Financing Developments in the Irish Economy

Overview

International financing conditions remained favourable in Q3 2015, as the ECB continued its accommodative monetary policy of historically low interest rates and its ongoing Asset Purchase Programme. Despite the ECB's expansionary monetary policy and a recovery in the domestic economy, the outstanding amount of credit extended by domestic banks to the household and non-financial corporate (NFC) sectors continued to decline. Credit extended to households and NFCs by resident credit institutions fell by €19 billion, or 12 per cent, between Q3 2014 and Q3 2015, while nominal GNP grew by over 6 per cent over the same period. The combination of deleveraging and strong economic growth has generated significant improvements in key economic indicators, notably the household debt to disposable income ratio, which has declined by more than 14 per cent over the year ending Q2 2015.

The creditless nature of the recovery[1] is noticeable when credit developments are compared with economic indicators. For instance, nominal GNP and combined household and NFC net credit transactions[2] declined in tandem during the economic crash, but decoupled as the economic recovery gained traction. A similar trend is evident when net credit transactions are compared to employment. Ireland's economic recovery is thus occurring despite ongoing retrenchment in the domestic banking sector. This suggests a lower reliance on bank funding, and greater use of own resources, particularly as deleveraging is occurring in tandem with increased holdings of deposits. There is also evidence from the Quarterly Financial Accounts of a positive trend in the flow of foreign lending into Ireland, but this most likely arises from activity in the multinational sector.

While credit conditions remain constrained in the domestic economy, the trend of positive inflows into the Investment Fund (IF) and Financial Vehicle Corporate (FVC) sectors continued in Q3 2015. However, these inflows were more than offset by valuation declines in financial markets over the quarter.

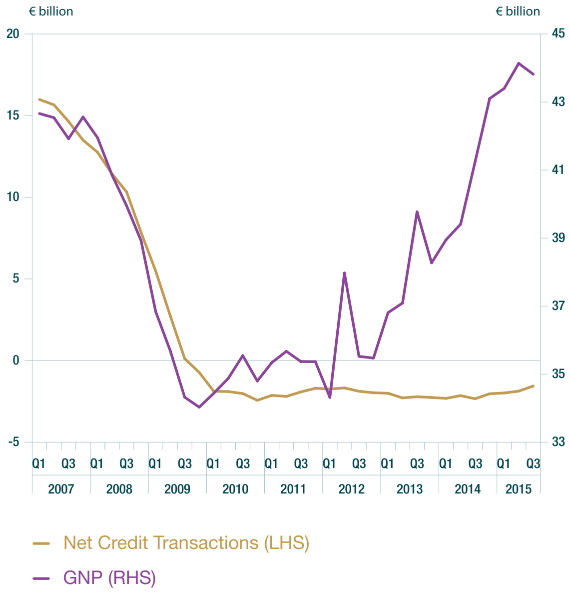
Household and NFC Sectors

While economic indicators such as consumption and employment have been growing strongly for some time, slight improvements in the net credit flows to the household and NFC sectors are only beginning to emerge. However, they remain negative with repayments continuing to outstrip new lending for both sectors. Furthermore, movements in net credit transactions have increasingly decoupled from GNP data, as the economic recovery gathers pace, as shown in Chart 1. While some concern has been expressed

1 See Honohan, Patrick (2015) "SME finance in the recovery" speech to the Small Firms Association available at http://www.sfa.ie/Sectors/SFA/SFA.nsf/vPages/Events~sfa-annual-lunch-2015-06-11-2015/$file/Governor+Honohan+slides_SFA+Annual+Lunch+2015.pdf

2 As measured by the four-quarter moving average for net transactions.

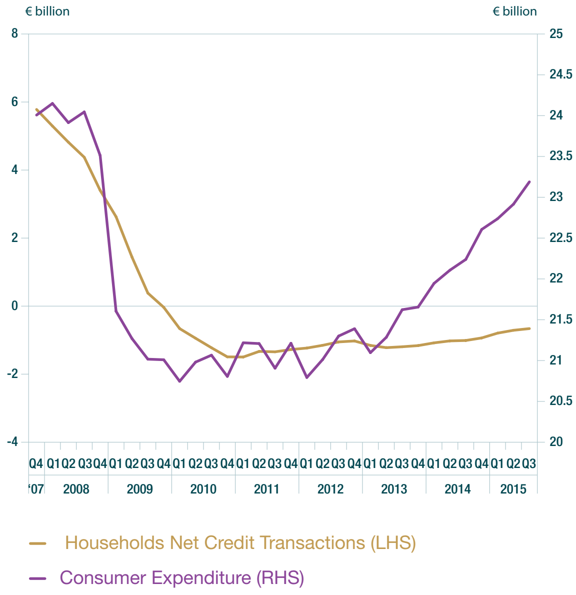
Chart 1: GNP and Net Credit Transactions of Households and NFCs



Source: Money and Banking Statistics, Central Bank of Ireland; Quarterly National Accounts, CSO.

Note: Credit transactions are calculated as a four-quarter moving average. GNP is seasonally adjusted at nominal value.

Chart 2: Consumption and Net Credit Transactions to Households



Source: Money and Banking Statistics, Central Bank of Ireland; Quarterly National Accounts, CSO.

Note: Credit transactions are calculated as a four-quarter moving average. Consumption is seasonally adjusted at nominal value.

about the reliability of GNP as a measure of the domestic economy[3], a similar picture emerges when credit transactions are compared to employment. While household net credit transactions are still negative, the decline has been slowing since early 2011 – driven in part by a slowdown in the decline of consumer credit. Nevertheless, the change in credit flows to households has lagged significantly behind growth in consumer expenditure, as shown in Chart 2. A new methodology for analysing credit developments in the household and NFC sectors is presented in Box A.

Box A: Enhancements to Household and Non-Financial Corporation Bank Lending Series in Money and Banking Statistics

By Martina Sherman[4]

Money and Banking Statistics play a pivotal role in euro area and domestic policy decision making and are widely used in financial stability analysis and by professional and public analysts. The recently introduced countercyclical capital buffer rules, for example, rely heavily on high-quality credit information. Therefore, the statistics need to be frequently reviewed to ensure they can respond to changes in financing activity in the economy.[5] There is a particularly strong focus on the challenge of ensuring the measurement of transactions in credit is accurate and comprehensive.

4 Economist, Statistics Division, Central Bank of Ireland.

5 The current collection of Money and Banking Statistics underwent a review and significant enhancement in July 2010 including the adoption of new methodology on calculating net flows or transactions, see McElligott, R. and M. O'Brien (2011), 'Irish Money and Banking Statistics: A New Approach', Central Bank of Ireland, Quarterly Bulletin, No. 1.

3 See FitzGerald, John (2013) "The Effect of Redomiciled Plcs on GNP and the Irish Balance of Payments" Research Note, ESRI Quarterly Economic Commentary, Summer.

Box A: Enhancements to Household and Non-Financial Corporation Bank Lending Series in Money and Banking Statistics

By Martina Sherman

In recent years, securitisation activity by Irish resident banks has been relatively high. Approximately 27 per cent of total household loans are now held off-balance sheet, and while almost no non-financial corporation (NFC) loan stock is currently off-balance sheet, NFC securitisation activity was prevalent between 2010 and 2013. From January 2003, transactions and growth rates for on-balance sheet loans are adjusted for loan sales, and securitisations at the time of transfer. The transaction calculations also include adjustments for write-downs of loans held on MFI balance sheets. This methodology ensures that credit transactions and growth rates reflect actual lending activity. To date, data limitations have not allowed for tracking repayments or write-offs/downs after a loan sale had occurred. This Box introduces a revised methodology effective from December 2014 which allows for the calculation of transactions, including the repayments and other activity on loans, not recorded on MFI balance sheets.

The new methodology for transactions and growth rates is detailed in Box A Table 1.

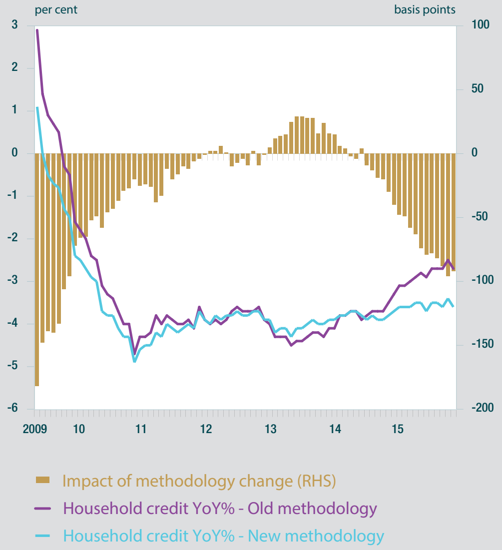
Box A, Table 1: Overview of Adjustment Method for Household and NFC Loan Series

	Transactions	Growth rate (in period t)
Former method	$T_t^{MFI} + N_t^{MFI}$	$(T_t^{MFI} + N_t^{MFI}) / (L_{t-1}^{MFI})$
New method	$T_t^{MFI} + N_t^{MFI} + TX_t^{DR}$	$(T_t^{MFI} + N_t^{MFI} + TX_t^{DR}) / (L_{t-1}^{MFI} + L_{t-1}^{DR})$

L_{t-1}^{MFI} = Outstanding amounts of loans on MFI balance sheets at the end of period t-1;
T_t^{MFI} = Transactions in loans on MFI balance sheets in period t, not adjusted for sales and securitisation;
N_t^{MFI} = Net transfers of loans off MFI balance sheets/derecognised (disposals minus acquisitions) in period t;
L_{t-1}^{DR} = Outstanding amounts of derecognised loans at the end of period t-1; and
TX_t^{DR} = Transactions in derecognised loans excluding transfers during period t, i.e. the loan repayments.

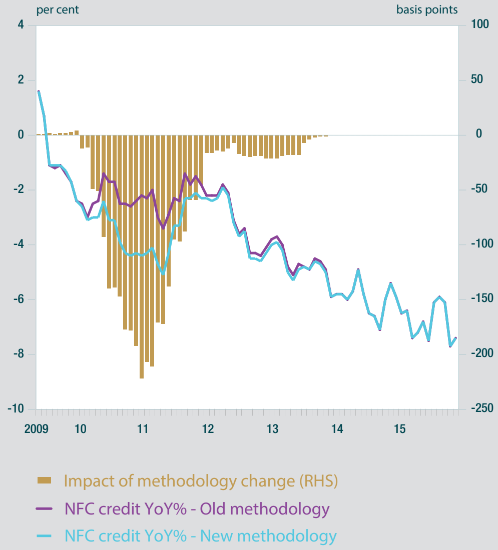
The key change in the new methodology is the inclusion of transactions of securitised loans in the transactions and growth rate calculation. This has the general effect of lowering the growth rate on loans advanced to Irish private sector households and NFCs (Box A Chart 1). The size of the adjustment reflects repayments and write-downs applied to securitised loans, along with the inclusion of securitised stock, which increases the base effect in the calculation of growth rates. The enhanced transactions series, available from end-December 2014, will be published in a revised Table A.6 of the online Money and Banking Statistics.

Box A Chart 1: Household Loans; Annual Growth Rates Before and After Change of Methodology



Source: Money and Banking Statistics, Central Bank of Ireland.
Note: Data as at November 2015.

Box A Chart 2: NFC Loans; Annual Growth Rates Before and After Change of Methodology

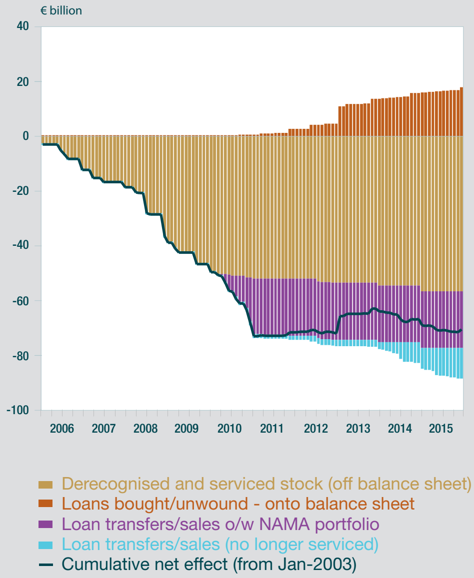


Source: Money and Banking Statistics, Central Bank of Ireland
Note: Data as at November 2015.

Box A: Enhancements to Household and Non-Financial Corporation Bank Lending Series in Money and Banking Statistics
By Martina Sherman

The new methodology covers off-balance sheet loans which continue to be managed by the originator bank. Data are not available for loan portfolios sold by a bank that are no longer serviced by an Irish bank. Box A Chart 3 displays the cumulative stock of loans moved on or off-balance sheet since January 2003. Of the cumulative stock of transferred loans, the 'derecognised and serviced stock' and 'loans bought/unwound' series are entirely covered by the new methodology from end-2014. However, there is no further information available for loans no longer serviced by Irish banks (i.e. the red-coloured series in Box A Chart 3). This would include loans which have been sold or securitised where the servicing rights have also transferred, i.e. loans transferred to NAMA or loan transfers to equity firms and unregulated entities. The servicing rights are usually transferred in loan sales and retained for securitised stock.

Box A Chart 3: Cumulative Gross Loan Transfers/Securitisation Flows (HH and NFC) from January 2003



Source: Money and Banking Statistics, Central Bank of Ireland.
Note: The chart is sale value of loans, therefore net of write-downs at time of transfer. Data as at November 2015.

While it is only possible to produce an official high-quality series from end-2014, estimates have been calculated from January 2003 to assist in understanding the dynamics of the new methodology. The estimated series has been calculated on a best-efforts basis with both available and calculated data. Prior to December 2014, there is no way to distinguish securitised loan transfers where the servicing rights have been retained and those where the servicing rights were transferred. However, in Ireland, the servicing rights of securitised loans often remain with the originating bank. It is possible therefore, to derive a good approximation of transactions on the serviced loan stock based on reported flows of derecognised loans transfer. This estimated series is also available in Table A.6 of the Money and Banking Statistics.

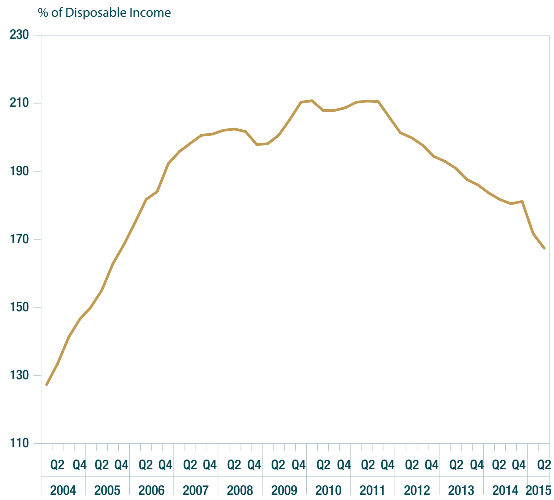
The enhanced method produces growth rates of loans advanced to both households and NFCs which are mostly lower than the traditional method, albeit trends remain the same (see Box A Chart 1). This is mainly due to the inclusion of additional repayments in the transactions series, thereby reducing the transactions and growth rates. The effect is greater for and mainly driven by loans to households. Under the new method, pre-mid 2009 growth is between 200 and 350 basis points lower than current on-balance sheet-based calculations. Rates of change in 2013, however, are 20 basis points higher on average, under the enhanced method, as on-balance sheet loans declined at a faster rate than securitised loans during this period. Since the beginning of 2015, a slight divergence is also evident, whereby the inclusion of both on-balance sheet and securitised stock, and repayments applies downward pressure to the growth rate, of approximately 70 basis points, on average. This is driven by a higher magnitude of repayments on the securitised loan stock offsetting some of the reduction in negative net lending of the on-balance sheet stock. The stock of securitised loans to Irish households, which are still serviced by Irish credit institutions, were €34.6 billion at end-November 2015.

In summary, the new method of adjustment takes into account all available information on loans advanced to the Irish real economy, regardless of whether they are derecognised from a bank's balance sheet. The enhanced method therefore offers a more complete view of underlying trends. The series are also available on the ECB's Statistical Data Warehouse (SDW) on a euro-area basis, as opposed to loans to Irish residents only. This allows for greater comparison across euro-area countries and nets out different accounting practices in member states in relation to securitised loans and transfers.[6]

6 See http://www.ecb.europa.eu/press/pr/date/2015/html/pr150921.en.html.

The stock of outstanding household debt continued to decline further during the second quarter of 2015, falling to €153.2 billion or €33,056 per capita, reaching its lowest level since Q1 2006. Household debt has decreased steadily since its peak of €203.7 billion in Q3 2008. More recently, declining household debt has coincided with increasing household disposable income, accelerating the improvement in the debt to disposable income ratio, which had fallen by 14.3 percentage points to 167.4 per cent in the year to end-Q2 2015, as shown in Chart 3. Nonetheless, Ireland's ratio of debt to disposable income remains high, with only Denmark and the Netherlands ranked higher in the European Union. Box B discusses recent trends in deleveraging in Ireland and the euro area.

Chart 3: Household Debt to Disposable Income



— Debt to Disposable Income

Source: Quarterly Financial Accounts, Central Bank of Ireland; Quarterly Non-Financial Accounts, CSO.

Box B: Trends in Net Lending and Borrowing by Economic Sector – A Euro Area Comparison

By Mary Cussen and Kenneth Devine[7]

Significant attention has focused on the extremely high debt levels accumulated by many sectors of the economy in the lead up to the financial crisis and, consequently, the need for balance sheet repair. In recent years, a number of sectors in the economies of the most affected countries have responded to the crisis by significantly altering their behaviour. In most cases, this involved a sustained period of debt reduction, which required a transition into net lenders[8] for sectors which traditionally were borrowers. Examining the net lending/borrowing of the institutional sectors of the economy allows an assessment of which sectors changed their behaviour following the crisis, and whether they are reverting back towards pre-crisis behaviour. In addition, as all borrowing must be financed by lending, the net lending/borrowing framework also shows which sectors have been borrowing the supplementary funds made available by deleveraging in other sectors. This Box examines sectoral shifts in net lending/borrowing in recent years in some of the euro area economies most severely impacted in the period succeeding the financial crisis.

With the exception of Greece, all households in the countries examined became net lenders, or have increased net lending, from 2009 onwards (Box B Chart 1-5). Households can only be net lenders if their income exceeds their consumption. In the case of Greece, declining disposable income levels have most likely prevented debt reduction on aggregate by Greek households. As shown in Box B Chart 1, Irish households engaged in the highest levels of deleveraging of the countries examined. In fact, from a low point in Q4 2006 to its peak in Q1 2010, the accumulated net lending by Irish households was the equivalent of 14.9 per cent of GDP. However, since Q4 2014, Irish households have reverted to becoming net borrowers, albeit to a much lesser extent that in the pre-crisis years.

7 Senior Economist and Research Assistant, Statistics Division, Central Bank of Ireland.

8 Net lending in non-financial accounts broadly equals household's disposable income minus their consumption. It can also be calculated from financial accounts as transactions in financial assets by households minus their liabilities. When net lending is negative, it is called net borrowing.

Box B: Trends in Net Lending and Borrowing by Economic Sector – A Euro Area Comparison
By Mary Cussen and Kenneth Devine

A large amount of deleveraging by private corporations has also taken place following the crisis, as these entities quickly attempted to repair their balance sheets. Koo (2014)[9] contends that a number of the economies most affected by the crisis are experiencing a recessionary period, which he refers to as a 'balance sheet recession'. This occurs following the bursting of an asset price bubble, in this case property prices, when those sectors of the economy most impacted shift their focus from profit maximisation and instead adopt a debt minimisation approach.

The non-financial corporation (NFC) sectors of all the studied economies became net lenders at some point during the crisis. However, as can be seen in Box B Charts 3 and 5, Italian and Portuguese NFCs became net lenders much later than their Irish and Spanish counterparts, with debt reduction of any significance only taking place from 2011 onwards. NFCs were the principal driver in Italy and Portugal, while deleveraging in Ireland and Spain was also evident in the household sector. In Portugal, between Q4 2008 and Q4 2013, the rate of NFC borrowing slowed, eventually switching to net lending. This signified a movement of 11.9 per cent of GDP over the period, a level far above the largest relative movement experienced by the EU (3.7 per cent). Net lending, while positive across all countries, had fallen from peak levels by Q2 2015, although still remained high in Greece.

In terms of financial corporations, Ireland recorded the highest level of deleveraging as they sought to repair their balance sheets during the recessionary period. The financial corporation sector increased deleveraging by 21.7 per cent of GDP over a four year period from Q4 2006 to Q4 2010, to reach 25 per cent of GDP in Q4 2010. This was the largest debt reduction of any studied sector. This reflects the well-documented difficulties experienced by the Irish banking sector during the crisis. The closest comparable figure is that of Spain, which saw an increase in financial corporation deleveraging of 6 per cent of GDP from Q1 2007 to Q4 2012. Since its peak, the financial sector in Ireland had vastly reduced its deleveraging to sit at a net lending level of 4.4 per cent of GDP at end-Q2 2015. Greece is the only country where the financial corporation sector was a net borrower during the period examined, experiencing 10 consecutive quarters of net borrowing from Q2 2007 to Q3 2009.

Ireland's government borrowing peaked in Q4 2010 at 32.3 per cent of GDP, well above the highest levels experienced by Italy (5.3 per cent), Spain (11.1 per cent) and the EU (7 per cent). The extremely high Irish deficit from 2009 to 2011 reflected, in part, support to the Irish banking system[10]. Since these uncharacteristically high deficits in the midst of the crisis, the level of government borrowing across all countries had, by Q2 2015, fallen significantly from peak levels. The most significant decrease was in Ireland, where the deficit fell by 29.3 per cent of GDP to 3 per cent of GDP between Q4 2010 and Q2 2015, only slightly above the EU figure of 2.6 per cent.

In conclusion, the Irish private sector[11] has experienced the highest level of net lending of the euro area peripheral countries examined, since the financial crisis began. This reflected the considerable deleveraging which has taken place in recent years. The Irish Government also ran the highest deficit of the countries examined in this Box, due in part to its interventions in the banking sector during the crisis. In recent quarters, however, Irish private sector net lending has declined or, in the case of households, reversed. In addition, the State deficit has substantially decreased. Private-sector deleveraging in Spain has followed a similar pattern to Ireland, although smaller in relative terms. In contrast, the NFC sectors in Italy and Portugal only began deleveraging at a much later stage. It is notable that the household sector in Ireland has reverted to a net borrower since Q4 2014. This may indicate that the reversion to pre-crisis net lending/borrowing patterns is further advanced in Ireland, compared to other peripheral countries.

9 Koo, R. C. (2014), 'The Escape from Balance Sheet Recession and the QE Trap: A Hazardous Road for the World Economy', John Wiley & Sons.

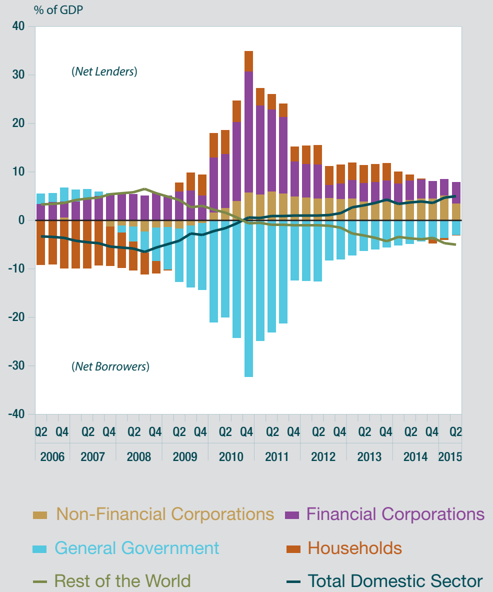
10 Cussen, M. and M. Lucey, (2011), 'Treatment of Special Bank Interventions in Irish Government Statistics', Central Bank of Ireland Quarterly Bulletin No. 4, p78-92.

11 The private sector is composed of households, non-financial corporations and financial corporations.

Box B: Trends in Net Lending and Borrowing by Economic Sector – A Euro Area Comparison

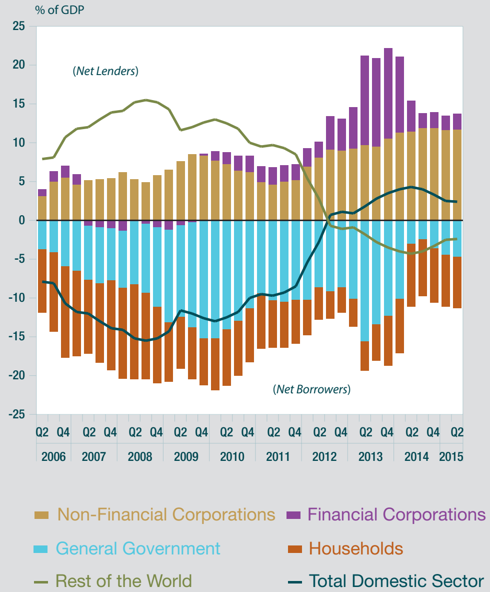
By Mary Cussen and Kenneth Devine

Box B Chart 1: Net Lending/Borrowing for Ireland



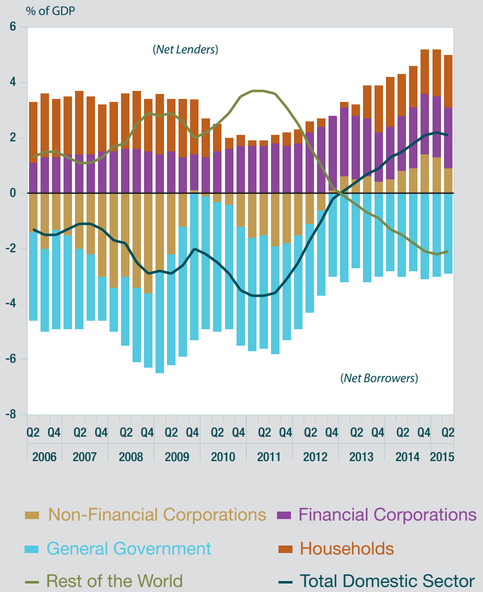
Source: Eurostat.

Box B Chart 2: Net Lending/Borrowing for Greece



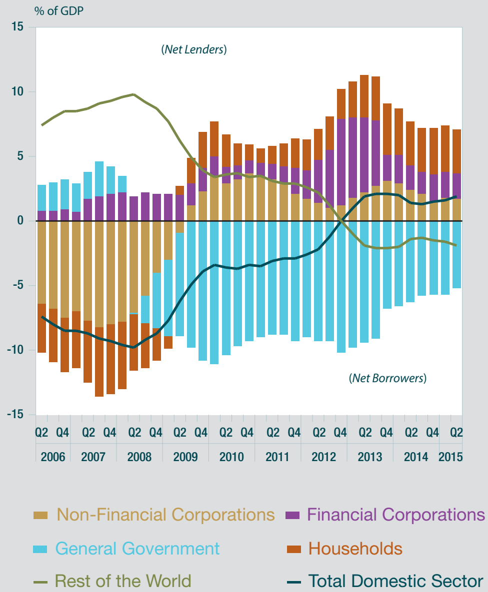
Source: Eurostat.

Box B Chart 3: Net Lending/Borrowing for Italy



Source: Eurostat.

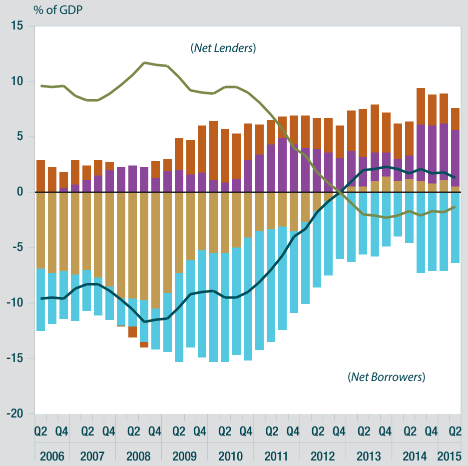
Box B Chart 4: Net Lending/Borrowing for Spain



Source: Eurostat.

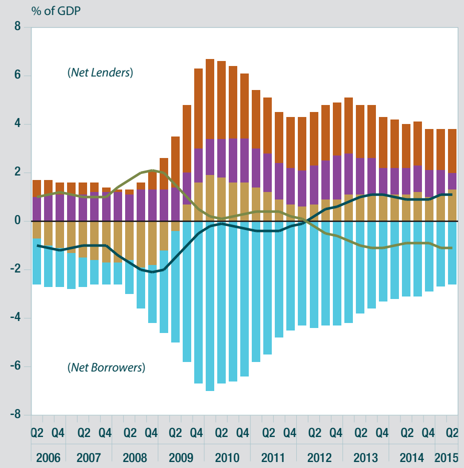
Box B: Trends in Net Lending and Borrowing by Economic Sector – A Euro Area Comparison
By Mary Cussen and Kenneth Devine

Box B Chart 5: Net Lending/Borrowing for Portugal



Source: Eurostat.

Box B Chart 6: Net Lending/Borrowing for EU



Source: Eurostat.

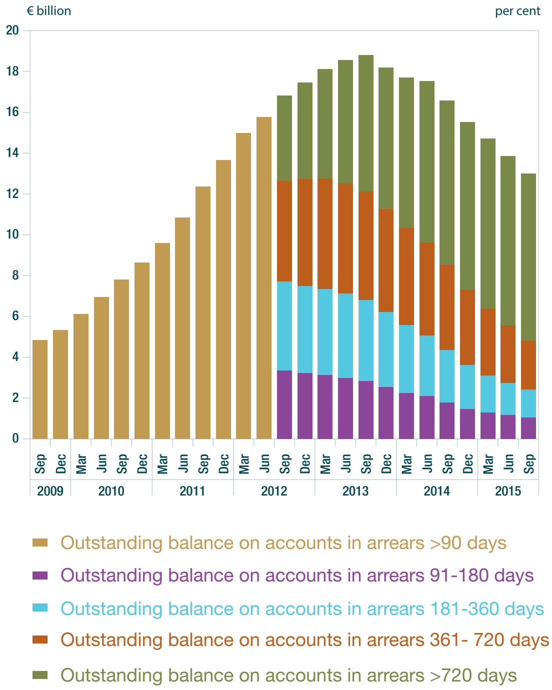
Household net worth, calculated as the sum of household housing and financial assets minus their financial liabilities, increased by €3.5 billion to reach €600.1 billion, or €129,454 per capita, at end–Q2 2015. The largest contributor to this improvement was a rise in the value of housing assets, which increased by €4.8 billion, while financial liabilities decreased by €2.3 billion. Overall household financial assets decreased by €3.6 billion, primarily reflecting valuation changes in insurance technical reserves and broader financial market developments, although holdings of deposits increased by €840 million in Q2 2015. Household deposits have been growing consistently since mid-2014, in tandem with declining borrowing levels. This may indicate a greater reliance on own resources for funding purposes.

While the stock of household debt has continued to fall, the weighted average interest rate on the outstanding stock of household debt also fell in the third quarter of 2015. The interest rate on outstanding loans for house purchase, which account for over 80 per cent of household borrowing, fell marginally from an average of 2.69 per cent in Q2 to 2.66 per cent in Q3. Conversely, interest rates on outstanding consumer debt with maturities of less than five years and on overdrafts rose sharply.

New business interest rates on floating and up to one year fixation agreements for house purchase (including renegotiations) stood at 3.24 per cent at end–Q3 2015, down from 3.38 per cent in the previous quarter. Interest rates on loans for house purchase fixed for over one year increased over the quarter to 3.73 per cent, up from 3.58 per cent in Q2 2015, but were some 68 basis points lower than the same period in the previous year. In terms of new business volumes, there has been a marked shift towards fixed rate mortgages, which now account for roughly half of new mortgages, up from 39 per cent at the end of 2014. New business fixed rates (excluding renegotiations) are now cheaper than variable rates for all maturity categories.

The number of mortgage accounts for principal dwelling houses (PDH) in arrears continued to fall in Q3 2015, the ninth quarterly decline in a row, as shown in Chart 4. A total of 92,291 (12.3 per cent) of accounts were in arrears at end-Q3, a decline of 6 per cent relative to Q2. PDH mortgage accounts in arrears over 90

Chart 4: Outstanding Balance on PDH Mortgages in Arrears



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

days also continued to fall during Q3 2015, standing at 65,584 (8.7 per cent of total) by end-September, reflecting a 6.7 per cent decline over the quarter. For the first time since the onset of the crisis, mortgages in arrears of over 720 days declined during Q3 2015, falling by 2 per cent over the quarter. Notwithstanding this decline, the levels of long-term mortgage arrears remain a cause for concern.

Buy-to-let (BTL) mortgage accounts in arrears over 90 days decreased by 4.5 per cent during Q3 2015. At end-June, there were 15,275 BTL accounts in arrears over 720 days, with an outstanding balance of €4.6 billion, equivalent to 17.4 per cent of the total outstanding balance on all BTL mortgage accounts.

Similar to households, NFC economic activity has been recovering strongly, despite ongoing deleveraging in relation to resident credit institutions. In this context, non-bank funding for NFCs and particularly small- and medium-sized enterprises (SMEs) is becoming more relevant. For example, trends in venture capital, an alternative source of funding, are discussed in Box C. NFC debt as a percentage of GDP continued to decline in Q2 2015, falling from 193.8 per cent in Q1 2015 to 185.4 per cent. This decline reflects both an increase in the value of annualised GDP, as well as a 1.5 per cent fall in the stock of NFC debt. NFC debt as a percentage of GDP is currently at its lowest level since Q2 2009. It is important to note that Ireland has substantial multinational corporation (MNC) activities, which can cause volatility in debt movements from quarter-to-quarter. NFC debt to GDP ratio in Ireland is relatively high, arising from these MNC activities, similar to Luxembourg (339.1 per cent) and Cyprus (228.2 per cent), who also have large multinational sectors.

Box C: Recent Developments in the Venture Capital Funding Environment in Ireland

By Dermot Coates, Siobhán O'Connell and Jenny Osborne-Kinch[12]

Venture capital funding, a form of equity-based funding[13], is an important alternative source of finance for the small- and medium-sized enterprise (SME) sector. It is typically targeted at that subset of SMEs with scalable business models and with high growth potential in technology and other science-based spheres. The recent global financial crisis exacerbated the difficulties faced by many SMEs in securing access to finance, undermining prospects for SME survival and growth. The impact of these financial constraints is not limited to more established SMEs but has the potential to severely affect enterprises at the very earliest stages of their lifecycle, where risks and uncertainty are higher. A tighter bank lending environment to private enterprises in Ireland over recent years is in marked contrast to trends in venture capital financing, where the availability of funding has proven to be more robust. The availability of venture capital and historic trends therein provide an important indicator of the capacity of the SME sector to access external equity for start-up, early development and expansion phases[14]. The objective of this Box is to shed some light on the developments in Ireland's venture capital funding environment over recent years.

12 Economist, Funds Data Analyst and Senior Economist, Statistics Division, Central Bank of Ireland.

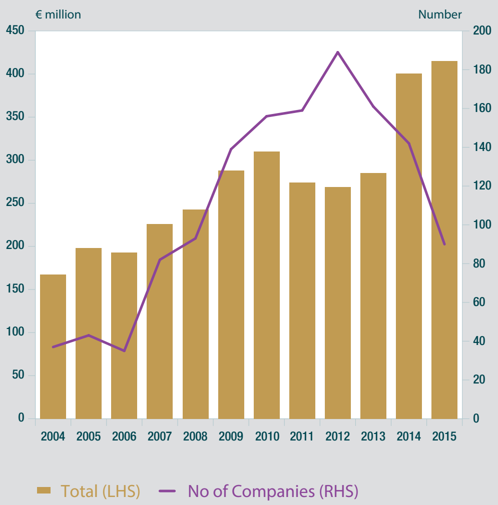
13 Venture capital is a specialised funding mechanism for the provision of capital to early-stage, unquoted firms for the purposes of growth or expansion.

14 OECD (2012), 'Financing SMEs and Entrepreneurs 2012: An OECD Scoreboard', OECD: Paris.

Box C: Recent Developments in the Venture Capital Funding Environment in Ireland
By Dermot Coates, Siobhán O'Connell and Jenny Osborne-Kinch

Ireland has a well-developed venture capital funding environment and, in recent years, it has been ranked highly amongst developed economies for venture capital investment as a proportion of GDP[15]. This is reflective of a combination of State co-investment and increasing private sector investment (including international investors). Through both public and private investment, a total of €3.3 billion has been invested since 2004 in Irish SMEs. Total venture capital investment to Irish SMEs stood at close to €170 million in 2004 but rose rapidly thereafter to €415 million by end-September 2015 (see Box C Chart 1). The rate of this increase was particularly notable over the period 2008 to 2010, as the financial crisis took hold throughout the economy. In parallel to this increase in investment, the number of Irish SMEs in receipt of venture capital funding also rose. Over the decade to 2014, the number of firms that received investment increased by just over 100 firms to 142 firms. The average value of these investments has also changed over time (see Box C Chart 2).

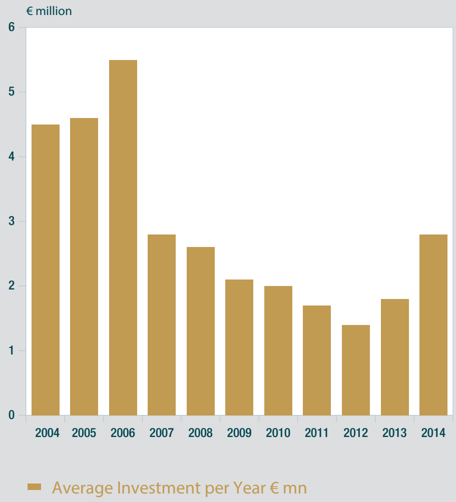
Box C Chart 1: Annual Venture Capital Investment and Volume of Transactions, 2004-2015



Source: Irish Venture Capital Association (IVCA).

Notes: (i) An individual SME can be in receipt of investment funding in multiple years as it progresses through successive funding rounds. (ii) 2015 data is total up to Q3.

Box C Chart 2: Average Investment per Annum, 2004-2014



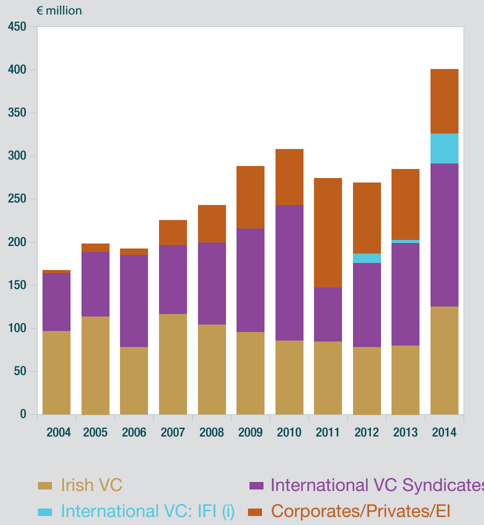
Source: Irish Venture Capital Association (IVCA).

There are a number of sources of venture capital financing. Venture capital managers, including private equity firms, establish funds (sometimes with co-investment from State agencies and credit institutions) to attract investment and channel funding to SMEs. Box C Chart 3 below details the totals invested by various sources of venture capital financing from 2004 to 2014. In 2004 and 2005, Irish venture capital funds represented nearly 60 per cent of venture capital financing. Corporates (effectively, the venture capital arm of multinational corporations operating in Ireland), private investors and Enterprise Ireland represented an average of 21 per cent of the funding over the period 2004 to 2014. International venture capital funds have played an increasing role over the past decade.

15 OECD (2009), 'Financing High-Growth and Innovative Start-Ups and SMEs: Data and Measurement Issues', OECD: Paris & Forfás (2012), 'A Review of the Equity Investment Landscape in Ireland', Forfás: Dublin.

Box C: Recent Developments in the Venture Capital Funding Environment in Ireland
By Dermot Coates, Siobhán O'Connell and Jenny Osborne-Kinch

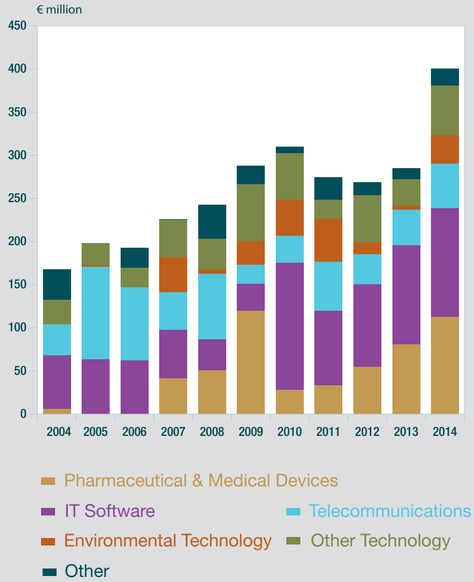
Box C Chart 3: Sources of Venture Capital Financing in Ireland



Source: Irish Venture Capital Association (IVCA).

Note: Innovation Fund Ireland (IFI) was established to encourage the set-up of European headquarters and subsequent investment in Ireland by international venture capital funds.

Box C Chart 4: Investment by Sector of Funding



Source: Irish Venture Capital Association (IVCA).

Note: Other Technology includes Nano, Fibreoptics, Photonics, Semiconductors, etc.
IT software includes medical, business and enterprise.

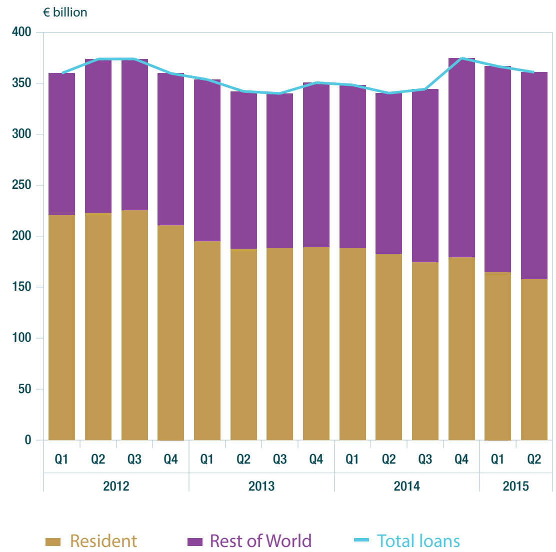
The profile of those SMEs in receipt of venture capital funding illustrates the target cohort of high potential technology and life sciences-based sectors. These firms are focused on new innovations or product developments within their sectors. In 2014, funding was provided to the software development; pharmaceutical and medical devices; and telecommunication sectors amongst others (Box C Chart 4)[16]. In conclusion, it is clearly evident that venture capital is an important alternative source of funding for innovative and high potential firms.

16 The authors estimate that for firms that received venture capital funding between 2007 and 2010 (at the peak of the financial crisis), 66 per cent of these firms are still currently listed as operational on the records of the Companies' Registration Office (as at Q4 2015), albeit that other factors (i.e. mergers, acquisitions, etc.) might impact upon the interpretation of these figures.

NFC loan liabilities fell in the first two quarters of 2015 to €361 billion. The recent fall masks significant divergence between domestic and foreign sources of financing of NFC loans, which is shown in Chart 5. While loans from domestic entities have fallen by 12.1 per cent since the end of 2014, loans from the rest of the world have increased by 4 per cent over the same period. This again largely reflects the significant activities of MNCs in Ireland, which have access to international sources of funding. Conversely, domestic financing of NFC loans has fallen from €221 billion in Q1 2012 to €157 billion in Q2 2015.

There were, however, some positive developments in gross new lending to the employment-intensive SME sector, which has been traditionally reliant on the domestic banking sector. Gross new lending advanced by Irish credit institutions increased by €400 million in the year ending Q3 2015 compared to the year to Q3 2014, with the agriculture and real estate sectors being the largest recipients. However, repayments continued to outpace new lending, with net lending for SMEs falling at an annual rate of 8.8 per cent in the third quarter of 2015.

Chart 5: Domestic and Foreign Financing of NFC Loans



Source: Quarterly Financial Accounts, Central Bank of Ireland.

Chart 6: Irish Government Ten-Year Bond Yields

Source: Thomson Reuters.

Direct investment by foreign-owned MNCs into their Irish operations increased by €4.6 billion over the third quarter of 2015, with increases in equity and reinvested earnings of €9.8 billion and €9.3 billion, respectively, offset by a €14.5 billion decrease in other capital. Over the same time period, direct investment income earned abroad by Irish-owned multinational MNCs remained steady at €4.8 billion. Foreign direct investment by Irish-owned MNCs abroad remained strong increasing by €16.8 billion during Q3 2015, primarily due to an increase in other capital of €19.2 billion. However, this investment predominantly reflects the operations of multinational NFCs who have established their corporate headquarters in Ireland.

Government

Government financing conditions improved during the third quarter, as bond yields recovered following the successful agreement of a new financial assistance programme for Greece. Yields on Irish government ten-year bonds had been steadily falling in the early part of the year, reaching a record low of 0.6 per cent in April. This reflected the ongoing economic recovery as well as an increasingly expansionary monetary policy that depressed euro-area sovereign bond yields generally. These trends resumed in the third quarter following uncertainty emanating from the Greek crisis, which saw bond yields increase across the euro area with 10-year yields for Ireland reaching 1.6 per cent in June 2015. Nevertheless, Irish bond yields have remained relatively stable throughout this period compared to other peripheral euro area countries, and ended Q3 2015 at under 1.1 per cent. Chart 6 highlights how the NTMA has availed of the favourable interest rate environment to raise funding in recent months, and how certain international developments have impacted bond yields.

Financial Sector

The funding position of resident credit institutions continued to improve in the third quarter of 2015, with deposits from the private sector increasing at an annual growth rate of 0.6 per cent at end-Q3 2015 and positive net transactions of €1.5 billion over the quarter. This improvement is primarily due to increased investment in deposits by NFCs of

€1.6 billion, although net transactions from households also grew by €0.8 billion during Q3 2015. This reflects a shift from government deposits into bank deposits by households. These movements offset continued outflows of deposits from non-bank financial institutions of just over €1 billion. Reliance on funding from the Central Bank of Ireland amounted to less than €10 billion at the end of the quarter, the lowest level since the series began in 2003, further underscoring the normalisation underway in the funding of the domestic banking system.

The net asset value of Irish resident IFs fell 7 per cent over the third quarter of 2015, from €1,456 billion to €1,355 billion, but was nevertheless €140 billion larger than at end–Q3 2014. Concerns surrounding emerging economies, including China, caused financial markets to fall, confounding market expectations of a Federal Reserve interest rate increase in September. Equity markets in the UK, US, Japan and the euro area declined by an average of 10 per cent over the quarter and, as a result, Irish resident equity funds experienced negative revaluations of €54 billion.

The net asset value of Money Market Funds was €424 billion at end-Q3 2015. Compared to Q2 2015, when outward transactions of €37 billion occurred as markets reacted to US interest rate expectations, transactions in the third quarter were relatively stable, falling by €657 million. There was some increase in the weighting of longer maturity assets. Holdings of debt securities with a residual maturity of less than three months fell by €3 billion compared to an increase of €24 billion in holdings of debt securities with residual maturity of over three months.

Total FVC asset values fell to €415 billion in Q3 2015, despite an increase in FVC reporting numbers. The fall in asset values was primarily attributable to valuation movements, as net transaction flows into Irish FVCs remained positive over the quarter.