 2: Analysis of Collateral Debt Obligations
By Brian Godfrey

Collateral Debt Obligations (CDOs) are the largest type of financial vehicle[6] in Ireland based on the number of vehicles in operation. This box outlines the types of activities undertaken by CDOs and provides aggregate details of the size and components of their balance sheet. CDOs are a type of structured asset-backed security used by financial vehicle corporations (FVCs) that issue multiple 'tranches' of debt securities where the underlying collateral is typically a portfolio of bonds, called collateralised bond obligations (CBOs), or loans, called collateralised loan obligations (CLOs). CDO-type vehicles classify themselves either as 'cash' (traditional) or 'synthetic' when registering with the Central Bank of Ireland. 'Cash CDOs' take on the credit risk of an asset where the legal ownership of the asset is transferred to the vehicle. These assets are credit based, such as loans, asset-backed or mortgage-backed securities. 'Synthetic CDOs' do not take on ownership of a pool of assets but gain exposure to assets such as sovereign or corporate bonds through the use of credit default swaps or through similar mechanisms. Synthetic CDOs can be 'fully' or 'partially' funded. A vehicle is 'fully' funded when all the credit risk of a pool of assets is transferred by credit-linked notes. These are debt securities issued by a vehicle that are linked to a credit default swap and the proceeds are held on deposit. A 'partially' funded vehicle is where the credit risk is transferred by credit-linked notes as well as by credit default swaps (CDSs)[7]. The general structure of CDO-type vehicles is shown in Box 2 Chart 1.

Box 2 Chart 1: Structure of CDO-Type Vehicles



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

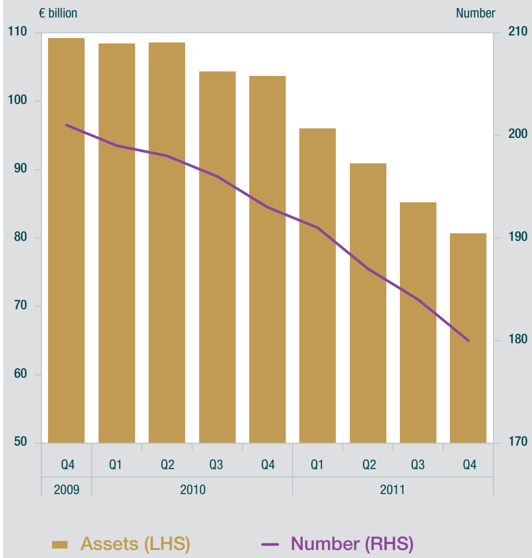
As can be seen from Box 2 Chart 1, different classes or tranches of securities are issued by a vehicle in what is termed 'credit tranching'. Each class of note has a different seniority with a credit rating assigned depending on the level of seniority. The notes are redeemed in order of seniority in what is called the 'waterfall' principle and any defaults affect the subordinated notes first, which results in the lower rated securities receiving higher interest payments. The majority of CDOs have an investment manager who actively manages the portfolio in what is termed 'arbitrage CDOs' which look to exploit the spread between the yield the CDO earns on its portfolio of assets and the yield it must pay out on the debt securities that it has issued.

6 Data on financial vehicles were first introduced in the article 'Meeting the Statistical Challenges of Financial Innovation: Introducing New Data on Securitisation', published in Quarterly Bulletin 3, 2011.

7 A CDS is a financial swap agreement where the seller of the CDS undertakes to compensate the buyer in the event of loan defaulting or other credit event taking place.

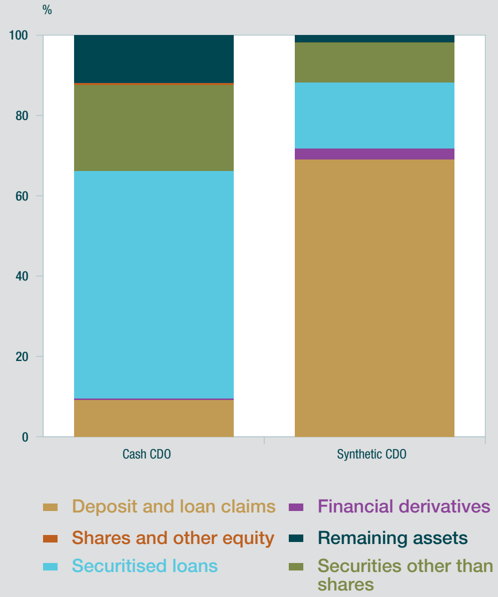
Box 2: Analysis of Collateral Debt Obligations
By Brian Godfrey

Box 2 Chart 2: Total CDOs by Outstanding Assets and Number



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

Box 2 Chart 3: Breakdown of Assets and Synthetic CDOs



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

A small proportion of CDOs have a static pool of assets which are referred to as 'balance sheet CDOs' whose primary function is to remove assets from the balance sheet of the issuing institution, thereby reducing the amount of regulatory capital it must hold. An asset-swap counterparty can also be involved to hedge currency risk, if the notes have been issued in a different currency to that of the collateral held.

In Ireland, the number of CDO vehicles is 180, representing 25.7 per cent of all Irish resident FVCs by number, and the third largest by asset value at €80.7 billion for Q4 2011 (Box 2 Chart 2). Cash CDOs account for 78.9 per cent of the CDO reporting population while there were only 38 synthetic CDOs in Q4 2011. Since Q4 2009, when data on these vehicles was first collected, reporting numbers have fallen for both 'cash' and 'synthetic' CDOs, with cash CDO vehicles declining by 15 and synthetic CDOs by 6. In terms of total assets for Q4 2011, cash CDOs reported €68.1 billion and synthetic CDOs €12.7 billion. Their combined assets for Q4 2011 was 16.4 per cent of total assets reported by all Irish resident FVCs, down from 20.3 per cent in Q4 2009.

For cash CDOs the main asset types are securitised loans, followed by securities other than shares. Securitised loans for Q4 2011 made up 56.8 per cent of the balance sheet and can be broken down by loans originated by: non-euro area residents €18.2 billion; euro area MFIs €11.3 billion; and euro area NFCs €8.4 billion. Securities other than shares account for 21.3 per cent of the cash CDOs' balance sheet, at €14.3 billion. The majority of these securities held are issued by Other Monetary Union Member (OMUM) non-MFIs at €5.8 billion and non-euro area residents at €6.6 billion. While full geographic detail is not available, issuer country information can be obtained where ISIN codes are reported. The information available indicates that the largest issuer countries are the US and the Netherlands, which each account for 14.9 per cent, while the UK accounts for 12.6 per cent. The main liability instrument is debt securities issued with a maturity of over two years at €61.2 billion.

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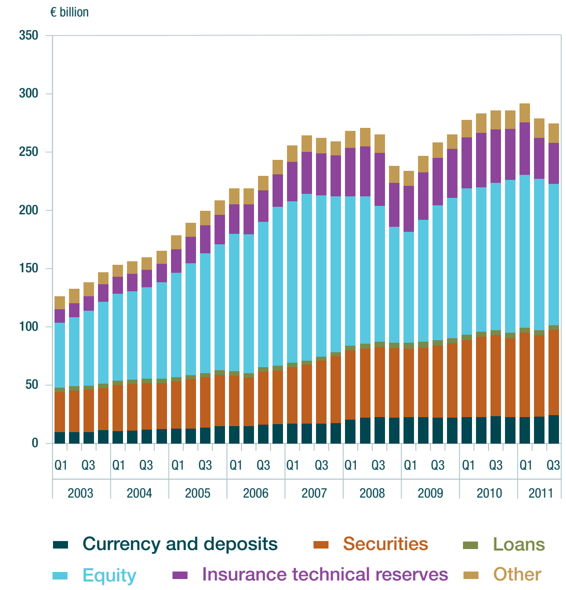
Synthetic CDOs' balance sheets are mainly composed of deposit and loan claims, accounting for nearly 70 per cent of the asset side of the balance sheet at €7.6 billion, which is held as collateral against the credit risk exposure of credit-linked notes. The rest of this balance sheet is mainly securitised loans originated by non-euro area residents at €1.8 billion and securities other than shares of €1.1 billion. The liability side of this balance sheet consists mainly of debt securities issued with a maturity of over two years at €7.4 billion, with loans and deposits received accounting for 20.9 per cent at €2.3 billion.

Insurance Corporations & Pension Funds

Irish resident insurance corporations and pension funds (ICPFs) accounted for just over 8 per cent of the total financial assets of the Irish financial sector at end-September 2011. In addition to its domestic activities, the insurance sector has increased its links with the rest of the world through the expansion of the domestic reinsurance industry and the number of general insurers locating in Ireland.

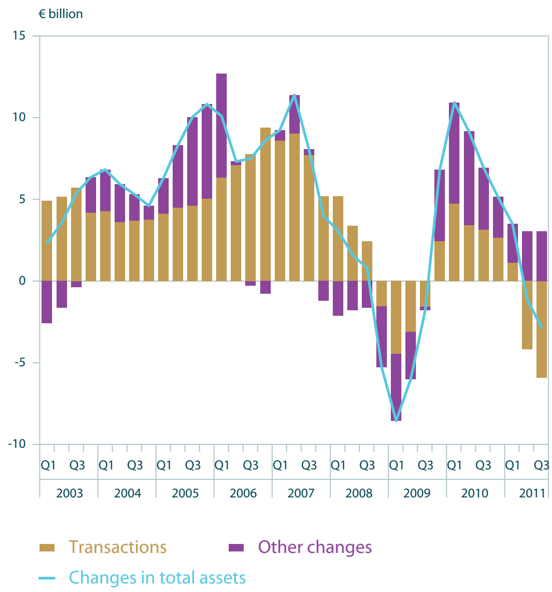
Chart 15: Assets Portfolio of Insurance Corporations & Pension Funds



Source: Quarterly Financial Accounts, Central Bank of Ireland.

During Q3 2011 ICPFs' assets recorded a 1.5 per cent decrease, falling to €274 billion, as depicted in Chart 15. As can be seen in Chart 16, changes in the balance sheet position of the ICPF sector are driven by two factors, financial transactions and other changes. For Q3 alone the decline in assets was largely as a result of negative transactions over the quarter. The decrease over the quarter reflected a €2.9 billion disinvestment in assets by the ICPF sector, accounting for 70 per cent of the total decline in ICPFs' assets. During Q3 the value of ICPFs' assets decreased in value by nearly €1.3 billion.

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.

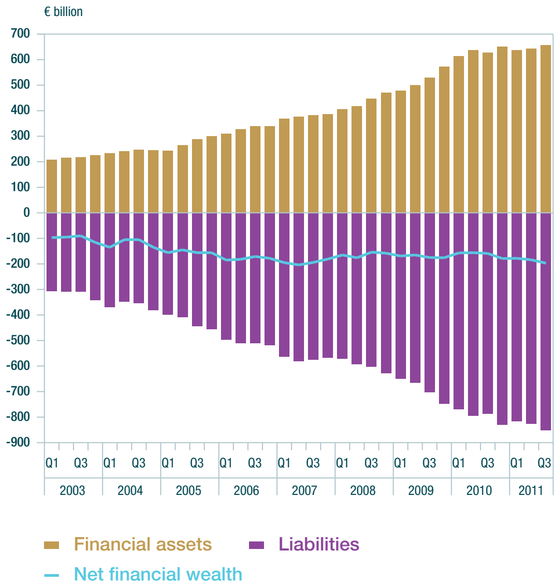
It should be noted, that despite the fall in assets the net financial wealth of the ICPF sector increased by 0.6 per cent over Q3 2011. This was driven by the fact that the sector's liabilities declined by €4.3 billion, or 1.5 per cent, over the quarter, caused by a decline in the value of shares and other equity.

Non-Financial Corporations (NFCs)

During Q3 2011, the NFC sector's financial assets and liabilities increased by 2 per cent to €656 billion and 3 per cent to €852 billion, respectively, as seen in Chart 17. The NFC sector's net financial wealth[8] declined during Q3 2011 by 7 per cent, to minus €197 billion, as a result of the stock of liabilities exceeding assets, which compares to a net financial wealth of minus €184 billion in Q2 2011.

The NFC sector's transactions show that it acquired €18.9 billion of financial assets and €16.1 billion of financial liabilities in Q3 2011. Overall the NFC sector showed a positive net borrowing/net lending figure for the fourth consecutive quarter, based on a four-quarter moving average. This suggests that the NFC sector was on average a net lender, providing funds to the other sectors in the economy[9].

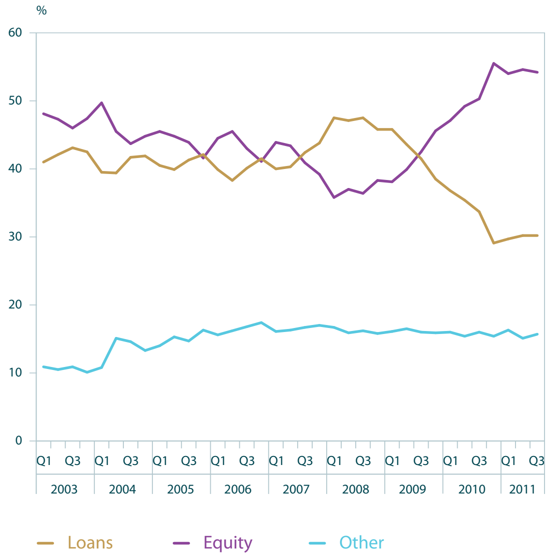
Chart 17: Non-Financial Corporations' Net Financial Wealth



Source: Quarterly Financial Accounts for Ireland, Central Bank of Ireland.

The NFC sector consists of both indigenous domestic industry and multinational companies located in Ireland, which have very different profiles in terms of funding. The primary funding instruments of the NFC sector are: loans; shares and other equity; and other accounts receivable/payable.[10] Chart 18 presents the contribution of each of the NFC sector's main sources of funding. The NFC sector continued to use shares and other equity as its main source of funding in Q3 2011, at 54 per cent. The NFC sector obtained 30 per cent of its funding from loans and 16 per cent from the other category in this quarter.

Chart 18: Non-Financial Corporations' Sources of Funding



Source: Quarterly Financial Accounts for Ireland, Central Bank of Ireland.

Credit Advanced to the NFC Sector by 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 1.8 per cent, based on the average for the three months ending January 2012. The monthly net flow of credit to the NFC sector, which removes any non-transaction effects, averaged minus €389 million during this three-month period,

8 Net financial wealth is defined as the difference between financial assets and liabilities. It should be noted that net financial wealth does not include non-financial assets such as housing.

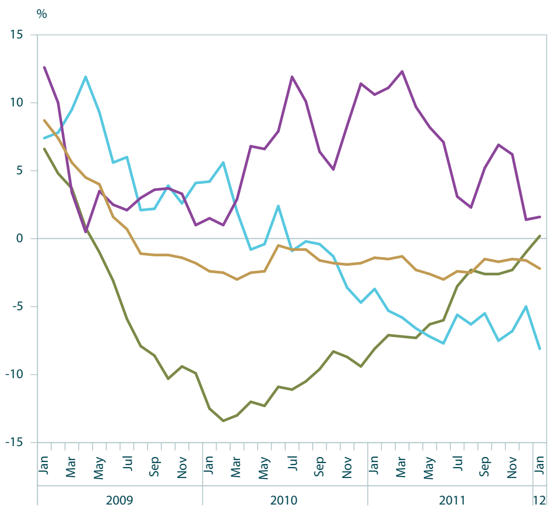
9 The net lending/net borrowing figures are examined in terms of the four-quarter moving average position to adjust for any seasonality that may be in the data.

10 Claims which stem from the early or late payment for financial transactions in goods and services, distributive transactions or secondary trade in financial assets.

reflecting significant declines in both December 2011 and January 2012.

The annual rate of change in loans to Irish resident NFCs averaged minus 1.8 per cent in the three months ending January 2012. Loans issued by credit institutions are the primary source of funding for indigenous industry, primarily SMEs, unlike the multinational sector which has greater access to financial markets. The pace of contraction in longer-term loans has eased in recent months. In the three months ending January 2012, the average annual rate of change in loans with an original maturity over five years was minus 1 per cent. Loans with an original maturity of between one and five years experienced a further sharp contraction however, declining at an average annual rate of 6.6 per cent over the same period. By contrast, short-term loans to NFCs with an original maturity up to one year, which includes the use of overdraft facilities, recorded an average annual growth rate of 3.1 per cent over this period.

Chart 19: Loans to Irish Resident NFCs, Annual Rates of Change

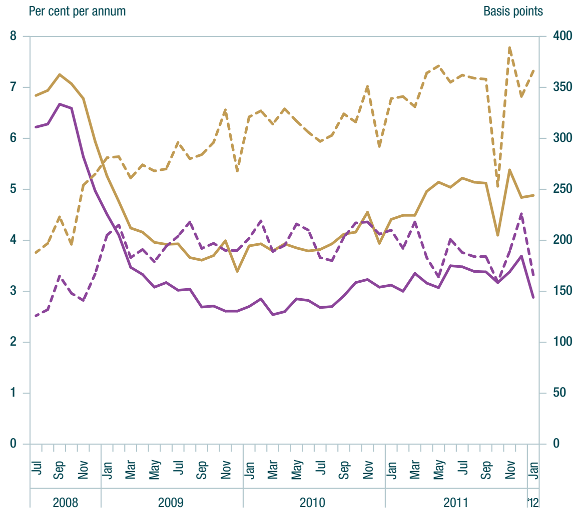


Source: Money and Banking Statistics, Central Bank of Ireland.

Interest rates on all outstanding loans to NFCs, issued by Irish resident credit institutions, have fallen slightly in recent months, following an increase of over 80 basis points between end-June 2010 and end-July 2011. The weighted average interest rate on all outstanding NFC loans was 3.59 per cent at end-January 2012. The equivalent rate at euro area level was 3.84 per cent. Longer-term loans with an original maturity over five years accounted for 46 per cent of all outstanding loans issued to NFCs by Irish resident credit institutions at end-January 2012. At this time, the weighted average interest rate on these loans was 3.51 per cent, while the rates on short-term and medium-term loans were higher, at 3.66 per cent and 3.65 per cent, respectively.

With regard to new business, the weighted average interest rate on new loans to NFCs up to an amount of €1 million, which is a proxy for the rate applying to SMEs, was 4.88 per cent in January 2012, having fallen from approximately 5.12 per cent in September 2011. The equivalent rate reported by euro area credit institutions in January 2012 was 4.36 per cent. For loans over €1 million, the rate reported by Irish resident credit institutions in January 2012 was 2.88 per cent – a decline of approximately 50 basis points since September 2011. The equivalent euro area rate was 2.83 per cent in January 2012.

Chart 20: Interest Rates on New NFC Loan Agreements



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

Multinational NFC Developments

Recourse by resident multinational NFCs, both foreign and Irish-owned, to market-based funding as an alternative to bank funding during Q4 2011 showed a slight increase, with the amount of debt securities outstanding rising to just over €3 billion. In Q4 2011, net issuances were €53 million. This compares with net issuances of €271 million during Q3 2011 and €60 million during Q4 2010.

Equity securities for all sectors had an outstanding value of €165.1 billion by end-September 2011, mainly comprising equities quoted on stock exchanges (€164.6 billion). The value of these quoted securities (mainly shares) had increased to €182.8 billion by end-2011, representing an increase of 11.1 per cent over the quarter. The value of these quoted securities had risen further to €196.9 billion by end-January 2012. Over the course of Q4 2011, the value of the equities of multinational NFCs rose to €155.5 billion (up 12 per cent), reflecting positive increases in market valuation. The value of these quoted securities had risen further to €168.1 billion by end-January 2012.

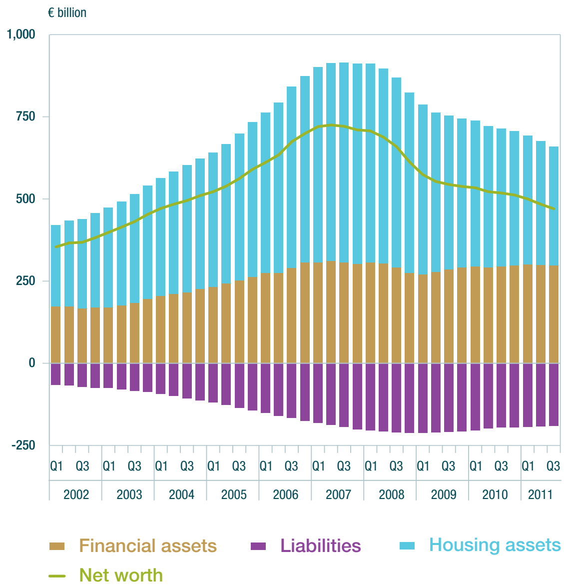
The value of all quoted equities had actually risen by €10 billion (6 per cent) by end-Q4 2011 when compared to end-Q4 2010. Changes to the valuation of the NFC sector were an important driver of this overall year-on-year change, as the value of multinational NFCs' equities rose by almost €3 billion (2 per cent) over the same period and accounted for 27 per cent of the increase in the value of all listed equities.

Changes in the composition of multinational companies in the NFC and other sectors have had a significant impact on the macro-economic aggregates for Ireland in recent years. A brief overview of the reasons underlying these changes is provided in Box 3.

Households

Households' net worth[11] declined by a further 3 per cent during Q3 2011, falling to €470 billion or €104,737 per capita, as depicted in Chart 21. Overall, net worth has fallen by 35 per cent, since its peak at Q2 2007. The decline in households' net worth during Q3 2011 reflected the continued decline in the value of housing assets; and to a much lesser extent, a further decline in the value of financial assets. Housing assets have been on a downward trend since late 2007 and have so far declined by 41 per cent since their peak. The fall in net worth during Q3 2011 was mitigated, to some extent, by the further reduction in households' liabilities. Over the period, liabilities fell to €190.5 billion or €42,484 per capita. This represented a decline of €1.8 billion, or 0.96 per cent, over the quarter. Overall, households' liabilities have declined by €21.7 billion, or 10 per cent, since their peak in Q4 2008.

Chart 21: Households' Assets, Liabilities and Net Worth



Source: Quarterly Financial Accounts, Central Bank of Ireland.

Since Q1 2009, households have been net lenders, as depicted in Chart 22. This trend partly reflects households' continued investment in financial assets, as well as, more substantially, a reduction in households' liabilities. Households are currently undergoing a process of deleveraging, as they reduce

11 Households' net worth is calculated as the sum of households' housing and financial assets minus their liabilities.

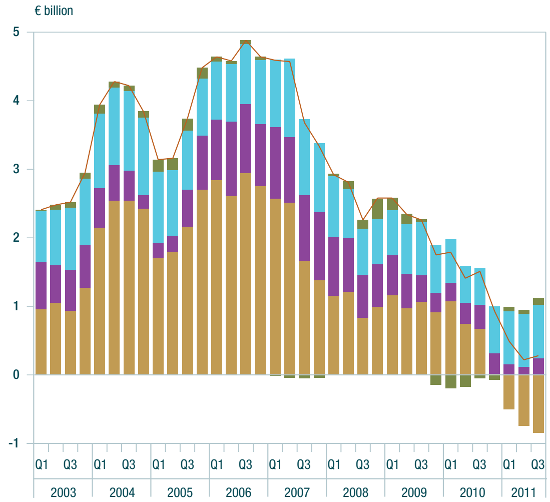
the high debt levels they incurred prior to the financial crisis. Chart 22 shows that this trend continued during Q3 2011, as household net lending increased once more over the quarter.

Chart 22: Household Net Lending/Borrowing, Four-Quarter Moving Average

Source: Quarterly Financial Accounts, Central Bank of Ireland.

Chart 22 also shows that households' investment in financial assets has been much lower during 2011 than in previous years. Chart 23 presents a decomposition of households' financial assets transactions by asset type. The chart shows that during 2011 households in aggregate have been disinvesting in 'currency and deposits', while investment in 'insurance technical reserves'[12] (ITRs) has remained largely unchanged. The latter trend may be because these ITRs are an extremely illiquid asset, from which households are generally unable to withdraw funds once invested until retirement.

Chart 23: Transactions in Households' Financial Assets



Source: Quarterly Financial Accounts, Central Bank of Ireland.

Lending to Households by Resident Credit Institutions

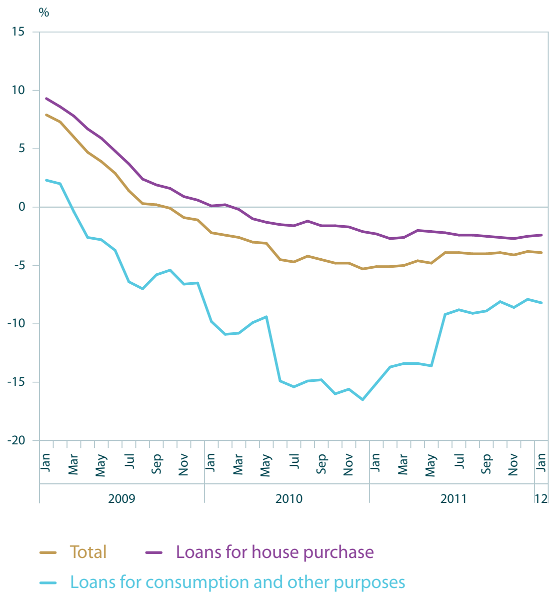
Loans to Irish households advanced by Irish resident credit institutions continued to decline in recent months, falling at an annual rate of 3.9 per cent, based on the average for the three months ending January 2012. During this period, loans to households for house purchase fell at an average annual rate of 2.5 per cent, while loans for consumption and other purposes fell by 12 per cent and 2.7 per cent, respectively. Overall, the monthly net flow of loans to households averaged minus €373 million in these three months.

Loans for house purchase account for over 70 per cent of outstanding on-balance sheet lending to Irish households, and have

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

remained on a downward trajectory in recent months. The average annual rate of change was minus 2.5 per cent in the three months ending January 2012, while monthly net flows averaged minus €133 million. The monthly net flow of loans for consumption purposes averaged minus €184 million during the same period, with particularly sharp declines reported in medium-term loans with an original maturity over one year and up to five years. Lending for other purposes which includes loans for debt consolidation, education, business loans etc. declined at an annual rate of 2.7 per cent, based on the average for the three months ending January 2012, while the monthly net flow averaged minus €56 million.

Chart 24: Loans to Irish Households, Annual Rates of Change



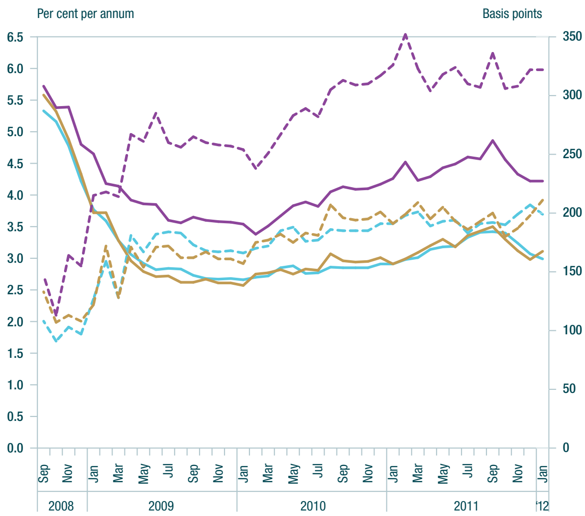
Source: Money and Banking Statistics, Central Bank of Ireland.

Households have experienced a reduction in the cost of their outstanding borrowings in recent months. Interest rates on outstanding loans for house purchases, reported by Irish resident credit institutions have fallen, as the ECB cut its main refinancing rate by 25 basis points in November 2011, and again in December. The weighted average interest rate on outstanding mortgage loans with an original maturity over five years (which account for 99 per cent of all outstanding mortgage loans) was 2.98 per cent at end-January 2012, having fallen by 44 basis points since end-September 2011. The size of the fall reflects the high weighting of tracker mortgages within housing loans, as ECB rate changes are passed through in full to these products. The corresponding rate reported by all credit institutions resident in the euro area was higher, at 3.87 per cent at end-January 2012, having fallen by just 4 basis points since end-September 2011.

Interest rates on outstanding loans to households for consumption and other purposes also fell in recent months, with the weighted average rate on all outstanding loans falling by 22 basis points between end-September 2011 and end-January 2012. The interest rate on short-term loans for consumption and other purposes with an agreed maturity up to one year, which includes overdrafts and credit card debt, was 8.83 per cent at end-January 2012. The equivalent rate reported by all credit institutions resident in the euro area was lower, at 8.14 per cent. Meanwhile, the weighted average rate reported by Irish resident credit institutions on longer-term loans for consumption and other purposes with an original maturity over five years was 4.34 per cent at end-January 2012, compared to a rate of 5.28 per cent reported by all euro area credit institutions.

With regard to new business, interest rates on new loans to households for house purchase fell in the final months of 2011, before rising again slightly in January 2012. 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 3.11 per cent in January 2012. In spite of an increase of 13 basis points relative to December 2011, this figure is still 39 basis points lower than the weighted average rate reported in September 2011. Interest rates on new loans to households for non-housing purposes also rose in January 2012, following a few months of relative stability. This weighted average interest rate on loans for consumption and other purposes was 6.74 per cent in January 2012[13].

Chart 25: Mortgage Interest Rates to Households



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

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

13 It should be noted that new business volumes have been exceptionally low in a number of instrument categories in recent months. This can result in volatile interest rate series.

Box 3: The Statistical Implications of Multinational Companies' Corporate Structures
By Mary Everett

The influence of a large multinational corporation (MNC) sector is a long recognised dynamic of Irish international macroeconomic statistics. One prominent feature is the sizeable differences between Gross Domestic Product (GDP) and Gross National Product (GNP), arising from the outflow of profits from Irish-based foreign affiliates to their foreign parent companies. In recent years, a number of foreign developments concerning the capital structure of multinational corporations has posed new difficulties in interpreting developments in Irish external macroeconomic accounts. This box provides a brief overview of these developments, followed by an illustration of how these factors impact Irish external macroeconomic statistics.

1. Statistical impact of MNCs locating their residency to Ireland

In the early 2000s, both the US and the UK announced intentions to curb the international activities of their resident multinational companies. These developments, and the complexity of multinational corporate structures, increased the difficulty in interpreting Irish external macroeconomic accounts.

The UK authorities announced their intention to introduce controlled foreign companies (CFC) legislation in 2008, targeted at curbing multinational companies shifting profits abroad to reduce their tax liabilities. Following this announcement, a number of high profile UK companies relocated their headquarters to Ireland, see Voget (2010)[14]. The multinational pharmaceutical company Shire, which lent its name to this phenomenon, was the first major company to relocate to Dublin in April 2008. Other companies which announced plans to relocate their headquarters to Ireland as part of the 'Shire effect' include Figureer International PLC, United Business Media and WPP. Following proposed reforms to the CFC tax regime in the UK budget in March 2011, a number of these companies, including WPP, have indicated that they intend to return to the UK. While these types of companies have large balance sheets, their contribution to the local economy in terms of employment tends to be limited.

In May 2009, the Obama Administration announced plans to curb US companies utilising tax havens and remove the tax incentives for shifting jobs overseas. While Ireland was initially included in the list of countries included in the tax haven list, it was later removed. Subsequently a number of countries relocated their multinational headquarters from countries remaining on the list, to Ireland. These included Ingersoll Rand, Accenture, Covidien, and Cooper Industries. Although the international insurance services industry was already well established in Ireland, the White House proposals led to a number of insurance companies relocating to Ireland, including Willis, Zurich Financial Services, RSA Group, Beazley and XL Capital.

The influx of new companies into Ireland is notable in gross foreign direct investment positions from 2008 onwards, see Box 3 Chart 1. The decline in foreign assets in 2011 is due to falling values in foreign investment owing to the turbulence in global markets.

14 Johannes Voget (2010), 'Headquarter Relocations and International Taxation', Working Papers 10/08, Oxford University Centre for Business Taxation.

Box 3: The Statistical Implications of Multinational Companies' Corporate Structures

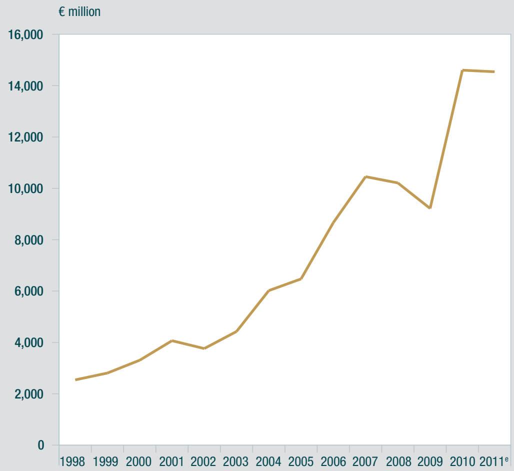
By Mary Everett

Box 3 Chart 1: Foreign Direct Investment – Assets and Liabilities

— Foreign Direct Investment Assets
— Foreign Direct Investment Liabilities

Source: Central Statistics Office.

Box 3 Chart 2: Direct Investment Income Credits



Source: Central Statistics Office.

In the second half of 2010, these headquartered companies began consolidating foreign-earned income in Ireland, which contributed to the increase in direct investment income receipts of €2.7 billion over the last two quarters of 2010, see Box 3 Chart 2. These increases also impacted on Irish net factor income and, in turn, GNP.

Problems in ascertaining the precise magnitude of this headquartering effect makes empirical analysis of Irish macroeconomic developments difficult. It is in this context that the recording of a MNC relocating residency to Ireland in macroeconomic statistics is described below.

Example: The External Statistical Accounting of Headquartering

When a MNC moves its headquarters to Ireland from abroad, its balance sheet of €20 billion at date 0, is reflected as: International Investment Position

Foreign Assets: €20 billion – in group operations abroad

Foreign Liabilities: €20 billion – to non-resident shareholders

Generally, these headquartered MNCs are significant direct investors, i.e. they have significant volumes of direct investment abroad (foreign assets). During the period ***t****, the headquartered multinational records profits of €2 billion from the activities of its worldwide operations in Ireland. The current account balance increases by €2 billion.*

Box 3: The Statistical Implications of Multinational Companies' Corporate Structures
By Mary Everett

Balance of Payments: Current Account

Direct investment income, credits: €2 billion.

Generally these headquartered MNCs have little real impact on the economy in terms of employment or manufacturing. It is assumed, for the purposes of the example, that all profits consolidated in Ireland will flow out of the country at some date in the future, ***t+X***.[15] *There are two probable channels for these outflows – dividends to foreign shareholders or intra-group financing.*

Depending on the channel for the outflow of money from Ireland, the accounts record the following:

(1) The foreign liabilities of the headquartered MNC, (i.e. its issued shares), are held by foreign shareholders. The dividends due to these foreign shareholders are traditionally paid in the second and fourth quarter of the year.

Balance of Payments: Current Account

Portfolio investment income on equity debits: €2 billion.

(2) The headquartered MNC may on-lend the profits consolidated in Ireland to foreign affiliates within its group structure.

Balance of Payments: Financial Account

Direct investment, other capital abroad: €2 billion.

In the first channel, all profits that were consolidated by the headquartered MNC in Ireland, outflowed from the country, and therefore over time, had a zero net effect on Irish external macroeconomic accounts. Any lag between profit inflows and outflows will, however, cause volatility on the current account. In the second scenario, profits received did not flow out again through the current account but via the financial account of the balance of payments. As these investment income inflows are not offset by outflows on the current account, a permanent overstatement of GNP is recorded.

2. The impact of multinationals' internal capital structures on external statistics

Profit maximisation strategies influence a company's capital structure and location. While decisions by multinational corporations on the location of manufacturing or service activities are influenced by a number of factors, including the availability of labour and the business environment, the type of corporate structure established is often influenced by taxation considerations. In the case of Ireland, the headline corporate tax rate of 12.5 per cent, the corporate tax regime applicable to holding companies, research and development credits, intellectual property management, profit repatriation and double taxation treaty networks are important factors in multinational capital structure choices. The types of corporate structures adopted have impacted significantly on macroeconomic external statistics and are further explored below.

15 In some cases, profits may not be repatriated, but instead held as reinvested earnings in Ireland.

Box 3: The Statistical Implications of Multinational Companies' Corporate Structures
By Mary Everett

A number of multinational companies resident in Ireland are utilising intra-group structures as part of profit maximisation. Data containing the counterpart country to direct investment highlights the extent of this activity. The location of outward and inward Irish direct investment is presented in Box 3 Table 1, showing Bermuda, the Netherlands and Luxembourg as significant counterparts at the end of 2010. The usefulness of these counterpart direct investment data are questionable for analytical purposes, as group structures involving these countries are largely driven by tax considerations. The ultimate beneficiary and owner of Irish capital would prove much more informative for users.

Box 3 Table 1: Counterpart Direct Investment Data for Ireland at End-2010

Inward direct investment (Irish foreign liabilities)		Outward direct investment (Irish foreign assets)	
Total inward	**100%**	**Total outward**	**100%**
Bermuda	15%	Bermuda	21%
Luxembourg	14%	Luxembourg	15%
Netherlands	13%	United Kingdom	15%
United Kingdom	13%	Netherlands	11%
United States	8%	United States	9%
Other	37%	Other	29%

Source: International Monetary Fund's Coordinated Direct Investment Survey.

Intra-company lending also plays a role in determining MNCs' capital structures as interest expenses on loans are deductible for corporate tax purposes, making it attractive to lend to high-tax jurisdictions.[16] The tax burden for the multinational corporation can be reduced by lending to a foreign affiliate to finance investment abroad or to the parent as a means of repatriating profits. The significant stock of reinvested earnings in Ireland provides MNCs with a reserve of capital which can be used to fund foreign affiliates and parent companies. The use of Irish resident foreign-owned subsidiaries as a source of intra-company borrowing impacts significantly on the foreign direct investment macroeconomic statistics.

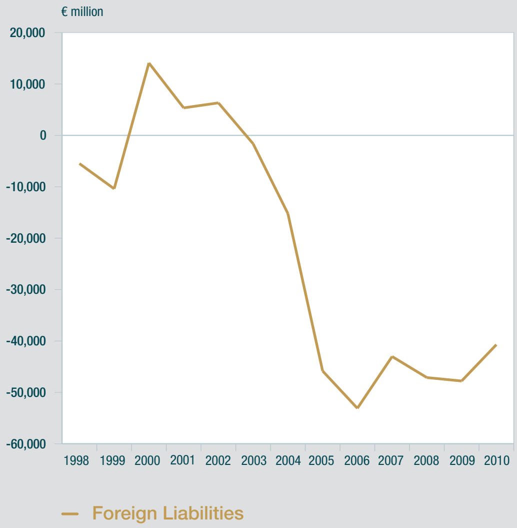
Intra-group lending and borrowing is compiled in the balance of payments and international investment position in accordance with the directional principle[17]. This statistical principle leads to accounting for lending by Irish-based foreign-owned subsidiaries being treated as negative liabilities, see Box 3 Chart 3.

16 Huizinga, H., L. Laeven, and G. Nicodeme (2008), 'Capital Structure and International Debt Shifting', Journal of Financial Economics, Elsevier, vol. 88(1), pages 80-118, April.

17 Irish external statistics are compiled in accordance with the International Monetary Fund's Balance of Payments Manual, Version 5.

Box 3: The Statistical Implications of Multinational Companies' Corporate Structures
By Mary Everett

Box 3 Chart 3: Irish Foreign-Owned Subsidiaries' Intra-Group Lending



Source: Central Statistics Office.

Negative liabilities can be difficult to interpret for statistical users. Intuitively, foreign lending should be considered an asset of the Irish-based foreign subsidiary. Furthermore, this accounting is on a net basis, whereby inter-affiliate positions are offset. External accounts, which are based on the debit/credit accounting principle provide a more accurate indication of this foreign lending as they are recorded on a gross basis. These accounts recorded intra-group lending and trade credits by Irish-based affiliates of €328 billion at end-September 2011.

In principle, US foreign direct investment in Ireland should mirror the magnitude of direct investment recorded in Ireland from the US. In practice however, structuring intra-group capital in the manner described above, has led to inconsistencies between the bilateral data reported to the US and those reported to the Irish statistical authorities. Box 3 Table 2 contains the direct investment recorded from the perspective of the statistical authorities in both the US and Ireland. According to the Irish accounts, Ireland had an accumulated stock of €14 billion worth of direct investment received from the US at end-2010. This differs significantly from the US accounts, which report €142.6 billion invested by the US in Ireland at end-2010. While differing accounting methods, including valuation methods used, as well as the difficulties in allocating investment to the ultimate beneficiary will impact on the accounts, complex capital structures established for tax and other purposes play a key role in channelling funding between the two countries.

Box 3: The Statistical Implications of Multinational Companies' Corporate Structures
By Mary Everett

Box 3 Table 2: Bilateral Foreign Direct Investment between the US and Ireland

€ million	US direct investment in Ireland: Irish accounts	US direct investment in Ireland: US accounts
2010	14,128	142,552
2009	-338	111,226
2008	11,280	107,876
2007	19,521	79,959
2006	5,825	65,582
2005	11,728	46,769
2004	10,718	54,994
2003	23,947	47,984
2002	32,037	49,202
2001	31,369	44,867

Sources: Central Statistics Office and US Bureau of Economic Analysis.

The American Jobs Creation Act of 2004, a US tax holiday, was also responsible for a reduction in US foreign direct investment in Ireland, as US MNCs availed of the holiday to repatriate profits and retained earnings from Ireland back to the US in 2004 and 2005. See, Everett, M. (2006) Foreign Direct Investment: An Analysis of its Significance, Central Bank of Ireland Quarterly Bulletin, No. 4, 2006.

3. Recent proposals potentially impacting Irish foreign direct investment

More recently, in late February 2012, the Obama Administration proposed reforms to the US corporate tax system[18], which have the potential to impact on Irish foreign direct investment from a policy, economic and statistical perspective. The proposal to lower the US corporate tax rate from 35 per cent to 28 per cent reduces the incentive for US companies to establish foreign operations abroad in comparatively lower tax jurisdictions. Other proposed amendments to the US tax regime include, providing US companies with tax credits for relocating back to the US. Of key concern is the plan to change the system that permits US companies to defer tax on income earned outside the US, until repatriated back to the US, at which time the difference between the two corporate tax rates is paid.[19] Removing the facility to tax foreign earned income only when repatriated back to the US, implies that the incentive to relocate taxable income away from the US no longer holds, see Desai, Foley and Hines (2011)[20].

18 The White House and Department of the Treasury (2012), 'The President's Framework for Business Tax Reform', February 2012, US Department of the Treasury.

19 Take the example of a US MNC who invests in Ireland and earns a profit of €800. Its tax liability to the Irish Exchequer is €800*12.5% which is €100. €700 is therefore the after-tax profit for this US company. The company decides to repatriate €70 to the US and reinvest €630 in Ireland. The repatriated €70 is subject to US corporate taxes of 35%. The tax liability owed to the US is in theory €70*35% which is €24.50. However as the US system offers a tax credit for the foreign taxes paid to the Irish Exchequer, the US Company's corporate tax liability to the US Inland Revenue Services is €15.75 (€24.50-€8.75). A 1:1 exchange rate is assumed for this example. This calculation assumes that the US MNC does not have excess foreign tax credits from its operations in high tax countries - if it does, it can use these credits to offset taxes due on the repatriated Irish profits. The remaining profits of €630 can grow abroad tax free prior to repatriation; this process is known as deferral.

20 Desai, M. A., C. F. Foley and J. R. Hines Jr. (2011), 'Tax Policy and the Efficiency of U.S. Direct Investment Abroad', NBER Working Paper 17202, National Bureau of Economic Research.

Developments in the International and Euro Area Economy

Overview

There have been tentative signs of stabilisation in the global economy in early 2012, as well as some easing of financial market tensions. Nevertheless, the global economy continues to go through a challenging period. Growth expectations for 2012 are moderate and continue to be characterised by an uneven performance, with weak growth in advanced economies and a stronger expansion in emerging markets. In particular, a number of advanced economies face numerous downside risks. The current state of the financial sector remains fragile, public debt in many economies remains at high levels, private balance sheets continue to undergo further repair while recent geopolitical tensions have seen oil prices rise in recent weeks. Over the review period, inflationary pressures remained contained in the advanced economies, while in the emerging economies inflation rates have continued their modest decline, although inflationary pressures persist.

The global economy is starting to show tentative signs of stabilisation, having experienced a loss of growth momentum in the second half of 2011. The latest survey indicators have been more encouraging with the Global PMI consistently improving over the past number of months, while forward-looking indicators of world trade have also picked up. For many advanced economies, however, sentiment indicators remain at relatively low levels by historical standards. In recent weeks, tensions have also diminished in financial markets, with an easing of pressures on both sovereign debt and bank funding markets, in particular in the euro area, where the ECB launched its 3-year refinancing operations and broadened the eligibility for collateral. While encouragement can be taken from these developments, risks to the outlook remain high.

Both advanced and emerging economies saw a slowdown in growth in the final months of 2011, with the exception of the US economy, where stronger growth reflected improved conditions in the labour market and a rebound in consumption. By contrast, real GDP in Japan deteriorated at the end of 2011, growth in China slowed, albeit from high levels, while economic activity continues to be subdued in UK. Finally, euro area activity slowed in the second half of 2011, contracting in the final quarter. According to recent survey data, however, there are signs of stabilisation in economic activity, albeit still at low levels at the start of this year.

Reflecting the strains that exist in the euro area and fragilities elsewhere, many international institutions have revised downwards their projections for economic growth this year and next. According to the January IMF World Economic Outlook Update, global output is now projected to expand by 3.3 per cent in 2012, before gradually picking up in 2013; a downward revision of roughly 0.7 per cent in each year. Activity in the advanced economies is now expected to expand by 1 ½ per cent on average during 2012-2013, while growth in emerging and developing economies is expected to average 5 ¾ per cent. The US is forecast to perform the best of the large advanced economies, with growth of 1.8 per cent this year increasing to average growth of 2.2 per cent in 2013. In contrast, the euro area economy is projected to go into a mild recession in 2012; the IMF highlighted a number of reasons for this in January - high sovereign yields, the impact of bank deleveraging on the real economy and the need for additional fiscal consolidation. Meanwhile, growth in emerging economies is expected to continue to suffer from the worsening external environment and a weakening of domestic demand.

Table 1: Changes in Real GDP in Selected Economies

	Percentage Change		
	2011	2012f	2013f
Global	3.8	3.3	3.9
Advanced Economies	1.6	1.2	1.9
Emerging and Developing Economies	6.2	5.4	5.9
United States	1.8	1.8	2.2
Euro Area	1.6	-0.5	0.8
United Kingdom	0.9	0.6	2.0
China	9.2	8.2	8.8
Japan	-0.9	1.7	1.6

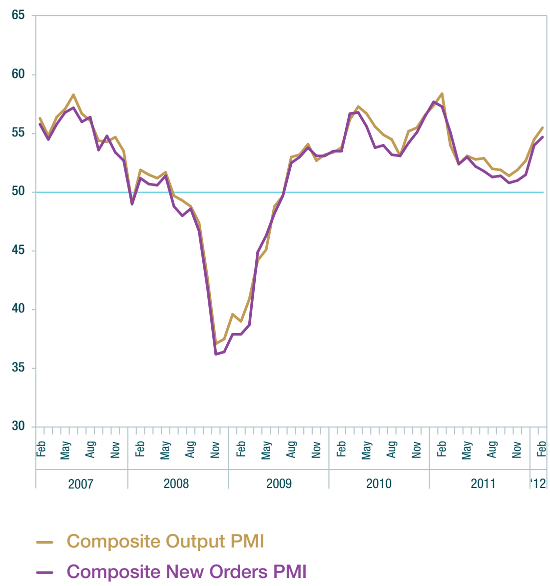
Source: IMF WEO Update January 2012.

Looking ahead, growth prospects for the global economy in the medium-term remain subdued in an environment of high uncertainty. The continued need to repair public and private balance sheets will act as an impediment to growth, while the persistently depressed housing markets and sluggish labour market developments in a number of advanced economies compound the lacklustre outlook for the global economy. Emerging Asia, while observing some signs of an easing in economic activity recently, is expected to continue to support global growth more so than the advanced economies over the coming years.

In such an environment of high uncertainty, risks to activity remain on the downside. The main prevailing downside risk stems from the ongoing euro area sovereign debt crisis and a potential intensification of adverse feedback loops between sovereign and bank funding pressures amid disruptive financial market developments. In addition, the precarious fiscal positions of a number of major advanced economies could depress near-term demand and growth further, while ongoing geopolitical tensions could lead to further upward pressure on oil prices. On the upside, the modest slowdown in emerging economies seen recently should help to alleviate overheating pressures that have prevailed in some key countries, such as China.

Finally, inflationary dynamics remain contained in advanced economies, while emerging economies' inflation rates have recently declined slightly from high levels. Price increases in key emerging economies remain more pronounced than in advanced economies given that they operate closer to full capacity and respond strongly to food and energy movements, reflecting the higher weight of commodity prices in these countries' consumption baskets. Going forward, concerns about geopolitical oil supply risks have increased again recently amid the escalation of the tensions related to Iran and tight spare capacity buffers, constituting an upside risk to global inflation. Conversely, less buoyant economic activity may reduce price pressures.

Chart 1: Global PMIs



Source: Markit.

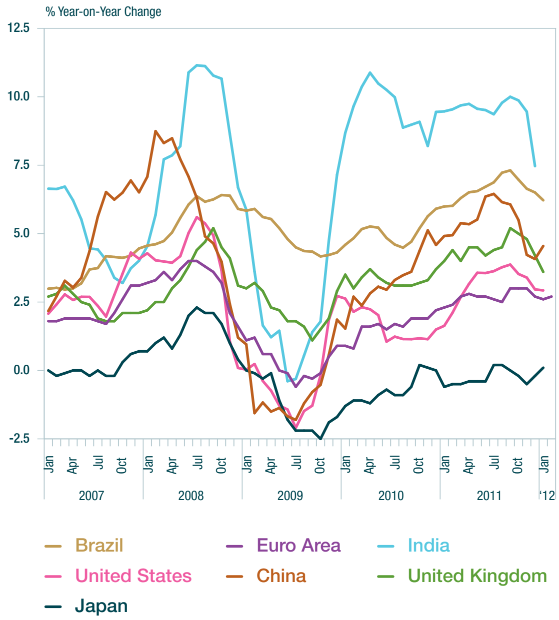
Note: For PMI indicators, above 50 represents expansion, below 50 represents contraction.

Table 2: Contributions of Expenditure Components to Change in GDP (Q-on-Q)

	2011			
	Q1	Q2	Q3	Q4
Consumption	0.1	-0.3	0.1	-0.2
Government	0.0	0.0	0.0	-0.1
Investment	0.3	0.0	-0.1	-0.1
Inventories	0.1	0.1	-0.2	-0.2
Exports	0.6	0.5	0.6	-0.2
Imports	-0.3	-0.2	-0.3	0.5
GDP	**0.8**	**0.1**	**0.1**	**-0.3**

Source: Eurostat.

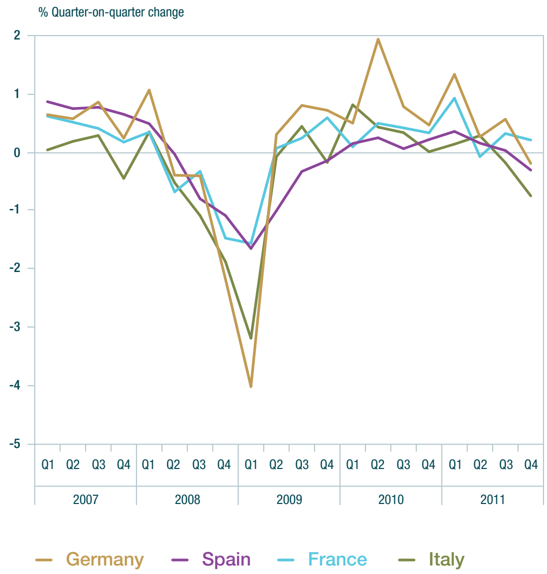
Chart 2: Selected Global Inflation Rates



Source: Reuters EcoWin.

As Table 2 outlines, domestic demand had the largest negative effect on euro area growth at the end of last year, subtracting 0.4 percentage points from GDP, with all aspects of the domestic economy contracting. A decline in inventories in the fourth quarter also subtracted from growth, largely driven by developments in France. Meanwhile, net trade made the only positive contribution to growth, solely as a result of a fall in imports, as exports from the euro area declined in the final quarter of 2011.

Chart 3: Euro Area GDP Growth



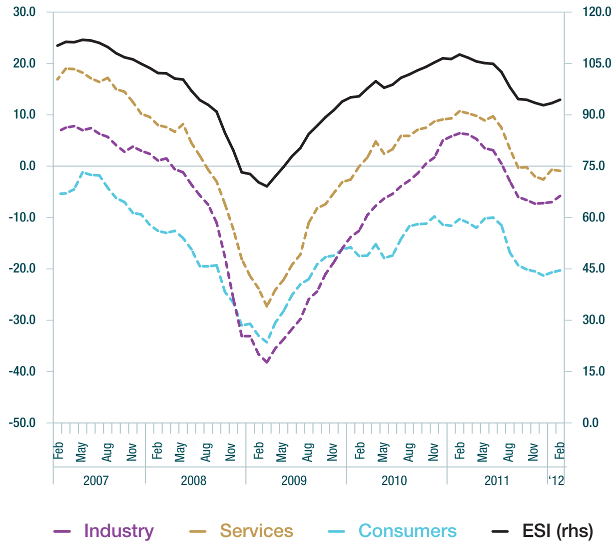
Source: Reuters EcoWin.

Section 1: Euro Area

Economic Growth – Recent Developments

In the fourth quarter of 2011, euro area real GDP declined by 0.3 per cent quarter-on-quarter, following a downwardly revised 0.1 per cent expansion in the previous three months. The quarterly contraction was the first time in two and a half years that output fell in the euro area, with declines recorded in all of the larger Member States, with the exception of France. The contraction in output in Italy, the Netherlands and Belgium, in the final quarter of 2011, means that these three countries now join Portugal and Slovenia in technical recession.

Chart 4: Economic Sentiment Indicator & Selected Components



Source: European Commission.

Turning to 2012, survey indicators have pointed to a slight improvement in business conditions at the turn of the year. The European Commission's Economic Sentiment Indicator (ESI) climbed one point to 94.4 in February, the second consecutive monthly rise, with confidence improving in all sectors of the economy except services. Although sentiment improved in most euro area countries, there are still large differences between the outlooks for Member States, with confidence in the peripheral economies still close to record lows. Consumer confidence in particular remains at very low levels in Greece, Portugal, Italy and Spain. Also in February, the PMI Composite Output Index came in at 49.3, and although the index declined from the previous month, it is still the second highest reading in six months, and suggests that the euro area economy stabilised over the first two months of the year, following the contraction in the final quarter of 2011. Manufacturing output dipped slightly, to 50.3 in February, but remained above the 50 mark that divides expansion from contraction, while services activity fell slightly further to 48.8.

With respect to labour market developments, the unemployment rate has been on an upward trend since June 2011, rising to 10.7 per cent in January 2012, while employment growth decreased by 0.2 per cent in the fourth quarter of 2011. Unemployment rates continue to vary significantly across the euro area, with Austria recording the lowest unemployment rate at 4.0 per cent in January, while Spain recorded the highest rate at 23.3 per cent. The number of persons unemployed in the euro area reached 16.9 million in January, with almost all euro area countries recording increases, including Belgium and Germany, where unemployment trends had been holding up relatively favourably in the second half of 2011. The euro area unemployment rate is expected to rise during the course of 2012, and the expected improvement in GDP in the second half of the year is unlikely to have any significant impact on employment levels. The unemployment rate is expected to remain at a high level for an extended period and is likely to decline only slowly in the latter half of 2013.

Economic Growth – Outlook

The euro area is projected to return to growth in the second half of 2012 although the recovery is expected to be slow and moderate. The latest ECB staff macroeconomic projections for March 2012 have revised downwards the outlook for the euro area and now anticipate real GDP growth between -0.5 per cent and 0.3 per cent in 2012, followed by growth of between 0.0 per cent and 2.2 per cent in 2013. These forecasts are based on the assumption that the financial crisis does not intensify further. The ECB forecasts are broadly in line with the latest European Commission projections for the euro area of a 0.3 per cent contraction in 2012; the latest IMF forecasts published in January pointed to a contraction of 0.5 per cent this year. In 2012, domestic demand is expected to remain subdued, as weaker labour markets, ongoing private sector deleveraging and higher taxes constrain consumers, while business investment is likely to be held back by tighter credit standards. Net trade is also unlikely to provide any significant boost to growth, as external demand is also slowing down.

Looking at the largest euro area Member States, growth rates for 2012 were revised down significantly by the European Commission since its previous forecast in

November 2011. According to the Interim Forecast, the German economy is now expected to grow by 0.6 per cent in 2012, while output in France is set to increase by 0.4 per cent, which is lower in both cases than November's estimates. Output is expected to contract sharply in both Italy and Spain in 2012, as the intensification of the sovereign debt crisis has lead to spillover effects to the financial sector in both countries, resulting in tighter credit conditions and a poor outlook for investment and consumer spending. Additional fiscal consolidation measures and a weak labour market, particularly in Spain, will also stifle consumption this year. Net trade is expected to provide some support to growth, mainly as a result of slowing imports due to the subdued domestic economy, while exports are forecast to expand moderately. Overall activity is expected to contract again in both countries in 2013 and any recovery is set to be slow and weak.

Although there have been tentative signs of stabilisation in economic activity, the risks to the euro area outlook remain on the downside and relate to a further intensification of the tensions in euro area financial markets and their potential spill-over to the real economy. Additional risks include a further slowdown in the global economy, which would negatively affect the euro area's exports, as well as further increases in energy prices due to geopolitical tensions.

Box 1: Financial Support Package for Greece & Private Sector Involvement
*By Linda Dungan**

In May 2010, a joint EU-IMF financial assistance programme was launched to support the Greek economy, amounting to €110 billion, with €80 billion provided by euro area Member States and the remaining €30 billion supplied by an IMF Stand-By Arrangement. This financial assistance was subject to a number of conditions, including fiscal consolidation efforts, structural reforms and measures to safeguard financial stability. Progress by the Greek authorities on the implementation of the programme was subject to quarterly reviews.

During the Fourth Review of the EU-IMF programme, which took place in May and June 2011, it became clear that the Greek authorities would not be in a position to regain access to private market financing in early 2012 as originally envisaged under the programme. As this breached IMF rules, that dictate that lending can only be extended to members who are fully funded for the following 12 months, negotiations began on a second financing deal for Greece.

In July 2011, euro area leaders agreed to support a new programme for Greece that would be funded through the European Financial Stability Facility (EFSF), together with the IMF. In order to address the financing gap and reduce the Greek public debt to a sustainable level, a voluntary contribution by Greece's private sector creditors was also deemed necessary. Negotiations began immediately on the design and extent of Private Sector Involvement (PSI), with Greece's creditors represented by the Institute of International Finance.

A deadline of 8 March 2012 was set and private creditors were invited to voluntarily tender their Greek government bonds for exchange as part of the debt restructuring before this date. Holders of approximately €152 billion of bonds governed by Greek law voluntarily participated in the exchange offer, representing 85.5 per cent of the €177 billion bonds outstanding that were eligible for exchange. The high participation rate allowed the Greek authorities to activate Collective Action Clauses (CACs), which forced all holders of bonds governed by Greek law to accept the new terms and conditions of the exchanged bonds. The CACs were inserted into the terms and conditions of these bonds retroactively, after the Greek parliament passed a law in February 2012. In addition, €20 billion of Greek bonds issued under laws other than Greek law and bonds issued by state enterprises and guaranteed by the Hellenic Republic, were tendered for exchange. The invitation period for this exchange offer has been extended until 23 March 2012 to allow additional bond holders to consent.

* Monetary Policy and International Relations Division.

Box 1: Financial Support Package for Greece & Private Sector Involvement
*By Linda Dungan**

The €197 billion worth of bonds offered for exchange represents 95.7 per cent of the total face value of Greek bonds that were invited to participate in the debt restructuring. In nominal terms, the write down on Greek debt amounts to 53.5 per cent, or in net present value terms, close to 75 per cent. The new bonds will have a face value of 31.5 per cent of the old bonds, with a detachable GDP-linked security that will offer additional payments in years when the Greek economy exceeds defined growth thresholds. Private sector participants will also receive an EFSF note maturing within 24 months amounting to 15 per cent of their old bond. The debt restructuring deal will reduce Greece's debt burden by more than €100 billion, and public debt is now expected to follow a downward path to reach 120.5 per cent of GDP by 2020.

Table 1: Greek Debt Exchange

		Percentage of Total Eligible
Total Bonds Eligible for Exchange	€206 billion	
- Issued Under Greek Law	€177 billion	
- Issued Under Foreign Law	€29 billion	
Bonds Voluntarily Exchanged	€172 billion	83.5%
- Issued Under Greek Law	€152 billion	85.8%
- Issued Under Foreign Law	€20 billion	68.9%
Bonds Exchanged following CACs	€197 billion	95.7%
- Issued Under Greek Law	€177 billion	100%
- Issued Under Foreign Law	€20 billion	68.9%

Source: Hellenic Republic Ministry of Finance.

PSI was just one of the conditions of the new Greek financial support package, with the authorities also required to speed up the privatisation of state assets, introduce additional spending cuts and tax increases, and initiate further economic reforms. The leaders of the two coalition parties were also required to provide assurances that Greece's adjustment programme would remain on track following the forthcoming general elections. Formal approval of the €130 billion of EFSF funds was granted on 14 March 2012 at the Eurogroup meeting of euro area finance ministers, and Member States authorised the EFSF to release the first instalment of €39.4 billion. The following day, on 15 March 2012, the IMF Executive Board supported a €28 billion arrangement for Greece under the IMF's Extended Fund Facility.

Inflation – Recent Developments

Euro area HICP inflation increased over the course of 2011, averaging 2.7 per cent, reflecting upward pressure from higher energy and other commodity prices. In recent months, inflation has eased somewhat from a peak of 3.0 per cent reached in November of last year, mainly owing to downward base effects in the energy component. According to Eurostat, euro area annual HICP inflation was 2.7 per cent in February, unchanged from January. Beneath the volatility of the headline rate, underlying inflation has remained relatively muted, with HICP inflation excluding energy and food averaging 1.4 per cent in 2011 and standing at 1.5 per cent in February. Of the components that make up most of this core rate, non-energy industrial goods inflation was 1.1 per cent in February, up from 0.9 per cent in January, while services price inflation fell to 1.8 per cent in February, down from 1.9 percent, where it stood for the previous three months.

Annual industrial producer price inflation has been trending downwards since last year's March high of 6.8 per cent. Producer price inflation (excluding construction) fell to 3.7 per cent year-on-year in January, representing the ninth drop in the last ten months. Producer price inflation excluding construction and energy also fell, to 1.9 per cent, reflecting a sharp decline in the rate of change in intermediate goods, which are at the early stage of the production chain. Meanwhile, price survey measures indicate relatively weak, but increasing, input price pressures on average. The PMI manufacturing input price index increased in February following recent oil and raw materials price increases and the depreciation of the euro, but remain considerably below the peak reached last year. At the same time, the PMI manufacturing selling price index remains relatively subdued, while both input and selling prices in the services sector declined slightly. Finally, labour cost dynamics appear to have stabilised, with the rate of change in total hourly labour costs standing at 2.7 per cent year-on-year in the third quarter of 2011, following a downwardly revised second quarter rate of 3.3 per cent. While unit labour costs remain contained, they increased slightly to 1.3 per cent year-on-year in the third quarter from 1.2 per cent in the second quarter, reflecting a decline in labour productivity growth.

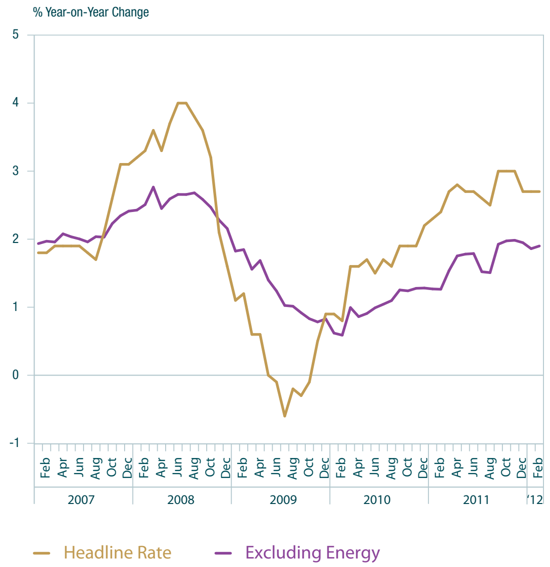
Oil and Other Commodity Prices

Prices of Brent crude oil have increased both in dollar and euro terms since the start of 2012, with oil prices in euro terms reaching record highs of around €97 per barrel in early March. Concerns over potential supply-side shortfalls owing to geopolitical tensions, particularly those stemming from Iran, in addition to a weaker euro exchange rate, have exerted upward pressure on euro oil prices . Crude prices have increased despite slowing global growth and the International Energy Agency revising down demand projections for 2012 every month since September. Inventories in both the U.S. and Europe remain low, however. Looking ahead, financial market participants expect a decline in oil prices, as indicated by a downward-sloping Brent crude oil futures curve. Non-energy commodity prices declined throughout the final quarter of 2011 but have been on an upward trend since the start of this year. Meanwhile, the United Nations Food and Agriculture Organisation's Price Index increased marginally in February but remains 10 per cent below its February 2011 peak.

Inflation – Outlook

Headline inflation is likely to stay above 2 per cent in 2012, owing to the recent rises in energy prices and indirect taxes. The March 2012 ECB staff macroeconomic projections for the euro area forecast annual HICP inflation in a range between 2.1 per cent and 2.7 per cent in 2012, and between 0.9 per cent and 2.3 per cent in 2013. Underlying price pressures are expected to remain limited, in the presence of slack in the economy and well-anchored long-term inflation expectations.

Chart 5: Euro Area Inflation



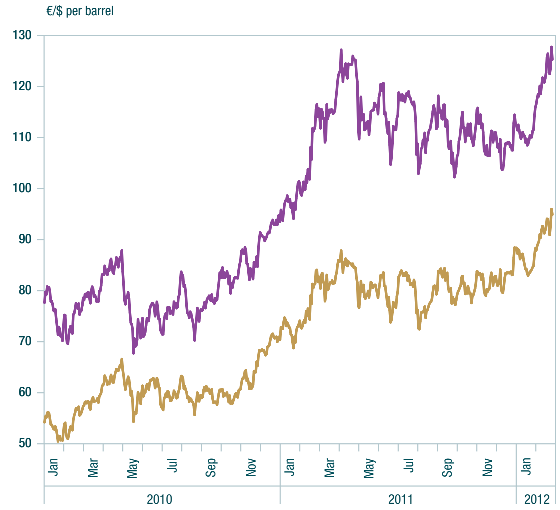
Source: Reuters EcoWin.

Table 3: US Contributions to GDP Growth

	2011 Q1	2011 Q2	2011 Q3	2011 Q4
Consumption	1.5	0.5	1.2	1.5
Government	-1.2	-0.2	0	-0.9
Fixed Investment	0.2	1.1	1.5	0.5
Inventories	0.3	-0.3	-1.4	1.9
Exports	1.0	0.5	0.6	0.6
Imports	-1.4	-0.2	-0.2	-0.7
GDP	**0.4**	**1.3**	**1.8**	**3.0**

Source: BEA.

Chart 6: Oil Prices – Brent Crude



— Oil Prices in Euro — Oil Prices in US Dollars

Source: Reuters EcoWin.

Section 2: External Environment

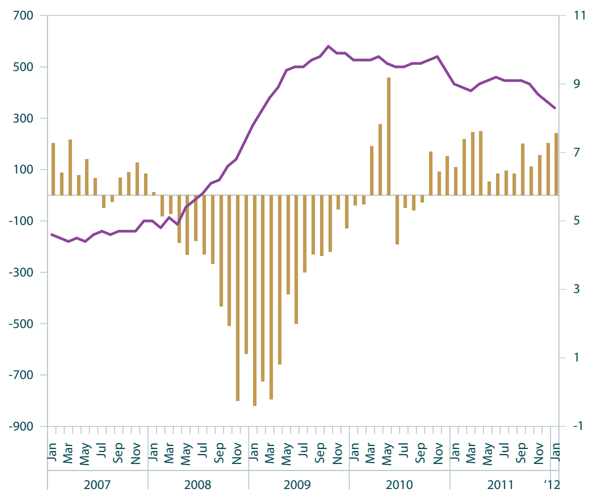
United States

Following relatively weak growth in the first half of 2011, the US economy ended the year on a stronger footing with annualised growth of 3.0 per cent in the fourth quarter. Real GDP was supported by an improvement in consumption and a substantial positive contribution from inventories. Moving into the first quarter of this year, it is unlikely that inventories will provide such support, while the latest hard and soft economic indicators have been rather mixed. The labour market has steadily improved, and business and consumer sentiment have recovered from recent lows. However, expansion in production, investment and consumption is still somewhat sluggish while the housing market remains persistently weak.

In it's latest World Economic Outlook Update, the IMF forecast output to expand by 1.8 per cent in 2012 and to strengthen to 2.2 per cent growth in 2013. It is anticipated that any downward effect of adverse spillovers from the euro area will be broadly offset by stronger underlying domestic demand.

Following their January meeting, the Federal Reserve's Open Market Committee announced a new long-term inflation goal of 2.0 per cent and now expect the Federal Funds Rate to be exceptionally low through to late 2014. Headline inflation hit a ten-month low of 2.9 per cent in January 2012 and is expected to fall further over the coming months.

Chart 7: US Labour Market



Nonfarm Payrolls in Thousands (Lhs)
Unemployment Rate (Rhs)

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

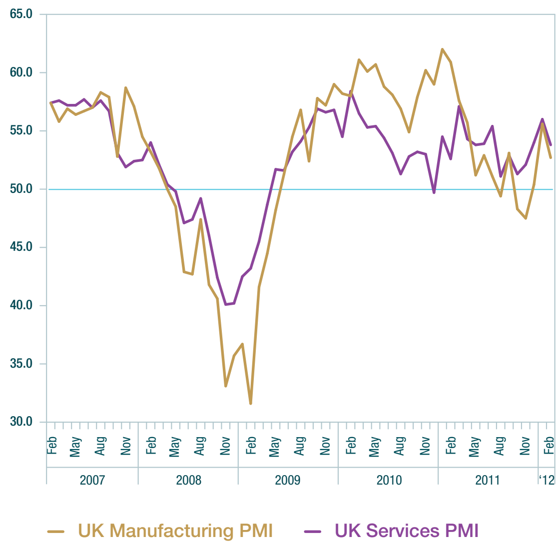
United Kingdom

The UK economy expanded by only 0.8 per cent during 2011, with output declining by 0.2 per cent in the fourth quarter as a result of a decrease in investment and inventories, which offset positive contributions from net trade and consumption. Economic indicators have generally improved in the first quarter of 2012, reducing fears of a double dip recession. The UK manufacturing PMI expanded for the third consecutive month in February, while expansion in the services PMI continued at a robust pace, with the sector achieving, in January and February, the best performance since the spring of 2010. In addition, consumer confidence stabilised in February, with improvements in some important components.

The UK recovery is predicted to gather pace in the second half of 2012, supported primarily by net trade and business investment, and enhanced by the London Olympics. However, risks to the outlook are skewed to the downside as a result of the euro area debt crisis and uncertainty regarding the recovery in household and business spending. In their latest World Economic Outlook Update, the IMF forecast growth to expand by 0.6 per cent in 2012, before strengthening to 2.0 per cent in 2013.

Inflation has continued to fall from its peak in September 2011, to reach 3.6 per cent in January 2012. This fall has given a much needed boost to consumption, and the Bank of England expects inflation to fall further towards 2.0 per cent by the end of 2012.

Chart 8: PMI Indicators for the UK



Source: Markit.

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

Emerging EU Member States

The economic recovery in the seven emerging non-euro area EU member states slowed in the final quarter of 2011 as the temporary factors which had boosted third quarter growth dissipated. Real GDP contracted in the Czech Republic and Romania in the fourth quarter, while output expanded at a modest pace in Bulgaria and Hungary. Growth in Poland, Latvia and Lithuania remained robust in the fourth quarter. Nevertheless, the outlook has deteriorated for all countries owing to the negative feedback loops from the euro area, the region's largest export market, which is likely to further weigh on export growth. In addition, the worsened global economic outlook and the persistent tensions in world financial markets are also likely to dampen growth prospects in the region. With respect to price developments, inflation rates in Bulgaria, Latvia, Lithuania and Romania eased in the final months of 2011 while inflation in the Czech Republic, Hungary and Poland increased moderately in the same period. Additional fiscal consolidation measures, in the form of higher VAT and administered prices, are expected to temporarily affect inflation in 2012 in all countries except Poland.

Japan

Real GDP fell by an annualised 2.3 per cent in the fourth quarter of 2011, as economic activity weakened owing to the appreciation of the yen, supply-side disruptions arising from the flooding in Thailand, and from the slowdown in overseas economies. As a result, exports and production declined in the final quarter of 2011, offsetting domestic demand which was supported by growth in housing investment as reconstruction work continued following the March earthquake, while private consumption remained robust. The latest forward-looking survey data point to a modest expansion, with the PMI Composite Output Index above the 50 neutral line for the third consecutive month in February.

At its Monetary Policy meeting in February, the Bank of Japan decided to further enhance monetary easing by increasing the total size of the Asset Purchase Program by about ¥10 trillion to ¥65 trillion. The Bank of Japan also announced its "price stability goal in the medium to long term" to be within a positive range of 2 per cent or lower in terms of the year-on-year rate of change in the consumer price index and, more specifically, set a goal of 1 per cent for the time being. Furthermore, in an attempt to boost economic activity and overcome deflationary pressures, the Bank announced the enhancement of its "Growth-Supporting Funding Facility" by ¥2 trillion to ¥5.5 trillion at its monetary policy meeting in March.

With respect to price developments, Japan's annual headline CPI inflation rate increased to 0.1 per cent in January, compared with -0.2 per cent in the previous month. The Bank of Japan decided to leave its target for the uncollateralised overnight call rate unchanged at 0.0 per cent to 0.1 per cent at its meeting on the 13 March 2012.

Emerging Asia

In emerging Asia, national accounts data indicate that economic growth slowed in the fourth quarter after stabilising in the third quarter. In addition to the weak external demand conditions, parts of the region were also adversely affected by the flooding in Thailand where fourth quarter data indicates that the Thai economy contracted by 9.0 per cent year-on-year following growth of 3.7 per cent in the third quarter. The IMF has forecast GDP growth of 7.3 per cent in 2012, and 7.8 per cent in 2013 for the region as a whole.

In China, real GDP growth slowed to 8.9 per cent year-on-year in the fourth quarter of 2011, down from a 9.1 per cent expansion recorded in the third quarter. The Chinese economy continued to suffer from the deteriorating external environment with export growth easing steadily throughout the final quarter. Industrial production, although still at relatively high levels, declined to 12.8 per cent in the fourth quarter, while retail sales recorded robust growth. More recently, the latest survey data point to a mild expansion in economy activity with the composite PMI output index for February 2012 at 51.8, up from 49.7 recorded in January. Inflationary pressures eased in China in the final months of 2011, with annual headline CPI inflation at 4.1 per cent in December, down from the 2011 peak of 6.5 per cent recorded in July. The latest monthly data indicate that inflation fell sharply at the start of 2012 to 3.2 per cent in February, its lowest level since June 2010 which was mainly driven by lower food prices. Against this background of slower growth and falling inflation, the Chinese authorities eased monetary policy further in mid-February by reducing the required reserve ratios for deposit taking institutions by 50 basis points to 20.5 per cent. According to the latest forecasts from the IMF, the Chinese economy is expected to grow by 8.2 per cent in 2012 and 8.8 per cent in 2013.

Real GDP growth in India was 6.3 per cent year-on-year in the fourth quarter of 2011, down over two percentage points from 8.5 per cent growth recorded in the second quarter of 2011. With respect to price developments, India's wholesale price inflation index fell steadily throughout the fourth quarter of 2011 and was 6.6 per cent at the start of this year. The IMF, in its latest World Economic Outlook Update, forecast GDP growth of 7.0 per cent in 2012, and 7.3 per cent in 2013.

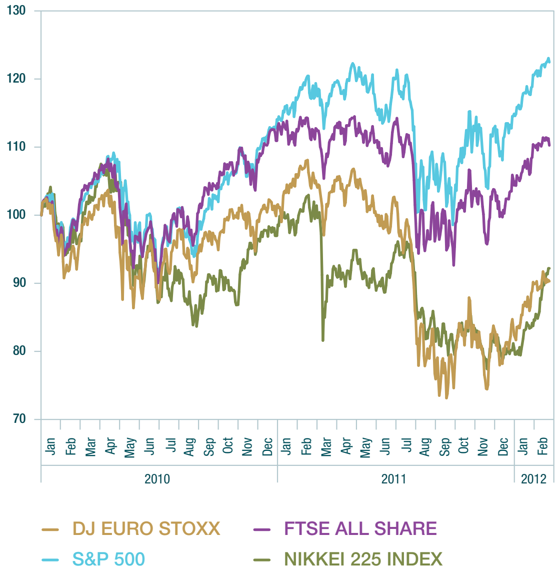
Section 3: Financial Markets

Financial Sector Developments

There was a marked improvement in financial market sentiment during the first quarter of 2012, leading to an increase in asset prices across most market segments. Nevertheless, uncertainty is still at a high level and financial market conditions remain fragile. The improvement in sentiment was primarily driven by an improvement in bank funding conditions and progress in reaching an agreement with private sector investors on a restructuring of Greek sovereign debt. A positive reaction to the decisions reached by euro area leaders at the 30 January meeting of the Heads of State or Government also contributed to the improvement in sentiment. These decisions included a finalisation of the Treaty on Stability, Coordination and Governance in Economic and Monetary Union (the fiscal compact) and a bringing forward of the European Stability Mechanism. Better than expected macroeconomic data releases from the US also contributed to improved financial market sentiment.

Equity Markets

Chart 9: International Share Price Indices (end-December 2009 = 100)



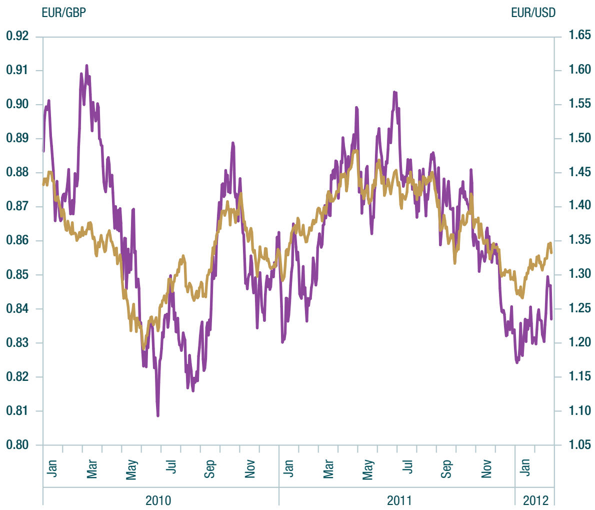
Source: Reuters EcoWin.

Euro area equity indices generally rose strongly during the first two months of 2012, reflecting an easing of concerns over the euro area sovereign debt crisis. This improvement was initially driven by the financial sector, primarily due to an easing in concerns over European banks' funding risks following the allotment of the ECB's first 3-year LTRO in December. The market rebound became more broad-based in February, with increases in financial indices typically lower than for general indices during that month. US equity indices also rose during the first two months of the year on account of better than expected US macroeconomic releases and the general improvement in sentiment. Uncertainty in equity markets eased in both the euro area and US, with measures of implied volatility falling to levels last seen before the significant deterioration in the euro area sovereign debt crisis during the summer of 2011.

Foreign Exchange Developments

The euro initially depreciated against other major currencies during the first few weeks of 2012, continuing on from its falls during the final quarter of 2011. The euro subsequently appreciated against these currencies and maintained an upward trend during the first two months of 2012, largely reversing the losses from December 2011. This appreciation reflected the generally improved sentiment towards the euro area in early 2012, on account of reduced bank funding risk, falling sovereign bond yields and further steps towards the ratification of the fiscal compact. Implied volatilities on euro currency pairs fell to levels in line with their historical averages, reversing their sharp increases during the third and fourth quarters of 2011.

Chart 10: Euro Exchange Rates

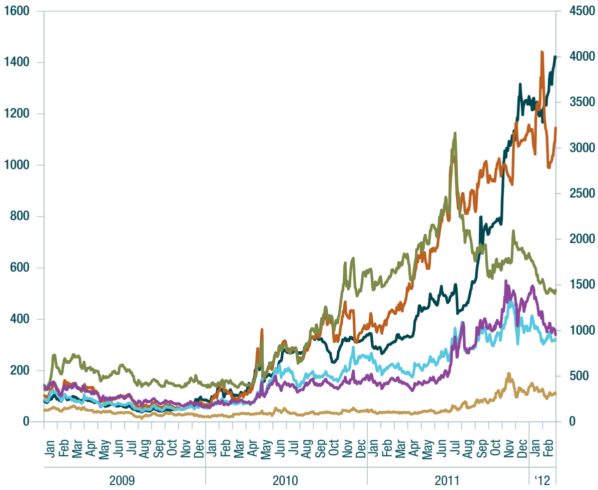


— EUR/USD (Right Axis) — EUR/GBP (Left Axis)

Source: Reuters EcoWin.

Sovereign Debt Markets

Chart 11: Selected Euro Area 10-Year Sovereign Bond Yield Spreads over Germany (bps)



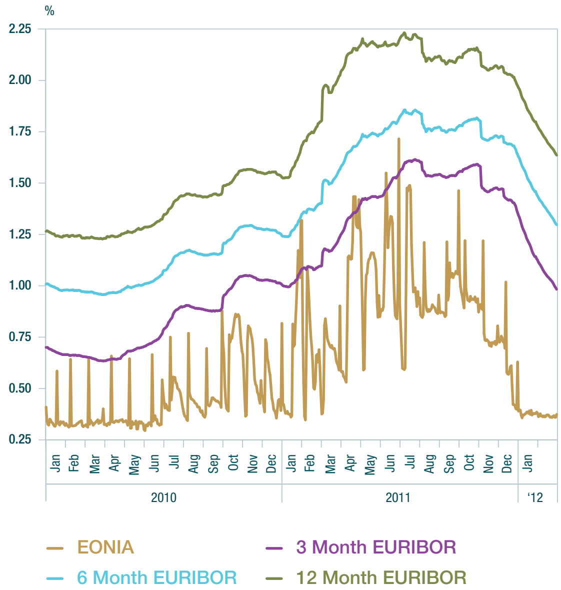
— France — Italy — Spain — Ireland
— Portugal — Greece (RHS)

Source: Thomson Reuters Datastream.

Yields on AAA-rated long-term euro area sovereign debt fell slightly during the first two months of 2012. At the same time, yield spreads over Germany for other euro area sovereign generally narrowed, quite significantly in the case of some countries. Implied bond market volatility also fell from the high levels that were reached during the final quarter of 2011. These moves came despite mixed macroeconomic releases from euro area countries and credit rating downgrades for a large number of euro area sovereigns by two of the major credit rating agencies. Instead, euro area sovereign bond markets were buoyed by the significant reduction in concerns over European banks' funding conditions and the decisions taken by euro area leaders at the 30 January meeting of the Heads of State or Government. Sovereign bond yield spreads over Germany did not fall uniformly, however, with those of Portugal and Greece rising during January and February. The yields on US government securities increased slightly over the same period, reflecting better than expected US macroeconomic releases and the general improvement in risk sentiment arising from the easing of the euro area sovereign debt crisis.

Money Markets

Chart 12: Selected Euro Area Money Market Interest Rates



Source: Reuters EcoWin.

Unsecured euro money market rates declined during the first two months of 2012, due largely to a reduction in the pricing of risk in these markets arising from improved bank funding conditions. This could be seen by the fall in spreads between secured and unsecured money market rates. Such spreads reflect the level of credit and liquidity risk priced into unsecured interest rates and had risen quite sharply during the third and fourth quarters of 2011, amid concerns over the funding positions of European banks. The 3-year LTROs and other non-standard monetary policy measures announced by the ECB in December 2011 contributed strongly to an easing of such concerns. At the same time, the large allocations at the ECB's 3-year LTROs, held in December and February, gave rise to very high levels of excess euro liquidity. As a result of this, the EONIA rate remained steady at a low level during the first two months of 2012.

Signed Articles

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

The Impact of the Financial Turmoil on Households: A Cross Country Comparison

Mary Cussen, Brídín O'Leary and Donal Smith*

Abstract

The financial crisis has had a significant impact on both the wealth and economic behaviour of Irish households. This paper compares the impact of the financial crisis on Irish households with 23 other European countries. Both the financial and total wealth lost in recent years are compared across the sample of countries. It is found that Irish households in particular have lost a significant proportion of net worth compared with other countries due to the substantial decline in house prices in recent years. The reaction of Irish households has not been unusual in the face of the deteriorating economic environment. Most countries' households increased their savings rates in recent years. Households in those countries that increased saving the most, such as Irish households, did so to reduce high debt levels. It is found that Irish households have decreased their debt levels more than any other country since 2008.

* The authors are Senior Economist, Economist, and Research Assistant, 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. They would like to acknowledge, with thanks, the helpful comments and suggestions of Joe McNeill and Aisling Menton. We would also like to thank our colleagues in the Statistics Division for statistical support.

1 Introduction

The economic environment in Ireland and Europe has undergone unprecedented change in recent years. The financial crisis which began in mid-2007 and intensified during September 2008 resulted in widespread stock market volatility and a recession unprecedented in the post-World War II era (IMF, 2009). Following years of rapid house price appreciation, house prices began to decline in recent years in a number of European countries, most notably Ireland, Spain, the United Kingdom (UK), France and Denmark. From late 2010 onwards, a number of European countries experienced problems accessing funding in the sovereign debt markets. Greece, Ireland and Portugal all entered EU/IMF programmes during May 2010, November 2010 and May 2011, respectively. As a consequence of the recession, financial and sovereign debt crises and the EU/IMF programmes, many countries' governments introduced austerity budgets in recent years, adversely impacting household finances. The implications of these developments for households in Ireland and Europe have been a considerable loss in housing and financial wealth, as well as greater economic uncertainty.

Cussen and Phelan (2010) found that the financial crisis and subsequent recession had a significant impact on Irish households' net worth and on their economic behaviour. This paper provides an update on the impact of the continuing difficult economic environment on Irish households. Moreover, the impact of Irish households' wealth and altered economic behaviour is contrasted with that of 23 other European countries[1]. The paper contrasts the impact of stock market volatility and, in some countries, declining house prices on the net worth of households across the countries in the sample. It is analysed how households in the sample countries responded to the change in their economic circumstances, particularly in terms of their savings behaviour and debt reduction.

Quarterly Financial Accounts for Ireland are used to analyse the financial position and behaviour of Irish households[2]. The analysis is facilitated by two new data sources which became available during 2011. In October 2011, the Central Statistics Office (CSO) published for the first time institutional sector accounts for all sectors in Ireland from Q1 2002 onwards.[3] In addition, the ECB's Statistical Data Warehouse (SDW)[4], now stores quarterly financial accounts for all EU countries[5].

2 The Impact of the Crisis on Households' Wealth

The latest recession has had a significant impact on household sector wealth in most European countries. The impact has been heterogeneous, however, as households' holdings of asset types can vary considerably by country. This section analyses household net financial wealth (financial assets less liabilities) and net worth (financial and non-financial assets less liabilities) to analyse the impact of the crisis. Using three different time periods: a pre-financial crisis household position (2004); the financial crisis (2007); and the current experience using the latest quarter data (Q3 2011); it is evident that some countries have been more significantly impacted than others. The household sector's stocks of financial assets are influenced by two factors; valuation changes and transactions. This section primarily deals with the impact of the crisis on household wealth, while Sections 3 and 4 focus on households' portfolio shift in response to the crisis.

1 The countries in our sample are: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovenia, Slovakia, Spain, Sweden, Switzerland and the UK.

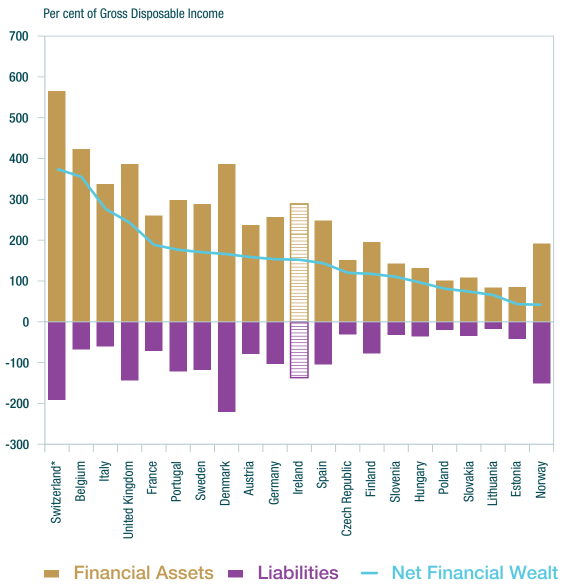
2 In financial accounts and in this article the household sector includes non-profit institutions serving households.

3 http://www.cso.ie/en/releasesandpublications/nationalaccounts.

4 http://sdw.ecb.europa.eu.

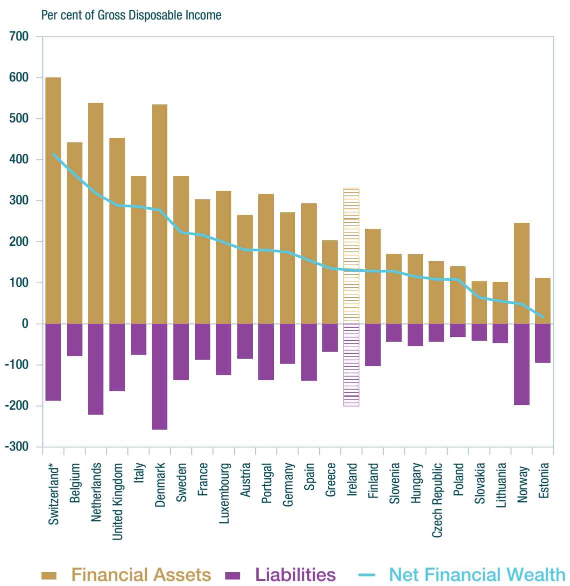
5 Complete quarterly financial accounts are not available for all countries from this source. Where quarterly financial accounts are not available the dataset is supplemented with accounts published on national central banks' or national statistics institutes' websites, or data published on Eurostat's website.

Chart 1: Financial Assets, Liabilities and Net Financial Wealth of Households as a Four-Sum Moving Average of Disposable Income, Q2 2004



Sources: ECB, Eurostat, National data for Austria, Germany, Ireland and Norway. Q2 2004 analysis is based on 21 countries in the data set. Q2 2004 data not available for the Netherlands, Luxembourg and Greece. *Indicates annual data used.

Chart 2: Financial Assets, Liabilities and Net Financial Wealth of Households as a Four-Sum Moving Average of Disposable Income, Q2 2007



Sources: ECB, Eurostat, National data for Austria, Germany, Greece, Netherlands, Ireland and Norway.
*Indicates annual data used.

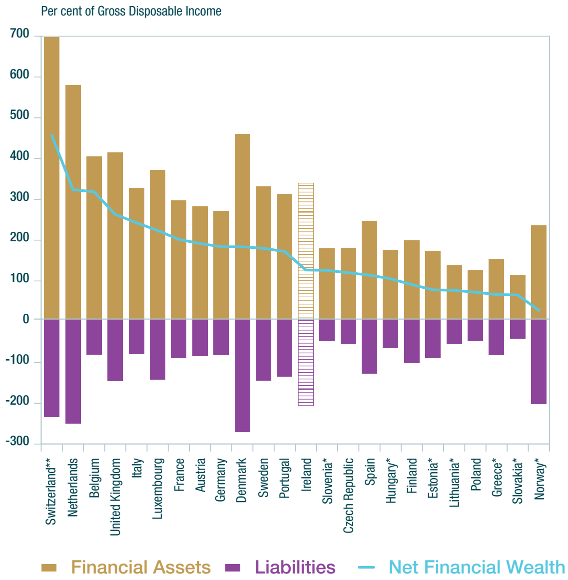
2.1 Household Net Financial Wealth: A Cross Country Comparison

An examination of the change in balance sheet positions of households in the sample of countries shows that the average net financial wealth as a proportion of disposable income increased by almost 17 percentage points between Q2 2004 to Q2 2007, but fell by 19 percentage points between Q2 2007 and Q3 2011. Prior to the financial crisis, Swiss households had the highest net financial wealth as a proportion of disposable income at end-Q2 2004, while Norway had the lowest, as depicted in Chart 1. Irish households had the eleventh highest net financial wealth out of the countries in the sample. Between Q2 2004 and Q2 2007 (the period just before the financial crisis began) Irish households increased their financial assets as a percentage of disposable income by 42 percentage points, while their liabilities increased by 63 percentage points. The rapid increase in liabilities over the period was largely driven by investment in housing assets in Ireland. This resulted in a decline of Irish households' net financial wealth as a percentage of disposable income of 21 percentage points over the period, giving it a lower ranking of fifteenth place out of 24 countries by Q2 2007. From Q2 2004 to Q2 2007, six countries experienced higher growth in financial assets as a proportion of disposable income compared to Ireland. No other country experienced as large an increase in household liabilities as Ireland during this period. Households in two countries did not increase their liabilities between Q2 2004 and Q2 2007; Switzerland and Germany, which showed a reduction as a proportion of disposable income by 4 and 7 percentage points, respectively. Households in Switzerland continued to have the highest net financial wealth as a proportion of disposable income in Q2 2007.

By Q3 2011, the world had experienced a long and costly recession associated with the financial crisis. As depicted in Chart 4, most countries' households' net financial wealth continued to be at a lower level in Q3 2011 than Q2 2007. Comparing Charts 2 and 3, it is evident that households in Estonia, Switzerland,

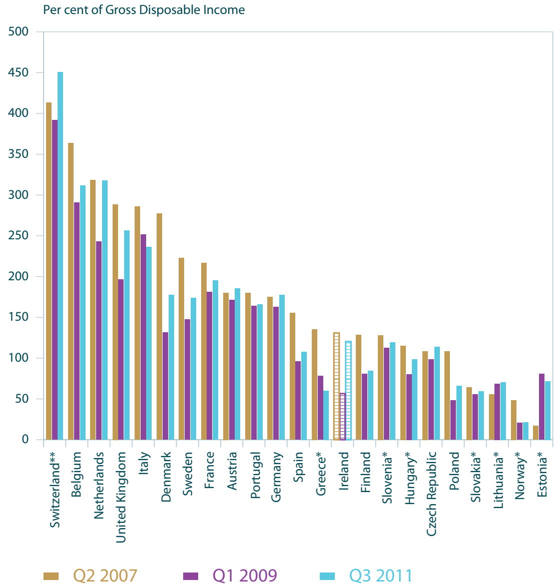
6 Annual 2010 figures used for Gross Disposable Income for Estonia, Greece, Hungary, Lithuania, Norway, Slovakia and Slovenia. The 2010 figures for financial assets and liabilities were used as a proxy for 2011 Swiss data, as 2011 data are unavailable. Annual 2009 figures are used for Gross Disposable Income for Luxembourg and Switzerland.

Chart 3: Financial Assets, Liabilities and Net Financial Wealth of Households as a Four-Sum Moving Average of Disposable Income, Q3 2011



Sources: ECB, Eurostat, National data for Austria, Germany, Greece, Netherlands, Ireland and Norway. Annual 2010 data used for Switzerland. **Indicates 2009 data used for disposable income. *Indicates 2010 data used for disposable income only.

Chart 4: Household Net Financial Wealth at Q2 2007, Q1 2009 and Q3 2011



Sources: ECB, Eurostat, National data used for Austria, Germany, Greece, Netherlands, Ireland and Norway. Data not available for Luxembourg. Annual 2010 data used for Switzerland for Q3 2011 figure.

**Indicates 2009 data used for disposable income for Q3 2011 figure.
*Indicates 2010 data used for disposable income only for Q3 2011 figure.

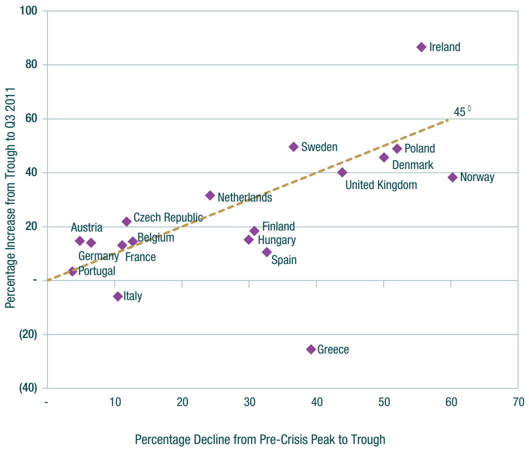
Luxembourg, Lithuania, Austria, Czech Republic and Germany have seen an improvement in net financial wealth by Q3 2011[6]. Between Q2 2007 and Q3 2011, Ireland's net financial wealth as a proportion of disposable income fell by 11 percentage points, to 120 per cent of disposable income. This was composed of an increase in total financial assets by 2 percentage points, while liabilities grew by 13 percentage points. At end-Q3 2011, Irish households' net financial wealth as a percentage of disposable income was the thirteenth highest in the sample of countries, overtaking households in Spain and Greece since Q2 2007.

From an analysis of the 24 countries between Q2 2004 and Q3 2011, 18 countries' net financial wealth peaked prior to the crisis, and reached a trough as the financial crisis led to increased stock market volatility during 2009[7]. Household net financial wealth peaked over the period for each country between Q4 2006 (Ireland) and Q2 2008 (Austria, Czech Republic and Hungary). The trough in net financial wealth occurred over a shorter time frame, between Q4 2008 (Austria, Belgium, Norway and Sweden) and Q2 2009 (the Netherlands). Thirteen countries experienced a trough in household net financial wealth in Q1 2009.

In Q3 2011, net financial wealth in 14 countries remained below their respective peaks, however, other countries such as Germany, France, Austria and the Czech Republic had net financial wealth in Q3 2011 that exceeded their previous peak levels. The net financial wealth of Italy and Greece have continued to decline and were at their lowest levels in Q3 2011 since their previous troughs.

7 Estonia, Lithuania, Slovenia, Slovakia, Luxembourg and Switzerland showed no obvious peak or trough in their net financial wealth from Q1 2004 to Q3 2011.

Chart 5: Decline in Net Financial Wealth from Peak to Trough and Recovery from Trough to Q3 2011



Sources: ECB, National data for Austria, Germany, Greece, Ireland, Netherlands and Norway.
Data unavailable for Switzerland.

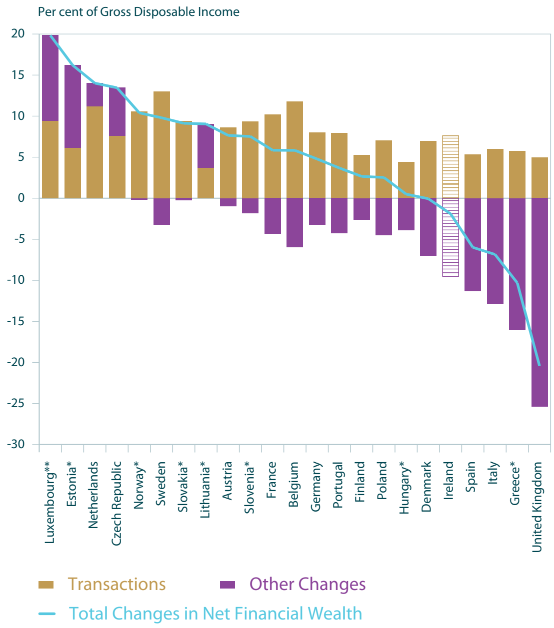
Chart 5 compares the percentage decline in each country's net financial wealth from peak to trough against the percentage change from trough to the latest quarter for which data are available. The data show that the greater the percentage decline in net financial wealth from peak to trough, the greater the recovery. Irish households had the second largest percentage decrease in net financial wealth of 56 per cent from peak to trough levels, but the greatest percentage increase in net financial wealth of 86 per cent from the trough period to Q3 2011. This is a result of increased saving and deleveraging by households, and will be examined in a later section. In contrast to the Irish experience, households in Portugal had the smallest decrease in net financial wealth of 5 per cent from peak to trough levels, followed by the third lowest gain in net financial wealth after the trough in Q1 2009 of just 3 per cent. Households in Greece behaved differently to most other countries as, despite a fall in net financial wealth of 39 per cent from peak to trough in Q1 2009, this had not rebounded by Q3 2011 – instead, net financial wealth decreased by a further 26 per cent.

While Sections 3 and 4 examine changes to household balance sheets due to savings and deleveraging, this section examines changes in wealth due to valuation effects. As depicted in Chart 6, valuation changes had a significant impact on changes in household net financial wealth between Q2 2007 and Q3 2011.

Valuation changes can be due to changes in the value of assets, or exchange-rate movements.

For most countries, households' holdings of financial assets fluctuated in value between Q1 2008 and Q3 2011, depicted in Charts 7, 8 and 9. The bulk of the negative revaluations occurred during the early part of the financial crisis: Q1 2008 – Q4 2008, except for Estonia, Norway, Lithuania and Slovakia. As outlined further in Box 1, households' main financial assets are: 'currency and deposits'; 'shares and other equity'; and 'insurance technical reserves'. The value of households' 'currency and deposits' are usually impacted only by exchange-rate changes, therefore, analysis is focussed on 'shares and other equity' and 'insurance technical reserves'.

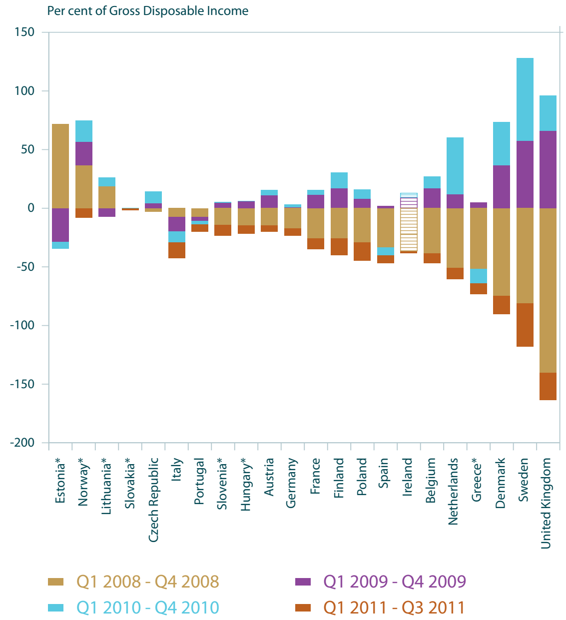
Chart 6: The Relative Contributions of Transactions and Revaluations to Changes in Net Financial Wealth, Q2 2007-Q3 2011



Sources: ECB, Eurostat, National data for Austria, Germany, Greece, Netherlands, Ireland and Norway.

**Indicates 2009 data used for disposable income for 2010 and 2011 figures.
*Indicates 2010 data used for disposable income only for 2011 figures.

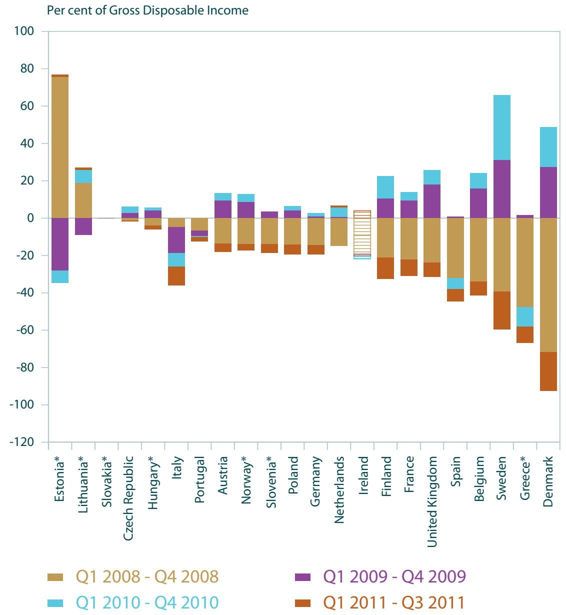
Chart 7: Changes in the Value of Financial Assets



Sources: ECB, Eurostat, Central Statistics Office Ireland, National data for Austria, Germany, Greece, Ireland, Netherlands and Norway. Data not available for Luxembourg and Switzerland.

*Indicates 2010 data used for disposable income in 2011 only.

Chart 8: Changes in the Value of Shares and Other Equity



Sources: ECB, Eurostat, Central Statistics Office Ireland, National data for Austria, Germany, Greece, Ireland, Netherlands and Norway. Data not available for Switzerland and Luxembourg.

*Indicates 2010 data used for disposable income in 2011 only.

The value of 'shares and other equity' has been extremely volatile since the beginning of the financial crisis, as illustrated in Chart 8. From Q1 2008 to Q4 2008, the total change in the stock of 'shares and other equity' can be decomposed into valuation changes (accounting for 84 per cent of total change) and transactions (accounting for 16 per cent). A similar ratio was seen for 'shares and other equity' in the second period, Q1 2009 – Q4 2009, of 71 per cent and 29 per cent, respectively.

Households' holdings of 'insurance technical reserves' ('ITRs') experienced large negative valuation changes in some countries during the first period, Q1 2008 – Q4 2008, followed by an increase in value in most subsequent quarters. Chart 9 highlights the valuation changes for 'ITRs' in recent years. The UK, Netherlands, Sweden, Norway and Ireland recorded the largest negative valuation changes for 'ITRs' over the four periods highlighted. However, during the second period, Q1 2009 – Q4 2009, the value of households' 'ITRs' in Ireland and the UK recovered by 55 and 42 per cent, respectively. There were notable increases during the same period, with households' holdings of 'ITRs' in Norway, Sweden and the Netherlands recovering by 70, 68 and 13 per cent, respectively.

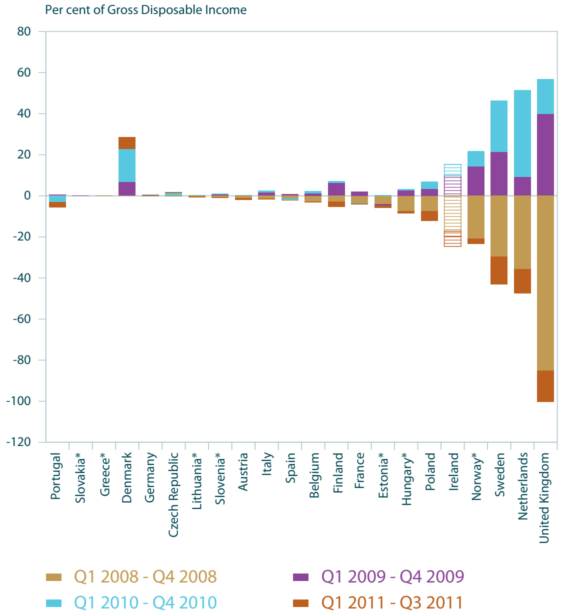
2.2 Household Net Worth: A Cross Country Comparison

As a large proportion of household wealth is concentrated in housing assets, it is instructive to include data on housing, where possible, in an examination of overall net worth[8]. Housing assets data, however, are only available for 14 of the sample European countries.[9]

8 Household net worth is analysed by looking at the aggregate categories on the balance sheet: financial assets, financial liabilities and housing assets. It is calculated as household assets (financial and housing assets) less their liabilities. See Cussen, Kelly and Phelan (2008) for an explanation of the determinants of household net worth.

9 Estimates of housing assets are calculated for Ireland based on the size and value of the housing stock. Figures for the household sector's non-financial assets for France, Germany, Italy and the UK are available on the OECD's website in Economic Outlook Annex Table 58, 'Household Wealth and Indebtedness'. For all other countries, the data was made available to us by economists working in the Danish Central Bank.

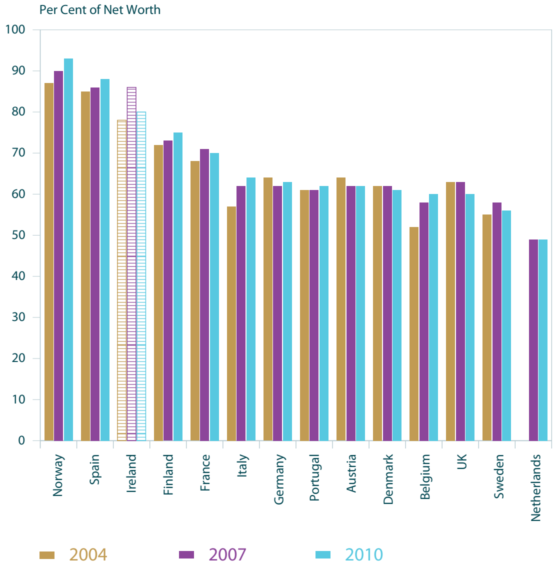
Chart 9: Change in the Value of Insurance Technical Reserves



Sources: ECB, Eurostat, Central Statistics Office Ireland, National data for Austria, Germany, Greece, Ireland, Netherlands and Norway. Data not available for Switzerland and Luxembourg.

*Indicates 2010 data used for disposable income in 2011 only.

Chart 10: Housing Assets as a Percentage of Household Net Worth



Sources: OECD, ECB, Eurostat, Danmarks Nationalbank. Data are available for Czech Republic, Estonia, Hungary, Lithuania, Luxembourg, Poland, Slovenia, Slovakia and Switzerland.

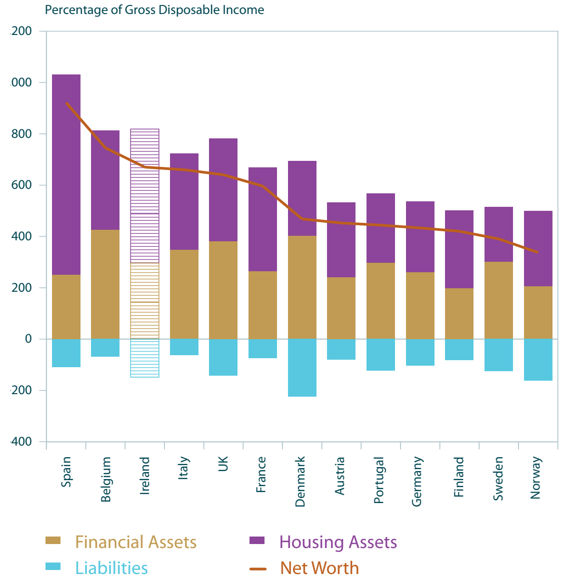
Chart 10 contrasts the proportion of household net worth that is attributable to housing assets for these 14 countries in 2004 (a pre-crisis year), 2007 (beginning of the financial crisis) and 2010 (latest annual data). Housing assets form a substantial proportion of households' overall net worth in most of these countries, particularly Norway, Spain, Ireland and Finland. This means that for such countries, changes to the value of housing assets have a major impact on overall household net worth. In turn, changes to the levels of household net worth influence spending and saving decisions – this is examined in detail in Section 3.

Housing assets as a percentage of net worth in Ireland, scaled for disposable income, increased from 78 per cent in 2004 to 86 per cent in 2007, as depicted in Chart 10. The effect of the downturn in property prices is evident by the fall in housing assets as a percentage of net worth by 2010 to 80 per cent. The impact of this decline on net worth is seen in Charts 11[10], 12 and 13.

In 2004, Irish households had a net worth of 670 per cent of disposable income and were ranked third highest out of the 13 countries in the sample. House prices increased nationally in Ireland by 30 per cent from Q1 2004 to Q4 2006, using the permanent tsb/ESRI Index. The CSO's Residential Property Price Index shows that Ireland reached its peak national price for all residential properties in September 2007. The impact of increased house prices, as well as an increase in the acquisition of housing assets, increased Irish household net worth as a proportion of disposable income by 53 percentage points between 2004 and 2007, to reach 723 per cent of disposable income. By the end of 2007, Ireland retained its third place out of the 14 countries in terms of net worth, largely as a result of substantial housing assets. Spain and Belgium continued to have higher household net worth of the 14 countries covered. From 2004 to 2007, Irish households' holdings of housing assets increased by 98 percentage points, financial assets by 11 percentage points and liabilities by 57 percentage points. The increase in

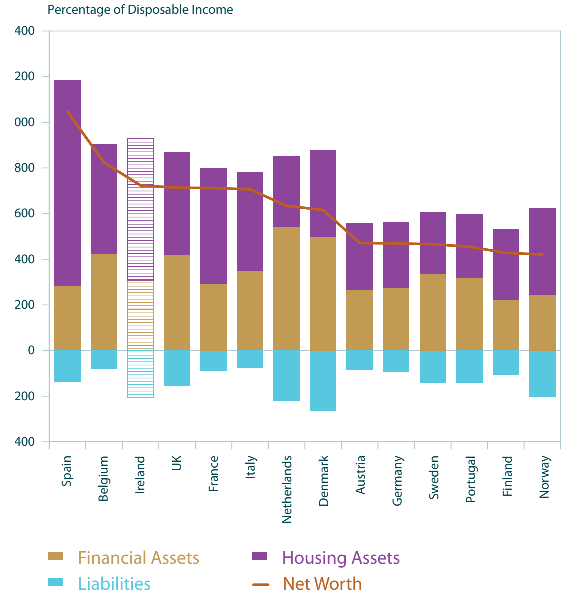
10 A complete dataset was not available for the Netherlands for 2004. The Netherlands is excluded from Chart 11.

Chart 11: Household Net Worth, 2004



Sources: ECB, Eurostat, National data for Austria, Germany, Ireland and Norway. Data unavailable for Czech Republic, Estonia, Hungary, Lithuania, Luxembourg, Poland, Slovenia, Slovakia and Switzerland.

Chart 12: Household Net Worth, 2007



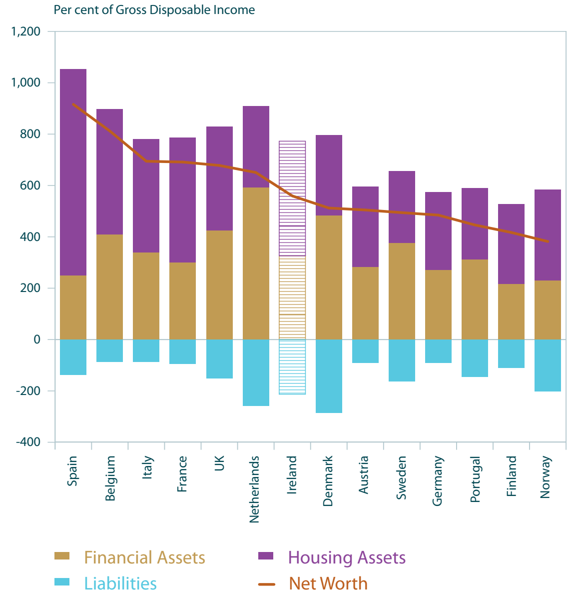
Sources: ECB, Eurostat, National data for Austria, Germany, Ireland and Norway. Data unavailable for Czech Republic, Estonia, Hungary, Lithuania, Luxembourg, Poland, Slovenia, Slovakia and Switzerland.

housing assets in all countries in the sample, with the exception of Austria and Germany, were also accompanied by a rise in debt levels. From 2004 to 2007, households' net worth as a proportion of disposable income had increased by 125 percentage points in Spain, while the UK had increased by 72 percentage points. Such a pattern of increasing debt levels and rising holdings of housing assets was also seen in the US and Japan prior to the bursting of their asset bubbles (Koo, 2009).

The net worth of Irish households as a percentage of disposable income fell by 164 percentage points between 2007 and 2010, largely as a result of the 174 percentage point reduction in the stock of housing assets as a proportion of disposable income. At end-2010, Irish net worth stood at 559 per cent of disposable income. This decline exceeded the gain in net worth prior to the recession and was the largest decline in net worth among the 14 countries, from 2007 to 2010. By end-2010, Irish household net worth ranked seventh out of the 14 countries in the sample – a lower position than in 2004 and 2007. Households in all 14 countries in the sample experienced an increase in net worth between 2004 and 2007. Only Austria, Sweden, Netherlands and Germany experienced an increase in their net worth as a proportion of disposable income from 2007 to 2010, with their housing assets as a proportion of disposable income also increasing.

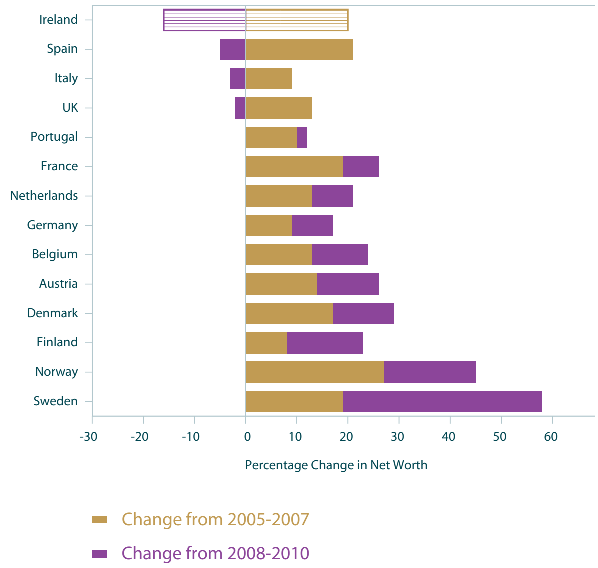
In comparing household net worth as a proportion of disposable income, it is important to take account of cross country divergence. Compared to the other 13 countries in the sample, Irish households had the largest percentage change in disposable income from 2004 to 2007. Irish disposable income increased by 29 per cent over this period, but suffered the second largest reduction among the 14 countries from 2007 to 2010, falling by 7 per cent. The UK had a greater fall in disposable income from 2007 to 2010 compared to Ireland, of 10 per cent. The Netherlands had a decline in disposable income of 1 per cent while all other countries in the sample, with the exception of Italy, had an increase in disposable income from 2007 to 2010. It is worth noting that, all other things being equal, declines in households' disposable income are accompanied by an increase in households' debt burden. It is not possible however, to fully understand the impact of declining income levels without information on the effects of falling disposable income among different income groups.

Chart 13: Household Net Worth, 2010



Sources: ECB, Eurostat, National data for Austria, Germany, Ireland and Norway. Data unavailable for Czech Republic, Estonia, Hungary, Lithuania, Luxembourg, Poland, Slovenia, Slovakia and Switzerland.

Chart 14: Change in Net Worth from 2005 to 2007 and from 2008 to 2010



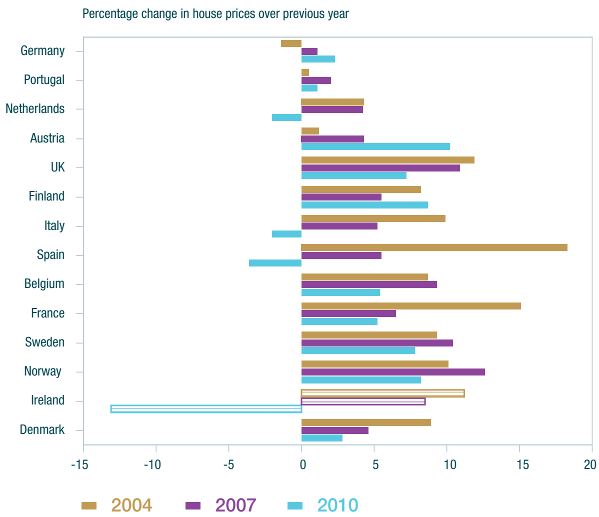
Sources: ECB, Eurostat, National data for Austria, Germany, Ireland and Norway. Data unavailable for Czech Republic, Esto Hungary, Lithuania, Luxembourg, Poland, Slovenia, Slovakia ar Switzerland.

The effect of the global downturn across the 14 countries is illustrated in Chart 14 below, which shows the change in household net worth during two time periods: 2005 to 2007 and 2008 to 2010. Norway and Spain recorded higher increases in net worth as a proportion of disposable income, compared with Ireland, despite larger increases in house prices in Ireland, from 2005 to 2007. Increases in overall net worth which are driven by house price increases heighten the vulnerability of households' balance sheet positions to any decline in housing values. Irish households increased their liabilities as a proportion of disposable income during this period by 32 percentage points, largely reflecting the purchase of housing assets. Only Norway had a greater increase in financial liabilities (37 percentage points) among the 14 countries, between 2005 and 2007.

As a result of the large falls in house prices many households now own properties that are worth less than the outstanding related mortgage (Duffy, 2009). Recent estimates have shown that approximately 31 per cent of mortgaged properties, or 47 per cent of the value of outstanding mortgage loans, were in negative equity at the end of 2010 (Kennedy and McIndoe-Calder, 2011). By the end of December 2011, 9 per cent of private residential mortgage accounts were in arrears of over 90 days (Central Bank of Ireland, 2012). Savings habits of households are shown to react to changes in net worth. This is examined later in Section 3.

Given that changes in the value of housing assets have been shown to impact on household net worth, it is useful to examine house price developments across the sample of 14 countries. In 2004, all countries except Germany experienced positive changes in house prices. Spain had the highest increase in house prices in 2004 of 18 per cent, followed by France, which had an increase of 15 per cent. Ireland had the fourth highest increase in house prices of 11 per cent. The greatest increase in nominal annual house price changes in the dataset occurred in 2006, when house price increases of greater or equal to 10 per cent were seen in Denmark, Ireland, Norway, Sweden, France, Belgium and Spain. The extent to which house prices increased

Chart 15: Annual House Prices Percentage Changes in 2004, 2007 and 2010



Sources: Nominal annual price changes from OECD property price index, indexed house price changes for Portugal (2005 = 100) and Austria (2000 = 100) from BIS Property Price Statistics.

varied by country is highlighted in Chart 15. According to the OECD, in 2007, Irish house prices increased by almost 9 per cent, which was 6 percentage points lower compared to 2006.

The overheating of the property markets in Ireland and Spain and the subsequent collapse in property prices, impacted negatively on household net worth in these countries. Reinhart and Rogoff (2009) in their examination of the bust phase in housing price cycles accompanied by banking crises, noted that the aftermath of severe financial crises is associated with real house price declines of 35 per cent over six years from peak. Bordo and Jeanne (2002) found that from twenty booms in property prices, eleven were followed by busts, such that one in two property booms end in a crash. This is in line with what happened in Ireland. According to the OECD, Irish house prices fell by 18 per cent in 2009 and by 13 per cent in 2010, the largest reductions in house prices for both years out of the 14 countries in the sample. In 2009, the year in which most sizeable house price decreases occurred, other countries such as Denmark, UK, Spain and France experienced substantial falls in house prices of 12, 8, 8 and 7 per cent, respectively.

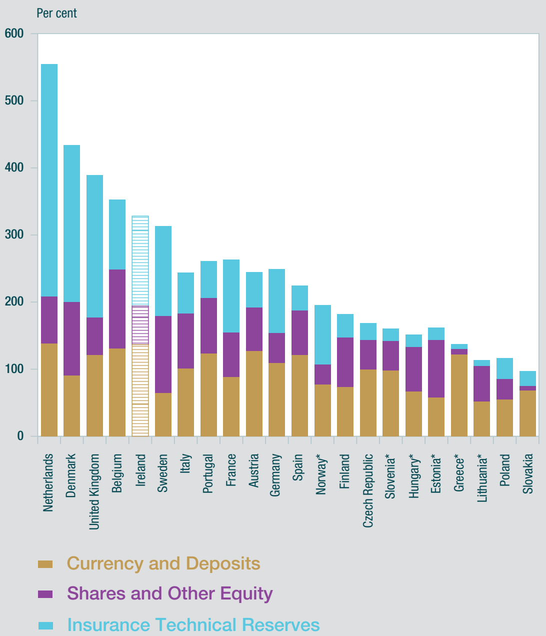
BOX 1: Households' Portfolio of Financial Assets: A Cross Country Comparison

There is substantial variation in the portfolio composition of financial assets of households across the sample of 24 countries. This allocation difference can be due to a range of factors, such as cross country variation in risk aversion, property ownership rates, wealth levels, age structure and tax systems (Borgy et al., 2011). Cross country differences in types and levels of financial assets held by households can be seen in Chart 16, which shows the stock of the main financial instruments[11] as a percentage of the four-sum moving average of quarterly gross disposable income of households. The countries are ranked by total financial assets as a percentage of gross disposable income.

At end-Q3 2011, households in the Netherlands held by far the largest amount of financial assets as a percentage of gross disposable income, at 574 per cent. Irish households ranked fifth at 333 per cent, which included the second largest amount in 'currency and deposits' as a percentage of gross disposable income. Irish holdings of this asset type as a percentage of the total portfolio of financial assets was 41 per cent, almost equal to the average for the sample of countries. Greek households had the highest percentage holdings of 'currency and deposits', accounting for 82 per cent of the portfolio in Q3 2011, followed by Slovakia with 64 per cent. Sweden and Denmark had the lowest proportions, with both holding 20 per cent of the household portfolio in this instrument category.

BOX 1: Households' Portfolio of Financial Assets: A Cross Country Comparison

Chart 16: Household Financial Assets as a Percentage of Four-Sum Moving Average of Gross Disposable Income, Q3 2011



Sources: ECB, Eurostat, Central Statistics Office Ireland, National data for Austria, Germany, Greece, Ireland, Netherlands and Norway. Data not available for Switzerland and Luxembourg. *Indicates 2010 data used for disposable income only.

Across the sample of countries 'insurance technical reserves' (ITRs) are the second largest asset type in the household portfolio, after 'currency and deposits', when measured as a percentage of the total portfolio and as a percentage of gross disposable income. ITRs include life assurance policies and pension funds. It is expected that there is considerable cross country variation in the asset composition of this instrument, as there is significant variation in the structure of public and private pension systems, and the tax treatment of pensions and other financial assets among the sample of countries (OECD, 2011). The Netherlands ranks the highest in terms of household holdings of ITRs, with these assets amounting to 347 per cent of gross disposable income at end-Q3 2011. Ireland ranks fourth with 134 per cent. ITRs account for 40 per cent of the Irish household portfolio in Q3 2011, which is well above the average of 26 per cent for the sample of countries.

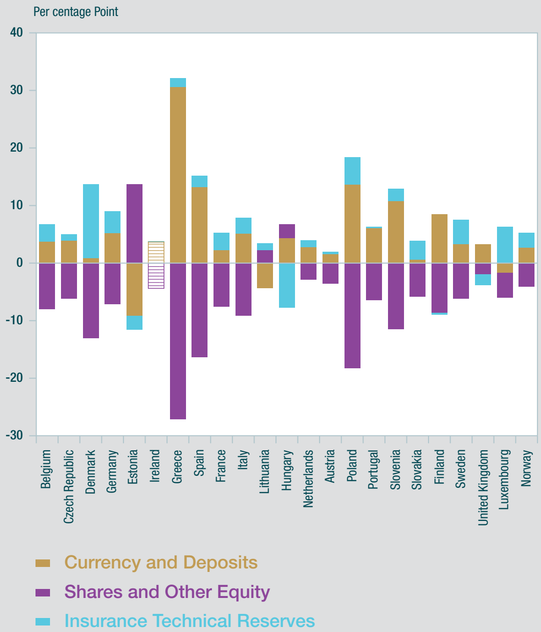
Belgium, Sweden and Denmark each hold over 24 percentage points more in 'shares and other equity' as a proportion of disposable income than any other country, amounting to over 100 per cent of average gross disposable income in each of these countries. This instrument, on average, accounted for 25 per cent of the household portfolio across the sample of countries. Irish households hold a below-average amount of 'shares and other equity', at 17 per cent of the portfolio.

Chart 17 depicts the change in the percentage of total financial assets accounted for by the major financial instruments from the start of the crisis in Q3 2007, to Q3 2011. With the exception of Estonia, Lithuania and Hungary, all countries saw a reduction in 'shares and other equity' as a percentage of the household portfolio. The most substantial changes occurred in Greece where 'currency and deposits' increased from 51 per cent to 82 per cent and 'shares and other equity' decreased from 33 per cent to 6 per cent of the portfolio over the period. 'Currency and deposits' increased as a percentage of the portfolio in all countries with the exception of Estonia, Lithuania and Luxembourg. The trends observed match the overall global pattern for all sectors detailed in the Allianz Global Wealth Report (2011) which shows that bank deposits have increased their share of global financial assets over the past decade, as security-focussed rather than return-orientated investment strategies have become the global trend in response to the uncertainty generated by the crisis.

11 Across the sample of countries 'currency and deposits', 'shares and other equity' and 'insurance technical reserves' are the main asset types with no other financial instrument accounting for more than 10 per cent of the portfolio – this is with the exception of Italy where securities account for 18 per cent of the asset portfolio.

BOX 1: Households' Portfolio of Financial Assets: A Cross Country Comparison

Chart 17: Percentage Point change in Household Financial Balance Sheet Portfolio, Q3 2007 – Q3 2011



Sources: ECB, Eurostat, National data for Austria, Germany, Greece, Ireland, Netherlands and Norway. Data not available for Switzerland.

Changes in the overall portfolio composition, as depicted in Chart 17, can be driven directly through acquiring and disposing of assets (transactions), or indirectly through valuation changes. It is important to decompose the overall change into these two components, particularly in a volatile environment, so that changing trends in household investment behaviour in relation to risk aversion and liquidity preferences can be analysed. While Section 2 looked at the impact of the crisis on asset values, Section 3 analyses the impact of the crisis on household savings rates, including precautionary savings and risk aversion.

BOX 2: Household Savings

Household savings can be derived from the real side of the economy i.e. the non-financial accounts perspective or alternatively, from analysing the uses of household savings i.e. a financial accounts perspective.

<u>Savings from a Non-Financial Accounts Perspective:</u>

Savings = Disposable income – Consumption

<u>Savings from a Financial Accounts Perspective:</u>

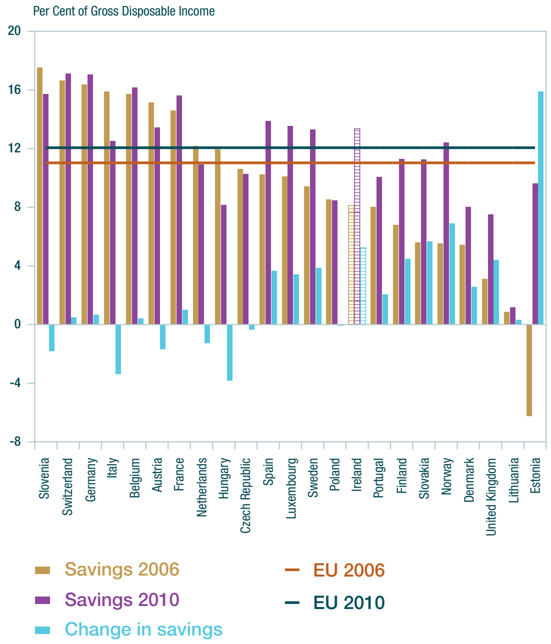
Savings = Transactions in financial assets + Acquisition of non-financial assets (gross fixed capital formation) – Transactions in liabilities

Savings: Non-Financial Accounts = Savings: Financial Accounts + Statistical Discrepancy

The household savings ratio is calculated by dividing savings by disposable income:

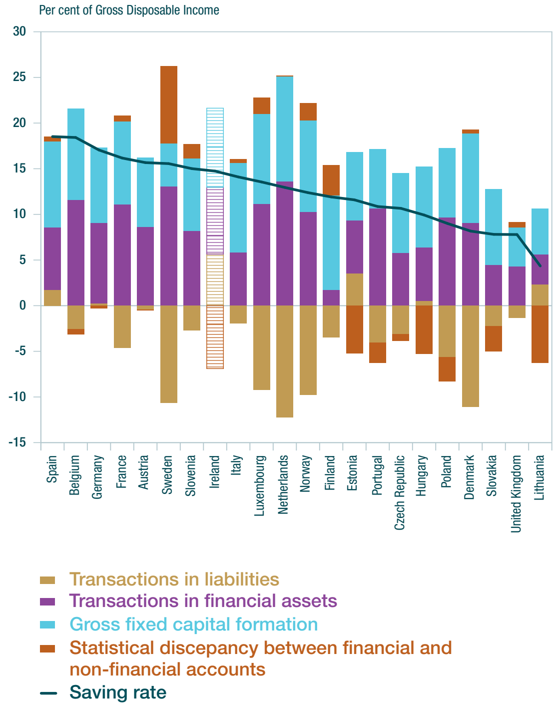
Savings Ratio = Savings ÷ Disposable Income

Chart 18: Household Saving Rates, 2006 and 2010



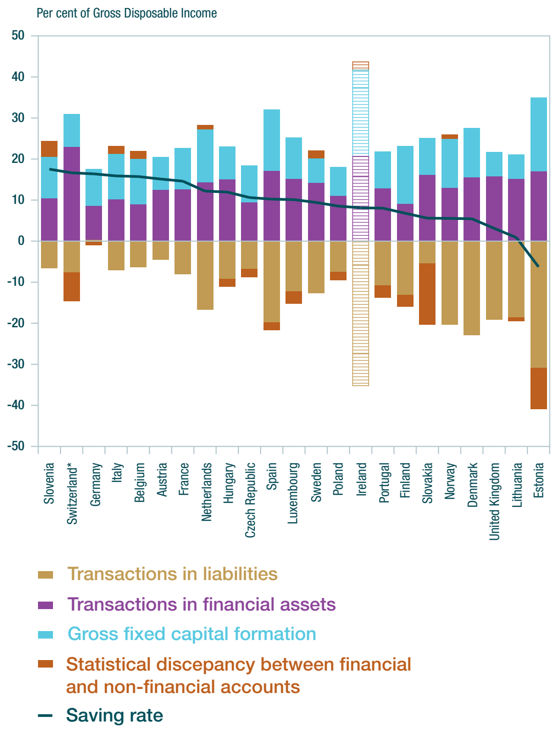
Sources: Eurostat, National data used for Ireland.

Chart 20: Decomposition of Household Savings Rate from a Financial Accounts Perspective, 2009



Sources: ECB, Eurostat, National data used for Austria, Germany, Ireland, Netherlands and Norway. Data unavailable for Greece and Switzerland.

Chart 19: Decomposition of Household Savings Rate from a Financial Accounts Perspective, 2006

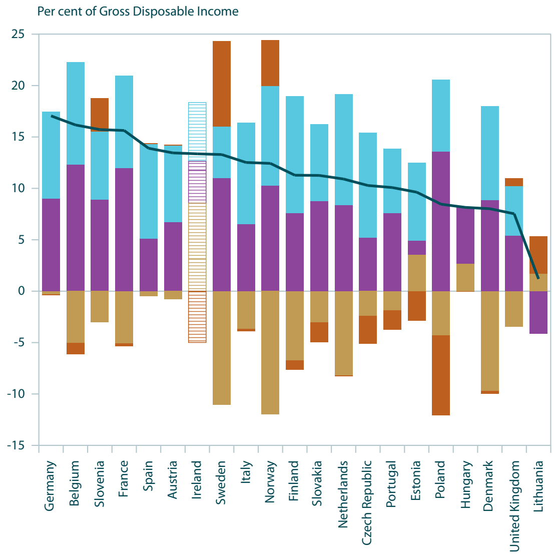


Sources: ECB, Eurostat, Central Statistics Office Ireland, National data for Austria, Netherlands, Germany, Ireland and Norway. *Indicates annual data used. Data unavailable for Greece.

3 Increased Household Savings – Precautionary or Debt Reduction

Increased savings rates have significant consequences for the economic outlook, given the importance of household spending as a component of aggregate demand. In a macroeconomic downturn or during a period of economic uncertainty, increased household savings would generally be expected, due to increased precautionary savings and/or debt reduction. There are a number of papers which look at households' precautionary savings behaviour during times of economic uncertainty [see Leland (1968), Deaton (1991), Carroll (1992)]. In addition, following a financial crisis, Roxburgh et al. (2010) find that debt reduction usually occurs either through net loan repayments or defaults/write-downs. If households reduce debt through net loan repayments, this will lead to higher household savings, as outlined in Box 2. This section compares how savings rates across the sample of 24 countries have been impacted by the crisis. Moreover, the paper examines

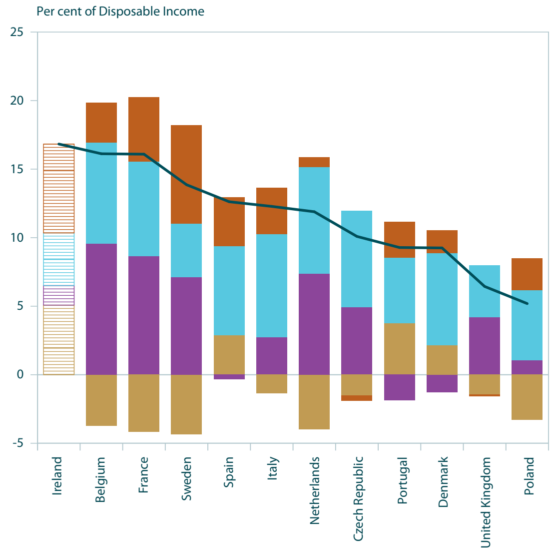
Chart 21: Decomposition of Household Savings Rate from a Financial Accounts Perspective, 2010



- Transactions in liabilities
- Transactions in financial assets
- Gross fixed capital formation
- Statistical discepancy between financial and non-financial accounts
- Saving rate

Sources: ECB, Eurostat, National data used for Austria, Netherlands, Germany, Ireland and Norway. Data unavailable for Greece and Switzerland.

Chart 22: Decomposition of Household Savings Rate from a Financial Accounts Perspective, Q1-Q3 2011



- Transactions in liabilities
- Transactions in financial assets
- Gross fixed capital formation
- Statistical discepancy between financial and non-financial accounts
- Saving rate

Sources: ECB, Eurostat, National data used for Austria, Germany, Netherlands, Ireland and Norway. Data unavailable for Greece and Switzerland.

whether the increased savings have been used by households to increase liquid financial assets as a precautionary measure or to reduce debt levels.

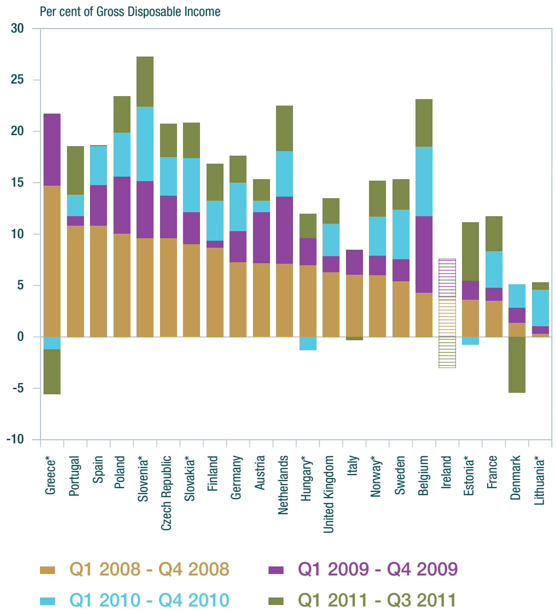
Household savings rates vary considerably across the sample of countries, as depicted in Chart 18. Part of the reason for this heterogeneity is that country specific factors can make cross country comparisons of savings rates difficult. Harvey (2004) outlines factors such as the relative importance of State versus private pension schemes, and State funding of health and education costs which can contribute to different savings ratios across countries. While long-term household savings rates may be a function of country-specific factors, fluctuations in short-term trends provide information about household expectations for future economic developments.

Chart 18 reveals that Slovenia had the highest savings rate in 2006, closely followed by Switzerland, Germany, Italy, Belgium and Austria. Ireland had a savings rate of 8 per cent of gross disposable income in 2006, lower than the EU average of 11 per cent. For 2010, the Irish savings rate stood at 13 per cent, a 5 percentage point increase on the 2006 rate. This represented the fourth highest percentage point increase in the savings rate over the period, after Estonia, Norway and Slovakia. Between 2006 and 2010 most countries increased their savings rates, with some exceptions such as Hungary, Italy, Slovenia and Austria.

Household savings can be looked at from two different perspectives as outlined in Box 2. The traditional calculation of savings is derived as gross disposable income minus consumption. An alternative can be derived by examining how household savings are used i.e. by adding households' investments in financial and non-financial assets and subtracting liabilities incurred. While technically both approaches should yield the same result, in practice there is usually a difference due to the statistical discrepancy between the real side and financial side of the household account.

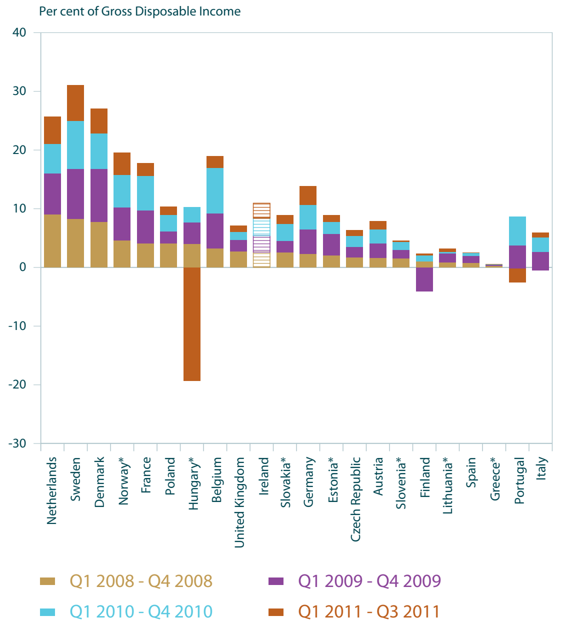
The motivation for the increase in households' savings rates can be assessed using the

Chart 23: Household Transactions in Currency and Deposits as a Percentage of Average Gross Disposable Income



Sources: ECB, Eurostat, National data used for Austria, Germany, Greece, Ireland, Netherlands and Norway. Data not available for Switzerland and Luxembourg. *Indicates 2010 data used for disposable income only.

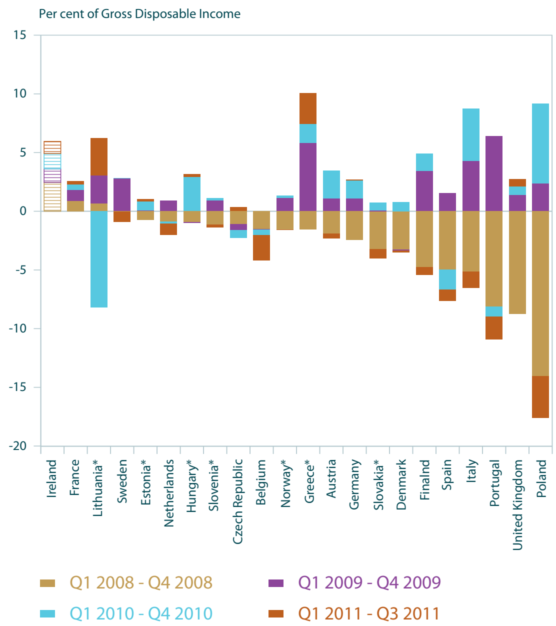
Chart 25: Household Transactions in Insurance Technical Reserves, as a Percentage of Average Gross Disposable Income.



Sources: ECB, Eurostat, National data used for Austria, Germany, Greece, Ireland, Netherlands and Norway. Data not available for Switzerland and Luxembourg.

*Indicates 2010 data used for disposable income only.

Chart 24: Household Transactions in Shares and Other Equity as a Percentage of Average Gross Disposable Income



Sources: ECB, Eurostat, National data used for Austria, Germany, Greece, Ireland, Netherlands and Norway. Data not available for Switzerland and Luxembourg.

*Indicates 2010 data used for disposable income only.

financial accounts perspective outlined above in Box 2. Chart 19 decomposes household savings rates into financial assets transactions, acquisition of non-financial assets, and liabilities transactions for Q1 to Q4 2006. The chart reveals that during 2006, Irish households invested a greater proportion of their disposable income in financial and non-financial assets than any other country in the sample, followed by Estonia, Spain and Switzerland. Irish households had the fifteenth largest savings rate over the period, as their substantial investment in assets was largely offset by sizeable liabilities transactions.

Charts 20, 21 and 22 depict the decomposition of households' savings behaviour during 2009, 2010 and Q1 2011 to Q3 2011[12]. Irish household savings rates ranked as the eighth highest, the seventh highest and overall highest for each period, respectively. The charts reveal that the increase in the Irish savings rate is largely due to net loan repayments. Irish households continued to invest in financial and non-financial assets over the periods, but to a much lesser extent than in

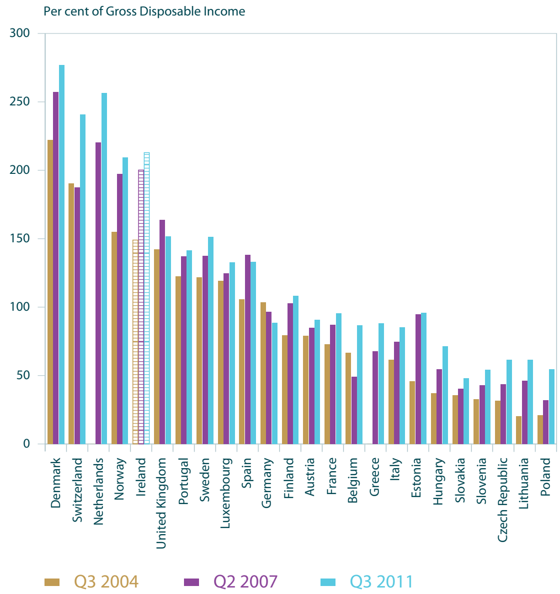
12 Data for 2011 is not yet available for a number of countries.

2006. The biggest increases in savings rates between 2009 and 2010 were experienced by Slovakia, Slovenia and Norway. The charts show that many countries reduced their liabilities transactions substantially from 2009 onwards, and this was largely responsible for the increased savings rates across many countries. Households in these countries continued to invest in financial and non-financial assets from 2009 onwards, but at a much reduced rate compared to 2006.

The household sector's portfolio of financial assets can be broken down by type of asset, to analyse the extent of movement into more liquid and/or less risky assets during the financial turmoil. Household transactions as a percentage of average gross disposable income are shown for 'currency and deposits', 'shares and other equity' and 'ITRs' in Charts 23, 24 and 25 for different time periods following the onset of the financial crisis. Charts 23 and 24 show a general trend towards greater investment in 'currency and deposits' and away from 'shares and other equity', particularly during 2008, reflecting greater risk aversion by households during the height of the financial crisis. Households in four countries – Denmark, Greece, Ireland, and to a much lesser extent, Italy – disinvested holdings of 'currency and deposits' during 2011, while households in Spain invested an amount equal to just 0.1 per cent of their disposable income in deposits over the same period. Reductions in 'currency and deposits' in recent quarters may reflect concerns about the stability of the banking sector, as well as the use of financial assets to repay debt. Banks in Greece and Italy were negatively impacted by the sovereign debt crisis due to their substantial home bias in sovereign bond holdings (Blundell-Wignall and Slovik, 2011). The banking sectors in Ireland, Spain and Denmark have been significantly impacted by the financial crisis. McQuinn and Woods (2012) find in their analysis of the Irish deposit market that any deterioration in the financial soundness of a deposit-taking entity will have implications for its deposit-gathering capacity.

It can be seen from Chart 24 that 19 of the 22 countries' household sectors in the sample disinvested in 'shares and other equity' in the early period of the crisis. The chart indicates that there has been some recovery in household investment in 'shares and other equity' during 2009, as the financial markets began to recover. Household acquisitions of 'shares and other equity' have, however, been relatively small during 2010 and 2011, which may indicate a continued preference by households for less risky assets.

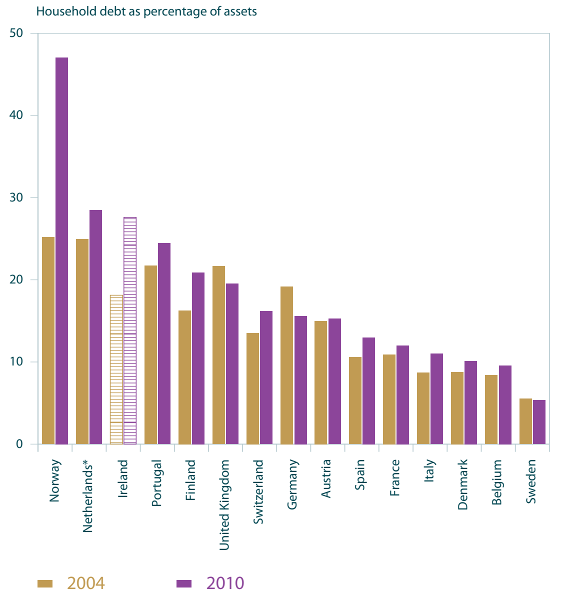
Chart 26: Household Debt



Sources: ECB, Eurostat, National data used for Austria, Germany, Greece, Netherlands, Ireland, Switzerland. and Norway. Q3 2004 data not available for the Netherlands and Greece.

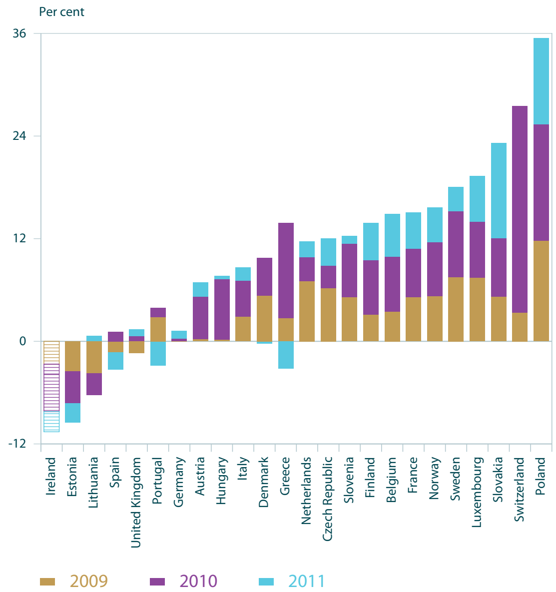
Chart 25 shows the transactions in 'ITRs'. It can be seen that Denmark, the Netherlands and the UK – the countries with the largest stock of assets in pension funds as a proportion of disposable income – continued to be amongst the biggest investors in 'ITRs' from 2008 onwards, albeit at a much reduced rate relative to pre-crisis years. While Irish households have also shown reduced transactions in this financial asset since the crisis, the reduction has been less pronounced. The most substantial change in this instrument has been in Hungary. This is as a result of a policy change which effectively nationalised a sizable portion of private pension funds held by households, transferring these assets to the government sector balance sheet (The Economist, 2010). A similar transfer of private pension fund assets to the State in response to a government deficit also occurred in Portugal and can also be seen in the chart

Chart 27: Household Debt as a Proportion of Total Assets



Sources: ECB, Eurostat, National data used for Austria, Germany, Greece, Ireland, Switzerland, Netherlands and Norway. Data not available for Czech Republic, Estonia, Hungary, Lithuania, Luxembourg, Poland, Slovenia and Slovakia.
*Indicates 2005 data is used for 2004 figure.

Chart 28: Percentage Change in Household Liabilities



Sources: ECB, Eurostat, National data used for Austria, Germany, Greece, Netherlands, Ireland, Norway and Switzerland. Data not available for Switzerland for 2011.

(European Commission, 2011). This highlights an issue raised in Ahearne and Wolff (2012) that the dynamics of the household balance sheet cannot be considered in isolation from the balance sheet of the rest of the economy, in particular the government sector.

In this section it was found that households in the sample of countries reallocated the assets within their portfolio as a result of the financial crisis and increased uncertainty, investing more in ‘currency and deposits’ and less in ‘shares and other equity’, particularly during 2008. This indicates a preference for lower risk, more liquid assets. It was also found, however, that the countries which increased savings the most between 2006 and 2010 did so in order to reduce debt levels. Section 4 futher examines household indebtedness and debt reduction in the countries in our sample.

4 Household debt and deleveraging

Access to credit allows households to smooth their consumption levels over time and facilitates investment. Very high household debt, however, can impede economic growth and can make households more susceptible to distress from increasing interest rates and declining incomes. Cecchetti et al. (2011) find that over the past three decades there has been a steady rise in non-financial sector indebtedness in advanced economies. Across a group of advanced economies, household sector indebtedness rose by 56 percentage points of GDP, with real household debt tripling between 1995 and 2010 – far in excess of the debt accumulation in other sectors of the economy. Cecchetti et al. (2011) also found that, though imprecisely measured, the level at which households’ debt-to-GDP ratio becomes a drag on economic growth is 85 per cent and above. Irish households’ debt-to-GDP ratio is currently 123 per cent. Roxburgh et al. (2010) argue however, that it is not clear what the “right” level of household indebtedness is. It may vary across countries and over time, depending on economic developments, demographic shifts, land availability and housing preferences. This section looks at Irish household debt levels and deleveraging behaviour in the context of the sample of 24 European countries. Household indebtedness is examined through a number of different metrics to highlight heterogeneous factors across countries.

Households' indebtedness, measured by total household debt as a percentage of disposable income, increased substantially in most European countries in the years preceding the financial crisis. Germany was the only European country not to experience an increase in household debt, as its households' disposable income increased faster than its debt over the period. Using US country-level data, Mian and Sufi (2010) find that household leverage was an important factor in explaining overall macroeconomic fluctuations, in particular during the recent recession. They find that the recession started earlier and was more severe in areas with prior high household leverage growth. Chart 26 ranks Q3 2004 household debt as a proportion of disposable income for all the countries in our sample. The chart shows that in Q3 2004, Irish households had a debt ratio of 149 per cent, making them the fourth most indebted in the sample; after Denmark, Switzerland and Norway.[13]

In the years preceding the financial crisis, Irish household debt as a percentage of disposable income had increased by more than any other country in the sample. The surge in Irish household debt in the years preceding the crisis largely reflected the rapid appreciation in house prices and housing stock prior to 2006, and historically low interest rates. By Q2 2007, Irish households' leverage ratio stood at 200 per cent. Chart 26 also shows that by Q3 2011, Irish debt as a proportion of disposable income had exceeded that of Norway.

Housing ownership rates vary considerably across Europe. In Ireland, 75 per cent of households are owner occupiers (CSO, 2011). This compares to 58 per cent in France and 83 per cent in Spain (Borgy et al., 2011). This can lead to significant heterogeneity in debt to disposable income ratios across Europe. Moreover, Glick and Lansing (2010) find that countries which exhibited the largest increases in household leverage between 1997 and 2007 also tended to experience the fastest rise in house prices over the same period. They find that at their peak, house prices rose the most in Ireland (172 per cent), UK (146 per cent), Spain (118 per cent), France and Sweden (108 cent), followed by Denmark (89 per cent), the Netherlands (75 per cent), and Italy (61 per cent)[14]. Net indebtedness, which takes account of asset holdings by households, may provide a better representation of the real level of household debt. Chart 27[15] provides this information for the countries for which housing assets data were available. When this measure of indebtedness is used, Norwegian households ranked as the most indebted during 2004, followed by households in the Netherlands. Due to their high level of housing and pension assets, Danish households ranked twelfth most indebted using this measure. Irish households were ranked third most indebted in 2010. The significant increase in Irish household indebtedness using this measure is due in part to increased household debt from 2004 to 2008, as well as the decline in Irish housing assets experienced from mid-2007 onwards.

In the case of Ireland, households have been reducing their debt since Q1 2009. This trend however is masked in Charts 26 and 27, as both household disposable income and total assets were also declining. In order to assess the extent to which debt reduction has occurred since the crisis began, Chart 28 depicts the percentage change in the outstanding level of household debt from 2009 onwards. The chart disaggregates the percentage change by year so as to identify the period when debt reduction began. Household debt can be reduced when repayments exceed the incurrence of new debt or through debt write-downs or write-offs. The chart reveals that Irish and Estonian households began to reduce their debt from 2009 onwards and have so far experienced the highest percentage reduction in household debt in the sample of countries used. The UK reduced their household debt during 2009 only, while debt reduction also occurred in Lithuania and Spain in at least one of the time periods covered. Household debt reduction only began during 2011 in Portugal, Greece and to a much lesser extent, in Denmark.

13 Q3 2004 data are unavailable for the Netherlands.

14 Austria, Belgium and Portugal were omitted from this analysis due to lack of data.

15 Total assets are equal to financial assets plus housing assets. Housing assets data are not currently available for all countries. In addition, there is no standard methodology for calculating housing assets.

The chart reveals that Polish and Slovakian household indebtedness increased the most over the three years. As depicted in Chart 26 however, these households were still among the least highly leveraged in Q3 2011. Marer (2010) found that nearly 40 per cent of Polish households' debt was foreign-currency denominated in 2008, making their debt levels particularly sensitive to exchange-rate movements.

The data show that Irish households are the fourth and third most indebted in the sample of countries when debt is measured as a proportion of disposable income and total assets, respectively. Irish households however, recorded a greater percentage reduction in debt than any other country in our sample since 2009. It is likely that Irish households will continue to reduce debt levels over the coming years. Roxburgh et al. (2010) found that, on average, deleveraging begins two years after the start of a financial crisis and lasts for six to seven years. They found that real GDP declined in the first two or three years of deleveraging but then rebounded in the next four to five years while deleveraging continued.

5 Conclusion

The changing economic environment in Europe has had a significant impact on households' wealth and economic behaviour. This paper finds that the stock market turmoil during late 2008 and 2009 resulted in a considerable decline in households' net financial wealth. At end-Q3 2011, most countries in the dataset, with the exception of Estonia, Switzerland, Luxembourg, Lithuania, Austria, Czech Republic and Germany continued to have lower levels of net financial wealth as a percentage of disposable income than before the crisis. This paper also finds that, for countries for which housing assets data are available, Irish households suffered the highest decline in net worth as a proportion of disposable income, followed by Spain, Denmark, Norway, the UK and France, from 2007 to 2010. Prior to the financial crisis Irish households were the third wealthiest in our sample of 14 countries when measured as a proportion of disposable income. By 2010, they had fallen to the seventh wealthiest.

The reaction of the Irish household sector in the face of deteriorating economic circumstances has not been unusual. Most countries altered their asset portfolio in response to the financial crisis to invest in assets which were more liquid and relatively less risky. In addition, like Irish households, most countries have increased their savings rates in recent years in response to economic uncertainty. The countries which increased their savings rates the most from 2006 to 2010 - Estonia, Norway, Slovakia and Ireland - did so in order to reduce indebtedness. As Irish households' disposable income has fallen considerably since 2008, Irish households' ratio of total liabilities to disposable income has only declined slightly. This paper finds, however, that Irish households have reduced their liabilities more than any other country since 2008, followed by Estonia and Lithuania.

The paper uses financial accounts data to look at wealth, debt and savings on aggregate across a sample of European countries. It is not possible, however to decompose financial accounts data by household types, for example, by income decile, age group, etc. The Central Bank intends to undertake a survey of household wealth in Ireland at end-2013, which will allow this type of analysis.

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SMEs in Ireland: Stylised facts from the real economy and credit market.

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Abstract

The Small and Medium Enterprise (SME) segment is regarded as an important contributor to sustainable economic and employment recovery. This is motivated by their largely indigenous, employment-intensive nature, which has also meant that the post-2008 economic, financial and employment crisis has been particularly sharply felt in this segment of the economy. Furthermore, these firms rely to a larger extent on domestically-provided credit than larger or multinational firms, meaning financial sector difficulties are transmitted more readily to these firms. This paper collates data on SMEs in Ireland from a variety of sources to create as complete a picture of this segment of the economy as possible. We highlight the role of SMEs, indigenous firms and exporters in employment, exports, domestic sales, wage bills and investment, as well as the cross-sector distribution of activity. We then describe SMEs' contribution to job creation and destruction. We analyse the allocation of credit stocks, new lending and deleveraging over time and examine survey and loan level data on credit conditions, both relating to credit access and loan-performance in the SME sector. The result is a comprehensive picture of the importance of and difficulties facing these firms.

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1. Introduction

The Irish economy has undergone remarkable change since the onset of the global financial crisis in late 2007. Irish GNP and GDP fell by 14 and 11[2] per cent, respectively, between the first quarter of 2008 and the fourth quarter of 2010. Unemployment in that period rose from 4.8 to 14.8 per cent. Personal consumption fell by 21.4 per cent from a Q4 2007 peak to Q3 2011, with Gross Domestic Fixed Capital Formation falling 74 per cent over the same period. The outstanding stock of credit to the non-financial, non-property related private sector has fallen from its peak in the fourth quarter of 2008 by 31 per cent up to mid-2011.

As a largely indigenous, employment-intensive sector that relies primarily on domestic demand, SMEs are particularly responsive to changes in domestic policy. When analysing the recent performance of the Irish economy, much attention has centered on increased export figures. However, from an employment perspective, the performance of the indigenous SME sector is of more concern. In this regard, the continued weakness in GNP and domestic consumption suggests significant challenges.

The purpose of this paper is to clarify the importance of SMEs in the economy. SMEs account for 72 per cent of private sector employment outside of construction and agriculture, with 63 per cent working in indigenous SMEs. We highlight the reliance of private sector employment in Ireland on domestic demand: 64 per cent of private sector workers are shown to work for indigenous non-exporting firms, with 57 per cent working for indigenous non-exporting SMEs, figures that highlight the need for job creation strategies to aim beyond an export-led recovery.[3] In terms of Gross Value Added and investment, indigenous non-exporters are shown to be less important, accounting for 33 and 39 per cent, respectively. Irish SMEs are shown to account for just 7 per cent of total export flows, with 67 per cent coming from large multinationals and 7 per cent from large Irish exporters. Jobs in multinational and large firms are shown to pay higher wages on average than those in indigenous firms or SMEs. In terms of job creation, SMEs are shown to be more dynamic than larger firms, in that they both create and destroy jobs at a higher rate.

We examine credit stocks and flows of new lending to SMEs across sectors of activity. In 2011 the credit market appears to be rebalancing, with sectors associated with the credit boom now receiving disproportionately low shares of new lending. Deleveraging[4] is also shown to be occurring at a higher rate in these sectors. We also show that Irish SMEs are experiencing unfavourable credit conditions currently, and that the level of non-performing loans on Irish banks' SME books is extremely high, with large risky exposures in boom-related sectors: Hotels and Restaurants, Construction, Professional and Real Estate, Wholesale and Retail.

Studies have analysed the optimal allocation of credit across sectors, although such a calculation is beyond the scope of this paper.[5] We describe the current and historical allocation of credit to the private sector highlighting those sectors with high credit concentrations. The main patterns that emerge from the data do suggest that the Irish credit market had become extremely over-concentrated in the Real Estate, Construction, Hotels and Restaurants sectors by the end of the boom in 2008, and that in looking at current credit stock levels, a degree of reallocation is still required to place credit allocation on a more stable path.

Finally an analysis of credit conditions and loan performance is carried out, suggesting that significant challenges exist in the Irish SME credit market currently.

2 Authors' own calculation from Central Statistics Office Quarterly National Accounts data.

3 While it is acknowledged that some indigenous, non-exporting firms exist to service the internationalised sector, and are therefore not reliant on domestic demand, an analysis of the sector breakdown of indigenous non-exporters suggests that the vast majority are in sectors that are not typically associated with this type of activity.

4 Defined as negative net transactions, which includes new lending, write downs of debt, asset disposals and debt being paid off.

5 In a recent paper Battilossi, Gigliobianco and Marinelli (2011) use Italian bank data to investigate the optimality of credit allocation in the Italian economy in an effort to examine the role of sectoral credit allocation to the interaction between financial development and economic growth.

Recent research from the CSO (Central Statistics Office, 2012) complements findings in this paper. Specifically, *Business in Ireland* describes data from its *Central Business Register* as well as data from the *Structural Business Statistics* dataset to exhaustively describe the private sector in Ireland and the role of SMEs therein. The CSO study reports that SMEs in Ireland accounted in 2009 for 99.8 per cent of enterprises in Ireland, 69 per cent of private sector employment, 52 per cent of turnover and 51 per cent of Gross Value Added.

The paper proceeds as follows: Section 2 provides a short overview of industrial policy towards SMEs in Ireland; Section 3 provides a description of data; in Section 4 we highlight the role of SMEs and internationalised firms in employment, exports, domestic sales, wage bills and investment; describe SMEs' contribution to job creation and destruction; illustrate the sectoral distribution of SMEs by employment and credit including the allocation of credit stocks, new lending and deleveraging over time; and examine survey and loan level data on credit conditions, both relating to credit access and loan-performance in the SME sector; Section 5 concludes.

2. Policy Context

A body of research examining the evolution of policies towards both SMEs and the internationalised sector in Ireland establishes the policy context for this work. Andreosso-O'Callaghan and Lenihan (2006) provide a useful overview of industrial policy in Ireland and the role of SMEs in particular. Irish industrial policy has had a focus on inward Foreign Direct Investment (FDI) since the first comprehensive plan in Department of Finance (1958). However, official policy has moved to encouraging the role of domestic enterprise and national competitiveness in recent decades. Sustained competitiveness would help to ensure Ireland's strategic importance as an FDI destination while (it was hoped that) promoting the role of domestic enterprise would develop the domestic private sector and encourage linkages between foreign and domestic firms. Apart from employment generation and growth objectives, it was expected domestic-foreign linkages would further embed foreign firms in Ireland whilst domestic firms would benefit from technology transfers as well as from meeting demand from these firms for inputs and/or support services. Culliton (1992) formalised this policy through a series of recommendations which resulted in a rationalisation of the Industrial Development Authority (IDA) and Forfás, and the development of a domestic culture that recognised the importance of providing a competitive environment for the private sector. By the 1990s this environment in Ireland was characterised by an attractive corporation tax framework, provision of a skilled domestic labour force with moderated wage demands, infrastructure development and a pro-business institutional environment. Finally, with the establishment of a task force on the subject, the Government explicitly noted the importance of SMEs in Ireland, particularly in employment and growth generation (Andreosso-O'Callaghan and Lenihan (2006)).

Despite the policy focus on linkages to the exporting sector, reflected in the literature, data in this paper will show that the vast majority of indigenous employment (which makes up 78 per cent of private sector employment) is still accounted for by traditional sectors such as Hotels and Restaurants, Wholesale and Retail, Business and Administrative services and Transport and Storage. These figures suggest that, while export growth and export linkages are vital to modernisation and growth strategies, the role of the typical domestic-demand driven services economy must not be overlooked when contemplating strategies for employment creation.

Several international organisations provide resources to and data on SMEs in the EU (European Commission, Directorate General for Enterprise and Industry) and the OECD (OECD Centre for Entrepreneurship, SMEs and Local Development). For example, the former produces annual fact sheets on SMEs comparing the institutional environment and SME characteristics across the EU. The European Commission (2011) notes that SMEs have been affected more negatively by the economic downturn in Ireland than large enterprises. However, the report also compares Ireland favourably with the EU average on seven out of nine characteristics of the national institutional environment affecting SMEs, including fostering and rewarding entrepreneurial spirit and ease of doing business. On two criteria Ireland performed below the EU average, namely, access to finance and aligning domestic single market legislation with EU legislation. It also notes that in 2010 and early 2011 the policy focus in Ireland was on "access to finance, reducing the administrative burden and facilitating SMEs' access to public procurement contracts"' (European Commission, 2011).

3. SMEs in Ireland

3.1. Defining SMEs

SMEs are defined variously in terms of employment, turnover and asset thresholds. The preferred definition in this paper, and one often used by Eurostat, relates to employment. We define micro firms as those with less than 10 employees, small firms with between 10 and 49, medium-sized firms with between 50 and 249 and large firms with over 249 employees. The lending and credit data presented in the paper from the Central Bank of Ireland and the Credit Review Office data use a combination of employment (<250 employees), turnover (<€50m) and balance sheet (<€ 43m) criteria to define SMEs.

In Ireland SMEs are located in all sectors of the economy. Here (where data allow) we examine 10 sectors: Primary Industries (Agriculture, Forestry and Fisheries and Mining); Industry (Manufacturing, Energy and Water); Construction; Wholesale/Retail Trade and Repairs; Transport and Storage; Hotels and Restaurants; Information and Communication; Real Estate Activities; Business and Administrative Services; Professional Services and Education, Human Health and Social Work and Other Community, Social and Personal Services.

3.2. The Data

In characterising the importance of SMEs to the economy, we collate data from the following sources:

- *Census of Industrial Production (CIP):* This is a confidential firm-level dataset from the CSO. All manufacturing enterprises with more than 3 employees are included, with data for 2009 being the most recently available.
- *Annual Services Inquiry (ASI):* This is another confidential firm-level dataset from the CSO. It comprises a sample of 15,000 or so non-financial services and distribution firms with grossing factors used to estimate totals for the 122,000 firms operating in services and distribution, with 2008 data being the most recent.
- *Forfás Annual Employment Survey:* This survey samples firms with relationships with either Enterprise Ireland or IDA Ireland. Where sectors have low internationalisation these data will have poor coverage. This data provides information up to 2010 on employment, job creation and job destruction at the firm level.
- Central Bank of Ireland *Money and Banking Statistics* lending data: These data report lending from Irish resident financial institutions the private non-financial corporations (NFCs) sector from 2003 and the SME sector from 2010q4. Information is available on three lending measures: the stock of outstanding credit in a quarter; gross new lending, which is cleaned to eliminate restructurings and reclassifications, and closely matches truly new transactions aimed to finance working capital and investments; transactions, or net flows, which are the underlying changes in lending as a result of draw-downs minus repayments over the quarter, abstracting from other non-business related factors which can impact on reported stocks (e.g. revaluation and reclassification adjustments and/or loan sales or transfers).[6]

6 See Central Bank of Ireland (2010) for a detailed description of the Central Bank of Ireland lending data.

- *Quarterly National Household Survey (QNHS):* Sector-level employment and aggregate data from the CSO.
- Loan-level data provided to the Central Bank of Ireland as part of FMP 2011. This is a confidential loan-level dataset of a large sample of SME loans from covered financial institutions. The data describe firm and loan-level characteristics of the FMP banks' SME books.

4. The Role of SMEs

In this section we provide a detailed profile of Irish private sector economic activity and highlight the importance of SMEs therein.

4.1. Real Economy Impact

All tables and figures in this subsection refer to data for 2009 and 2008. As is often the case, micro-level data availability is unfortunately subject to a long lag. While this may pose some concerns given the enormous decline in output that has taken place between 2008/09 and the current period, there is reason to believe that these figures are relevant today. Firstly, the figures relate to phenomena that are inherently structural such as the share of employment, investment or sales accounted for by exporters, indigenous firms and multinationals. These are characteristics of the economy which are not expected to change dramatically over a two to three year horizon. Confirming this, Table 15 in Section 3.2 reports that, within a given size category, the job destruction rates in 2008-10 were similar for Irish and foreign-owned firms. One potential shift from 2009-12 is that workers signing onto the Live Register are more likely to have come from SMEs than large firms, as evidenced again by the larger net destruction rates for micro, small and medium firms in Table 15. This suggests that SMEs' importance in overall employment is likely to have fallen marginally since the time period on which tables in this subsection was based. Given that the differential between job destruction rates in SMEs versus large firms was between 4 and 7 per cent, it is not expected that the key messages of this section are diminished to any great extent by post-2009 changes.

Table 1 reports the number of enterprises in the data that fall into each category. This data does not include sole traders and firms with under three employees in manufacturing, and thus cannot be seen to truly represent the population of firms in manufacturing. Given that most missing firms in manufacturing are micro firms, we can conclude that overall, micro firms account for much larger than the 55 per cent reported in the table. Indeed, Central Statistics Office (2012) report that SMEs account for over 99.8 per cent of establishments in Ireland.

Table 1: Number of enterprises in each dataset, share of total

	Manuf. (2009)		Services (2008)	
	Num.	%	Num.	%
Micro	2,760	0.55	106,550	0.87
Small	1,587	0.32	12,999	0.11
Medium	534	0.11	2,245	0.02
Large	148	0.03	297	0
	5,029	1	122,091	1

Sources: Census of Industrial Production, (2009) and Annual Services Inquiry (2008).

Table 2: Manufacturing, Share of Employment by Ownership, Export Status and Size, 2009

	Irish Non-Exporter	Irish Exporter	Foreign Non-Exporter	Foreign Exporter	Total
Micro	0.044	0.028	0	0.001	0.074
Small	0.081	0.082	0.001	0.015	0.18
Medium	0.043	0.125	0.015	0.099	0.283
Large	0.035	0.124	0.041	0.264	0.464
	0.204	0.359	0.058	0.379	1

Sources: Census of Industrial Production, (2009).

Note: Total employees is 196,107.

Table 2 shows how employment is distributed across the manufacturing sector in Ireland. Of 196,107 employees covered in the Census of Industrial Production, 54 per cent work in SMEs. Taking only the indigenous economy, SMEs' importance in employment rises to 72 per cent. The data also reveal interesting insights on internationalisation, with as many workers (35 per cent) employed in indigenous exporting as foreign owned exporting firms. Amongst indigenous exporters, SMEs employ more than half of all workers.

Table 3 reports the figures for the services sector. The first point to note is the relative size of the services sector - in 2008, there were 996,768 workers, more than four times the size of the manufacturing sector. Of this total, 75.2 per cent were employed by SMEs, indicating that SMEs account for more employment in services than in manufacturing. Looking at the indigenous services economy, 83 per cent of workers are employed by SMEs. As one would expect, the services sector is less internationalised than manufacturing, with 72.5 per cent of workers employed in indigenous non-exporting firms.

Combining Tables 2 and 3, Table 4 describes total employment in the non-construction, non-financial private sector. We now observe that SMEs account for 72 per cent of employment in the private sector, while they account for 82 per cent of the 933,768 workers employed in the indigenous economy. Of note is the fact that, despite Ireland's reputation as one of the world's most globalised economies, fully 64 per cent of private sector workers are employed by indigenous non-exporting firms, with 56 per cent working for indigenous, non-exporting SMEs. These statistics highlight the importance of domestic demand for employment generation, and suggest that an export-led recovery may not be a panacea for the Irish unemployment crisis.

Table 3: Services, Share of Employment by Ownership, Export Status and Size, 2009

	Irish Non-Exporter	Irish Exporter	Foreign Non-Exporter	Foreign Exporter	Total
Micro	0.271	0.002	0.005	0.001	0.279
Small	0.227	0.021	0.012	0.006	0.266
Medium	0.144	0.024	0.024	0.015	0.207
Large	0.083	0.054	0.08	0.031	0.248
Total	0.725	0.101	0.121	0.053	1

Sources: Annual Services Inquiry, (2009).

Note: Total employees is 996,768.

Table 4: Services and Manufacturing, Share of Employment by Ownership, Export Status and Size

	Irish Non-Exporter	Irish Exporter	Foreign Non-Exporter	Foreign Exporter	Total
Micro	0.234	0.006	0.004	0.001	0.245
Small	0.203	0.031	0.01	0.007	0.252
Medium	0.127	0.041	0.023	0.029	0.219
Large	0.075	0.066	0.074	0.069	0.284
Total	0.639	0.143	0.111	0.107	1

Sources: Census of Industrial Production, (2009) and Annual Services Inquiry (2008).
Note: Total employees is 1,192,875

Table 4 is repeated for other variables of interest. In Table 5, Gross Value Added (GVA) is reported. It is clear that in terms of this measure of output, neither SMEs nor indigenous non-exporters are as important as they are for employment. Multinational exporters, accounting for 11 per cent of employment, make up 38 per cent of GVA. Indigenous non-exporters, on the other hand, while accounting for 64 per cent of employment, appear much less important in GVA, with 33 per cent of the total. The SME total of 52 per cent is also significantly lower than their 72 per cent share in employment.

As a chief determinant of economic growth, a detailed depiction of the sources of aggregate investment is provided in Table 6. Similar to GVA, SMEs are shown to account for 52 per cent of total investment in the private sector. The composition in terms of internationalisation is less similar to that for GVA, however, with Irish firms, both non-exporters and exporters, having a 64 per cent share, as opposed to 50 per cent share in GVA. This suggests that flat domestic demand is likely to be having a large impact on aggregate investment, regardless of the performance of the exporting sector.

Table 5: Services and Manufacturing, Share of Gross Value Added by Ownership, Export Status and Size

	Irish Non-Exporter	Irish Exporter	Foreign Non-Exporter	Foreign Exporter	Total
Micro	0.112	0.008	0.01	0.003	0.133
Small	0.106	0.027	0.04	0.01	0.183
Medium	0.063	0.04	0.027	0.074	0.205
Large	0.047	0.09	0.052	0.29	0.48
Total	0.329	0.165	0.129	0.377	1

Sources: Census of Industrial Production, Annual Services Inquiry (2008).
Note: Total GVA is €88.4bn.

Table 6: Services and Manufacturing, Share of Investment by Ownership, Export Status and Size

	Irish Non-Exporter	Irish Exporter	Foreign Non-Exporter	Foreign Exporter	Total
Micro	0.109	0.001	0.007	0	0.117
Small	0.092	0.024	0.11	0.006	0.232
Medium	0.084	0.035	0.024	0.032	0.174
Large	0.107	0.18	0.066	0.123	0.476
Total	0.392	0.241	0.206	0.162	1

Sources: Census of Industrial Production, Annual Services Inquiry (2008).
Note: Total Investment is €15.4bn.

Table 7: Services and Manufacturing, Share of Employment by Ownership, Export Status and Size

	Irish	Foreign	Total
Micro	0.008	0.007	0.015
Small	0.023	0.026	0.049
Medium	0.048	0.147	0.196
Large	0.067	0.673	0.74
Total	0.146	0.854	1

Sources: Census of Industrial Production, Annual Services Inquiry (2008).

Note: Total Export Figure is €109.5bn.

Finally, Table 7 provides a breakdown of exports. The table is narrower in this case, as both the indigenous and foreign-owned non-exporter categories are redundant. SMEs are shown to account for 26 per cent of the €110bn of exports recorded in the data in 2008, with indigenous firms accounting for just 14 per cent and Irish-owned SMEs accounting for just 7 per cent. This presents an entirely different picture to that for employment in Table 4.

Up to this point, the data have shown that SMEs contribute heavily to activity in the real economy. These figures can be thought of as measures of the economic weight of SMEs. Table 8 indicates that despite clear evidence that SMEs are an extremely large component of the real economy, it is large firms that most likely employ more productive workers. For all categories apart from foreign services firms, wage per worker is shown to increase incrementally as firm size increases. The extremely high average wage in micro and small foreign services firms could stem from the very small sample sizes in these categories, allowing some particularly small niche high-end producers to skew the figure upwards.

The CSO data also allow a breakdown by sector. The following tables portray the distribution of economic activity across sectors of activity. The manufacturing sector data allows a granular approach, with 15 subsectors identified: Basic Metals; Chemical, Rubber, Plastic and Minerals; Computer and Electronic; Electrical Equipment; Electricity and Gas; Fabricated Metal; Food and Beverages; Machinery and Equipment; Mining and Quarrying; Other Manufacturing; Pharmaceutical; Textiles and Leather; Tobacco, Petroleum and Furniture; Water and Sewerage; Wood, Pulp, Paper, Printing. The other sectors broadly match NACE Rev. 2 services sectors: Business and Administrative Services; Information and Communication; Real Estate; Transport and Storage; Wholesale and Retail. Due to confidentiality issues in some sectors, these tables do not explicitly deal with SMEs, but rather act as an introduction to further research in Sections 3.3.1 and 3.3.2 on the distribution of bank credit across sectors of activity.

Table 8: Average wages, €000s

	Manufacturing		Services	
	Irish	Foreign	Irish	Foreign
Micro	35	42	30	65
Small	36	51	32	62
Medium	41	52	31	56
Large	48	63	36	41

Sources: Census of Industrial Production, (2009) and Annual Services Inquiry (2008).

Table 9: Employment by nationality of ownership and sector

	Irish Share	Foreign Share	Total Employment	Sector's Share of Employment
Accommodation & Food	0.945	0.055	162,485	0.142
Basic Metals	0.937	0.063	2,792	0.002
Business & Admin	0.783	0.217	230,797	0.201
Chemical, Rubber, Plastic	0.592	0.408	28,009	0.024
Computer, Electronics	0.07	0.93	22,528	0.02
Electrical Equipment	0.545	0.455	5,347	0.005
Electricity, Gas	0.977	0.023	9,258	0.008
Fabricated Metals	0.897	0.103	13,335	0.012
Food, Beverages	0.782	0.218	40,003	0.035
Information & Communications	0.54	0.46	70,390	0.061
Machinery, Equipment	0.527	0.473	11,676	0.01
Mining, Quarrying			4,842	0.004
Other Manufacturing	0.163	0.837	22,433	0.02
Pharmaceutical	0.105	0.895	14,621	0.013
Real Estate	0.969	0.031	20,911	0.018
Textiles, Leather	0.769	0.231	4,298	0.004
Tobacco, Petroleum, Furniture	0.92	0.08	6,578	0.006
Transport & Storage	0.915	0.085	87,459	0.076
Water, Sewage	0.965	0.035	5,469	0.005
Wholesale & Retail	0.808	0.192	368,570	0.321
Wood, Pulp, Paper & Printing	0.804	0.196	15,509	0.014
Total	0.775	0.225	1,147,310	1

Source: Annual Services Inquiry (2008), Census of Industrial Production, (2009).

Table 9 reports the numbers employed in each sector, the share of employment in Irish and Foreign-owned enterprises, along with each sector's share in total employment accounted for in the data. As expected, foreign shares are highest in high-end manufacturing sectors such as Pharmaceutical and Computer and Electronic. The largest sectors in terms of employment are the services sectors such as Wholesale and Retail, Business and Administrative Services and Accommodation and Food Services sectors, all sectors in which domestic employment is over 75 per cent. Of services sectors, only the Information and Communication sector, at 46 per cent, has over a quarter of employees working in foreign enterprises.

Table 10 replaces employment from Table 9 with investment, defined as all capital additions. In total, Irish-owned enterprises account for 63 per cent of the 14.79bn of investment recorded in the data. The sector breakdown reveals, as before, that the wholesale and retail and business and administrative services sectors are particularly important, while the share of the transportation and storage sector outstrips its share of employment. Again, no manufacturing sector individually can compare with these large employment-intensive sectors in terms of investment. The Pharmaceutical sector, for example, at 5 per cent has a lower share of total capital additions than the Accommodation and Food Services sector.

Table 10: Investment by nationality of ownership and sector

	Irish Share	Foreign Share	Total Investment (€m)	Sector's Share of Investment
Accommodation & Food	0.865	0.135	890	0.06
Basic Metals	0.957	0.043	28	0.002
Business & Admin	0.419	0.581	2568	0.174
Chemical, Rubber, Plastic	0.363	0.637	521	0.035
Computer, Electronics	0.054	0.946	237	0.016
Electrical Equipment	0.227	0.773	37	0.002
Electricity, Gas	0.992	0.008	1463	0.099
Fabricated Metals	0.726	0.274	56	0.004
Food, Beverages	0.67	0.33	478	0.032
Information & Communications	0.208	0.792	1058	0.072
Machinery, Equipment	0.333	0.667	125	0.008
Mining, Quarrying			66	0.004
Other Manufacturing	0.189	0.811	214	0.014
Pharmaceutical	0.044	0.956	742	0.05
Real Estate	0.986	0.014	539	0.036
Textiles, Leather	0.584	0.416	10	0.001
Tobacco, Petroleum, Furniture	0.31	0.69	52	0.004
Transport & Storage	0.99	0.01	2554	0.173
Water, Sewage	0.977	0.023	63	0.004
Wholesale & Retail	0.625	0.375	2954	0.2
Wood, Pulp, Paper & Printing	0.708	0.292	136	0.009
Total	0.634	0.366	14791	1

Source: Annual Services Inquiry (2008), Census of Industrial Production, (2009).

In considering exports, one would expect an altogether different picture to emerge. Table 11 confirms that the sectoral concentration of exports is significantly different to that of employment or investment. Compared to 36 per cent of investment and 23 per cent of employment, foreign owned firms account for 86 per cent of export volume. The four largest sectors are Pharmaceutical (25 per cent), Computer and Electronic (18 per cent), Food and Beverages (14 per cent) and Information and Communication services (13 per cent). Apart from Food and Beverages, each of these sectors has 96 per cent or more of its exports accounted for by foreign enterprises. Even in the Food and Beverage sector, one which is traditionally portrayed as a largely indigenous sector, 73 per cent of export volume came from foreign firms in 2008. If exports from indigenous firms are considered alone, of the total of 15.78bn exported in 2008, 26 per cent came from the Food and Beverage sector, Transport and Storage Services 17 per cent, and Wholesale and Retail accounting for 13.8 per cent.

Table 11: Exports by nationality of ownership and sector

	Irish Share	Foreign Share	Total Exports (€m)	Sector's Share of Exports
Accommodation & Food	1	0	1.8	0
Basic Metals	0.9	0.1	382.1	0.004
Business & Admin	0.483	0.517	2,251.20	0.021
Chemical, Rubber, Plastic	0.105	0.895	6,648.80	0.061
Computer, Electronics	0.009	0.991	19,551.20	0.18
Electrical Equipment	0.453	0.547	520.2	0.005
Electricity, Gas	1	0	317.6	0.003
Fabricated Metals	0.507	0.493	536.9	0.005
Food, Beverages	0.273	0.727	15,164.00	0.14
Information & Communications	0.037	0.963	13,900.30	0.128
Machinery, Equipment	0.206	0.794	1,939.00	0.018
Mining, Quarrying			114.3	0.001
Other Manufacturing	0.208	0.792	5,410.20	0.05
Pharmaceutical	0.021	0.979	27,302.60	0.252
Real Estate	0.867	0.133	4.6	0
Textiles, Leather	0.531	0.469	217.1	0.002
Tobacco, Petroleum, Furniture	0.138	0.862	714.9	0.007
Transport & Storage	0.897	0.103	3,075.20	0.028
Water, Sewage	0.574	0.426	321.5	0.003
Wholesale & Retail	0.239	0.761	9,171.70	0.084
Wood, Pulp, Paper & Printing	0.445	0.555	1,010.20	0.009
Total	0.145	0.855	108,555.40	1

Source: Annual Services Inquiry, Census of Industrial Production, (2008).

A number of key lessons can be taken from the data presented in this section:

- 64 per cent of services, manufacturing and distribution workers are employed in indigenous, non-exporting enterprises, with 57 per cent in indigenous, non-exporting SMEs.
- These indigenous, non-exporting enterprises account for 32 per cent of Gross Value Added and 39 per cent of investment.
- SMEs account for 72 of employment in these sectors, along with 52 per cent of both Gross Value Added and Investment.
- Irish firms account for 15 per cent of total exports. Irish SMEs account for 7 per cent.
- 78 per cent of workers are employed by Irish enterprises.
- The largest sectors in terms of employment are Wholesale and Retail (32 per cent), Business and Administrative Services (20 per cent) and Hotels and Restaurants (14 per cent). The manufacturing sector in total accounts for 16 per cent.
- Irish firms account for 63 per cent of total investment.
- SMEs pay lower wages than large firms. Irish firms pay lower wages than foreign firms.

4.2 SMEs and Job Turnover

We have already seen that SMEs account for a large proportion of overall employment in the economy. This section decomposes the employment story further, by looking at the rates at employment growth across firm size groups and compare the rate at which these groups create and shed jobs.

The job flow measures we use are defined following Davis and Haltiwanger (1999). Job creation at time t is the employment gain summed over all business units that expand or set-up between t-1 and t. Job destruction at time t is the employment loss summed over all business units that contract or shut down between t-1 and t. Net employment change is defined as the difference between job creation and job destruction.

Comparisons of job flows can be made more convenient by converting these measures into rates. In order to do this, the job flows literature uses a variant on the ordinary growth rate by defining the growth rate of the firm (or sector etc.) as the change in employment between t-1 and t divided by the average of employment in t-1 and t.[7]

One reason to look at job turnover rates, in addition to the net changes in employment, is that they can be used to obtain additional information on employment dynamics, and give a better indication of the amount of change the economy is undergoing. The same net employment change may reflect very different rates of creation and destruction thereby masking an important element of the flexibility or volatility of the labour market (Konings, 1995).

The job turnover measures are calculated using the Forfás Employment Survey. This survey tracks employment levels and has been carried out on an annual basis since 1972, covering agency-supported firms engaged in manufacturing and internationally traded services.[8] The survey collects numbers of permanent full-time employees, along with some descriptive information on the sector the firm operates in, ownership and location.[9] Lawless and Murphy (2008) and Lawless (2012) examine various elements of this data over time, and in this paper we focus on how the turnover rates vary between SMEs and larger firms.

Table 12 shows the job creation (JC), job destruction (JD) and net employment changes in the four firm size groups over the past decade. There is a clear relationship between the amount of labour turnover and the size of the firm, with smaller firms consistently both creating and destroying jobs at a higher rate than larger firms. This is particularly marked for the micro firms, where we see very considerable levels of job churn, even when the net employment position is almost unchanged in 2000-2004 and 2005-2007.

Despite the variance across firm size groups in terms of job turnover, the net employment changes were not dissimilar over the two earlier periods that we highlight in Table 12. Both small and large firms grew at 3 per cent on average each year from 2005 to 2007, while micro and medium firms grew at an average annual rate of 1 per cent and 2 per cent respectively. The more recent period, however, shows a divergence in growth rates with SMEs being more affected by the economic downturn than large firms. Small firms had the greatest decline in employment in 2008-2010, losing 8 per cent of jobs on average, with micro and medium firms also

Table 12: Job Creation, Destruction and Net Employment Change

	2000-2004			2005-2007			2008-10		
	JC	JD	Net	JC	JD	Net	JC	JD	Net
Micro	0.20	0.22	-0.01	0.20	0.19	0.01	0.18	0.24	-0.06
Small	0.12	0.13	-0.01	0.14	0.11	0.03	0.08	0.17	-0.08
Medium	0.10	0.10	0.00	0.10	0.08	0.02	0.06	0.12	-0.06
Large	0.07	0.06	0.01	0.07	0.04	0.03	0.04	0.07	-0.02

Source: Annual Employment Survey (2010).

7 The reason for this adjustment is that it gives a growth rate which is symmetric around zero and which lies within a closed interval [–2, 2], thereby allowing an integrated analysis of entry and exit.

8 As a consequence of the survey's design, sectors with low internationalisation will have poor coverage.

9 The survey covers 10,000 firms, on average, each year with 70 per cent of firms reporting at least 20 employees. Most sectors are well represented, with the exception of Hotels and Restaurants where between 60 and 70 firms participate in the survey each year.

Table 13: Job Creation, Destruction and Net Employment Change by Sector

	2000-2004			2005-2007			2008-10		
	JC	JD	Net	JC	JD	Net	JC	JD	Net
Agriculture, food	0.11	0.10	0.00	0.12	0.08	0.04	0.09	0.17	-0.08
Business services	0.19	0.08	0.11	0.21	0.07	0.14	0.10	0.12	-0.01
Community services	0.23	0.16	0.07	0.19	0.12	0.08	0.15	0.16	-0.01
Construction	0.20	0.03	0.17	0.11	0.03	0.08	0.04	0.23	-0.19
Education	0.21	0.11	0.10	0.19	0.08	0.11	0.11	0.09	0.03
Electricity, gas	0.51	0.14	0.37	0.28	0.04	0.24	0.19	0.09	0.10
Financial intermediation	0.20	0.07	0.13	0.18	0.03	0.15	0.08	0.08	0.00
Health	0.21	0.10	0.11	0.18	0.06	0.12	0.14	0.10	0.04
Hotels, restaurants	0.12	0.13	-0.02	0.27	0.13	0.15	0.18	0.11	0.07
Information	0.14	0.11	0.03	0.13	0.10	0.03	0.10	0.11	-0.02
Manufacturing	0.08	0.09	-0.02	0.08	0.08	0.00	0.05	0.12	-0.07
Transport	0.16	0.08	0.08	0.12	0.18	-0.06	0.16	0.08	0.08
Water	0.31	0.07	0.24	0.26	0.02	0.24	0.10	0.05	0.05
Wholesale, retail, repair	0.09	0.07	0.02	0.10	0.06	0.04	0.06	0.16	-0.10

Source: Annual Employment Survey (2010).

reducing employment considerably. Large firms experienced an average employment fall of 2 per cent each year, which is also significant but shows greater resilience than the SME group.

Looking at job turnover rates for all firms across sectors in Table 13, we see that simultaneous creation and destruction of jobs is the norm. The 2008-2010 period shows the net falls in employment that occurred across most sectors were due to a combination of falls in the job creation rate and increases in the job destruction rate. The Construction sector, as one would expect, was the hardest hit, but large falls are also observed in sectors such as Manufacturing and Wholesale and Retail Trade. Table 14 breaks the sectoral patterns down by firm size (where for brevity we combine the small and medium groups). The overall picture is one in which the smallest firms experience larger increases in their job destruction rates, although there is heterogeneity across sectors.

Table 15 looks at how the patterns of job turnover differ by firm ownership. In general, foreign firms exhibit higher levels of job turnover than Irish firms, tending to both create and destroy jobs at higher rates. Employment growth in foreign-owned firms throughout the early and mid-2000s was mainly accounted for by large firms, with foreign SMEs experiencing a net fall. Irish firms, on the other hand, grew steadily on net and particularly in the period 2005-2007. The 2008-10 downturn affected employment in all groups, with the turnaround in performance being particularly marked for Irish small and medium sized firms. Irish small and medium firms show a reverse from growth rates of 4 per cent in 2005-07 to a net decline of 9 per cent in 2008-10 for small firms and to -6 per cent for medium firms. This was a combination of job creation rates almost halving for both these groups along with a marked increase in the job destruction rate. For micro firms, the rate of job creation fell less dramatically and the net reduction in employment can be attributed mainly to an increase in job destruction.

4.3 Credit Allocation in the Economy

We now turn to describing the allocation of credit to the private sector, including that portion accounted for by SMEs, by sector of economic activity. We compare private credit stocks over time to relative employment shares, before examining the recent data on new lending and net credit transactions in order to investigate the roles of credit expansion and deleveraging on the net credit positions of the SME sectors of the economy.

Table 14: Job Turnover by Sector and Size

	Micro			Small & Medium		
	JC	JD	Net	JC	JD	Net
	2008-2010					
Agriculture, food	0.16	0.29	-0.12	0.08	0.15	-0.07
Business services	0.28	0.21	0.07	0.10	0.15	-0.05
Community services	0.19	0.21	-0.02	0.08	0.08	0.00
Construction	0.39	0.26	0.13	0.04	0.21	-0.16
Education	0.23	0.17	0.06	0.09	0.07	0.02
Electricity, gas	0.61	0.24	0.37	0.14	0.07	0.07
Financial intermediation	0.26	0.26	0.00	0.09	0.08	0.01
Health	0.25	0.29	-0.03	0.12	0.06	0.06
Hotels, restaurants	0.25	0.24	0.01	0.16	0.09	0.07
Information	0.25	0.21	0.05	0.11	0.12	-0.01
Manufacturing	0.12	0.26	-0.14	0.05	0.15	-0.10
Transport	0.17	0.21	-0.04	0.14	0.10	0.04
Water	0.32	0.29	0.03	0.12	0.04	0.07
Wholesale, retail, repair	0.20	0.16	0.04	0.05	0.16	-0.11

Source: Annual Employment Survey (2010).

4.3.1 Credit to the Private Sector

Figure 1a illustrates the boom in all private sector credit between 2005 and 2008, followed by a sharp, ongoing, contraction. The dominance of Real Estate over this time period is noteworthy, although credit to the non-financial and non-real-estate (`core") sectors did expand considerably between 2005 and 2008.

Figure 1b examines the evolution of private enterprise credit growth in the non-construction, core sectors of the economy. The dominance of the Hotel and Restaurant, Industry (Manufacturing and Energy) and Wholesale and Retail sectors over the period is clear as well as the large credit-contraction from 2008.

Figure 2a shows the average relative credit allocation across several sectors of economic activity for the period 2000-2004. In the absence of a formal analysis on optimal credit allocation in Ireland, we assume that this pre-boom allocation of credit stocks, occurring during a period of significant but relatively stable economic growth, reflects a steady-state allocation that correlates with a balanced sectoral risk and return framework. The dominance of Real Estate is an outlier here.

Figure 2b shows the pre-boom credit allocation compared to the relative post-boom allocation. The gold bar on the right hand side picture represents the share of the total credit stock outstanding in a sector in 2010-2011, with the purple line representing the "equilibrium" 2000-2004 share. A large discrepancy between the maroon and blue bars for a sector illustrates the relative expansion of this sector during the credit boom. The dominance in terms of credit growth of the Real Estate sector is apparent, with all other sectors apart from the Health, Education and Community sectors experience a fall in their share of total outstanding private sector credit over the time period 2004-2010. Construction, Industry and Professional Services have seen their relative shares halve over this time period with significant reductions also across Primary Industries (dominated by Agriculture, Forestry, and Fishing) and Construction.

4.3.2 Credit to SMEs

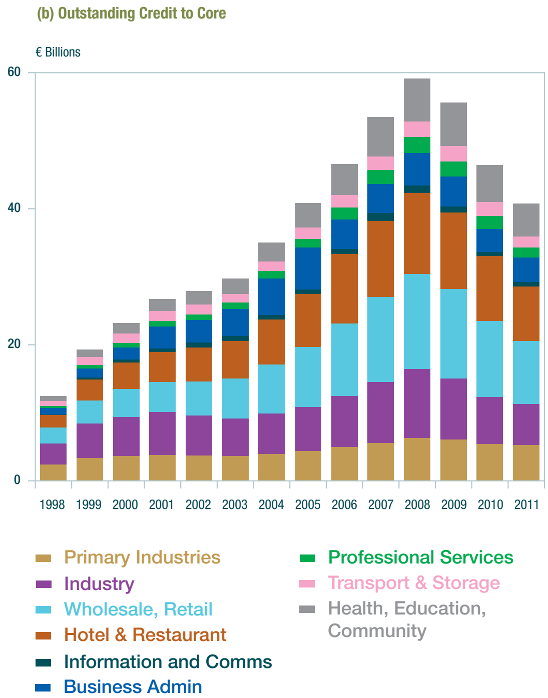
We have established the distribution of credit across the private sector and now examine the share of SMEs in this total private sector credit allocation. From an outstanding stock point of view, we establish how credit was allocated to SMEs in the past. From a new lending and net transactions point of view we examine how credit is being allocated during

Table 15: Job Turnover by Ownership and Size

		Foreign Owned			Irish Owned		
		JC	JD	Net	JC	JD	Net
Micro	2000-2004	0.26	0.34	-0.08	0.20	0.20	-0.01
	2005-2007	0.28	0.28	0.00	0.20	0.18	0.01
	2008-2010	0.22	0.31	-0.09	0.18	0.23	-0.05
Small	2000-2004	0.16	0.19	-0.03	0.12	0.12	0.00
	2005-2007	0.15	0.16	-0.01	0.14	0.10	0.04
	2008-2010	0.12	0.18	-0.06	0.07	0.16	-0.09
Medium	2000-2004	0.11	0.12	-0.01	0.09	0.08	0.01
	2005-2007	0.09	0.10	-0.01	0.10	0.07	0.04
	2008-2010	0.07	0.12	-0.06	0.05	0.12	-0.06
Large	2000-2004	0.07	0.06	0.01	0.07	0.04	0.03
	2005-2007	0.06	0.04	0.02	0.11	0.05	0.05
	2008-2010	0.04	0.07	-0.03	0.05	0.08	-0.02

Source: Annual Employment Survey (2010).

Figure 1: Outstanding Credit to Private Sector Enterprises, by Sector 1998-2011Q3



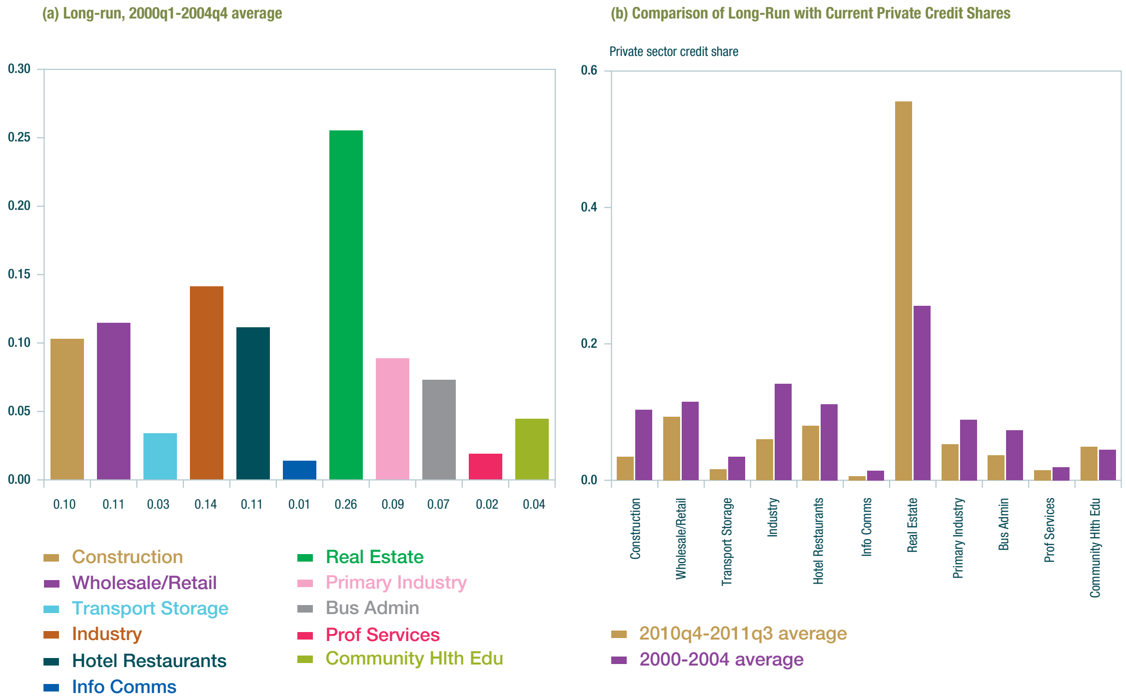
Source: Central Bank of Ireland (2011).

Note: Annual figures generated as averages of quartlery figures.

a period of financial and economic downturn and how deleveraging is progressing between and within sectors. The interaction of the description of historic lending and current new lending and deleveraging gives an indication of how the economy is restructuring and where banks are advancing new credit.

Figure 3 uses recent credit data to examine the SME share of private credit stocks by sector. The dominance of SMEs in several sectors is noted, for example, Primary Industries, Professional Services and Hotel and Restaurant. It is unsurprising that credit to Industry goes mainly to larger firms. On average, 61 per cent of outstanding credit to

Figure 2: Long-run and Current Private Credit Shares, by Sector



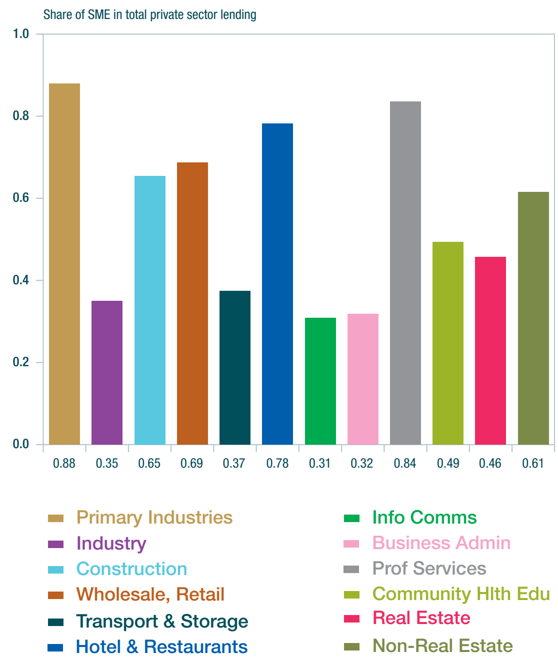
Source: Central Bank of Ireland (2011).

core sectors goes to SMEs. This highlights the financial stability and policy relevance of SMEs to domestic employment, demand and credit allocation.

The collection of data by the Central Bank on new lending to SMEs[10] began from the end of 2010, with data available up to 2011q3. The direction of current, new, lending is a policy issue, if, as we assume throughout, current credit flows are likely to drive future growth. Figure 4a again illustrates the recent dominance of Real Estate in the Irish economy which accounted for almost 50 per cent of outstanding credit to SMEs between 2010 and 2011. With a share of new lending to Real Estate that is 23 per cent lower than its share of credit stock. Thus a welcome shift in SME credit towards non-real estate activities appears to be taking place.

Figure 4b examines the reallocation of credit across SMEs by comparing relative outstanding credit stocks and new lending shares in the core SME sectors. Business Administration and Primary Industries are significant here with both sectors recording

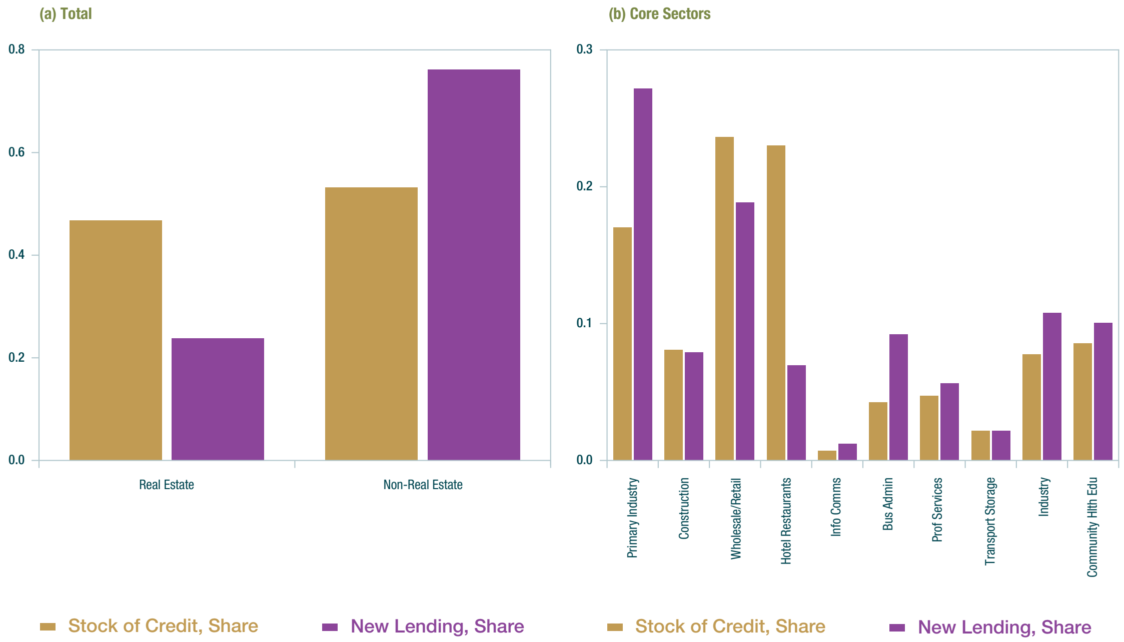
Figure 3: Share of SME in Total Private Sector Lending, 2010Q4-2011Q3 average



Source: Central Bank of Ireland (2011).

10 New lending is net of restructuring and reclassifications, attempting to capture `true' new lending.

Figure 4: Allocation of Credit to SMEs: Credit Stock and New Lending by Sector, 2010Q4-2011Q3 average



Source: Central Bank of Ireland (2011).

Note: Annual figures generated as averages of quartlery figures.

large shares of new lending when compared to their relative credit stocks. However, Health, Education and Community; Industry; Information and Communications; Professional Services and Transport and Storage sectors further record higher new lending than existing stock shares. Lower new lending shares in Construction; Hotels and Restaurants and Wholesale and Retail sectors, when compared to outstanding credit stocks, may be reassuring in the sense that credit is being allocated away from sectors most associated with the credit bubble, although these sectors combined still account for 34 per cent of all new lending to SMEs.

Figure 5a describes net credit transactions in the core and Real Estate sectors for SMEs as well as the new lending figure for SMEs. We refer to a negative net transaction figure as “deleveraging” on behalf of the financial institutions. A total €0.86bn contraction in core sector SME credit stock was observed in the first three quarters of 2011. This figure represents two-fifths of total private sector deleveraging in core sectors (see Figure A1a for the figures for all private sector firms). In the Real Estate sector, SME deleveraging of €0.67bn was observed over the time period, although the net transaction figure for the total private sector in Figure A1a was positive, indicating that new lending to Real Estate continued to outstrip balance sheet reductions.

Total new lending to non-Real Estate sectors amounted to €1.7 billion in Q1-Q3 2011. This is somewhat lower than the €6 billion in new lending to SMEs that the FMP pillar banks committed to for 2011.[11] This difference is explained by the fact that the lending figures quoted as part of the target include restructuring of old facilities, and money sanctioned but not drawn down. However, the figure of €1.6bn represents an accurate picture of the amount of new money entering the SME segment of the economy in 2011.

Figure 5b reports sector-specific figures for all core sectors. All core SME sectors experienced net deleveraging, bar Education,

11 Allied Irish Banks (2010), Bank of Ireland (2010) and Moran (2011).

Figure 5: Cumulative Quarterly New Lending and Net Transactions, SME, 2011Q1-2011Q3

Source: Central Bank of Ireland (2011).

Health and Community which experienced an expansion of over €500m in the first three quarters of 2011.[12] The fastest deleveraging in 2011 occurred in Hotels and Restaurants, followed closely by Wholesale and Retail (-€310m); Primary Industries (€-261m) and Business Administration (€-230m).

The desirability of these allocation choices requires an in depth analysis that is beyond the scope of this paper. Intuitively, however, Figure 6a indicates[13] that those sectors with the largest credit exposures at the peak of the recent economic boom are also those undergoing the most significant deleveraging. The clear outlier to this trend is Construction, which given its high peak credit stock levels, would be expected to have large negative transaction numbers. The Construction anomaly aside, this pattern is to be expected in an economy undergoing a substantial contraction and reflects restructuring across the economy, where those sectors that experienced the largest booms will also experience the largest contractions. Figure 6b shows that sectors which had higher peak stock levels are in general also posting higher new lending figures in 2011. This simply reflects an industry size effect, where certain sectors will receive more lending than others, regardless of economic conditions. The telling pattern in Figure 6a is that despite increased new lending to these larger sectors, the peak level of credit is still associated with higher net deleveraging.

The data presented here is confined to SME credit provision from banks operating in Ireland. Other external funding sources for SMEs traditionally include venture capital (an underdeveloped funding source for SMEs in Ireland), retained earnings, informal sources, micro-credit and even international sources, for example the European Investment Bank. Discussion of this is beyond the scope of the current paper. To the extent that bank funding is generally the chief source of funding in Ireland, many important lessons can still be drawn from the data presented in this section. However, it is acknowledged that in order for

12 See Figure A1b for the total private sector.

13 See Figures A2 for the total private sector.

Figure 6: The Current Deleveraging and New Lending Plotted against Peak Credit Stock, SME

Source: Central Bank of Ireland (2011).
Note: Estimated SME share 2008 using 2010-2011 shares.

a complete picture of the funding situation for Irish SMEs to be developed, trends in these alternative sources of funding would also need to be outlined.

4.4 Credit conditions and loan performance

In discussing the financial stability impact of SMEs in Ireland, we focus both on credit available to SMEs and on the performance of SME loans outstanding in the Irish banking system. Table 16 reports the most recent data available from the European Central Bank's *Survey of Access to Finance of Small and Medium Enterprises* (SAFE). Irish responses for both the first half of 2011 and the second half of 2010 are included, along with the average for all euro area countries apart from Ireland over the two time periods. The responses of Irish firms to this survey suggest that the majority of Irish SMEs have experienced increases in the costs of financing, and decreases in the extent of finance available. When comparing the Irish responses to the euro area average, it is clear that credit conditions are very different in Ireland.

The share of Irish firms reporting increased interest rates was 15 per cent higher than the euro area average; non-interest costs of finance increased for 7 per cent more firms in Ireland; the size of loan available decreased for 28 per cent more firms in Ireland than the average; collateral requirements increased for 12 per cent more Irish firms than the average; rejection rates for loan applications are 48.6 per cent as opposed to 21.3 per cent on average in the euro area.

This rejection rate appears higher than that reported by Mazars (2011). This is due to the wider definition of rejection used here, and the potential impact of the small number of firms responding to this question. However, in applying the Mazars results to the SAFE data, Ireland appears with the second highest rejection rate in Europe, regardless of the data source used. This confirms that the qualitative pattern of the Irish results is not driven by the SAFE data.

While the above patterns are descriptive and do not attempt to control for justified reasons for such changes, previous research using

Table 16: Changing Credit Conditions for Irish SMEs, March-September 2011

Period	Increased	%	Unchanged	%	Decreased	%	Total
			Interest Rates				
2010h2	92	69.7	34	25.8	4	3	132
2011h1	104	76.5	25	18.4	4	2.9	136
Euro area total	2844	61.8	1379	30	380	8.2	4603
			Non-Interest Rate Costs of Finance				
2010h2	84	63.6	41	31.1	1	0.8	132
2011h1	82	60.3	44	32.4	1	0.7	136
Euro area total	2438	53.2	2010	43.9	135	2.9	4583
			Size of Loan Available				
2010h2	13	9.8	59	44.7	55	41.7	132
2011h1	20	14.7	46	33.8	63	46.3	136
Euro area total	968	21.2	2756	60.4	836	18.3	4560
			Collateral Requirements				
2010h2	60	45.5	54	40.9	7	5.3	132
2011h1	64	47.1	53	39	2	1.5	136
Euro area total	1628	35.9	2744	60.5	160	3.5	4532
			Loan Rejection Rates				
	Accepted	%	Rejected	%			
2010h2	37	53.6	32	46.4			69
2011h1	36	51.4	34	48.6			70
Euro area total	2682	78.7	726	21.3			3408

Sources: ECB SAFE (2010).

Eurostat and SAFE data by Lawless and McCann (2011) similarly found that Irish SMEs were experiencing amongst the toughest credit conditions in Europe up to 2010, while controlling for output falls and firm risk measures. The implications of such constraints can be debilitating: the knock-on effects of credit constraints on firms are well highlighted in the literature, including increased likelihood of exiting the market, shedding employment, lowering investment, failing to enter export markets.[14]

Table 17 reports results for survey questions relating to firms' changed needs for different forms of external financing. In terms of bank loans, the share of Irish firms reporting an increased demand is negligibly lower than the euro area average for September 2010-September 2011. For trade credit and bank overdrafts, the share of Irish firms reporting increased demand is actually higher than the euro area total, suggesting that demand for these forms of loan facility is not particularly weak in Ireland.

Lawless and McCann (2012) examine data on a large sample of SME loans from financial institutions covered under the Financial Measures Program 2011. Micro-level information on the loan's size, performance, sector of activity were made available to the Central Bank of Ireland as part of the Program. Tables 18 and 19 report the most relevant results to this study from Lawless and McCann (2012). Table 18 reports the concentration of lending across sectors of activity. These sectors do not perfectly match NACE sectors as in previous sections, due to different banks operating different classification systems for borrowing firms. The Wholesale & Retail sector is the largest in terms of its share of total

14 Campello, Graham, and Harvey (2010) show that a range of measures of investment, technology spending and employment are lower for credit constrained firms than match unconstrained firms. A large literature in international trade has shown that credit constraints prevent entry to export and import markets. See for example Berman and Hericourt (2010).

Table 17: Changing Demand for External Finance Among Irish SMEs, 2010-2011

Period	Increased	%	Unchanged	%	Decreased	%	Total
	Demand for Bank Loans						
2010h2	90	22.1	241	59.1	77	18.9	408
2011h1	86	22	251	64.2	54	13.8	391
Euro area total	2,573	24.6	6,018	57.5	1,874	17.9	10,465
	Demand for Trade Credit						
2010h2	114	25.7	262	59.1	67	15.1	443
2011h1	117	26.1	279	62.1	53	11.8	449
Euro area total	1,652	20.4	5,500	68	932	11.5	8,084
	Demand for Bank Overdrafts						
2010h2	134	29.9	254	56.7	60	13.4	448
2011h1	134	30.3	249	56.3	59	13.3	442
Euro area total	2,769	27.6	5,824	58	1,457	14.5	10,050

Sources: ECB SAFE (2010).

exposure, with Agriculture & Food, Financial and Hotels & Restaurants also accounting for large proportions of the loan book. In looking at the share of total exposure relative to the number of loans to a sector, one can conclude that the Hotels & Restaurants and Financial sectors are in general characterised by much higher than average loan volumes.

Table 19 reports loan performance across sectors. Loans can be placed in three categories, with different terminology used by different banks: Performing; Past Due or Watchlist; Default or Impaired. In terms of performing loans, the Agriculture & Food sector performs strongest, a result in line with general economic output data in the post-crisis period. Large sectors with particularly low shares of performing loans are the Hotels & Restaurants, Professional & Real Estate, Construction, Financial, Transport & Communications and Wholesale & Retail sectors, all of which have over 30 per cent of loans categorised as non-performing. The performance of loans across the distribution of loan size is revealed in Figure 7. The left-hand axis measures the share of performing loans in each of 20 quantiles. The picture shows a steady deterioration in loan performance beyond the median loan size, with particularly dramatic falls in the largest 10 to 15 per cent of loans. This picture presents a worrying trend towards significant risk among the largest SME loans in Ireland.

Table 18: Share of Loans, Exposure by Sector of Activity

	Share of number of loans	Share of total exposure
Agriculture & Food	24.83	15.2
Construction	8	3.42
Electronic	0.34	0.06
Energy & Mining	0.25	0.95
Financial	7.44	15.91
Hotels & Restaurants	5	15.46
Manufacturing	5.84	6.48
Professional & Real Estate	18.8	11.74
Public, Community & Local	8.46	7.66
Transport & Comms	4.58	3.03
Wholesale & Retail	16.46	20.1

Sources: Central Bank of Ireland Loan Level Data (2010).

Table 19: Loans in Performing, Watchlist, Default/Impaired by Sector of Activity

	Performing %	Watchlist/Past Due %	Default/Impaired %
Agriculture & Food	81.38	13.83	4.79
Construction	65.23	12.75	22.02
Electronic	49.63	48.08	2.29
Energy & Mining	53.31	20.78	25.91
Financial	65.79	16.22	17.99
Hotels & Restaurants	48.9	34.82	16.28
Manufacturing	65.9	20.38	13.72
Professional & Real Estate	68.92	20.1	10.98
Public, Community & Local	71.99	19.99	8.01
Transport & Comms	66.26	20.1	13.63
Wholesale & Retail	69.31	17.1	13.6
Total	70.48	18.02	11.5

Sources: Central Bank of Ireland Loan Level Data (2010).

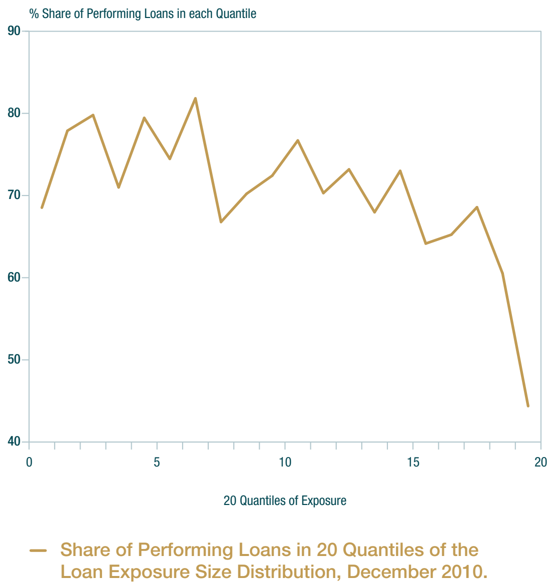
5. Conclusion

Data presented in this paper clearly show SMEs in Ireland as a largely indigenous and employment intensive sector. As such, SMEs are responsive to domestic policy and dependent on domestic demand. The difficulties experienced in the SME segment are highlighted by the relatively high job destruction seen in SMEs between 2008 and 2010 compared to larger firms. The importance of SMEs in a range of measures of economic activity is outlined in the paper. While shown to account for large shares of employment, investment and Gross Value Added (GVA), it must also be pointed out that in observing the SME share of exports and the average wage paid by indigenous SMEs, it is evident that productivity levels are lower in this segment of the economy.

A novel contribution of the paper is to highlight the importance of domestic demand for employment, and to a lesser extent investment and GVA, with 64 per cent of workers, 40 per cent of investment and 33 per cent of GVA accounted for by indigenous non-exporting firms. These findings call into question a policy focus which relies exclusively on export-led recovery, particularly where the employment crisis is concerned.

There is still much work to be done on establishing the optimal credit allocations across sectors in the Irish economy and similarly the optimal funding sources for SMEs, as opposed to households and larger firms. The recent experience of large-scale misallocation of credit to sectors with largely unsustainable growth rates motivates the need to understand bank credit allocation dynamics more fully. Data from the Central Bank of Ireland show a large expansion of credit to the private sector between 2005 and 2008 followed by a sharp contraction across all sectors to 2011. Transactions and new lending data for SMEs in 2011 show that deleveraging

Figure 7: Share of Performing Loans in 20 Quantiles of the Loan Exposure Size Distribution, December 2010.



Source: Loan level data, Central Bank of Ireland (2011).

is occurring generally in proportion to the scale of boom-time credit accumulation, indicating a welcome correction in the SME credit market. The sectoral composition of new lending also suggests that the post-Celtic Tiger era credit market will be characterised by a more balanced sectoral distribution of credit.

Credit conditions and loan performance are also outlined in the paper. In terms of loan rejection rates, interest rates, collateral requirements and fees and commission, Irish SMEs appear to be currently experiencing much tougher credit conditions than the euro area average. On loan performance, it is shown that nearly a third of all SME loans were non-performing as of December 2010, with particularly high risk in the Hotels and Restaurants sector. Other large sectors to perform poorly included the Construction, Wholesale and Retail, Financial and Manufacturing sectors, all with shares of performing loans between 60 and 70 per cent.

This paper has presented descriptive statistics on the Irish private sector and on SMEs in particular. It is to be hoped that the wide-ranging and detailed picture presented here on the real economy and credit market can help to inform policy makers as strategies for economic recovery are devised.

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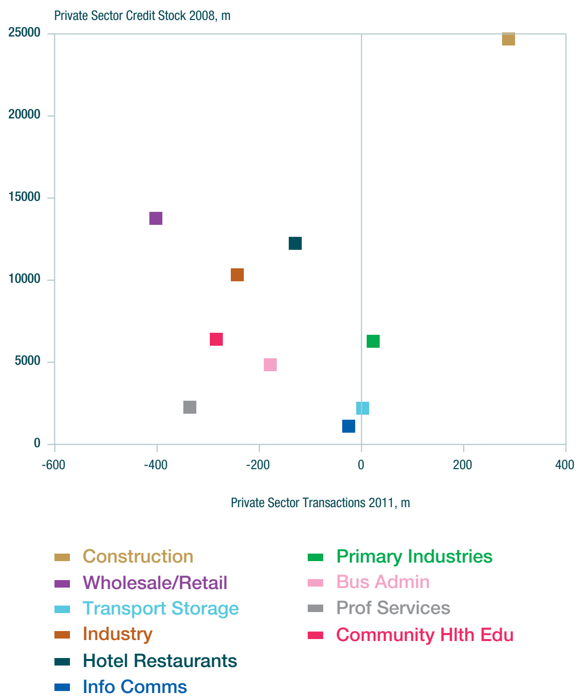
Appendix

Figure A1: Cumulative Quarterly Lending Transactions Total Private Sector Loans, 2011Q1-2011Q3

Source: Central Bank of Ireland (2011).

Figure A2: The Current Deleveraging Plotted against Peak Credit Stock, Private Sector



Source: Central Bank of Ireland (2011).

Statistical Appendix

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							
January	129,370	99,289	18,609	11,473	92,652	92,524	129
February	131,001	99,080	18,531	13,390	91,096	90,965	131
March	130,520	98,851	18,272	13,397	90,035	89,912	124
April	129,920	98,627	17,921	13,373	89,045	88,923	122
May	129,510	98,371	17,783	13,356	89,069	88,946	123
June	129,352	98,335	17,699	13,317	89,133	88,959	174
July	128,692	98,020	17,416	13,256	89,480	89,301	179
August	128,234	97,771	17,283	13,179	88,711	88,568	143
September	128,302	97,964	17,172	13,166	89,193	89,045	147
October	111,009	80,798	17,139	13,073	87,963	87,817	146
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	16,221	13,191	87,687	87,534	153
Transactions – € million							
2011							
January	- 674	- 284	- 384	- 5	- 12	- 26	14
February	- 298	- 212	- 78	- 8	- 107	- 104	- 2
March	- 385	- 147	- 206	- 32	- 11	- 4	- 7
April	- 571	- 214	- 342	- 15	- 707	- 708	1
May	- 449	- 262	- 156	- 31	- 93	- 87	- 6
June	- 196	- 127	- 69	-	275	343	- 68
July	- 710	- 334	- 293	- 83	163	158	5
August	- 443	- 242	- 127	- 74	- 437	- 436	- 1
September	- 183	- 83	- 119	19	519	514	5
October	- 613	- 319	- 245	- 49	- 454	- 450	- 4
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
Growth rates – per cent.							
2011							
January	- 5.1	- 2.3	- 15.6	- 20.9	- 1.7	- 1.4	- 30.1
February	- 5.1	- 2.7	- 14.5	- 18.7	- 1.8	- 1.5	- 27.3
March	- 5.0	- 2.6	- 14.9	- 16.2	- 1.5	- 1.3	- 27.1
April	- 4.6	- 2.0	- 15.3	- 16.6	- 2.5	- 2.3	- 23.9
May	- 4.8	- 2.1	- 15.7	- 16.6	- 2.8	- 2.6	- 27.4
June	- 3.9	- 2.2	- 14.3	0.2	- 3.3	- 3.0	- 67.2
July	- 3.9	- 2.4	- 13.4	- 0.6	- 2.7	- 2.4	- 66.3
August	- 4.0	- 2.4	- 13.7	- 1.2	- 2.7	- 2.5	- 66.5
September	- 4.0	- 2.5	- 13.6	- 0.7	- 1.8	- 1.5	- 65.2
October	- 3.9	- 2.6	- 13.2	0.6	- 1.9	- 1.7	- 59.6
November	- 4.1	- 2.7	- 12.7	- 2.0	- 1.7	- 1.5	- 59.0
December	- 3.8	- 2.5	- 11.4	- 2.8	- 1.6	- 1.6	- 49.6
2012							
January	- 3.9	- 2.4	- 11.8	- 3.3	- 2.2	- 2.2	- 56.1

Table A.1 – *continued*

Insurance corporations and pension funds/Other financial intermediaries	Loans	Securities	Irish Private Sector Deposits: Total	Households	Non-financial corporations	Insurance corporations and pension funds/ Other financial intermediaries	
8	9	10	11	12	13	14	
							Outstanding amounts – € million
							2011
110,668	37,707	72,961	166,912	93,957	33,578	39,377	January
110,197	37,914	72,284	165,163	93,259	33,213	38,691	February
110,140	37,047	73,093	162,983	92,803	32,151	38,029	March
105,735	34,916	70,819	164,937	92,813	31,580	40,544	April
113,345	43,212	70,133	172,495	92,133	31,655	48,707	May
113,805	43,845	69,961	168,153	92,215	30,906	45,033	June
112,817	43,198	69,619	167,378	91,795	31,073	44,510	July
109,769	42,501	67,268	166,152	91,239	31,412	43,501	August
108,526	43,176	65,350	163,992	91,769	31,209	41,014	September
124,753	41,869	82,884	162,993	91,919	31,550	39,524	October
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
124,014	41,638	82,376	162,036	91,243	29,795	40,998	January
							Transactions – € million
							2011
- 855	- 607	- 249	- 1,202	- 472	- 79	- 652	January
- 439	- 4	- 434	- 1,750	- 734	- 319	- 697	February
- 471	- 363	- 109	- 1,833	- 424	- 929	- 480	March
- 2,167	- 1,600	- 566	2,283	37	- 292	2,538	April
- 838	- 186	- 652	- 752	- 709	- 36	- 8	May
785	- 398	1,183	- 4,289	27	- 741	- 3,575	June
- 1,272	- 1,025	- 247	- 1,008	- 445	95	- 657	July
- 1,508	- 528	- 980	- 895	- 510	459	- 844	August
- 2,018	- 98	- 1,920	- 2,671	485	- 420	- 2,736	September
- 2,261	- 1,684	- 577	590	184	464	- 58	October
- 476	- 531	55	- 1,328	- 1,210	- 155	37	November
- 212	- 271	59	108	540	- 68	- 365	December
							2012
- 729	- 349	- 380	- 482	- 57	- 1,079	654	January
							Growth rates – per cent.
							2011
27.3	- 10.5	62.7	- 8.0	- 5.5	- 15.3	- 7.1	January
24.5	- 9.5	54.5	- 9.8	- 6.1	- 14.3	- 14.2	February
25.3	- 7.8	53.8	- 10.0	- 5.4	- 10.6	- 19.0	March
18.1	- 10.8	40.8	- 9.1	- 5.6	- 10.3	- 15.2	April
13.2	- 10.6	30.7	- 8.7	- 5.7	- 10.9	- 13.1	May
13.8	- 11.5	32.6	- 10.0	- 5.1	- 13.0	- 17.3	June
10.6	- 12.9	27.5	- 10.4	- 5.6	- 11.4	- 18.7	July
7.3	- 14.0	22.2	- 10.4	- 5.4	- 10.1	- 20.0	August
6.0	- 13.3	19.1	- 10.5	- 4.7	- 8.2	- 22.9	September
1.2	- 16.7	13.3	- 11.0	- 4.5	- 7.8	- 25.0	October
- 5.2	- 19.6	4.2	- 9.0	- 3.4	- 7.6	- 20.3	November
- 10.1	- 16.6	- 6.3	- 7.3	- 3.4	- 6.0	- 15.4	December
							2012
- 10.0	- 16.0	- 6.4	- 7.0	- 3.0	- 9.1	- 12.6	January

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									
25 February	208,431	204	116,924	33,445	66,390	–	–	17,089	–
25 March	202,725	204	114,495	26,935	84,170	–	–	3,390	–
29 April	181,656	194	106,130	23,730	82,400	–	–	-	–
27 May	177,445	194	102,345	26,490	75,805	–	–	50	–
24 June	180,067	194	103,000	30,620	72,180	–	–	200	–
29 July	175,999	202	97,593	27,455	70,138	–	–	-	–
26 August	175,931	202	97,878	24,490	73,388	–	–	-	–
30 September	176,573	233	100,355	23,090	77,265	–	–	-	–
28 October	171,918	233	100,940	20,475	78,765	–	–	1,700	–
25 November	172,188	233	102,910	31,845	71,065	–	–	-	–
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	–	–	–	–

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									
25 February	208,431	12,038	8,787	7,517	20	1,250	–	–	–
25 March	202,725	11,999	7,541	6,241	100	1,200	–	–	–
29 April	181,656	12,186	8,329	5,722	600	2,000	7	–	–
27 May	177,445	12,012	6,201	4,837	164	1,200	–	–	–
24 June	180,067	12,226	8,249	8,140	109	-	–	–	–
29 July	175,999	12,497	7,889	5,456	1,233	1,200	–	–	–
26 August	175,931	12,428	8,834	6,665	169	2,000	–	–	–
30 September	176,573	12,521	6,730	4,375	855	1,500	–	–	–
28 October	171,918	12,747	7,174	4,929	750	1,495	–	–	–
25 November	172,188	12,572	6,687	4,092	1,245	1,350	–	–	–
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	–	–	–	–

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
195	142	1,341	1,380	18,177	–	70,068
348	205	1,169	1,353	18,161	–	66,790
598	185	861	1,274	18,268	–	54,146
483	200	1,076	1,264	18,184	–	53,699
343	181	1,157	1,285	18,241	–	55,666
529	189	1,163	1,277	18,079	–	56,967
181	153	1,201	1,308	19,059	–	55,949
405	185	1,376	1,357	19,406	–	53,256
299	176	1,151	1,372	20,019	–	47,728
448	31	1,168	1,071	20,599	–	45,728
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

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
–	25,639	22	–	–	897	229	1,697	159,122
–	23,070	22	–	–	897	229	1,720	157,247
–	8,359	22	–	–	865	201	1,723	149,971
–	7,915	20	–	–	865	201	1,723	148,508
–	10,328	26	–	–	865	201	1,723	146,449
–	9,339	26	–	–	858	201	1,723	143,466
–	11,279	19	–	–	858	201	1,723	140,589
–	13,851	20	–	–	897	291	1,723	140,540
–	14,041	19	–	–	897	291	1,723	135,026
–	13,748	17	–	–	897	291	1,723	136,253
–	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

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									
January	1,121,751	449,254	158,130	31,523	259,601	101,330	16,167	12,074	73,089
February	1,114,576	453,806	162,308	31,618	259,880	101,518	18,073	11,031	72,415
March	1,084,828	436,343	150,110	28,754	257,479	100,373	16,159	10,996	73,217
April	1,052,086	418,065	135,507	28,799	253,759	97,840	16,708	10,191	70,941
May	1,038,964	401,513	110,950	28,896	261,667	97,105	16,653	10,195	70,257
June	1,023,188	403,616	113,097	28,364	262,155	96,826	16,392	10,299	70,135
July	1,029,006	405,683	115,044	29,449	261,191	96,544	16,285	10,462	69,798
August	1,027,422	406,399	117,550	29,547	259,303	96,893	17,407	12,074	67,411
September	1,045,519	408,473	118,328	29,622	260,524	95,537	17,269	12,772	65,497
October	1,030,784	389,832	119,527	29,610	240,695	113,581	17,593	12,958	83,030
November	1,027,837	390,602	119,989	29,593	241,020	113,931	18,571	12,279	83,081
December	1,025,070	383,645	113,322	29,687	240,636	113,613	17,638	13,029	82,946
2012									
January	1,002,686	379,203	110,701	29,728	238,773	115,091	18,216	14,346	82,529

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								
January	1,121,751	325,832	155,971	2,949	166,912	33,627	21,799	62,007
February	1,114,576	328,298	159,993	3,142	165,163	34,477	21,470	60,006
March	1,084,828	319,475	147,589	8,902	162,983	32,451	20,866	56,958
April	1,052,086	319,505	132,878	21,690	164,937	32,026	20,465	56,583
May	1,038,964	300,727	106,640	21,592	172,495	32,070	22,445	55,853
June	1,023,188	300,675	110,985	21,538	168,153	31,742	21,501	52,278
July	1,029,006	281,576	111,908	2,290	167,378	32,177	21,288	50,454
August	1,027,422	281,620	113,107	2,361	166,152	31,396	21,946	48,276
September	1,045,519	282,226	115,482	2,752	163,992	31,053	21,739	47,645
October	1,030,784	283,180	117,722	2,465	162,993	31,951	20,913	46,004
November	1,027,837	282,550	117,899	2,514	162,137	33,047	20,486	45,115
December	1,025,070	277,536	112,228	2,725	162,584	30,503	20,446	44,536
2012								
January	1,002,686	272,551	107,942	2,573	162,036	29,991	20,384	41,467

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
111,402	214,568	82,876	96,455	9,396	–	28,323	28,197	January
108,564	209,430	80,491	94,935	9,161	–	28,666	28,055	February
114,425	197,484	78,573	89,303	10,272	–	31,035	27,047	March
115,521	188,947	76,756	85,841	9,241	–	32,814	27,086	April
109,820	193,037	77,897	88,184	9,168	–	34,686	27,583	May
109,000	186,843	74,375	83,229	7,287	–	36,158	25,879	June
106,389	190,430	73,310	84,022	8,784	–	36,098	27,770	July
102,566	192,113	71,591	81,344	11,138	–	35,970	29,434	August
110,408	202,842	70,815	80,829	7,586	–	35,774	33,281	September
113,953	190,055	69,132	78,657	8,024	–	35,936	31,640	October
111,347	192,217	68,832	76,391	6,659	–	26,445	41,412	November
114,759	189,786	69,245	78,001	6,765	–	27,517	41,739	December
								2012
108,524	182,053	68,545	76,759	6,191	–	25,720	40,601	January

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
153,336	180,885	79,838	25,684	126,010	77,297	35,436	January
147,882	171,235	82,568	25,210	116,137	93,207	34,086	February
145,118	166,102	79,980	23,936	111,120	97,328	31,495	March
135,611	163,391	81,306	23,843	106,130	80,674	32,552	April
133,141	167,116	84,149	23,639	102,335	83,727	33,762	May
131,593	159,409	88,413	22,192	100,363	84,045	30,977	June
133,577	162,150	109,465	21,479	97,593	85,396	33,851	July
136,254	161,498	108,627	20,202	94,838	87,869	34,897	August
141,904	165,747	110,831	19,826	100,355	84,669	39,525	September
141,808	161,553	109,283	19,011	100,940	78,167	37,973	October
143,452	155,759	109,570	18,561	103,925	66,492	48,880	November
141,710	156,649	109,422	17,828	108,407	67,869	50,164	December
							2012
147,917	151,652	107,299	18,499	94,905	70,793	47,227	January

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									
January	720,794	393,209	118,972	31,217	243,020	96,522	14,637	11,953	69,931
February	726,155	401,469	126,706	31,312	243,451	96,798	16,682	10,898	69,218
March	704,132	386,313	116,413	28,448	241,452	95,885	14,946	10,866	70,072
April	691,338	379,877	113,132	28,493	238,252	93,355	15,466	10,062	67,827
May	662,566	356,349	90,595	28,590	237,164	92,616	15,403	10,067	67,146
June	653,898	357,646	91,750	28,060	237,836	92,654	15,177	10,184	67,292
July	657,812	360,035	93,533	29,147	237,355	92,394	15,080	10,335	66,980
August	658,492	361,338	96,456	29,245	235,637	92,764	16,188	11,953	64,622
September	659,387	361,216	95,921	29,321	235,974	91,802	16,294	12,649	62,858
October	649,194	343,153	97,328	29,309	216,516	109,923	16,631	12,836	80,455
November	643,321	343,225	97,649	29,292	216,284	110,335	17,627	12,179	80,528
December	634,141	337,119	92,265	29,389	215,465	110,110	16,694	12,927	80,488
2012									
January	623,583	334,225	90,626	29,430	214,169	111,708	17,350	14,242	80,116

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								
January	720,794	283,298	124,745	2,922	155,632	33,174	10,000	19,812
February	726,155	289,553	132,840	3,128	153,584	34,028	9,896	18,969
March	704,132	282,471	122,012	8,902	151,557	32,012	9,753	17,844
April	691,338	292,953	117,687	21,683	153,582	31,602	9,710	17,602
May	662,566	268,771	94,368	21,585	152,818	31,639	9,863	17,258
June	653,898	268,590	99,833	21,533	147,223	31,310	8,904	16,980
July	657,812	248,569	100,145	2,283	146,140	31,741	8,919	16,755
August	658,492	248,636	101,780	2,360	144,496	30,963	8,538	16,634
September	659,387	248,861	103,293	2,740	142,828	30,599	8,444	15,259
October	649,194	250,062	105,653	2,441	141,968	31,510	8,300	15,035
November	643,321	249,971	106,120	2,486	141,366	32,590	8,070	14,458
December	634,141	243,349	99,425	2,455	141,469	30,031	7,949	13,623
2012								
January	623,583	239,533	95,803	2,541	141,189	29,524	7,957	11,466

Table A.4.1 – *continued*

Loans to non-residents: Euro area	Loans to non-residents: Rest of the world	Holdings of securities issued by non-residents: Euro area	Holdings of securities issued by non-residents: Rest of the world	Central bank balances: Resident	Central bank balances: Non-resident	Remaining assets: Resident	Remaining assets: Non-resident	
24	107	131	145	28	29	30	31	
								Outstanding amounts – € million
								2011
9,425	128,791	15,700	37,105	6,814	–	25,105	8,123	January
9,109	124,536	16,090	37,053	7,436	–	25,278	8,386	February
9,459	117,211	15,085	35,022	8,434	–	27,888	8,836	March
11,445	113,244	13,370	34,161	7,720	–	29,527	8,639	April
8,716	113,717	12,950	34,238	7,513	–	28,042	8,426	May
8,757	108,515	11,321	32,434	5,512	–	29,268	7,791	June
9,130	108,223	11,964	32,417	6,047	–	29,812	7,789	July
8,665	107,970	10,237	31,420	7,940	–	29,956	8,202	August
8,403	113,120	10,020	31,233	5,587	–	29,595	8,410	September
9,011	104,224	9,464	30,204	5,695	–	29,204	8,316	October
8,520	103,597	9,192	26,988	4,908	–	19,081	17,475	November
8,546	101,142	9,115	28,498	4,385	–	18,769	16,456	December
								2012
8,393	93,430	8,865	27,867	4,260	–	19,259	15,577	January

Deposits from non-residents: Euro area	Deposits from non-residents: Rest of the world	Capital & reserves: Resident	Capital & reserves: Non-resident	Borrowing from the Eurosystem relating to monetary policy operations	Remaining liabilities: Resident	Remaining liabilities: Non-resident	
39	40	41	42	43	45	46	
							Outstanding amounts – € million
							2011
17,143	108,965	59,043	7,004	96,050	74,106	12,200	January
17,118	99,119	61,707	6,772	88,697	89,739	10,557	February
16,428	93,821	59,415	6,044	82,775	94,034	9,534	March
15,104	91,952	61,171	5,992	77,790	77,523	9,940	April
14,151	91,105	62,523	5,615	74,445	77,074	10,123	May
13,584	85,095	66,921	4,294	71,950	77,657	8,613	June
13,277	86,819	89,768	3,640	70,390	79,253	8,682	July
13,152	87,429	89,106	3,640	70,480	81,064	8,849	August
13,173	90,183	90,417	3,428	71,130	78,543	9,350	September
11,199	88,104	89,227	2,910	71,495	71,495	9,856	October
11,978	82,536	89,405	2,397	73,090	59,178	19,646	November
12,760	85,129	89,143	1,742	71,986	58,994	19,435	December
							2012
12,872	80,618	87,153	2,393	71,252	64,071	16,743	January

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

		Outstanding amounts – € million				
		Sep-10	Dec-10	Mar-11	Jun-11	Sep-11
1.	**Primary Industries**	5,486	5,323	5,291	5,250	5,323
1.1	Agriculture	4,595	4,503	4,460	4,420	4,435
1.1.1	Growing of crops, market gardening, horticulture	..	483	491	489	473
1.1.2	Farming of animals	..	2,896	2,868	2,860	2,853
1.1.3	Other agricultural activities	..	1,124	1,101	1,071	1,110
1.2	Forestry, logging, mining and quarrying	575	468	486	494	566
1.3	Fishing and aquaculture	316	352	345	337	322
2.	**Manufacturing**	5,718	5,268	5,128	4,949	4,947
2.1	Manufacture of food, beverages and tobacco products	..	2,440	2,152	2,072	2,094
2.2	Wood, pulp, paper, paper products, printing and reproduction of recorded media	..	635	636	661	646
2.3	Chemicals, rubber/plastic products, other non-metallic mineral products	..	707	746	753	740
2.4	Pharmaceutical products and preparations, medical and dental instruments and supplies	..	81	109	91	92
2.5	Fabricated metal products, except machinery and equipment	..	76	127	114	86
2.6	Computer, electronic and optical products	..	79	91	82	75
2.7	Production, installation and repair of commercial machinery/equipment, not including computers	..	415	423	390	389
2.8	Other manufacturing	..	835	845	787	825
3.	**Electricity, Gas, Steam and Air Conditioning Supply**	622	915	965	751	795
4.	**Water Supply, Sewerage, Waste Management and Remediation Activities**	107	128	129	130	142
5.	**Construction**	4,248	3,289	3,558	3,429	3,266
5.1	Construction of buildings carried out on contract	..	1,634	1,729	1,721	1,596
5.2	Civil engineering activities carried out on contract	..	571	716	689	700
5.3	Other construction activities	..	1,084	1,112	1,018	969
6.	**Wholesale/Retail Trade & Repairs**	11,493	9,720	9,498	9,169	9,267
6.1	Sale, maintenance/repair of motor vehicles, retail sale of fuel	1,794	1,692	1,646	1,601	1,640
6.2	Wholesale trade and commission trade (except vehicles)	2,383	1,744	1,645	1,636	1,606
6.3	Retail trade (except vehicles), repair of personal/ household goods	6,022	5,305	5,261	5,076	5,088
6.4	Other wholesale/retail	1,294	978	946	856	933
7.	**Transportation and Storage**	2,270	1,567	1,639	1,668	1,495
7.1	Land, water and air transport	..	957	994	993	902
7.2	Postal, courier, warehousing and support activities for transportation	..	306	309	308	304
7.3	Other transportation and storage	..	304	336	367	288
8.	**Hotels and Restaurants**	9,418	8,184	8,080	7,972	7,906
8.1	Hotels	5,190	4,453	4,415	4,343	4,328
8.2	Restaurants	693	619	617	606	589
8.3	Bars	2,993	2,745	2,682	2,659	2,632
8.4	Other accommodation and catering	542	367	366	365	357
9.	**Information and Communication**	621	630	638	608	599
9.1	Publishing of printed material	..	210	182	180	177
9.2	Audio-visual production and publishing, programming and broadcasting activities	..	40	51	47	48
9.3	Telecommunications and information service activities	..	266	262	253	262
9.4	Software publishing, computer programming, consultancy and related activities	..	113	142	127	111
9.5	Other information and communication	..	1	1	1	1

Table A.14 – *continued*

Transactions – € million					Growth rates – per cent.				
Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11
82	-104	-9	-39	71	1.9	3.9	7.7	-1.3	-1.5
76	-99	-21	-40	19	3.8	4.8	8.7	-1.9	-3.1
..	..	8	-2	-14	..	..	..	..	..
..	..	-8	-8	-3	..	..	..	..	..
..	..	-22	-31	36	..	..	..	..	..
-8	-9	19	10	67	-7.3	-2.7	3.4	3.2	18.8
14	4	-6	-9	-15	-4.7	4.6	4.3	1.3	-7.4
-348	-103	-10	-126	-54	-9.5	-11.4	-5.9	-9.7	-5.4
..	..	-191	-28	-21	..	..	..	..	..
..	..	3	25	-14	..	..	..	..	..
..	..	53	2	-12	..	..	..	..	..
..	..	30	-17	0	..	..	..	..	..
..	..	51	-11	-28	..	..	..	..	..
..	..	15	-8	-8	..	..	..	..	..
..	..	11	-32	-3	..	..	..	..	..
..	..	18	-55	32	..	..	..	..	..
-140	403	60	-176	39	-33.3	3.9	54.2	17.7	51.0
-13	1	1	2	21	-29.7	-26.9	-4.9	-8.3	19.3
-146	-1,905	308	-21	1	-24.3	-51.9	-43.5	-41.9	-40.0
..	..	132	100	81	..	..	..	..	..
..	..	145	-27	-39	..	..	..	..	..
..	..	31	-94	-42	..	..	..	..	..
91	-492	-172	-289	58	1.2	-3.9	-3.2	-8.1	-8.3
-65	42	-38	-44	42	-0.4	0.4	-1.5	-5.9	-0.1
-21	-129	-91	-4	-62	-8.2	-11.8	-10.4	-11.3	-14.0
128	-171	-24	-182	18	1.4	-1.8	0.1	-4.7	-6.3
47	-234	-19	-59	61	25.6	-3.9	-8.7	-21.9	-19.3
-210	-71	152	37	-187	-6.0	-6.0	6.0	-0.3	-3.5
..	..	98	5	-102	..	..	..	..	..
..	..	10	1	-4	..	..	..	..	..
..	..	46	32	-79	..	..	..	..	..
-195	-242	-6	-62	-62	-1.2	-4.7	-5.8	-5.3	-4.1
-255	-247	6	-33	-19	-5.2	-9.5	-11.2	-9.6	-5.8
4	11	1	-10	-16	3.7	3.5	0.5	0.7	-2.6
43	55	-11	-18	-18	4.3	3.7	2.8	2.1	0.0
13	-60	-1	-1	-8	6.3	-11.0	-4.8	-9.5	-13.5
-9	140	3	-18	-11	-20.9	3.5	25.2	18.1	17.6
..	..	-28	4	-4	..	..	..	..	..
..	..	5	-4	0	..	..	..	..	..
..	..	-2	-3	8	..	..	..	..	..
..	..	29	-15	-15	..	..	..	..	..
..	..	0	0	0	..	..	..	..	..

Table A.14 – *continued*

	Outstanding amounts – € million				
	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11
10. Financial Intermediation (Excl. Monetary Financial Institutions)	93,318	109,179	107,865	112,985	107,739
10.1 Financial leasing	..	1,485	1,674	1,711	1,639
10.2 Non-bank credit grantors, excluding credit unions	..	12,851	10,912	17,942	17,983
10.3 Investment funds, excluding financial vehicle corporations and money market funds	..	419	828	529	461
10.4 Financial vehicle corporations (FVCs)	..	71,060	71,483	72,018	69,389
10.5 Life insurance	..	4,480	4,494	4,272	2,781
10.6 Pension funding	..	84	74	91	78
10.7 Non-life insurance	..	274	150	141	169
10.8 Security broker/fund management	..	4,565	4,255	3,428	3,159
10.9 Other financial intermediation / Unallocated	..	13,961	13,995	12,854	12,079
11. Real Estate, Land and Development Activities	67,999	55,361	55,160	55,397	55,570
11.1 Property investment/development of residential real estate	..	9,082	16,050	16,298	16,288
11.2 Property investment/development of commercial real estate	..	13,930	17,266	17,258	17,122
11.3 Property investment/development of mixed real estate	..	27,995	17,457	17,528	17,826
11.4 Investment in unzoned land	..	1,010	998	1,005	1,004
11.5 Other real estate activities	..	3,344	3,388	3,308	3,330
12. Business and Administrative Services	4,736	5,522	5,122	5,055	5,014
12.1 Legal, accounting and management consultant activities	..	1,590	1,313	1,272	1,229
12.2 Architectural and engineering activities, technical testing and analysis	..	162	151	178	185
12.3 Scientific research and development	..	29	29	32	30
12.4 Rental and leasing activities, services to buildings and landscape activities	..	149	136	106	104
12.5 Employment, office administration and business support activities	..	227	285	263	280
12.6 Other business and administrative services	..	3,365	3,209	3,203	3,186
13. Other Community, Social and Personal Services	2,416	1,436	2,288	2,248	2,207
13.1 Recreational, cultural and sporting activities	..	763	942	912	908
13.2 Membership organisations (business, employers, professional, trade unions, religious, political)	..	219	317	311	306
13.3 Other service activities	..	454	1,029	1,025	994
14. Education	785	724	674	640	589
15. Human Health and Social Work	2,423	2,049	2,043	2,038	2,006
15.1 Hospitals and medical practice activities	..	1,380	1,362	1,355	1,347
15.2 Residential care activities	..	401	314	318	313
15.3 Other health and social work	..	269	368	365	346
16. Extra-Territorial Organisations and Bodies		2	1	0	0
17. Total	211,660	209,299	208,078	212,288	206,864
17.1 Total ex Financial Intermediation	118,342	100,120	100,213	99,304	99,126
17.2 Total ex Financial Intermediation and Property Related Sectors	46,095	41,470	41,496	40,479	40,290

Table A.14 – *continued*

Transactions – € million					Growth rates – per cent.				
Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11
2,365	14,552	-1,351	-2,503	-4,737	9.5	33.0	26.9	14.3	6.8
..	..	191	39	-85	..	..	..	..	..
..	..	-1,694	-859	-237	..	..	..	..	..
..	..	415	-296	-75	..	..	..	..	..
..	..	-544	650	-2,982	..	..	..	..	..
..	..	34	-215	-153	..	..	..	..	..
..	..	-9	17	-6	..	..	..	..	..
..	..	-99	0	24	..	..	..	..	..
..	..	-183	-767	-406	..	..	..	..	..
..	..	537	-1,073	-820	..	..	..	..	..
-319	-109	-53	413	328	-0.4	-0.7	-0.9	0.1	1.1
..	..	-606	407	126	..	..	..	..	..
..	..	4	44	-91	..	..	..	..	..
..	..	470	-16	280	..	..	..	..	..
..	..	17	5	-1	..	..	..	..	..
..	..	63	-27	15	..	..	..	..	..
252	331	-361	-61	-92	1.6	15.2	4.7	3.9	-3.0
..	..	-273	-43	-45	..	..	..	..	..
..	..	-12	29	7	..	..	..	..	..
..	..	0	3	-3	..	..	..	..	..
..	..	-8	-30	-2	..	..	..	..	..
..	..	58	-27	-11	..	..	..	..	..
..	..	-127	7	-37	..	..	..	..	..
-36	-1,053	-78	-39	-33	-3.9	-46.6	-47.9	-48.3	-48.3
..	..	-212	-29	-3	..	..	..	..	..
..	..	30	-6	-6	..	..	..	..	..
..	..	104	-3	-24	..	..	..	..	..
-55	-171	-49	-34	-50	1.5	-22.2	-26.1	-35.1	-36.1
34	-179	6	4	-11	3.4	-7.3	-2.9	-5.7	-7.5
..	..	-12	-7	-11	..	..	..	..	..
..	..	-82	13	-4	..	..	..	..	..
..	..	100	-3	4	..	..	..	..	..
..	..	-1	-1	0	..	..	..	..	..
1,353	10,992	-1,559	-2,912	-4,719	2.3	10.0	8.6	3.6	0.7
-1,012	-3,560	-208	-409	18	-2.1	-4.4	-3.5	-4.4	-3.6
-547	-1,546	-464	-800	-311	-2.3	-5.0	-3.5	-7.3	-7.0

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

	Outstanding amounts – € million				
	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11
1. Primary Industries	2,555	3,030	2,753	2,727	2,760
2. Manufacturing	4,751	4,703	4,584	4,114	4,173
3. Electricity, Gas, Steam and Air Conditioning Supply	681	765	566	518	517
4. Water Supply, Sewerage, Waste Management and Remediation Activities	244	45	58	57	60
5. Construction	2,464	2,282	1,903	2,017	1,925
6. Wholesale/Retail Trade & Repairs	4,150	4,435	4,124	4,336	4,313
7. Transportation and Storage	3,108	2,842	2,294	2,557	2,665
8. Hotels and Restaurants	738	665	634	658	668
9. Information and Communication	1,381	1,062	1,035	960	974
10. Financial Intermediation (Excl. Monetary Financial Institutions)	45,312	40,399	38,305	45,007	40,935
11. Real Estate, Land and Development Activities	6,000	6,226	4,744	4,048	3,993
12. Business and Administrative Services	5,737	5,034	7,188	6,919	7,143
13. Other Community, Social and Personal Services	4,709	4,473	4,319	4,374	4,401
14. Education	1,763	1,839	1,929	1,727	1,768
15. Human Health and Social Work	1,839	1,110	1,088	1,125	1,168
16. Extra-Territorial Organisations and Bodies	0	0	0	0	3
17. Total	85,432	78,910	75,525	81,145	77,467

Table A.16 – *continued*

Transactions – € million					Growth rates – per cent.				
Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11
-6	491	-276	-26	33	-10.3	4.1	0.5	7.1	8.6
-812	2	-119	-470	68	-15.7	-17.2	-7.7	-25.1	-11.0
-118	92	-199	-48	-1	-24.9	-8.2	-39.1	-34.4	-23.3
24	-190	13	0	3	11.5	-75.1	-65.7	-68.7	-70.3
-157	-165	-377	114	-98	-17.6	-26.3	-32.6	-22.3	-21.4
-292	169	-311	210	8	2.5	-6.3	-5.6	-4.9	1.9
-37	-202	-547	263	108	-7.8	-9.9	-26.8	-16.8	-12.3
86	-149	-31	23	19	4.2	-11.3	-10.3	-10.8	-18.9
1	-204	-73	-75	14	-14.1	-27.9	-18.3	-26.3	-25.3
-1,698	-4,247	-1,800	-1,196	-4,292	3.1	-4.6	-15.7	-19.1	-24.1
-184	305	270	-738	-58	-20.5	-15.5	6.7	-10.2	-8.7
-63	-696	375	-273	223	-18.6	-29.5	-10.4	-10.1	-6.2
91	-236	-240	69	9	-0.7	-5.6	-11.3	-6.9	-8.5
64	99	90	-202	41	5.4	10.6	8.0	2.9	1.6
-313	-607	-21	37	43	-22.7	-46.2	-47.0	-41.9	-29.5
0	0	0	0	3	-	-	-	-	-
-3,414	-5,538	-3,246	-2,311	-3,878	-4.4	-10.2	-13.7	-16.4	-17.2

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

	Total Lending	Lending for house purchase	Floating rate	Standard variable	Tracker	Up to 1 year fixed	Fixed rate	Over 1 and up to 3 years	Over 3 and up to 5 years	Over 5 years
Outstanding amounts – € million										
2010										
June	129,513	107,676	92,160	..	..	..	15,516	7,621	6,318	1,578
September	128,256	107,813	92,451	..	..	..	15,362	7,338	6,546	1,478
December	122,484	99,578	86,715	32,073	53,320	1,322	12,863	6,163	5,169	1,531
2011										
March	120,155	98,851	84,974	30,843	52,880	1,251	13,877	6,774	5,513	1,590
June	119,027	98,335	84,694	30,819	52,633	1,242	13,641	6,772	5,310	1,560
September	117,872	97,964	85,002	31,764	52,026	1,212	12,963	6,498	4,991	1,473
Transactions – € million										
2010										
June	-2,287	-1,172	..	..	..	..	..	..	..	..
September	-1,384	-432	..	..	..	..	..	..	..	..
December	1,080	-583	..	..	..	..	..	..	..	..
2011										
March	-1,369	-678	-1,698	-1,223	-401	-74	1,021	614	347	60
June	-1,229	-640	-405	-76	-320	-10	-235	-1	-202	-32
September	-1,468	-639	40	700	-600	-60	-679	-274	-318	-87
Growth rates – per cent.										
2010										
June	-3.8	-1.5	..	..	..	..	..	..	..	..
September	-4.2	-1.6	..	..	..	..	..	..	..	..
December	-3.0	-2.1	..	..	..	..	..	..	..	..
2011										
March	-3.0	-2.7	..	..	..	..	..	..	..	..
June	-2.3	-2.3	..	..	..	..	..	..	..	..
September	-2.5	-2.5								

Table A.18 – *continued*

Total Lending			Total Deposits	
Other personal	Finance for investment	Finance for other purposes		
				Outstanding amounts – € million
				2010
21,837	1,927	19,910	92,722	June
20,443	1,709	18,734	91,371	September
22,906	2,864	20,042	89,217	December
				2011
21,304	2,843	18,461	87,455	March
20,692	2,840	17,852	87,005	June
19,908	2,800	17,108	86,523	September
				Transactions – € million
				2010
-1,115	3	-1,118	-891	June
-952	-125	-827	-1,229	September
1,663	95	1,568	-1,959	December
				2011
-691	-64	-627	-1,551	March
-589	9	-598	-509	June
-830	-66	-763	-497	September
				Growth rates – per cent.
				2010
-12.9	-10.1	-13.1	-2.6	June
-15.6	-18.4	-15.2	-2.0	September
-6.5	-4.8	-6.6	-5.2	December
				2011
-4.4	-3.4	-4.6	-6.0	March
-2.5	-3.2	-2.6	-5.7	June
-2.1	1.1	-2.8	-5.0	September

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

	30 September 2011	30 December 2011
Assets		
1. Analysis by currency		
Irish residents in non-euro	39,870	35,853
US Dollar	16,883	16,255
Sterling	19,944	17,256
Other	3,043	2,342
Non-residents in non-euro	239,766	227,874
US Dollar	94,491	91,483
Sterling	118,038	109,953
Other	27,237	26,438
Non-residents in euro	216,960	215,052
2. Analysis by sector		
Irish residents in non-euro		
Monetary financial institutions	10,817	8,279
Non-monetary financial institutions	29,053	27,574
Non-residents in non-euro		
Monetary financial institutions	115,492	112,540
Non-monetary financial institutions	124,274	115,334
Non-residents in euro		
Monetary financial institutions	110,832	106,794
Non-monetary financial institutions	106,128	108,257
3. Total international business	**496,595**	**478,779**

Table A.19.1 – *continued*

	30 September 2011	30 December 2011
Liabilities		
1. Analysis by currency		
Irish residents in non-euro	28,774	28,084
US Dollar	12,299	12,323
Sterling	12,607	12,613
Other	3,868	3,148
Non-residents in non-euro	172,176	169,743
US Dollar	72,106	72,437
Sterling	76,112	71,251
Other	23,958	26,055
Non-residents in euro	204,860	193,600
2. Analysis by sector		
Irish residents in non-euro		
Monetary financial institutions	15,113	13,818
Non-monetary financial institutions	13,661	14,266
Non-residents in non-euro		
Monetary financial institutions	114,522	111,995
Non-monetary financial institutions	57,654	57,748
Non-residents in euro		
Monetary financial institutions	151,746	143,524
Non-monetary financial institutions	53,114	50,076
3. Total international business	**405,810**	**391,426**

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

	Liabilities			Assets			
	Euro	Non-euro	Total	Euro	Non-euro	Total	Net external liabilities[a]
	30 December 2011						
1. EU Countries	**184,253**	**157,641**	**341,894**	**205,457**	**193,484**	**398,941**	**- 49,278**
MU Countries	**124,609**	**65,633**	**190,242**	**162,964**	**56,067**	**219,031**	**- 21,020**
Austria	1,175	76	1,251	1,780	327	2,107	- 856
Belgium	30,167	9,070	39,237	4,160	813	4,973	34,263
Luxembourg	585	1,468	2,053	4,936	1,110	6,046	- 3,993
Finland	27	78	105	874	158	1,032	- 927
France	20,254	7,032	27,287	18,126	4,660	22,786	4,501
Germany	45,224	5,470	50,694	56,272	2,638	58,910	- 8,216
Greece	5	10	15	747	230	978	- 963
Ireland	-	28,084	28,084	-	35,853	35,853	-
Italy	17,060	705	17,765	39,332	5,521	44,854	- 27,089
Netherlands	7,425	13,460	20,885	12,151	2,205	14,356	6,530
Portugal	25	15	40	1,511	5	1,515	- 1,475
Spain	2,049	63	2,112	21,537	2,187	23,725	- 21,613
Other MU[b]	614	101	715	1,538	359	1,897	- 1,182
Other EU	**59,644**	**92,008**	**151,653**	**42,493**	**137,418**	**179,911**	**- 28,258**
Denmark	5,571	440	6,011	2,828	1,593	4,420	1,591
Sweden	20	365	385	641	1,162	1,802	- 1,417
United Kingdom	54,023	91,065	145,088	36,310	131,446	167,756	- 22,668
Other EU	30	138	168	2,714	3,218	5,932	- 5,764
2. Other Europe	**1,443**	**3,233**	**4,676**	**1,684**	**8,297**	**9,981**	**- 5,304**
Switzerland	1,379	2,928	4,307	445	4,809	5,254	- 946
Other Europe	63	305	369	1,239	3,488	4,727	- 4,358
3. Other Industrial Countries	**6,097**	**25,209**	**31,306**	**5,648**	**48,639**	**54,286**	**- 22,980**
Australia, New Zealand, South Africa	76	57	133	453	1,955	2,407	- 2,274
Canada	57	7,127	7,184	564	3,834	4,399	2,785
Japan	189	42	231	105	3,526	3,631	- 3,400
United States	5,776	17,983	23,759	4,526	39,324	43,850	- 20,091
4. Offshore Centres	**1,424**	**9,677**	**11,101**	**183**	**6,433**	**6,615**	**4,486**
5. Other	**381**	**2,067**	**2,449**	**2,080**	**6,875**	**8,955**	**- 6,507**
Grand Total	**193,600**	**197,827**	**391,426**	**215,052**	**263,727**	**478,779**	**- 79,584**

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			
Euro	Non-euro	Total	Euro	Non-euro	Total	Net external liabilities[a]
30 September 2011						
192,907	**167,868**	**360,775**	**205,787**	**204,418**	**410,205**	**- 38,334**
127,653	**64,765**	**192,418**	**161,051**	**59,082**	**220,133**	**- 16,619**
1,311	54	1,364	2,048	178	2,226	- 861
32,354	9,816	42,171	4,644	1,584	6,228	35,942
1,571	1,451	3,022	2,338	936	3,274	- 252
39	76	115	947	65	1,012	- 897
22,554	4,897	27,451	19,403	3,725	23,128	4,323
45,534	5,817	51,351	50,733	2,360	53,094	- 1,743
5	12	16	936	322	1,258	- 1,242
-	28,774	28,774	-	39,870	39,870	-
15,934	745	16,679	44,368	4,917	49,285	- 32,606
7,324	12,958	20,282	11,787	2,350	14,137	6,145
49	3	53	1,735	28	1,764	- 1,711
324	21	345	20,558	2,404	22,962	- 22,617
654	141	794	1,552	344	1,895	- 1,101
65,254	**103,103**	**168,357**	**44,736**	**145,336**	**190,072**	**- 21,715**
5,464	245	5,709	3,591	1,452	5,043	666
54	353	407	518	1,278	1,796	- 1,389
59,707	102,424	162,131	38,029	139,489	177,518	- 15,387
30	81	111	2,598	3,117	5,715	- 5,604
1,882	**3,717**	**5,599**	**1,698**	**9,045**	**10,743**	**- 5,144**
1,816	3,452	5,268	463	5,219	5,682	- 414
66	264	330	1,236	3,826	5,061	- 4,731
7,070	**18,430**	**25,499**	**7,099**	**53,304**	**60,403**	**- 34,904**
157	277	435	677	1,974	2,650	- 2,216
80	7,269	7,349	594	3,909	4,503	2,846
162	41	203	184	3,470	3,654	- 3,450
6,671	10,842	17,512	5,645	43,951	49,596	- 32,084
2,586	**8,931**	**11,517**	**273**	**6,555**	**6,828**	**4,690**
416	**2,004**	**2,419**	**2,102**	**6,315**	**8,416**	**- 5,997**
204,860	**200,950**	**405,810**	**216,960**	**279,636**	**496,595**	**- 79,690**

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

Assets

	Total	Deposits and loan claims	Securities other than shares: Issued by Irish residents	Securities other than shares: Issued by other euro area residents	Securities other than shares: Issued by non-euro area residents: MFIs	Securities other than shares: Issued by non-euro area residents: Other	Money market fund shares/ units	Other assets including shares and other equities
Outstanding Amounts – € million								
2011								
January	359,684	41,792	2,899	91,286	182,268	39,951	732	755
February	360,229	46,597	2,618	93,242	178,843	37,765	762	400
March	347,723	44,060	2,431	91,830	167,104	40,570	786	941
April	350,458	69,140	2,374	84,552	156,938	36,082	892	480
May	362,704	107,508	1,894	73,536	141,897	36,505	960	406
June	351,493	108,862	2,967	59,049	138,041	40,577	833	1,163
July	347,572	105,512	3,999	56,261	138,354	40,908	866	1,682
August	354,920	123,189	4,195	57,740	130,828	37,449	940	580
September	367,261	115,334	2,531	64,231	139,125	43,805	889	1,345
October	367,336	120,829	2,912	63,719	133,637	44,150	896	1,208
November	382,485	126,616	2,807	69,487	129,039	52,585	875	1,093
December	287,611	75,266	1,561	51,552	109,527	48,421	–	1,284
2012								
January	295,445	72,873	1,880	53,321	115,305	50,878	–	1,189

Liabilities

	Total	Money market fund shares/units issued: Issued to Irish residents	Money market fund shares/units issued: Issued to other euro area residents	Money market fund shares/units issued: Issued to non-euro area residents	Other Liabilities
Outstanding amounts – € million					
2011					
January	359,684	13,147	53,849	289,516	3,172
February	360,229	15,248	54,137	287,154	3,690
March	347,723	15,186	55,213	274,606	2,718
April	350,458	15,719	57,225	271,813	5,701
May	362,704	15,564	55,696	287,914	3,530
June	351,493	17,798	55,881	276,592	1,222
July	347,572	16,581	55,515	273,856	1,619
August	354,920	19,225	54,882	275,716	5,097
September	367,261	16,498	53,050	292,214	5,500
October	367,336	16,547	52,992	291,167	6,630
November	382,485	17,436	53,721	303,948	7,380
December	287,611	13,317	36,529	235,437	2,328
2011					
January	295,445	13,345	35,798	242,458	3,844

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 €104 billion of funds previously classified as MMF's being re-categorised as Investment Funds and no longer being included in these statistics.

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									
2009									
September	308,528	4,607	8,394	14,903	460	1,005	2,412	899	–
December	308,551	6,608	8,193	12,983	316	1,232	2,439	852	–
2010									
March	322,280	7,825	6,385	20,786	306	1,458	1,980	987	3
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	286,327	16,415	33,309	25,089	453	1,195	216	148	1

	Securities other than shares							
	Issued by other euro area residents				Issued by non-euro area residents			
	Euro	Sterling	USD	Other	Euro	Sterling	USD	Other
2009								
September	43,812	17,536	12,903	308	14,170	84,170	101,383	1,569
December	46,923	18,901	12,388	552	15,119	80,807	100,113	1,124
2010								
March	50,509	19,647	12,775	562	16,166	84,072	97,543	1,275
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	64,616	1,184

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 €104 billion of funds previously classified as MMF's being re-categorised as Investment Funds and no longer being included in these statistics.

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							
January	0.63	2.17	2.79	1.72	0.21	2.30	2.51
February	0.63	2.17	2.77	1.79	0.21	2.29	1.38
March	0.64	2.18	2.74	1.80	0.22	2.31	1.37
April	0.70	2.29	2.76	1.82	0.23	2.47	1.19
May	0.68	2.29	2.80	2.06	0.24	2.61	1.30
June	0.65	2.30	2.84	2.01	0.26	2.72	1.22
July	0.66	2.41	2.89	2.03	0.25	2.82	1.25
August	0.66	2.40	2.95	2.01	0.26	2.90	1.16
September	0.65	2.41	3.04	2.04	0.26	2.98	1.15
October	0.66	2.43	3.12	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	0.62	2.27	3.57	2.37	0.21	3.22	1.42
Volumes (€ million)							
2011							
January	36,509	14,974	27,848	3,310	16,450	14,260	529
February	36,554	14,708	27,384	3,343	16,118	14,209	511
March	36,349	14,324	27,511	3,382	16,003	14,544	533
April	36,333	14,159	27,764	3,408	15,932	13,459	513
May	35,754	13,795	27,954	3,402	15,887	13,442	545
June	35,786	13,365	28,156	3,565	15,928	13,154	552
July	35,650	13,221	28,081	3,613	15,789	13,233	555
August	35,107	13,210	28,114	3,601	16,374	13,128	545
September	35,141	13,003	28,710	3,601	16,195	13,204	551
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

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							
January	13.24	3.30	3.11	2.90	9.20	6.00	4.31
February	13.12	3.26	2.98	2.98	9.08	5.93	4.09
March	13.13	3.32	3.06	3.01	9.12	5.93	4.11
April	13.29	3.47	3.22	3.14	9.38	6.02	4.27
May	13.08	3.54	3.27	3.18	9.33	6.03	4.31
June	12.79	3.50	3.35	3.19	9.20	6.16	4.29
July	13.28	3.76	3.49	3.33	9.24	6.21	4.42
August	13.43	3.70	3.52	3.41	9.21	6.32	4.43
September	13.36	3.75	3.40	3.42	9.24	6.33	4.47
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	13.35	3.74	3.47	2.98	8.83	6.26	4.34
Volumes (€ million)							
2011							
January	4,467	771	980	97,139	7,217	7,778	9,451
February	4,487	686	923	97,067	7,299	8,521	10,459
March	4,411	683	920	96,866	7,036	8,508	10,537
April	4,377	623	907	96,723	6,965	8,359	10,621
May	4,360	586	894	96,506	6,864	8,291	10,560
June	4,306	632	829	96,475	6,817	8,260	10,551
July	4,319	533	807	96,266	6,731	8,188	10,507
August	4,211	549	769	96,047	6,957	7,844	10,443
September	4,274	550	988	96,015	6,748	7,914	10,421
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

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	Loans with original maturity: Over 1 and up to 5 years	Loans with original maturity: Over 5 years	
				Rates (per cent per annum)
				2011
5.16	3.52	3.33	3.20	January
5.31	3.60	3.36	3.27	February
4.91	3.64	3.34	3.29	March
5.06	3.73	3.54	3.44	April
5.14	3.77	3.55	3.47	May
5.35	3.85	3.60	3.57	June
5.36	3.99	3.85	3.68	July
5.35	3.98	3.78	3.66	August
5.26	3.96	3.81	3.65	September
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
5.04	3.66	3.65	3.51	January
				Volumes (€ million)
				2011
10,610	22,571	27,882	42,768	January
10,602	23,563	26,740	41,337	February
10,425	23,061	26,642	40,957	March
10,122	22,990	26,170	40,885	April
10,022	23,128	26,053	40,619	May
10,021	23,815	25,757	40,609	June
9,768	23,695	25,519	40,618	July
9,746	23,348	25,335	40,820	August
9,886	23,455	25,379	40,808	September
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
9,731	23,122	24,297	40,660	January

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							
January	2.91	4.26	3.24	5.79	10.63	6.71	4.50
February	2.99	4.52	3.72	7.26	9.92	8.16	5.09
March	3.09	4.23	3.46	6.03	10.08	7.24	4.89
April	3.20	4.29	3.47	5.23	9.90	6.38	4.61
May	3.30	4.43	3.50	7.23	10.55	8.19	5.93
June	3.18	4.49	3.38	5.05	10.79	6.69	5.12
July	3.36	4.60	3.53	6.36	10.81	7.99	5.13
August	3.43	4.57	3.64	6.78	10.80	8.37	5.27
September	3.50	4.86	3.65	5.38	11.08	6.77	5.94
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
Volumes (€ million)							
2011							
January	1,047	322	-	182	44	-	54
February	1,009	898	-	143	62	-	53
March	1,194	586	-	134	60	-	57
April	1,092	331	-	156	51	-	77
May	1,086	211	-	104	42	-	38
June	1,086	181	-	155	62	-	48
July	1,103	169	-	104	60	-	46
August	1,130	160	-	92	60	-	48
September	1,039	127	-	167	53	-	62
October	772	108	-	158	50	-	85
November	957	114	-	179	52	-	81
December	752	95	-	200	32	-	54
2012							
January	656	91	-	116	55	-	42

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						
Loans up to €1 million		Loans over €1 million		Households	Non-financial corporations	
Floating rate and up to 1 year fixation	Over 1 year fixation	Floating rate and up to 1 year fixation	Over 1 year fixation	With agreed maturity	With agreed maturity	
						Rates (per cent per annum)
						2011
4.24	5.41	3.24	2.83	1.81	1.42	January
4.32	5.38	3.09	2.63	1.97	1.41	February
4.26	5.78	3.50	2.30	1.93	1.41	March
4.74	6.17	3.22	2.27	1.81	1.52	April
4.75	6.90	2.96	4.29	1.98	1.72	May
4.86	6.24	3.49	4.47	2.11	1.82	June
5.08	6.10	3.44	4.68	2.12	2.07	July
4.97	6.39	3.37	4.17	2.32	1.92	August
4.99	6.04	3.36	3.89	2.46	2.05	September
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
						Volumes (€ million)
						2011
303	50	627	264	10,088	6,575	January
328	63	803	189	10,129	6,565	February
405	65	1,151	169	12,333	6,717	March
250	45	626	45	7,873	5,170	April
247	54	841	77	7,862	5,143	May
329	50	988	9	8,052	5,465	June
265	43	883	27	7,145	5,270	July
285	38	679	16	7,691	5,185	August
303	42	857	31	8,765	5,999	September
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
252	38	740	22	7,820	4,891	January

Table B.3: Official and Selected Interest Rates

	Eurosystem Official Interest Rates			Interbank Market				Clearing Banks' Prime Rates
Per cent per annum	Marginal lending facility	Deposit facility	Main refinancing operations	Eonia (overnight)	1 month Euribor	3 month Euribor	12 month Euribor	Ireland
End-month								
2011								
January	1.75	0.25	1.00	1.31	0.90	1.07	1.64	1.15 - 2.40
February	1.75	0.25	1.00	0.69	0.87	1.09	1.77	1.15 - 2.40
March	1.75	0.25	1.00	0.90	0.97	1.24	2.00	1.20 - 2.50
April	2.00	0.50	1.25	1.42	1.24	1.39	2.13	1.25 - 2.70
May	2.00	0.50	1.25	0.95	1.23	1.43	2.14	1.35 - 2.80
June	2.00	0.50	1.25	1.72	1.33	1.55	2.16	1.45 - 2.80
July	2.25	0.75	1.50	0.97	1.43	1.61	2.18	1.60 - 2.90
August	2.25	0.75	1.50	0.96	1.35	1.54	2.09	1.70 - 2.90
September	2.25	0.75	1.50	1.46	1.36	1.55	2.08	1.65 - 2.90
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

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							
2010							
March	510,571	4,448	2,484	12,604	5,918	33,115	120,299
June	553,748	4,836	2,760	18,363	5,619	34,120	144,596
September	577,972	4,649	1,733	18,011	5,721	36,471	157,039
December	645,556	4,178	1,771	19,464	5,871	37,934	190,426
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[a]	818,648	4,046	1,565	39,859	9,683	55,821	305,949
Transactions – € million							
2010							
March	25,062	-197	-41	-1,068	1,579	-2,806	6,528
June	19,678	377	389	4,224	-513	654	11,017
September	29,006	-131	-968	1,068	144	1,913	16,768
December	35,137	-435	17	1,290	260	938	29,153
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	-9,372	295	-292	586	1,996	2,045	-3,883

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									
2010									
March	510,571	7,132	26,961	34,093	33,933	128,271	162,204	288,097	484,395
June	553,748	9,637	36,430	46,067	34,536	130,552	165,088	309,438	520,593
September	577,972	9,122	34,482	43,603	36,418	137,666	174,084	322,055	539,743
December	645,556	10,367	39,188	49,555	41,103	155,375	196,478	359,435	605,468
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[a]	818,648	17,317	25,890	43,207	92,654	138,519	231,174	494,286	768,667
Transactions – € million									
2010									
March	25,062	598	2,262	2,860	-89	-338	-427	13,605	16,038
June	19,678	1,798	6,798	8,596	-315	-1,192	-1,507	7,687	14,776
September	29,006	-605	-2,288	-2,894	2,012	7,604	9,615	16,295	23,017
December	35,137	495	1,871	2,365	2,767	10,459	13,226	17,673	33,264
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	-9,372	-1,805	-2,699	-4,505	-2,243	-3,353	-5,595	7,751	-2,439

Note: Within Liabilities, changes to investment fund shares/units can be larger than normal in Q2 due to updating according to the Fund Annual Survey of Liabilities.

* A reclassification from Non-Financial assets to Other Assets resulted in large transaction figures in Q4 2010.

a 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 brought €104 billion worth of funds previously classified as MMF's under the Investment Fund category for the first time. Transactions presented in this table do not include the impact of transactions in these reclassified funds for Q4 2011.

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
10,390	35,532	186,836	29,445	4,950	20,395	16,242	524	14,934	12,455
11,109	30,508	192,061	31,628	5,005	23,218	17,286	510	17,185	14,944
9,627	34,523	198,468	31,457	5,472	20,963	17,621	843	13,936	21,439
12,175	38,097	230,145	33,092	6,909	21,556	11*	0*	135*	43,793*
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	8,526	28,047	11	0	64	55,927
850	1,927	3,031	2,211	123	-865	7,011	271	6,451	59
431	-4,190	4,699	693	46	1,226	-1,422	-42	184	1,904
-1,082	1,846	2,812	2,567	437	-918	1,719	307	-2,153	4,677
2,787	2,331	8,215	-165	1,245	-805	-8,299*	-526*	1,475*	22,470*
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

Loans and deposits received	Other liabilities
Total	Total
4,082	22,095
5,440	27,715
4,206	34,023
3,899	36,190
4,792	36,700
5,419	41,936
5,626	50,165
6,094	43,887
1,615	7,408
1,040	3,861
-993	6,982
-365	2,238
1,038	2,258
566	4,684
-141	5,509
428	-7,450

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						
2010						
January	95,311	46,771	35,988	0	0	12,552
February	85,106	47,448	26,362	0	0	11,296
March	85,468	47,975	25,442	0	0	12,051
April	87,014	46,971	28,064	0	0	11,979
May	80,254	41,251	31,085	0	0	7,918
June	78,860	38,201	31,686	0	0	8,973
July	71,359	35,251	29,467	0	0	6,641
August	80,248	36,883	34,205	0	0	9,160
September	78,007	32,609	33,735	0	0	11,663
October	77,416	29,094	38,090	0	0	10,232
November	76,868	26,792	40,626	0	0	9,450
December	83,519	18,382	58,268	0	0	6,869
2011						
January	100,726	35,235	60,782	0	0	4,709
February	87,498	35,254	48,800	0	0	3,444
March	84,592	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	80,721	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	77,279	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	80,209	26,940	52,920	0	0	349
2012						
January	81,027	28,632	51,760	0	0	635
Transactions						
2010						
January	294	275	204	0	0	-185
February	-10,201	665	-9,610	0	0	-1,256
March	369	528	-914	0	0	755
April	1,556	-1,004	2,632	0	0	-72
May	-6,698	-5,720	3,083	0	0	-4,061
June	-1,387	-3,050	608	0	0	1,055
July	-7,558	-2,950	-2,276	0	0	-2,332
August	8,913	1,633	4,762	0	0	2,518
September	-2,294	-4,275	-522	0	0	2,503
October	-612	-3,515	4,334	0	0	-1,431
November	-494	-2,302	2,591	0	0	-783
December	6,628	-8,410	17,619	0	0	-2,581
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	1,690	2,668	186	0	0	-1,164
May	-699	-865	178	0	0	-12
June	-4,860	-4,122	-474	0	0	-264
July	-2,256	-1,418	-861	0	0	23
August	267	-1,887	1,320	0	0	834
September	-1,453	-173	-468	0	0	-812
October	1,228	-729	592	0	0	1,365
November	-2,736	-706	-662	0	0	-1,368
December	4,438	-402	4,985	0	0	-145
2012						
January	818	1,692	-1,160	0	0	286

Table C.2.1 – *continued*

Debt securities: All currencies

Long-term securities					
Total	MFIs	OFIs	IC&PF	NFCs	Govt
971,133	135,817	753,110	2,245	2,006	77,955
967,081	136,067	746,423	2,299	2,233	80,059
972,018	141,941	744,178	2,385	2,201	81,313
983,701	144,801	751,306	2,346	3,273	81,975
999,100	145,348	763,263	2,537	4,189	83,763
996,421	142,696	762,382	2,557	3,537	85,249
980,653	138,000	751,107	2,214	2,665	86,667
1,003,988	138,332	771,380	2,457	3,615	88,204
968,507	115,471	757,440	2,294	3,605	89,697
969,936	105,978	768,058	2,229	4,001	89,670
994,575	102,983	793,081	4,310	4,227	89,974
981,558	101,120	782,393	4,186	3,665	90,194
983,253	99,327	787,741	2,277	3,734	90,174
976,237	99,508	780,791	2,261	3,596	90,081
960,277	94,511	770,128	2,197	3,549	89,892
952,916	93,242	765,026	2,108	2,867	89,673
953,545	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
941,748	88,896	762,151	2,328	2,993	85,380
948,455	86,035	771,566	2,400	3,044	85,410
938,510	83,110	764,567	2,382	3,032	85,419
10,623	3,136	863	-57	9	6,672
-2,595	251	-5,232	55	227	2,104
4,942	5,874	-2,240	86	-32	1,254
10,190	2,860	5,636	-39	1,071	662
15,340	547	11,896	191	917	1,789
-2,684	-2,652	-887	21	-652	1,486
-15,715	-4,697	-11,219	-344	-872	1,417
23,312	332	20,249	243	950	1,538
-35,428	-22,861	-13,888	-163	-9	1,493
1,449	-9,493	10,639	-66	396	-27
24,583	-2,995	24,967	2,081	225	305
-11,500	-1,863	-9,172	-124	-561	220
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
-7,334	-1,269	-5,074	-89	-683	-219
611	-482	1,001	59	40	-7
-2,654	-1,677	-819	-15	-188	45
2,775	-192	2,778	30	97	62
-11,868	-484	-11,455	-15	-10	96
2,506	-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
-9,944	-2,924	-6,999	-18	-12	9

Table C.2.1 – *continued*

€ Million	Debt securities: Euro denominated					
	Short-term securities					
	Total	MFIs	OFIs	IC&PF	NFCs	Govt
Outstanding amounts						
2010						
January	62,826	23,782	29,774	0	0	9,270
February	52,015	24,285	20,133	0	0	7,597
March	54,167	25,420	20,224	0	0	8,523
April	57,512	26,122	22,756	0	0	8,634
May	56,046	24,950	25,751	0	0	5,345
June	55,074	21,605	26,786	0	0	6,683
July	50,169	20,151	24,884	0	0	5,134
August	58,285	20,963	29,746	0	0	7,576
September	58,868	19,436	29,284	0	0	10,148
October	59,038	16,417	33,494	0	0	9,127
November	60,702	16,157	36,354	0	0	8,191
December	70,967	11,198	53,607	0	0	6,162
2011						
January	87,985	27,434	56,289	0	0	4,262
February	75,807	28,332	44,366	0	0	3,109
March	72,493	27,445	43,485	0	0	1,563
April	74,443	30,315	43,623	0	0	505
May	74,484	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	68,583	24,697	43,701	0	0	185
December	70,673	24,258	46,115	0	0	300
2012						
January	72,579	26,029	45,968	0	0	582
Transactions						
2010						
January	-89	-289	200	0	0	0
February	-10,822	491	-9,640	0	0	-1,673
March	2,151	1,135	90	0	0	926
April	3,344	702	2,532	0	0	110
May	-1,465	-1,171	2,995	0	0	-3,289
June	-973	-3,346	1,035	0	0	1,338
July	-4,903	-1,453	-1,901	0	0	-1,549
August	8,115	812	4,861	0	0	2,442
September	583	-1,527	-462	0	0	2,572
October	-612	-3,515	4,334	0	0	-1,431
November	1,664	-261	2,860	0	0	-935
December	10,265	-4,959	17,253	0	0	-2,029
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	1,228	-729	592	0	0	1,365
November	-2,218	-676	-232	0	0	-1,310
December	2,088	-440	2,413	0	0	115
2012						
January	1,907	1,771	-146	0	0	282

Table C.2.1 – *continued*

Debt securities: Euro denominated

Long-term securities					
Total	MFIs	OFIs	IC&PF	NFCs	Govt
727,609	100,469	548,008	0	1,617	77,515
723,770	100,292	542,013	0	1,857	79,608
730,971	105,637	542,714	0	1,757	80,863
734,414	109,444	540,552	0	2,899	81,519
734,169	108,778	539,264	0	2,859	83,268
728,284	106,381	534,964	0	2,192	84,747
733,211	104,508	540,025	0	2,100	86,578
751,680	106,360	554,891	0	2,318	88,111
730,361	88,980	549,454	0	2,318	89,609
724,716	80,992	551,825	0	2,318	89,581
729,823	76,902	560,461	160	2,418	89,882
723,491	76,548	554,695	160	1,986	90,102
714,446	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
706,745	72,596	543,203	0	1,356	89,590
703,412	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
682,903	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
673,873	66,617	520,590	0	1,356	85,310
667,499	64,113	516,712	0	1,356	85,318
9,249	2,113	599	-120	0	6,657
-3,840	-177	-5,995	0	239	2,093
7,201	5,345	701	0	-100	1,255
3,443	3,807	-2,162	0	1,143	655
-246	-666	-1,289	0	-40	1,749
-5,884	-2,396	-4,299	0	-668	1,479
4,928	-1,873	5,061	0	-91	1,831
18,468	1,852	14,866	0	217	1,533
-21,318	-17,380	-5,437	0	0	1,499
1,449	-9,493	10,639	-66	396	-27
5,108	-4,090	8,636	160	100	302
-6,332	-354	-5,766	0	-432	220
-9,046	-642	-8,326	-160	100	-18
-5,027	1,068	-5,877	0	-126	-92
-7,954	-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
-3,652	-276	-3,434	0	0	58
-7,632	-176	-7,551	0	0	95
-7,567	-1,715	-5,762	0	100	-190
-6,568	-930	-5,626	-50	-51	89
-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

Table C.2.2: Securities Issues Statistics: Equities

€ Million	Equity Securities					
	Quoted securities					
	Total	MFIs	OFIs	IC&PF	NFCs	Govt
Outstanding amounts						
2010						
January	146,485	8,904	3,692	201	133,688	..
February	134,812	9,813	3,948	201	120,850	..
March	137,922	9,738	4,151	243	123,790	..
April	144,041	10,023	4,662	260	129,096	..
May	137,250	10,906	4,987	212	121,145	..
June	138,919	11,345	4,819	222	122,533	..
July	141,195	12,358	9,301	226	119,310	..
August	141,339	12,304	9,010	230	119,795	..
September	146,562	10,915	9,529	215	125,903	..
October	159,358	10,269	9,317	204	139,568	..
November	164,328	9,112	10,081	193	144,942	..
December	172,760	9,389	10,409	206	152,756	..
2011						
January	173,953	9,125	10,832	220	153,776	..
February	176,419	9,760	11,047	253	155,359	..
March	174,339	8,567	11,088	241	154,443	..
April	180,718	11,370	10,704	241	158,403	..
May	181,344	10,020	10,410	243	160,671	..
June	178,633	9,410	10,636	238	158,349	..
July	173,322	10,895	10,420	229	151,778	..
August	166,840	14,860	9,983	223	141,774	..
September	164,571	14,512	10,497	216	139,346	..
October	179,512	16,020	11,303	215	151,974	..
November	180,840	15,578	11,561	218	153,483	..
December	182,772	15,195	11,889	216	155,472	..
2012						
January	196,940	16,401	12,174	233	168,132	..
Transactions						
2010						
January	2	0	0	0	2	..
February	940	0	-17	0	957	..
March	135	0	0	0	135	..
April	129	0	0	0	129	..
May	1,949	1,725	57	0	167	..
June	1,082	910	0	0	172	..
July	6	0	0	0	6	..
August	0	0	0	0	0	..
September	189	182	0	0	7	..
October	8	0	0	0	8	..
November	105	0	0	0	105	..
December	-430	0	-299	0	-131	..
2011						
January	104	190	0	0	-86	..
February	-101	0	0	0	-101	..
March	-154	0	-225	0	71	..
April	2,518	2,394	1	0	123	..
May	-544	0	0	0	-544	..
June	141	0	5	0	136	..
July	2,104	2,024	0	0	80	..
August	5,411	5,534	-158	0	35	..
September	2,212	0	2,284	0	-72	..
October	2,269	708	0	0	1,561	..
November	-371	0	343	0	-714	..
December	-108	0	58	0	-166	..
2012						
January	-59	0	-77	0	18	..

Table C.2.2 – *continued*

Equity Securities

Unquoted securities

Total	MFIs	OFIs	IC&PF	NFCs	Govt
477	0	14	0	463	..
463	0	14	0	449	..
463	0	14	0	449	..
463	0	14	0	449	..
463	0	14	0	449	..
463	0	14	0	449	..
463	0	14	0	449	..
490	0	14	0	476	..
490	0	14	0	476	..
490	0	14	0	476	..
490	0	14	0	476	..
490	0	14	0	476	..
509	0	14	0	495	..
515	0	14	0	501	..
508	0	14	0	494	..
507	0	14	0	493	..
506	0	14	0	492	..
501	0	14	0	487	..
501	0	14	0	487	..
501	0	14	0	487	..
501	0	14	0	487	..
501	0	14	0	487	..
501	0	14	0	487	..
501	0	14	0	487	..
501	0	14	0	487	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
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0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
9	0	0	0	9	..
0	0	0	0	0	..
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0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..
0	0	0	0	0	..

Section D

Quarterly Financial Accounts

Table D.1: Financial Balance Sheet By Sector, Q3 2011

€ million	Total Assets	Total Liabilities	Net Financial Wealth	Total Assets Transactions	Total Liabilities Transactions	Net Financial Borrowing/ Lending
Non-financial corporations	**655,587**	**852,301**	**-196,714**	**18,883**	**16,133**	**2,751**
Financial corporations	**3,412,961**	**3,441,202**	**-28,241**	**4,420**	**8,812**	**-4,392**
Monetary financial institutions	1,553,620	1,565,095	-11,475	-1,144	-20,529	19,385
Other financial intermediaries and financial auxiliaries	1,584,933	1,597,054	-12,121	8,497	35,237	-26,740
Insurance corporations and pension funds	274,408	279,053	-4,645	-2,933	-5,896	2,963
General government	**68,630**	**169,271**	**-100,640**	**-225**	**4,037**	**-4,262**
Households and non-profit institutions serving households	**298,150**	**190,512**	**107,638**	**1,320**	**-1,897**	**3,217**
Rest of the world	**3,055,327**	**2,836,535**	**218,792**	**21,594**	**18,907**	**2,686**

Table D.1.1: Financial Balance Sheet By Sector, Q3 2011

Total Assets

€ million		Gold & SDRs	Currency & Deposits			Securities other than shares			
				Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives
Non-financial corporations	**655,587**	**0**	**61,539**	**20,202**	**41,337**	**3,246**	**510**	**2,360**	**376**
Financial corporations	**3,412,961**	**841**	**722,945**	**163,288**	**559,658**	**1,110,260**	**252,645**	**794,771**	**62,845**
Monetary financial institutions	1,553,620	841	628,307	139,608	488,700	539,094	204,598	293,411	41,085
Other financial intermediaries and financial auxiliaries	1,584,933	0	70,384	21,399	48,985	497,942	45,564	432,560	19,818
Insurance corporations and pension funds	274,408	0	24,254	2,281	21,973	73,225	2,483	68,800	1,942
General government	**68,630**	**0**	**15,322**	**0**	**15,322**	**4,791**	**40**	**4,028**	**723**
Households and non-profit institutions serving households	**298,150**	**0**	**122,213**	**56,128**	**66,085**	**480**	**0**	**200**	**280**
Rest of the world	**3,055,327**	**0**	**466,332**	**62,353**	**403,979**	**611,895**	**21,390**	**545,886**	**44,619**

Total Liabilities

€ million		Gold & SDRs	Currency & Deposits			Securities other than shares			
				Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives
Non-financial corporations	**852,301**	**0**	**0**	**0**	**0**	**10,278**	**556**	**9,170**	**552**
Financial corporations	**3,441,202**	**0**	**919,817**	**138,743**	**781,074**	**649,079**	**22,653**	**566,036**	**60,390**
Monetary financial institutions	1,565,095	0	919,817	138,743	781,074	153,584	15,481	92,908	45,195
Other financial intermediaries and financial auxiliaries	1,597,054	0	0	0	0	492,921	7,172	470,834	14,915
Insurance corporations and pension funds	279,053	0	0	0	0	2,574	0	2,294	280
General government	**169,271**	**0**	**15,050**	**685**	**14,365**	**83,939**	**910**	**82,553**	**477**
Households and non-profit institutions serving households	**190,512**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Rest of the world	**2,836,535**	**0**	**453,484**	**162,542**	**290,942**	**987,376**	**250,467**	**689,485**	**47,423**

n.a. not available.

Table D.1.1 – *continued*

Total Assets

Loans	Short-term loans	Long-term loans	Shares and other equity	Quoted shares	Unquoted shares and other equity	Mutual fund shares	Insurance technical reserves	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	Other accounts receivable/ payable	€ million
200,370	**82,786**	**117,584**	**268,099**	**2,365**	**262,104**	**3,629**	**2,785**	**0**	**0**	**2,785**	**119,548**	**Non-financial corporations**
916,622	**172,538**	**744,083**	**569,250**	**380,882**	**37,343**	**151,025**	**35,011**	**0**	**0**	**35,011**	**58,030**	**Financial corporations**
358,309	65,225	293,084	17,145	10,006	6,200	939	0	0	0	0	9,924	Monetary financial institutions
554,493	106,153	448,339	430,525	314,892	31,143	84,489	0	0	0	0	31,589	Other financial intermediaries and financial auxiliaries
3,820	1,160	2,660	121,581	55,983	0	65,597	35,011	0	0	35,011	16,517	Insurance corporations and pension funds
8,534	**3**	**8,531**	**31,660**	**10,673**	**19,185**	**1,802**	**0**	**0**	**0**	**0**	**8,323**	**General government**
0	**0**	**0**	**51,424**	**11,838**	**39,586**	**0**	**120,072**	**47,852**	**69,778**	**2,441**	**3,962**	**Households and non-profit institutions serving households**
438,105	**194,802**	**243,303**	**1,382,086**	**87,603**	**385,556**	**908,927**	**109,214**	**80,324**	**0**	**28,890**	**47,695**	**Rest of the world**

Total Liabilities

Loans	Short-term loans	Long-term loans	Shares and other equity	Quoted shares	Unquoted shares and other equity	Mutual fund shares	Insurance technical reserves	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	Other accounts receivable/ payable	€ million
258,068	**77,519**	**180,549**	**463,737**	**n.a.**	**n.a.**	**0**	**0**	**0**	**0**	**0**	**120,219**	**Non-financial corporations**
380,377	**224,829**	**155,548**	**1,183,986**	**18,225**	**198,019**	**967,742**	**236,782**	**128,177**	**69,778**	**38,828**	**71,160**	**Financial corporations**
0	0	0	472,363	7,512	103,067	361,784	0	0	0	0	19,331	Monetary financial institutions
375,318	223,748	151,571	687,700	10,497	71,246	605,958	0	0	0	0	41,114	Other financial intermediaries and financial auxiliaries
5,059	1,081	3,977	23,922	216	23,706	0	236,782	128,177	69,778	38,828	10,715	Insurance corporations and pension funds
61,874	**321**	**61,553**	**1,785**	**0**	**1,785**	**0**	**0**	**0**	**0**	**0**	**6,622**	**General government**
182,391	**8,008**	**174,383**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8,122**	**Households and non-profit institutions serving households**
680,921	**139,452**	**541,469**	**653,018**	**335,796**	**219,579**	**97,642**	**30,300**	**0**	**0**	**30,300**	**31,436**	**Rest of the world**

n.a. not available.

Table D.1.2: Financial Transactions By Sector, Q3 2011

Total Assets Transactions

€ million		Gold & SDRs	Currency & Deposits			Securities other than shares			
				Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives
Non-financial corporations	**13,352**	**0**	**-7**	**-327**	**320**	**31**	**72**	**-3**	**-38**
Financial corporations	**-82,494**	**0**	**-19,882**	**14,216**	**-34,098**	**-16,576**	**-26,231**	**7,928**	**1,727**
Monetary financial institutions	-94,972	0	-24,361	11,379	-35,740	-29,334	-22,788	-5,690	-855
Other financial intermediaries and financial auxiliaries	31,496	0	5,148	3,181	1,966	17,422	-1,257	16,061	2,619
Insurance corporations and pension funds	-19,018	0	-668	-344	-324	-4,665	-2,185	-2,443	-37
General government	**-864**	**0**	**1,943**	**0**	**1,943**	**-3,817**	**0**	**-3,656**	**-161**
Households and non-profit institutions serving households	**37**	**0**	**-936**	**-432**	**-504**	**-4**	**0**	**-4**	**0**
Rest of the world	**-3,197**	**0**	**-30,898**	**-1,326**	**-29,572**	**-4,431**	**-1,974**	**-2,676**	**219**

Total Liabilities Transactions

€ million		Gold & SDRs	Currency & Deposits			Securities other than shares			
				Currency & Transferrable Deposits	Other Deposits		Short-term securities	Long-term securities	Financial Derivatives
Non-financial corporations	**13,493**	**0**	**0**	**0**	**0**	**-196**	**0**	**-127**	**-68**
Financial corporations	**-83,871**	**0**	**-91,843**	**-558**	**-91,285**	**-3,047**	**-1,404**	**-1,904**	**261**
Monetary financial institutions	-96,842	0	-91,843	-558	-91,285	-12,662	-1,583	-11,091	12
Other financial intermediaries and financial auxiliaries	32,296	0	0	0	0	9,660	179	9,232	249
Insurance corporations and pension funds	-19,325	0	0	0	0	-45	0	-45	0
General government	**1,393**	**0**	**597**	**5**	**592**	**-2,829**	**-1,375**	**-1,457**	**3**
Households and non-profit institutions serving households	**-1,304**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Rest of the world	**-2,922**	**0**	**41,420**	**12,638**	**28,782**	**-18,725**	**-25,354**	**5,077**	**1,551**

n.a. not available.

Table D.1.2 – *continued*

Total Assets Transactions

Loans	Short-term loans	Long-term loans	Shares and other equity	Quoted shares	Unquoted shares and other equity	Mutual fund shares	Insurance technical reserves	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	Other accounts receivable/ payable	€ million
6,522	**4,457**	**2,065**	**3,291**	**19**	**3,272**	**0**	**-695**	**0**	**0**	**-695**	**4,210**	**Non-financial corporations**
-44,048	**-4,474**	**-39,573**	**9,677**	**7,991**	**1,003**	**683**	**-8,933**	**0**	**0**	**-8,933**	**-2,733**	**Financial corporations**
-43,110	-592	-42,519	-195	-153	0	-42	0	0	0	0	2,028	Monetary financial institutions
-952	-3,888	2,935	11,113	10,144	1,003	-34	0	0	0	0	-1,234	Other financial intermediaries and financial auxiliaries
15	5	10	-1,241	-2,000	0	759	-8,933	0	0	-8,933	-3,526	Insurance corporations and pension funds
-7	**0**	**-7**	**788**	**1,281**	**26**	**-520**	**0**	**0**	**0**	**0**	**228**	**General government**
0	**0**	**0**	**277**	**16**	**261**	**0**	**600**	**356**	**85**	**159**	**100**	**Households and non-profit institutions serving households**
2,710	**-1,917**	**4,628**	**32,410**	**-3,947**	**7,995**	**28,362**	**-12,331**	**-3,331**	**0**	**-8,999**	**9,342**	**Rest of the world**

Total Liabilities Transactions

Loans	Short-term loans	Long-term loans	Shares and other equity	Quoted shares	Unquoted shares and other equity	Mutual fund shares	Insurance technical reserves	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	Other accounts receivable/ payable	€ million
3,784	**3,078**	**707**	**7,795**	**n.a.**	**n.a.**	**0**	**0**	**0**	**0**	**0**	**2,109**	**Non-financial corporations**
-3,913	**-3,478**	**-435**	**32,681**	**6**	**4,065**	**28,610**	**-12,406**	**-2,975**	**85**	**-9,516**	**-5,345**	**Financial corporations**
0	0	0	9,100	0	-29	9,129	0	0	0	0	-1,438	Monetary financial institutions
-3,659	-3,454	-204	25,946	6	6,459	19,481	0	0	0	0	348	Other financial intermediaries and financial auxiliaries
-254	-23	-231	-2,365	0	-2,365	0	-12,406	-2,975	85	-9,516	-4,255	Insurance corporations and pension funds
3,853	**-335**	**4,188**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**-227**	**General government**
-1,457	**-208**	**-1,249**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**153**	**Households and non-profit institutions serving households**
-37,089	**-992**	**-36,097**	**5,968**	**5,681**	**371**	**-84**	**-8,953**	**0**	**0**	**-8,953**	**14,456**	**Rest of the world**

n.a. not available.

Section E

Public Finances and Competitiveness Indicators

Table E.1: Government Debt[a]

€ million End-quarter	2011 31 Mar.	 30 Jun.	 30 Sep.	 30 Dec.
Government Debt				
Amount outstanding (gross)				
Euro-denominated debt				
Government stock	89,807	89,626	89,589	85,310
Exchequer Bills/Notes, Central Treasury Notes	1,655	487	250	2,572
Saving Certificates/Stamps, National Solidarity Bonds	4,551	4,662	4,740	4,841
Prize Bonds	1,392	1,409	1,431	1,449
Savings Bonds	4,540	4,657	4,725	4,781
National Instalment Savings	468	468	470	473
Ways and means	1,944	1,583	1,798	1,697
Borrowings from Central Bank, etc.	-	-	-	-
Local loans funds	5	5	5	5
Short-term paper	234	318	239	1,285
FX contracts	1,479	156	300	3,042
EIB loans	-	-	-	-
Public bond issues	-	-	-	-
Private placements	602	602	602	602
IMF[b]	2,091	2,658	3,349	4,904
EFSM	8,400	11,400	13,400	13,900
EFSF	3,664	3,664	3,664	6,664
Medium-term notes	-	-	-	-
Swaps	2,388	4,482	5,416	5,416
Total euro-denominated debt	**123,220**	**126,177**	**129,979**	**136,942**
Non-euro-denominated debt				
EIB loans	-	-	-	-
Public bond issues	-	-	-	-
Private placements	-	-	-	-
Medium-term notes	85	86	96	100
IMF[b]	3,499	4,448	5,606	8,208
EFSM	-	-	-	-
EFSF	-	-	-	-
UK Bilateral Loan	-	-	-	483
Swaps	-2,357	-4,417	-5,714	-5,949
Short-term paper	292	145	303	49
FX contracts	-1,432	-147	-304	-3,059
Total non-euro-denominated debt	**87**	**116**	**-12**	**-169**
Gross debt	**123,307**	**126,293**	**129,966**	**136,773**
Residual Maturity Profile				
Amounts due to mature in:				
– ≤ 1 year	9,846	8,057	8,111	12,309
– Over 1 year but ≤ 5 years	53,649	54,275	54,653	52,030
– Over 5 years but ≤ 10 years	50,925	55,076	56,316	61,547
– Over 10 years	8,886	8,886	10,886	10,886
Total	**123,307**	**126,293**	**129,966**	**136,773**

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 underlying currency weighting in the SDR basket is Euro: 37.4 per cent, Non-euro: 62.6 per cent.

Source: NTMA.

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

€ million	2011			
End-quarter	31 Mar.	30 Jun.	30 Sep.	30 Dec.
1. Resident[a]	14,916	15,466	15,141	18,408
– MFIs and Central Bank	12,345	12,404	12,175	15,210
– General government	539	890	879	806
– Financial intermediaries	1,781	1,912	1,822	2,157
i) Financial auxiliaries	315	309	333	337
ii) Insurance corporations and pension funds	1,335	1,331	1,147	1,192
iii) Other financial intermediaries	132	272	341	627
– Non-financial corporations	32	31	48	12
– Households	219	228	217	224
2. Rest of world	74,891	74,160	74,448	66,901
Total	**89,807**	**89,626**	**89,589**	**85,310**
3. Amounts due to mature in:				
– Less than 3 years	16,215	16,033	15,987	11,592
– 3 or more years but less than 5 years	11,793	11,793	11,795	11,808
– 5 or more years but less than 10 years	53,497	53,497	53,504	53,606
– 10 or more years but less than 15 years	8,302	8,302	8,303	8,303
– 15 or more years	0	0	0	0
Total	**89,807**	**89,626**	**89,589**	**85,310**

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	113.31	104.28
February	102.14	113.11	104.66
March	102.65	113.59	104.71
April	103.52	114.52	105.62
May	104.67	115.97	107.25
June	104.82	116.05	107.13
July	104.93	116.30	106.59
August	104.97	116.65	107.34
September	104.73	116.20	107.98
October	104.30	115.82	105.53
November	104.96	116.40	105.56
December	105.83	117.55	106.78
2007			
January	105.06	116.76	106.73
February	105.35	117.13	105.62
March	106.08	118.00	105.61
April	106.74	118.76	106.77
May	106.67	118.68	107.19
June	106.22	118.16	107.63
July	106.81	118.88	107.84
August	106.69	118.76	108.83
September	107.58	119.72	108.36
October	108.39	120.38	109.74
November	109.79	121.88	109.92
December	109.80	121.70	111.41
2008			
January	110.55	122.22	110.52
February	110.50	122.37	111.39
March	113.03	125.56	113.36
April	114.12	126.35	115.87
May	113.56	125.66	114.63
June	113.54	125.49	114.01
July	113.98	125.23	113.71
August	111.99	122.91	114.22
September	110.73	121.63	110.84
October	108.14	118.79	109.31
November	107.56	118.60	108.59
December	111.59	122.90	110.78
2009			
January	111.28	122.33	110.28
February	109.76	119.81	109.62
March	111.70	121.73	111.20
April	111.10	120.87	110.85
May	111.67	120.78	111.25
June	112.23	121.05	111.52
July	112.36	120.55	113.25
August	112.67	120.57	111.38
September	113.93	121.39	113.43
October	114.91	121.98	113.66
November	114.77	121.49	112.74
December	113.87	119.87	111.72
2010			
January	112.25	117.90	109.83
February	110.26	115.15	108.91
March	110.05	114.40	107.52
April	108.78	112.81	107.32
May	105.95	109.92	105.25
June	104.15	107.90	102.34
July	105.91	109.90	104.22
August	105.76	109.53	104.20
September	106.34	109.68	105.11
October	109.33	112.55	106.66
November	108.15	110.80	106.30
December	106.52	109.11	103.55
2011			
January	106.66	109.24	103.28
February	107.56	110.08	104.07
March	108.99	111.27	105.27
April	110.46	112.52	107.01
May	109.88	111.60	107.68
June	110.15	111.61	106.65
July	109.47	110.78	105.88
August	109.56	110.64	106.03
September	108.33	109.11	104.49
October	108.43	109.36	103.93
November	107.83	108.61	103.85
December	106.40	107.17	102.90
2012			
January	104.94	105.72	102.25
February	105.68	106.39	103.05

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)
1995		
Q1	91.67	104.42
Q2	90.89	103.55
Q3	91.28	103.93
Q4	91.38	103.20
1996		
Q1	91.60	103.08
Q2	92.37	103.90
Q3	93.96	104.56
Q4	96.29	105.81
1997		
Q1	97.65	106.11
Q2	96.47	102.85
Q3	95.80	106.16
Q4	99.74	105.60
1998		
Q1	95.21	98.87
Q2	98.55	100.55
Q3	100.35	101.24
Q4	102.01	105.90
1999		
Q1	100.00	100.00
Q2	97.26	100.31
Q3	99.47	97.02
Q4	98.71	95.55
2000		
Q1	97.20	94.50
Q2	95.91	91.96
Q3	96.12	92.08
Q4	95.17	91.15
2001		
Q1	100.20	94.55
Q2	99.51	94.12
Q3	101.88	96.78
Q4	102.18	96.90
2002		
Q1	103.55	94.41
Q2	103.60	96.42
Q3	107.67	97.43
Q4	109.78	98.51
2003		
Q1	113.57	103.74
Q2	116.56	106.65
Q3	116.65	107.58
Q4	118.07	107.26
2004		
Q1	119.36	111.41
Q2	118.00	111.31
Q3	118.06	112.68
Q4	120.54	113.70
2005		
Q1	121.28	116.48
Q2	120.58	115.07
Q3	118.43	117.51
Q4	118.11	116.57
2006		
Q1	119.70	117.52
Q2	120.15	120.06
Q3	123.41	119.38
Q4	121.53	121.66
2007		
Q1	122.58	118.13
Q2	123.88	124.06
Q3	120.96	129.35
Q4	123.25	130.59
2008		
Q1	122.54	132.06
Q2	123.47	138.79
Q3	121.55	136.52
Q4	118.15	136.20
2009		
Q1	116.17	132.79
Q2	116.26	128.80
Q3	115.87	126.56
Q4	115.23	126.65
2010		
Q1	111.55	118.94
Q2	108.02	115.38
Q3	106.19	112.88
Q4	102.95	115.14
2011		
Q1	105.24	112.56
Q2	106.51	113.75
Q3	104.87	114.66

Table E.4: Indices of Relative Wage Costs in Manufacturing Industry

	Average Hourly Earnings[a]		Unit Wage Costs[a]	
1999=100	Ireland	Major Trading Partners	Ireland[c]	Major Trading Partners
Year				
1990	69	71	166	90
1991	73	75	171	94
1992	76	79	163	97
1993	81	83	164	99
1994	82	86	155	98
1995	84	88	136	99
1996	87	92	135	100
1997	90	94	124	100
1998	95	97	110	101
1999	100	100	100	100
2000	106	105	97	99
2001	117	108	95	101
2002	125	112	88	101
2003	131	116	85	100
2004	137	119	85	99
2005	142	123	84	97
2006	149	126	85	97
2007	155	130	85	97
2008	163	135	86	102
2009	171	138	81	110
2010	171	140	73	105
2011	169	143	71	105
2012[f]	168	146	70	106

	Relative Hourly Earnings[b]		Relative Unit Wage Costs[b]	
1999=100	National Currencies	Common Currency (€)	National Currencies	Common Currency (€)
Year				
1990	97	110	185	209
1991	97	107	181	201
1992	96	109	169	192
1993	98	103	165	174
1994	96	101	157	166
1995	95	101	137	146
1996	95	104	135	147
1997	95	104	124	136
1998	97	101	109	113
1999	100	100	100	100
2000	101	95	98	91
2001	108	102	94	88
2002	112	108	87	84
2003	113	117	85	87
2004	115	121	86	90
2005	116	122	86	90
2006	118	125	88	93
2007	119	130	88	95
2008	121	138	85	97
2009	123	142	74	85
2010	122	136	69	77
2011	118	133	68	76
2012[f]	115	126	66	72

a In national currencies.

b A rise in the index implies a disimprovement in competitiveness, while a fall in the index implies an improvement.

c Changes in domestic unit wage costs should be interpreted with caution because of the strong influence of the chemicals sector in recent years.

Sources: Ireland – Central Statistics Office and Central Bank estimates.

Major trading partners comprise the United Kingdom, the United States, Germany, France, Italy, Belgium, the Netherlands, Spain and Singapore. Data on these were derived from the OECD and other sources.

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