Household Credit Market Report

Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

H2 2016

The Central Bank of Ireland's *Household Credit Market Report* (HCMR) is compiled by the Financial Stability Division. It collates information from a wide range of internal and external sources to give an up-to-date picture of developments in the household credit market in Ireland.[1] Data are drawn from Central Bank of Ireland *Credit, Money and Banking*, *Retail Interest Rates*, *Quarterly Financial Accounts*, and *Mortgage Arrears* aggregate statistics, loan-level data collected by the Central Bank of Ireland from the Irish domestic banks, the ECB/Central Bank of Ireland *Bank Lending Survey* and the Banking and Payments Federation Ireland. For cross-country comparisons, the report also draws on data from the ECB (MFI statistics). All data sources are detailed in Appendix A. Appendix B provides a glossary of key terms and abbreviations. Figures may differ from previous HCMR versions where revisions have taken place.

The report is structured as follows: Section 1 provides an overview of developments in total household debt. Section 2 focuses on the mortgage credit market. Section 3 highlights developments in non-mortgage credit. This report also includes a number of Boxes. Box 1 provides a review of the financial resilience of mortgaged Irish households. Box 2 presents new loan-level data submitted to the Central Bank of Ireland following the introduction of the macroprudential mortgage measures in 2015 and Box 3 contextualises the level of mortgage default at Irish banks from a European perspective.

Executive Summary

- Household debt sustainability in Ireland continues to improve with both debt-to-income and debt-to-asset levels decreasing. However, Irish household indebtedness remains high in a European context.
- In the mortgage market, the pace of decline in outstanding credit shows some signs of stabilisation across both Principal Dwelling House (PDH) and Buy-to-Let (BTL) lending.
- The value and number of new mortgage loans increased year-on-year in Q3 2016 by 17 per cent and 12 per cent, respectively. The largest share of new lending, circa 48 per cent, went to First Time Buyers (FTBs).
- New mortgage approvals (both value and number) have increased year-on-year in Q3 2016.
- The average interest rate on outstanding mortgages in Ireland stood at 2.60 per cent in Q2 2016. The rate on outstanding PDH mortgages stood at 3.91 per cent for standard variable rate (SVR) contracts and 1.01 per cent for tracker contracts.
- The standard variable rate on new lending for PDH mortgages stood at 3.60 per cent in Q2 2016, down from 4.13 per cent in Q2 2015.
- For the period January to June 2016, the average loan-to-value ratio for new residential property PDH mortgages for FTBs was 78.6 per cent and the average loan-to-income ratio was 2.9. The corresponding figures for Second and Subsequent Borrowers (SSBs) were 66.2 per cent and 2.4 respectively.
- The overall value of mortgages in arrears continues on a downward trend, falling to €17.6bn in Q2 2016. This represented approximately 14.0 per cent of total mortgage balances.
- The number of PDH mortgage modifications stood at 120,614 in Q2 2016 for PDH loans. The total number of modifications for BTLs stood at 26,930 in Q2 2016.
- Total non-mortgage consumer credit has begun to grow following a period of considerable contraction. Expansion has been driven by loans of 3-5 year maturity.
- Regarding the performance of non-mortgage loans, the arrears rate is also on a declining trend. As of December 2015, arrears rates ranged from approximately 3.6 per cent on revolving facilities (credit cards and overdrafts) to 12.1 per cent for unsecured term loans.

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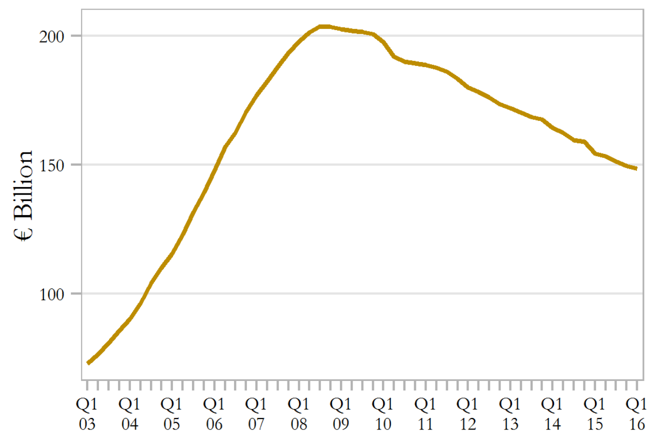
1 Overview

Figure 1 presents the total outstanding balance of household debt. Total debt stood at €148.5bn in Q1 2016 from €154.3bn a year earlier. Total debt comprised short-term debt (up to one year or payable on demand) of approximately €4.6bn and long-term debt (greater than one year maturity) of €143.9bn.

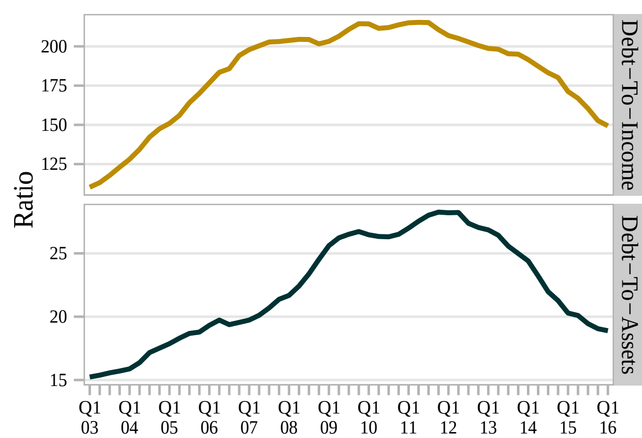
Figure 1. Outstanding Household Debt, Q1 2003-Q1 2016



Source: Central Bank of Ireland, Quarterly Financial Accounts.

Figure 2 presents the household debt-to-disposable income ratio (DTI) and the debt-to-asset ratio (DTA) The decline in DTI, down to 149.4 in Q1 2016 from 171.3 one year earlier, mainly reflects deleveraging rather than income growth, which has been modest A downward trend is also evident in the DTA ratio that decreased from 20.3 in Q1 2015 to 18.9 in Q1 2016. Both indicators suggest an improvement in the sustainability of household balance sheets.

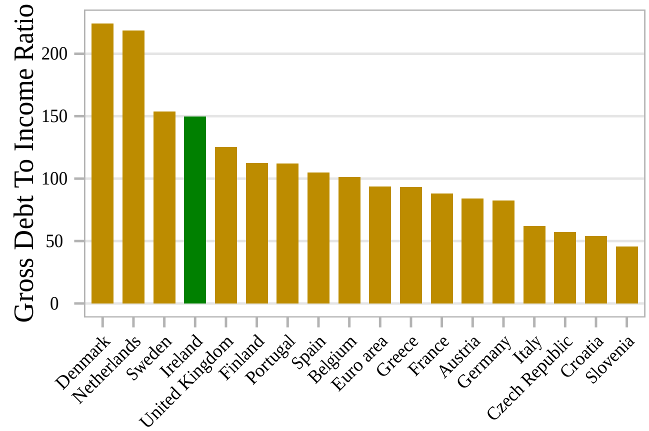
Figure 2. Household Debt-to-Asset and Debt-to-Income Ratios, Q1 2003-Q1 2016



Source: Central Bank of Ireland, Quarterly Financial Accounts.

Figure 3 presents the DTI ratio for selected European countries to provide a benchmark for Ireland's position internationally. Irish household indebtedness remains high by cross-European comparison. It stood at 149.4 in Q1 2016, above the average of 108.9 for the countries reported in Figure 3. However, relative to data indicated in the HCMR H1 2016, Ireland had now the fourth (previously third) highest DTI. Continued falls in the DTI ratio are important to reduce financial vulnerabilities.

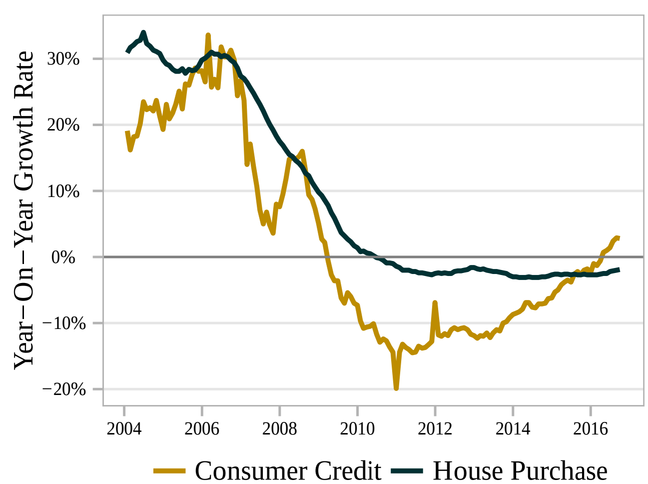
Figure 3. Debt-to-Income Ratios Across Countries, Q1 2016



Source: Central Bank of Ireland, Quarterly Financial Accounts and ECB Statistical Data Warehouse (SDW). Note: Debt-to-income ratios excluding Ireland taken from ECB SDW.

To provide some context on the path of deleveraging, Figure 4 presents the growth rate in outstanding credit to Irish resident households from Irish resident credit institutions for both consumer loans as well as loans for house purchase. The change in loans for house purchase was -1.9 per cent in September 2016, down from -2.7 one year ago. This indicates an easing in the pace of contraction. The growth in consumer loans turned positive in 2016 and the rate of growth in September 2016 was 2.8 per cent.

Figure 4. Growth Rate in Credit for House Purchase and Consumer Credit, January 2003-September 2016



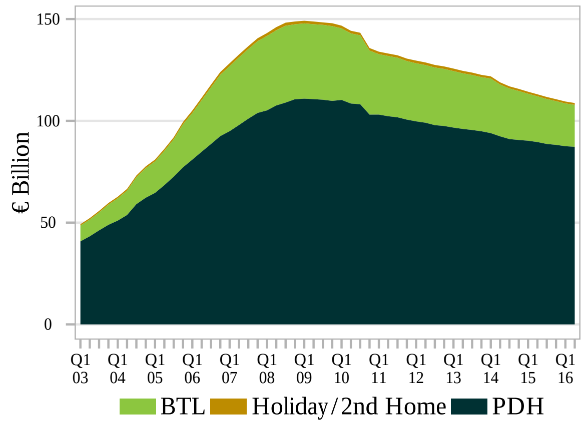
Source: Central Bank of Ireland, Credit, Money and Banking Statistics. Note: These growth rates are taken from CBI table A.5.1.

2 Developments in Mortgage Credit

2.1 Mortgage Credit Stocks Outstanding

Figure 5 presents the evolution of the total outstanding stock of credit for house purchase to domestic resident households by resident credit institutions. These data are split between loans for primary homes (PDH), buy-to-let investments (BTL) and holiday or other second-homes (Holiday/2nd Home). The majority of lending has historically been for PDH mortgages. Total outstanding PDH house purchase credit amounted to €87.2bn, BTL loans to €20.6bn and holiday or second home loans to €0.9bn in Q2 2016.

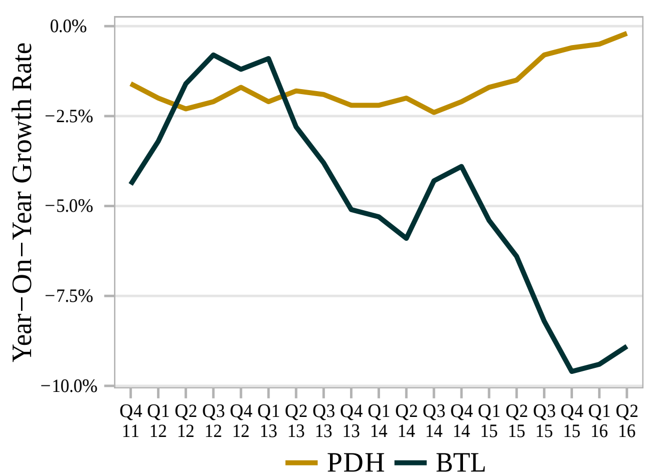
Figure 5. Outstanding Mortgage Credit by Dwelling Type, Q1 2003-Q2 2016



Source: Central Bank of Ireland, Credit, Money, and Banking Statistics. Note: Figure 5 is based on the current outstanding stock of mortgages on the balance sheet of banks residing in Ireland. These numbers are subject to population changes and asset sales in the banking sector.. Note: Totals sum CBI tables A.18.1 and A.18.2 (securitised data).

Figure 6 shows a negative growth rate in the stock of credit advanced to Irish resident households for house purchase by resident credit institutions in Q2 2016. As of Q2 2016, loans for PDH and BTL declined at an annual rate of -0.2 per cent and -8.9 per cent, respectively. A decline in the pace of deleveraging for PDH lending was already observed in 2015, but as of Q1 2016, there appears also to be a reduction in the pace of decline for BTL lending which has continued into Q2 2016.

Figure 6. Growth Rate in Outstanding Mortgage Stocks by Dwelling Type, Q2 2004-Q2 2016

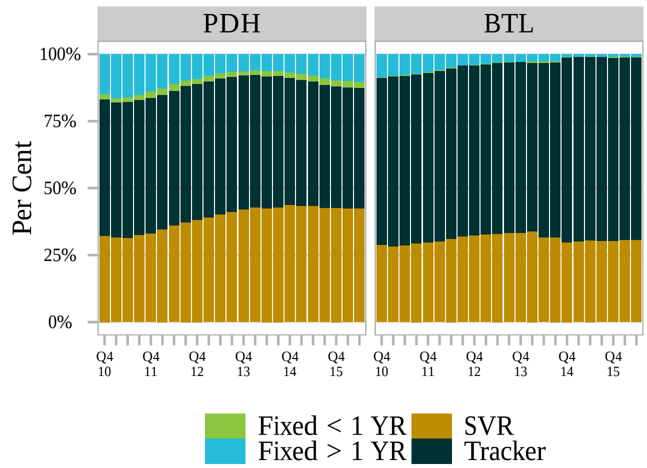


Source: Central Bank of Ireland, Private Household Credit and Deposits.

2.2 Interest Rates on Outstanding Loans

Figure 7 presents the percentage of outstanding PDH and BTL loans that was fixed rate, standard variable rate (SVR) and tracker mortgages. As of Q2 2016, for PDH loans, 42.5 per cent of the balance of loans was contracted to an SVR interest rate, a further 44.9 per cent of the balance had tracker rates and the remaining were fixed-rate contracts (with 2.2 per cent on short-term fixed and 10.3 per cent on fixed terms of greater than one year). For BTL loans, a majority were tracker rate mortgages (68.1 per cent) with SVR rates being the second largest type of rate structure (30.7 per cent). There were less than 1 percent of BTL loans on fixed rates.

Figure 7. Average Rates on Mortgage Credit Outstanding Stock, Q2 2016



Source: Central Bank of Ireland, Credit, Money and Banking Statistics. Note: SVR relates to loans with a standard variable, floating interest rate.

To provide more granular detail on the interest rates faced by borrowers with different mortgage interest rate types, Table 1 presents the average interest rate on outstanding PDH & BTL mortgages by interest rate type. As of Q2 2016 the average standard variable (SVR) or loan-to-value variable (LTVV) rate on PDH mortgages was 3.91 per cent. This rate has declined year-on-year from 4.08 per cent. The average rate on outstanding tracker PDH mortgages stood at 1.01 per cent in Q2 2016. Meanwhile the tracker rate on BTL mortgages stood at 1.05 per cent in Q2 2016. Fixed rates on PDH and BTL mortgages varied by term duration.

Table 1. Average Interest Rate on Mortgage Credit Outstanding Stock by Rate Type, Q2 2016

Average Rate	PDH	BTL
Standard or LTV Variable	3.91	4.34
Tracker	1.01	1.05
Fixed		
1 to 3 Years	3.70	4.45
over 3 years	3.56	3.41

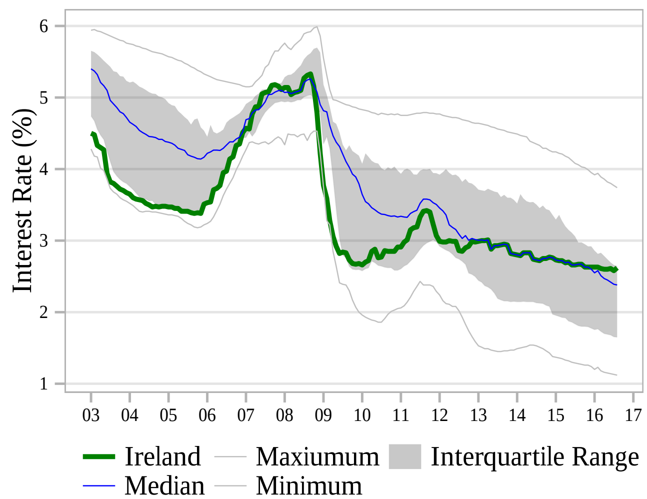
Source: Central Bank of Ireland, Retail Interest Rates.

To provide an international comparison, Figure 8 presents interest rates on the stock of outstanding mortgages for Ireland and the median across a group of select European countries.* Percentiles and the sample maximum and minimum are also presented. The interest rate on current outstanding mortgages in Ireland was 2.60 per cent as of September 2016. This fell from 2.7 per cent one year earlier. However, interest rates in Ireland are high relative to the median in other European countries presented. The falls year-on-year for Ireland have been lower than other countries.

It is important to note that, for Ireland, there are also large differences between the outstanding rate on tracker loans and standard variables rates as documented in Table 1. Figure 8 aggregates all these categories. In addition to differences in interest rates, part of the cross-country variation can thus be explained by the different shares of variable and fixed-rate mortgages in the stock of loans in each country, as well as by other structural features of the residential real estate market.

*Countries were selected on the basis of data availability. Included countries are: AT, BE, DE, ES, FI, FR, GR, IE, IT, LU, NL, and PT.

Figure 8. Interest Rates on Current Outstanding Mortgages, European Comparison, January 2003- September 2016



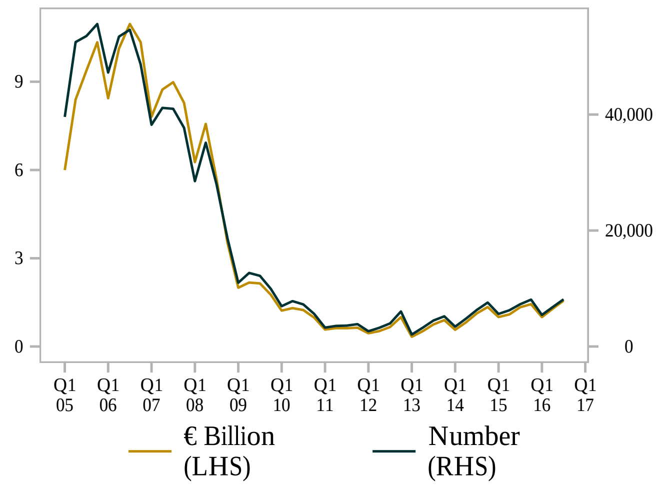
Source: European Central Bank, MFI Interest Rates.

2.3 Mortgage Approvals and New Lending

2.3.1 Overview of New Lending

Figure 9 presents data on new lending from the Banking and Payments Federation Ireland (BPFI). The value of new lending between Q3 2015 and Q3 2016 went from €1.33bn to €1.56bn, an increase of 17 per cent. The number of new loans went from 7,292 in Q3 2015 to 8,133 in Q3 2016, an increase of 12 per cent. Lending volumes remained well below levels seen in the 2005-2007 period.

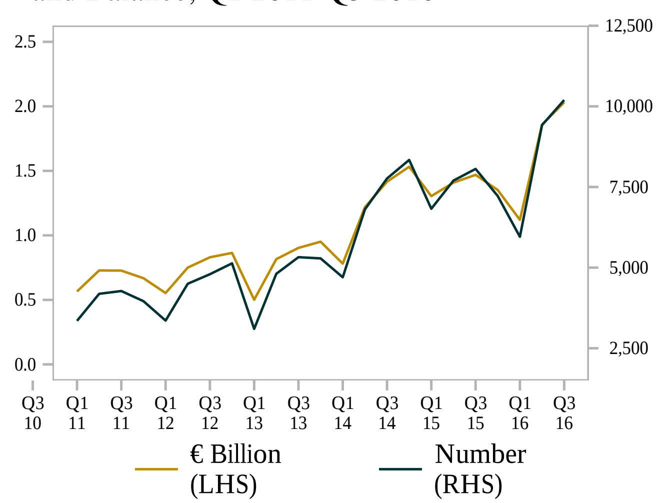
Figure 9. New Mortgage Lending by Loan Count and Balance, Q1 2005-Q3 2016



Source: Banking and Payments Federation Ireland.

Figure 10 presents data on approvals for new mortgage lending from the BPFI. The value of new mortgage loan approvals between Q3 2015 and Q3 2016 went from €1.47bn to €2.03bn, an increase of 38 per cent. The number of new loan approvals went from 8,061 in Q3 2015 to 10,196 in Q3 2016, an increase of 26 per cent.

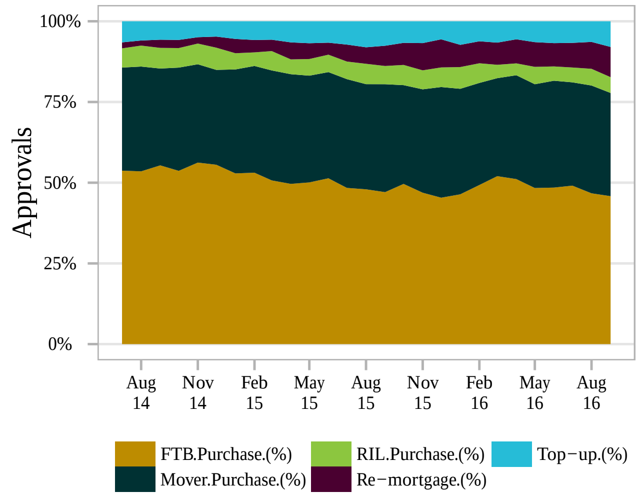
Figure 10. New Mortgage Approvals by Count and Balance, Q1 2011-Q3 2016



Source: Banking and Payments Federation Ireland.

Figure 11 presents data on approvals for new mortgage lending by credit-applicant type across the following categories: First Time Buyers (FTB), Movers, Residential Investment Loans (RIL), Re-mortgaging and equity release (Top-ups). As of September 2016, FTBs accounted for 45.8 per cent of new loans, Movers accounted for 31.9 per cent of new loans with 4.9 per cent for RIL, 9.3 per cent for re-mortgages and 7.9 per cent for Top-ups.

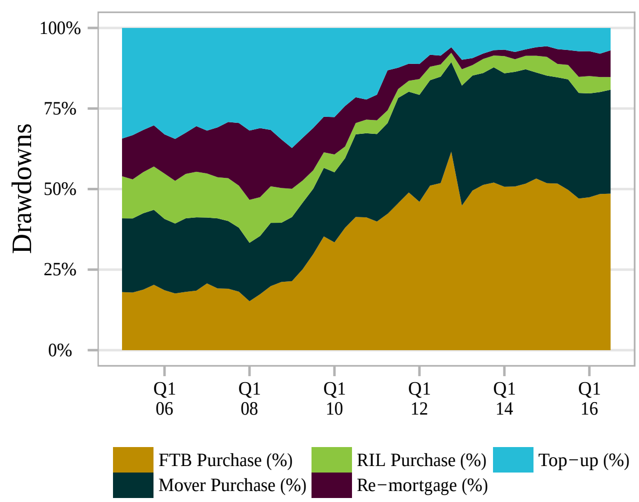
Figure 11. Breakdown of New Mortgage Approvals (Count) by Credit Type, July 2014 - September 2016



Source: Banking and Payments Federation Ireland.

Figure 12 presents new lending by loan type. The categories used are the same as those for mortgage approvals: FTBs, Movers, RILs, and Top-ups. Prior to the crisis, considerable new lending was allocated for re-mortgaging, equity release and residential investment. Since 2009, the highest share of mortgage borrowing has been undertaken by FTBs. In Q3 2016, FTBs accounted for 48.6 per cent of new loans, Movers accounted for 32.2 per cent of new loans with 3.9 per cent for RIL, 8.2 per cent for re-mortgages and 6.9 per cent for Top-ups.

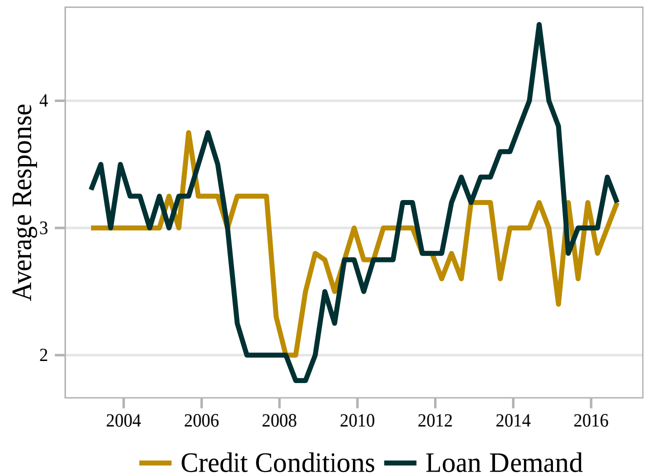
Figure 12. Breakdown of New Mortgage Lending (Drawdowns) by Credit Type, Q1 2005 - Q3 2016



Source: Banking and Payments Federation Ireland.

To provide further insight into the credit conditions facing households and their demand for credit, Figure 13 presents the average response from bank loan officers to questions on credit conditions and credit demand for house purchase from the CBI/ECB Bank Lending Survey. Each respondent indicates whether credit conditions have changed in the following manner: 1 = Tightened considerably, 2 = Tightened somewhat, 3 = Remained basically unchanged, 4 = Eased somewhat, and 5 = Eased considerably. For credit demand, respondents answer: 1 = Decreased considerably, 2 = Decreased somewhat, 3 = Remained basically unchanged, 4 = Increased somewhat, and 5 = Increased considerably. The mean responses are then calculated across loan officers. They indicate that credit demand for house purchase increased over the period 2013 to mid-2014 but stabilised in 2015. Credit conditions have improved marginally in the most recent quarter. Loan demand has also increased in the latest quarter.

Figure 13. Loan Demand and Credit Conditions for House Purchase Loans, Q1 2003 - Q2 2016



Source: CBI/ECB Bank Lending Survey.

2.3.2 New Lending for Home Purchase

Summary statistics for new mortgage lending for the period January to June 2016 inclusive are shown in Table 2. These data are taken from new loan-level Monitoring Template data (MTD) that is submitted to the Central Bank (See Box 2). The average loan size of new mortgages was €187,570. Average loan sizes were larger for SSBs relative to FTBs. The average LTV across all loans was 72.5% and the average LTI was 2.7. First time buyers had a higher average LTV and LTI relative to SSBs. On average, loan terms were 26 years, again with FTBs having a higher average term. Average gross income of borrowers getting PDH mortgage loans was €81,507. For first time buyers, average income was €65,944 and for SSBs it was €105,473. The average age of new mortgage borrowers was 34 for FTBs and 41 for SSBs.

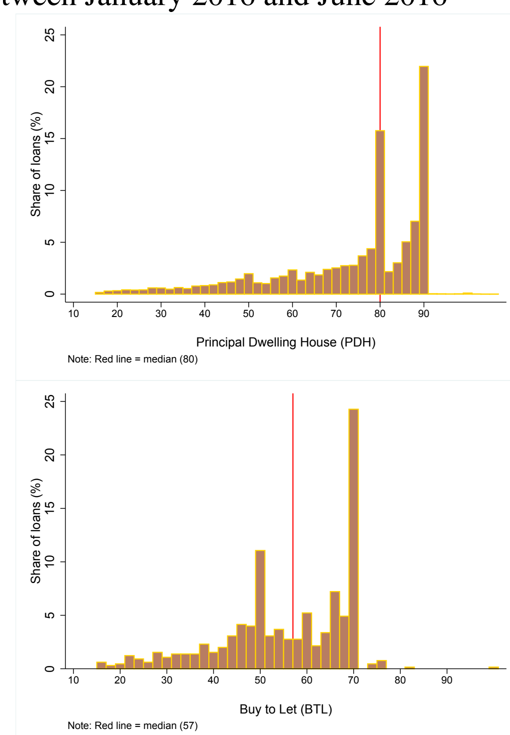
Table 2. Overview of New Lending, Jan 2016 - June 2016 - Newly submitted the Monitoring Template data (MTD) collected by the Central Bank of Ireland (See Box 2).

	All	PDH		BTL
		FTB	SSB	
Average Loan Characteristics				
Loan Size (€)	187,570	180,011	211,662	117,732
LTV (%)	72.5	78.6	66.2	55.4
LTI	2.7	2.9	2.4	–
Loan Term (Years)	26	29	24	19
Interest Rate (%)	3.6	3.7	3.4	4.9
Average Borrowers Characteristics				
Gross Income (€)	81,507	65,944	105,473	–
Age	37	34	41	–

Source: Central Bank of Ireland, MTD.

Figure 14 shows the distribution of Originated Loan-to-Value (OLTV) ratios for new lending between January and June 2016. The distributions are shown separately for PDH (Primary Dwelling House) and BTL (Buy to Let). As in 2014 and 2015, lending for the PDH market was concentrated at 90 per cent OLTV in H1 2016. A peak can be seen at or below the 80 per cent OLTV which corresponds to the macroprudential LTV limit for SSBs. There was very little lending to PDH borrowers at an LTV greater than 90 per cent. The variation across OLTV for BTL loans was less concentrated than for PDH. This is unsurprising given that many BTL investors will bring equity into the transaction. On the right tail for BTL OLTVs, the distribution spiked at the 70-71 bucket on the chart. This is consistent with clustering at the macroprudential limit of 70 per cent LTV for BTL lending. Very few BTL loans were allocated with an LTV above the regulatory limit of 70 per cent.

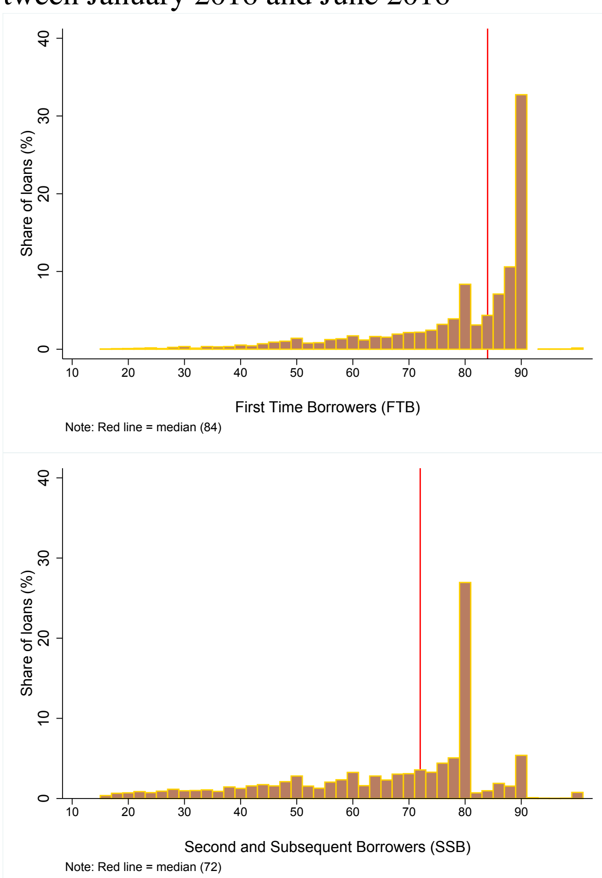
Figure 14. Distribution of Originated Loan-to-Value Ratios by type of purchase, New Lending Between January 2016 and June 2016



Source: Central Bank of Ireland, MTD.
Note: Values below 16 and above 100 LTV have been censored to these points.

Figure 15 breaks down the PDH distribution of OLTV ratios by buyer status for new mortgages from the MTD between January 2016 and June 2016. These data refer to all PDH new loans across FTBs and SSBs. The median LTV for FTBs was 84 per cent. For FTBs, a considerable portion of the distribution was clustered between the regulatory maximum limit of 90 per cent and the 80 per cent limit to which the sliding house price scale applies. For SSBs, the median LTV was 72 per cent. The vast majority of lending took place at the 80 per cent regulatory threshold. Some lending took place between 80 and 90 per cent LTV which is allowed under the regulations with very little above 90 per cent LTV.

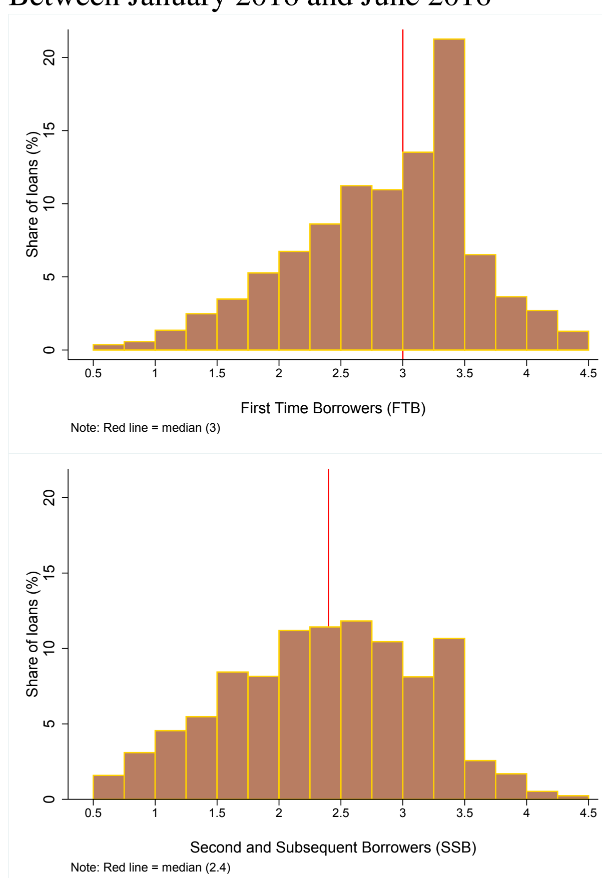
Figure 15. Distribution of Originated Loan-to-Value Ratios by Buyer status, New Lending Between January 2016 and June 2016



Source: Central Bank of Ireland, MTD.
Note: Values below 16 and above 100 LTV have been censored to these points.

Figure 16 breaks down the PDH distribution of Originating Loan-to-Income (OLTI) ratios by buyer status for new mortgages from the MTD between January 2016 and June 2016. As is the case for the OLTV charts, these data refer to all PDH loans for new residential property purchase across FTBs and SSBs. The median LTI for FTBs was 3. For FTBs, a considerable portion of the distribution was clustered at the regulatory maximum limit of 3.5 times gross income. Some lending took place for FTBs at higher LTI values. For SSBs, the median LTI was 2.4 times gross income. The distribution of LTI for SSBs was much more dispersed. There was also a spike at the 3.5 limit.

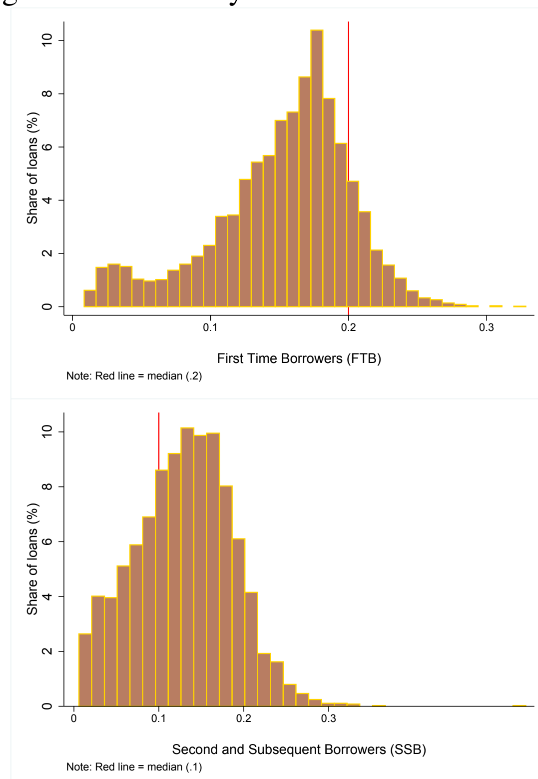
Figure 16. Distribution of Originated Loan-to-Income Ratios by Buyer status, New Lending Between January 2016 and June 2016



Source: Central Bank of Ireland, MTD. Note: Values below 0.5 LTI have been censored to 0.5

Figure 17 presents the distributions of originated debt-service-to-income ratios for FTBs and SSBs respectively from the MTD. FTBs had higher median debt-service-to-income ratio (DSR) than SSBs, at 0.2 and 0.1 respectively. For FTBs, the bulk of the distribution was concentrated between a DSR of 0.1-0.3 with relatively few FTB borrowers having a debt-service-to-income ratio less than 0.1. The dispersion of DSR for SSB was wider. For both borrower types, practically no lending occurs where the DSR exceeds 0.3.

Figure 17. Distribution of Originated Debt-Service-to-Income by Buyer Status, New Lending Between January 2016 and June 2016



Source: Central Bank of Ireland, MTD.

Table 3 presents the composition of new mortgages in terms of interest rate regimes from the MTD. More fixed rates were agreed by FTBs and banks as was evident from the 60 per cent of FTBs on this interest rate regime. More SVR rates were agreed by SSBs and BTLs, with approximately 55.4 and 91.6 per cent of borrowers in both groups agreeing this type of interest rate, respectively. Of those borrowers who contracted a fixed rate, circa 10 per cent of these were fixed for one year only.

Table 3. Rates on New Mortgages by Type of Purchase and Interest Rate Types, Jan 2016 - June 2016

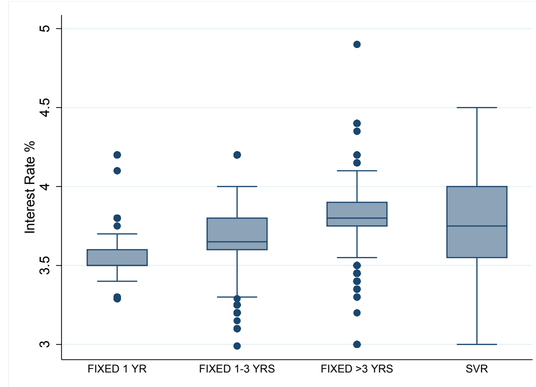
	Overall	PDH FTB	SSB	BTL
Total Lending (€mn)				
SVR	970.5	417.2	480.3	73.0
Fixed	972.7	629.3	336.8	6.7
Fixed 1 year	209.4	152.6	56.5	0.3
Share of Total Lending (%)				
SVR	48.6	39.7	55.4	91.6
Fixed	48.7	60.0	38.8	8.4
Fixed 1 year	10.5	14.5	6.5	0.3

Source: Central Bank of Ireland, MTD.

Figure 18 presents the distributions of interest rates on new loans for FTBs by interest rate type: fixed rates ($<$ 1yr, 1-3 yrs and $>$ 3 years) and standard or LTV variable rates. Each box shows the levels (as read on the y-axis) of the interest rates across different types of rate. The body of the box is delimited by the upper and lower quartile, with the line in the middle of the box indicating the median. Dots indicate outliers[a]. The majority of mortgages with a fixed interest rate were clustered between the values of 3.5 and 3.75 per cent, while there was greater dispersion in the standard variable rates offered to first time borrowers.

[a] An outlier is a value outside the quartile range.

Figure 18. Distribution of New Mortgage Lending Rates for First Time Buyers Q2 2016



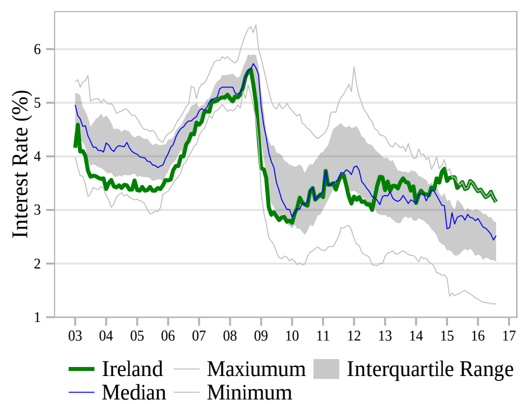
Source: Central Bank of Ireland, MTD.

Figure 19 presents interest rates on new business loans for house purchase for Ireland and the median across a group of selected European countries.[a] Percentiles and the sample maximum and minimum are also presented. The interest rate in Ireland as of August 2016, at approximately 3.15 per cent, was the highest of the countries presented. As was the case with the interest rate on outstanding loans, part of the cross-country variation can be explained by the different shares of variable and fixed-rate mortgages in total new loans in each country[b].

[a] Countries were selected on the basis of data availability. Included countries are: AT, DE, ES, FI, FR, GR, IE, IT, LU, NL, and PT.

[b] Note: Data include restructured mortgage contracts and renegotiated loans (mortgage switchers) so do not only capture the interest rates on new mortgage drawdowns. New mortgage rates (excluding restructures) are provided in table 3.

Figure 19. Interest Rates on New House Purchase Loans, Jan 2003 - August 2016



Source: European Central Bank, MIR.

Table 4 depicts the average interest rates on new PDH & BTL mortgages. As of Q2 2016, the average Standard or LTV Variable rate on new PDH mortgages stood at 3.6 per cent, while the rate on equivalent BTL mortgages was 4.87 per cent. These rates have declined by 53 basis points and 22 basis points, respectively, since the same quarter in 2015. For fixed-rate mortgages, shorter-term loans had a slightly lower interest rate than loans with longer periods of fixation. While also following a similar trend, rates on equivalent BTL were highest in the over 3 year category.

Table 4. New Mortgage Lending Rates, Q2 2016

	PDH	BTL
Standard or LTV Variable	3.60	4.87
Fixed rate		
- 1 to 3 Years	3.54	4.80
- over 3 years	3.67	5.33

Source: Central Bank of Ireland, Interest Rate Statistics. Note: These data exclude restructured arrangements.

2.3.3 Loan Refinancing

Table 5 presents summary statistics for refinancing (switcher) mortgage lending for the period January to June 2016 inclusive. As with new house purchase lending, these statistics are calculated based on the MTD. The average loan size of new refinance mortgages was €209,857. The average LTV across all loans was 57 per cent and the average LTI was 2.3. The interest rate on refinanced loans was 3.4 per cent on average and the average loan term was 21 years. Average gross income of borrowers getting refinanced PDH mortgage loans was €101,321. The average age of refinancing mortgage borrowers was 41 which is higher than that for new property purchase loans.

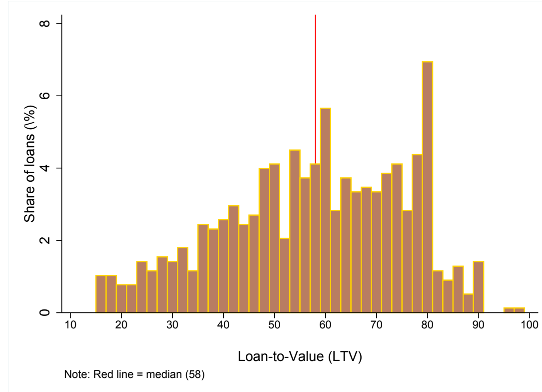
Table 5. Refinanced Mortgage Overview, January to June 2016

Refinanced Mortgages	
	All
Average Loan Characteristics	
Balance (€)	209,857
LTV (%)	57.1
LTI	2.3
Loan Term (Years)	21.3
Interest Rate (%)	3.4
Average Borrowers Characteristics	
Gross Income (€)	101,631
Age	41

Source: Central Bank of Ireland, MTD.

Figure 20 shows the distribution of loan-to-value of refinanced mortgages between January to June 2016. The median LTV for refinanced loans was 58 per cent. There was considerable dispersion across the distribution with the highest share of lending occurring at circa 80 per cent LTV. Relatively few refinanced loans originated in the period January-June 2016 had an LTV greater than 80 per cent LTV.

Figure 20. Refinanced Mortgage Loan-to-Value, January to June 2016



Source: Central Bank of Ireland, MTD.
Note: Values below 16 and above 100 LTV have been censored to these points.

2.3.4 Equity Release and Top-Ups

Table 6 presents an overview of the equity releases and top-ups granted between January and June 2016. As with new house purchase lending, these statistics are calculated based on the MTD. The average loan size of equity releases and top-ups was €72,161. The average new facility LTV for the total exposure following the top-up/equity release was 55.1 per cent and the similar facility level average LTI was 2.2. The interest rate on equity release/top-up loans was 3.6 on average and the average loan term was 20 years. Average gross income of borrowers getting top-ups/equity releases was €102,125 . The average age of top-ups/equity release borrowers was 43 which is higher than that for new property purchase loans.

Table 6. Equity Release / Top-Ups Overview, January to June 2016

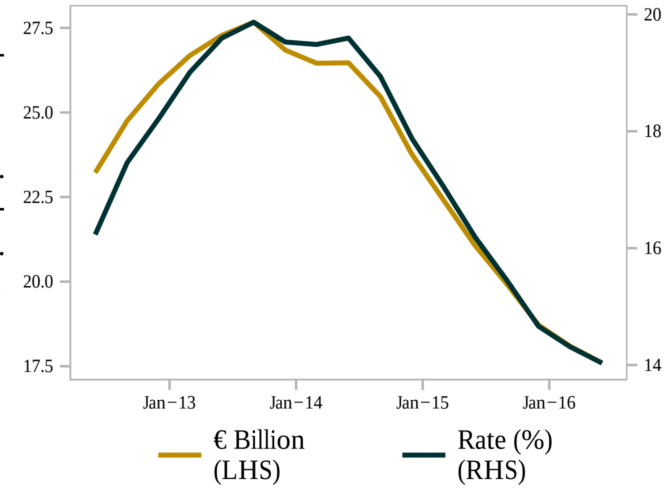
Refinanced Mortgages	
	All
Average Loan Characteristics	
Loan Size (€)	72,161
LTV (%)	55.1
LTI	2.2
Loan Term (Years)	20.4
Interest Rate (%)	3.6
Average Borrowers Characteristics	
Gross Income (€)	102,125
Age	43

Source: Central Bank of Ireland, MTD.

2.4 Household Vulnerability and Mortgage Arrears

Figure 21 presents the total value of outstanding mortgage balances in arrears across both PDH loans and BTL loans. As of Q2 2016, €17.59bn worth of loans were in arrears, down from €19.92bn in Q2 2015. In Q2 2016, 14.01 per cent of the value of all residential mortgage loans outstanding was in arrears. The overall value of mortgage arrears continues on a downward trend, having peaked at over €27.66bn in Q3 2013 or approximately 19.92 per cent of all loan balances.

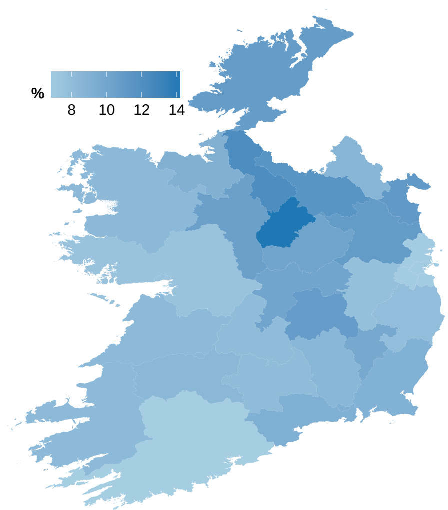
Figure 21. Mortgage Arrears by Rate and Balance, Q2 2012-Q2 2016



Source: Central Bank of Ireland, Mortgage Arrears Statistics.

Figure 22 presents the percentage of loans that were in arrears by county in December 2015 from the Central Bank Loan-Level Data (LLD). There was considerable variation across counties in Ireland. Default rates were the lowest in large urban centers. Arrears rates were high in counties in the Border and Midlands regions.*

Figure 22. Arrears Rates on All Residential Mortgages by County (Per Cent of Loans), December 2015

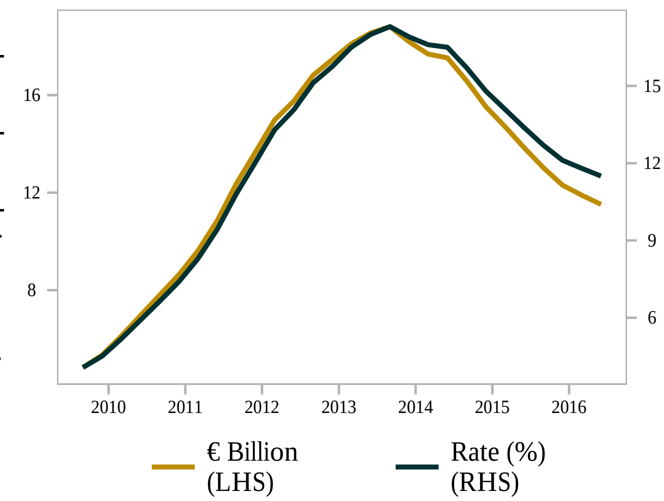


Source: Central Bank of Ireland, Loan Level Data (3 Banks).

*Note that as these data were taken from the Central Bank of Ireland's Loan Level Data they differ from statistics provided as part of the official Mortgage Arrears statistics due to differences in the reporting population. A breakdown of arrears by county from the official returns is not available.

Figure 23 presents the total value of mortgage balances in arrears for PDH loans as well as the share of the total value of outstanding loans that this balance accounts for. The value of mortgages in arrears peaked at just over €18.81bn in Q3 2013. This represented just over 17.30 per cent of the total value of the outstanding stock of mortgages. Since then, there has been a general decline in the value of mortgages in arrears to €11.51bn in Q2 2016. This accounts for 11.5 per cent of the value of the outstanding stock.

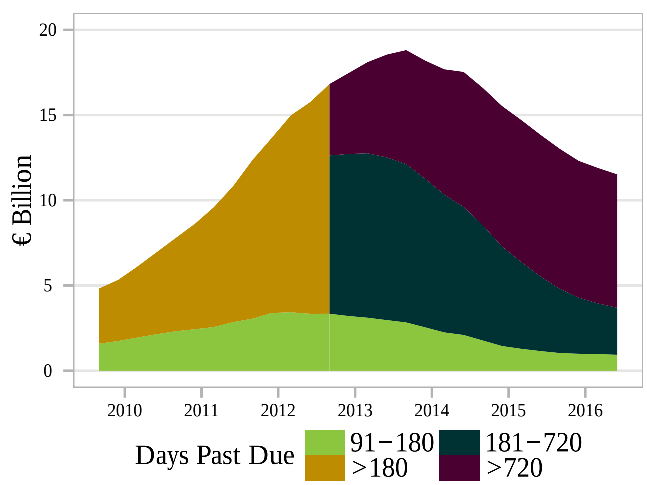
Figure 23. PDH Mortgage Arrears by Rate and Balance, Q3 2009-Q2 2016



Source: Central Bank of Ireland, Mortgage Arrears Statistics.

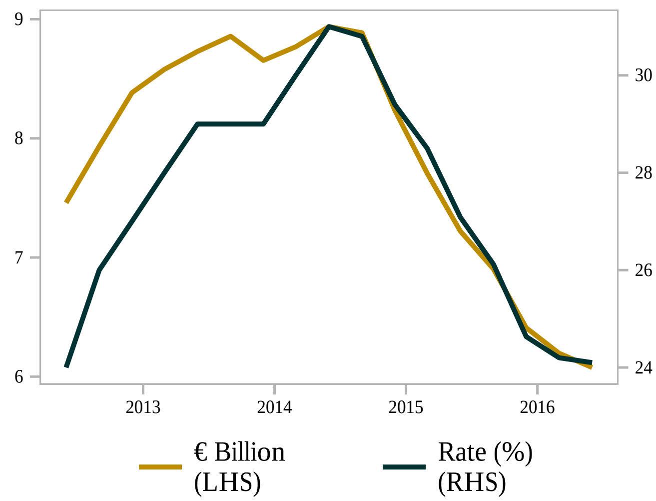
Despite the overall decline in the total volume of PDH arrears, there has been an increasing percentage of loans in long-term arrears. Figure 24 presents the value of mortgages in arrears by the depth of arrears. An increasing share of arrears cases are moving into long-term arrears (more than 720 days-past-due). In Q2 2016, €7.82bn of total arrears was more than 720 days-past-due (dpd). A further €2.75bn was between 180 and 720 dpd, with approximately €0.94bn in arrears between 90 and 180 dpd.

Figure 24. PDH Mortgage Arrears by Depth of Arrears, Q3 2009-Q2 2016



Source: Central Bank of Ireland, Mortgage Arrears Statistics.

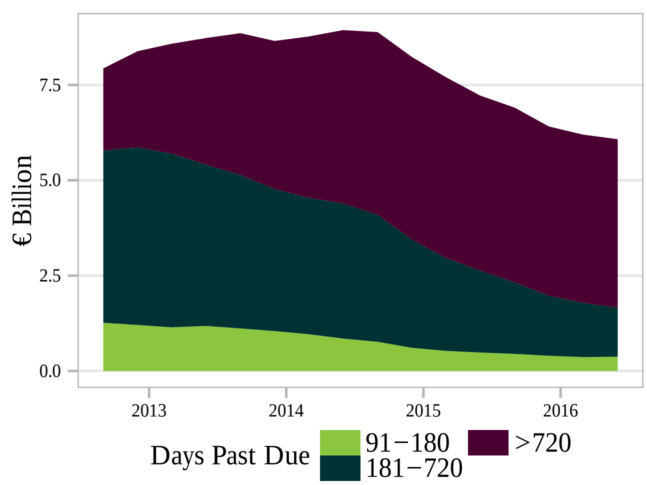
Figure 25. BTL Mortgage Arrears by Default and Balance, Q2 2012-Q2 2016



Source: Central Bank of Ireland, Mortgage Arrears Statistics.

Figure 25 presents the total balance of BTL mortgages that were in arrears as well as the share of total outstanding balance in arrears. As of Q2 2016, the total balance of BTL mortgages in arrears was approximately €6.07bn, representing 24.10 per cent of the total outstanding credit stock for BTLs.

Figure 26. BTL Arrears by Depth of Arrears, Q2 2012-Q2 2016

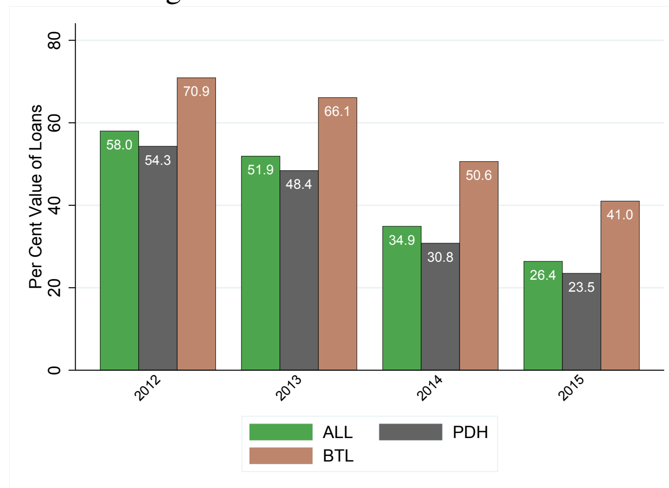


Source: Central Bank of Ireland, Mortgage Arrears Statistics.

Figure 26 presents the balance of BTL loans in arrears by the duration of arrears. As of Q2 2016, approximately €4.41bn is in long-term arrears of greater than 720 dpd. A further €1.29bn is in arrears of between 180 and 720 dpd. Approximately €0.37bn are in arrears of between 90 and 180 dpd. The trend is towards an increasing share of mortgages in long-term arrears, which is similar to that for PDH mortgage arrears.

Figure 27 presents the percentage of the balance of mortgage loans in negative equity by year. The data are taken from the annual reports of AIB, BOI and PTSB. The data are presented for both PDH loans and BTL loans. Given house price increases since 2012, the share of mortgage loans in negative equity has fallen considerably. As of end-year 2015, the total balance of PDH loans in negative equity, for the three banks considered, represented 23.5 per cent of lending. For BTLs, the share of total loan balances in negative equity was 41.0 per cent at end of year 2015.

Figure 27. Mortgage Loans in Negative Equity - Percentage of Balance 2012- 2015

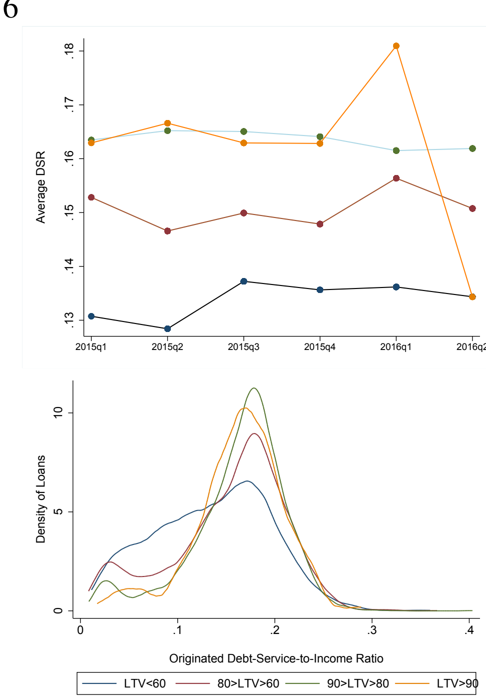


Source: Annual Reports.

Note: These data relate to BOI, AIB and PTSB activities.

OLTV and DSR ratios indicate the borrowers' degree of vulnerability to negative equity and cash-flow problems, respectively. Figure 28 presents the evolution of DSRs from Q1 2015 to Q2 2016 for different ranges of OLTV (< 60 LTV, 60 to 80 LTV > 80 to 90 LTV, > 90 LTV). The top plot presents the average DSR for different LTV groups and the bottom plot presents a density for the DSRs by OLTV group. For any range of OLTV values, few loans had a debt-service-to-income ratio larger than 0.3. This is consistent with the improved resilience of Irish mortgage borrowers highlighted in Box 1. On average and at origination, loans with lower LTV (less than 60 per cent) had also exhibited lower DSR since 2015. There was more dispersion in the DSR distribution of low LTV loans as shown by the density plots in the bottom chart.

Figure 28. Originated Debt-Service-to-Income across LTV ranges for First Time Borrowers, New Lending Between February 2015 and June 2016



Source: Central Bank of Ireland, MTD.

Table 7 presents the share of loans in default and in negative equity for both PDH and BTL loans as of December 2015. For PDH loans, 76 per cent of loans were both in positive equity and performing, 10 per cent were in negative equity and performing, 9 per cent in default and positive equity, and 5 per cent in negative equity and default. For BTL loans, 61 per cent of loans were both in positive equity and performing, 14 per cent were in negative equity and performing, 13 per cent in default and positive equity, and 12 per cent in negative equity and default.

Table 7. Split of Loans by Negative Equity and Default Status, December 2015

PDH

	Positive equity	Negative equity
Performing	76%	10%
Default	9%	5%

BTL

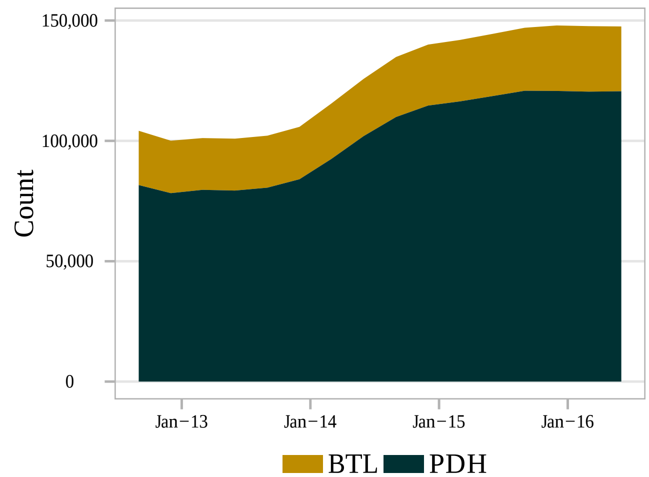
	Positive equity	Negative equity
Performing	61%	14%
Default	13%	12%

Source: Central Bank of Ireland, Loan Level Data.

2.5 Mortgage Modifications

Figure 29 presents the total stock of mortgage modifications provided by financial institutions to borrowers in arrears or pre-arrears for PDH and BTL loans. In recent quarters there has been an increase in the number of modifications. Up to Q2 2016, there were 120,614 PDH modifications provided by financial institutions to borrowers. This has increased from 118,590 in Q2 2015. The total number of modifications for BTLs stood at 26,930 in Q2 2016 from 26,187 in Q2 2015.

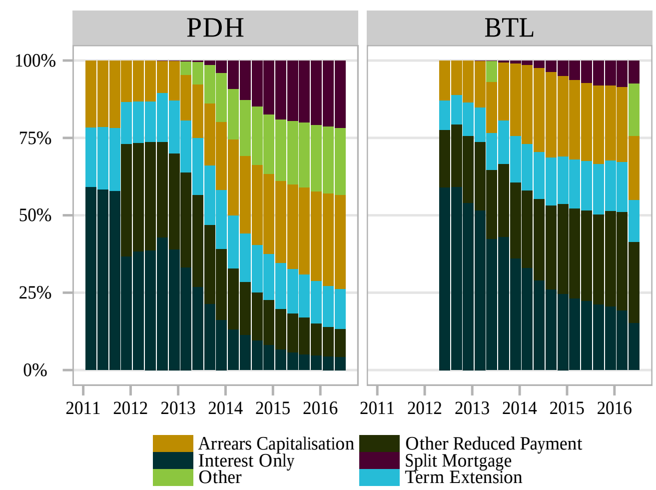
Figure 29. Total Restructured Mortgage Accounts, Q3 2012 - Q2 2016



Source: Central Bank of Ireland, Mortgage Arrears Statistics.

Figure 30 presents the total number of mortgage modifications by the type of arrangement up to Q2 2016 for both PDH and BTL mortgages. For PDH loans, the most commonly occurring arrangement types are arrears capitalisations and permanent split mortgages. These arrangement types also posted the fastest growth rates. The share of other reduced payment arrangements has been falling in recent quarters as have the frequency of interest only schemes. For BTLs, the most common arrangement was reduced payment schemes.

Figure 30. Total Restructured PDH Mortgage Accounts by Type, Q4 2010 - Q2 2016



Source: Central Bank of Ireland, Mortgage Arrears Statistics.

Table 8 outlines the percentage of modified loans that are meeting the terms of the arrangement, both in total and for each specific type of modification as of Q2 2016. Overall for PDH loans, 87.9 per cent are meeting the terms of the arrangement. The equivalent figure for BTL is 86.3 per cent. The percentage of borrowers meeting the arrangement terms has increased since Q4 2015 as reported in the previous HCMR (H1 2016). There is variation across modification type in the percentage of borrowers meeting the terms of the arrangements.

Table 8. Percentage of Modifications Meeting Arrangement Terms, Q2 2016

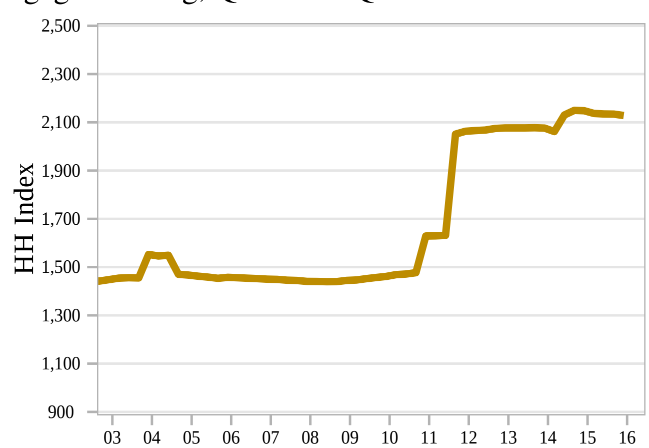
	PDH	BTL
Arrears Capitalisation	78.1	63.2
Deferred Interest Scheme	64.0	100
Interest Only - over one year	94.7	92.6
Interest Only - up to one year	87.4	81.4
Payment Moratorium	94.4	97.8
Permanent Interest Rate Reduction	48.9	25.0
Reduced Payment (greater than interest only)	91.5	94.4
Reduced Payment (less than interest only)	73.7	85.1
Split Mortgage	95.0	94.1
Temporary Interest Rate Reduction	93.8	96.1
Term Extension	93.0	94.1
Other	88.4	89.7
Total	**87.9**	**86.3**

Source: Central Bank of Ireland, Mortgage Arrears Statistics. Note: It should also be noted that some categories reflect only a small number of arrangements, particularly in the case of BTL accounts.

2.6 Mortgage Market Structure

Figure 31 presents a Herfindahl-Hirschman index (HH Index) for the stock of outstanding Irish mortgages. This measure is the sum of the squares of each institution's market share and is a widely accepted measure of concentration. The index has increased since the onset of the crisis and is currently high in a historical Irish perspective. The sharp increases in 2011 relate to market exits, mergers (such as AIB and EBS) and loan transfers. Values of greater than 1800 are internationally accepted by competition practitioners to be high. As the current Irish level exceeds this threshold, this indicates a highly concentrated market.

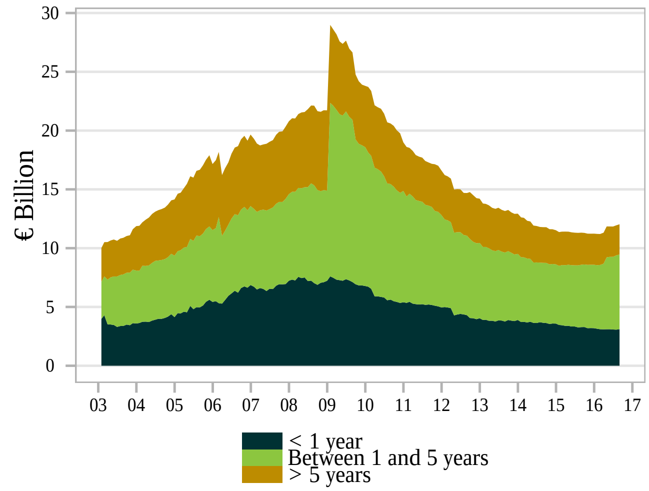
Figure 31. Concentration Index for Irish Mortgage Lending, Q1 1998 - Q1 2016



Source: Central Bank of Ireland confidential data.

3 Non-Mortgage Household Credit

Figure 32. Outstanding Stock of Consumer Credit, 2003 - 2016

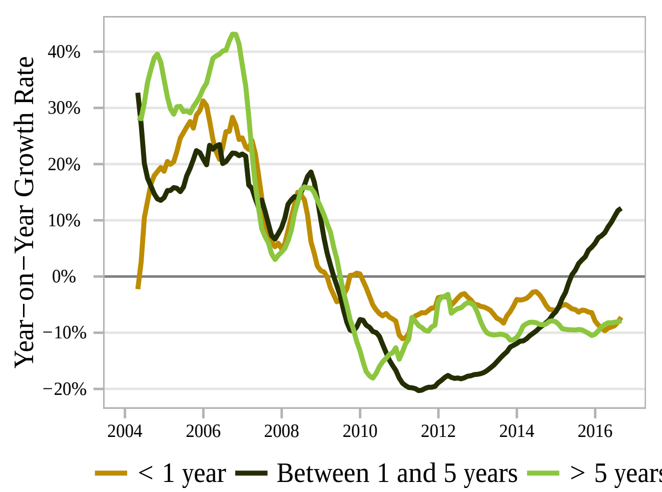


Source: Central Bank of Ireland, Credit, Money and Banking Statistics. Note: The increase in the series in Q1 2009 reflects the inclusion of credit unions in the reporting population. Note: These data are taken from CBI Credit, Money and Banking table A.5.1.

Figure 32 presents the stock of credit outstanding for consumer lending by Irish resident credit institutions by duration of the loan.[a] Consumer credit of less than one year stood at €3.11bn in August 2016. Loans of 1 to 5 year terms stood at €6.35bn in August 2016. Consumer loans of over 5 years stood at €2.56bn in August 2016. Differences across time periods may be affected by portfolio re-balancing and other compositional issues.

[a] Please note that these data are compiled from resident credit institutions only. If certain credit providers, such as some car financing operations like PCP or direct-from-dealer financing, do not report data to the Central Bank under this return, then these data will not be captured by the figures presented.

Figure 33. Growth Rate in Outstanding Stock of Consumer Credit, 2010 - 2016



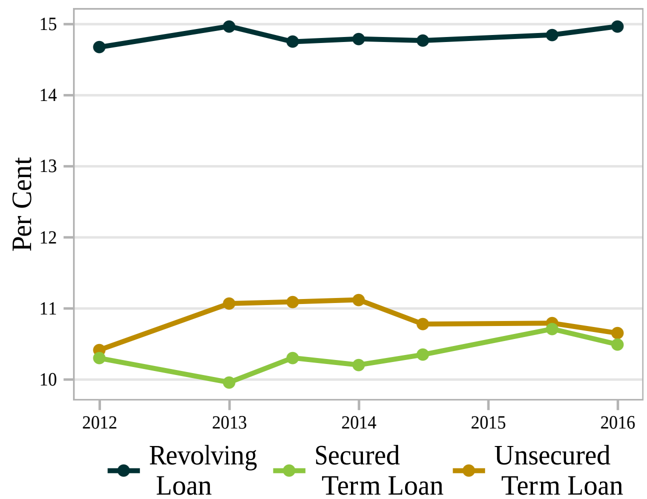
Source: Central Bank of Ireland, Credit, Money and Banking Statistics. Note: These data are taken from CBI statistical table A.5.1. Note: These growth rates have been adjusted to account for compositional issues.

Figure 33 shows the growth rates in the stock of consumer credit from 2004 onwards for different lending terms. The growth rate in consumer credit of all loan duration turned negative circa Q2 2009 and extensive deleveraging occurred. While the growth rate on loans of < 1 year and > 5 year duration continues to be negative, more recently there has been a recovery in credit of between 1 and 5 year duration. The growth rate on these loans was 12.7 per cent in August 2016, up from 4.1 per cent year-on-year. Loans of < 1 year and > 5 year duration experienced -5.8 per cent and -6.7 per cent growth rates as of August 2016.

Figure 34 shows the interest rates on outstanding loan amounts of consumer and other loans by loan type over time. These data are taken from the Central Bank of Ireland LLD for the following reporting institutions: Allied Irish Banks (including EBS), Bank of Ireland and Permanent TSB. These figures are therefore only representative of these institutions and do not reflect the financing conditions provided by other players in this market.[a] As of December 2015 (the latest available loan-level data), revolving loans (credit cards and overdrafts) had the highest interest rates at 14.9 per cent. Term loans, both secured and unsecured, had lower rates at 10.5 and 10.7 per cent respectively.

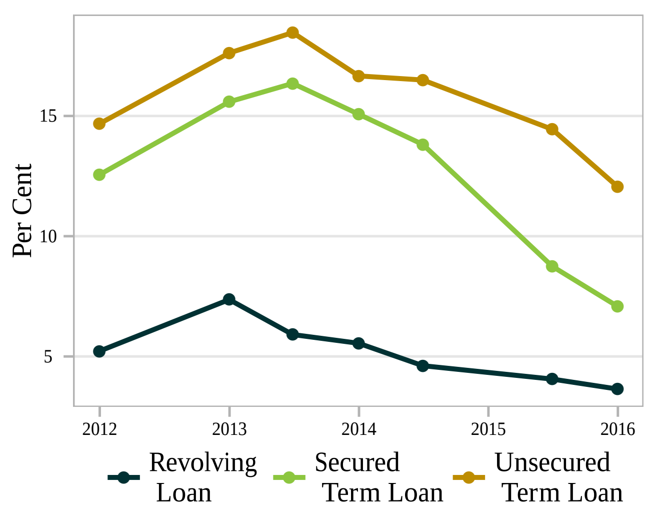
[a]This can include credit cards provided by other financial institutions or auto loans provided by car manufacturers own financing arms.

Figure 34. Interest Rates on Consumer Credit, December 2011 to December 2015



Source: CBI Loan-Level Data.

Figure 35. Arrears Rate on Consumer Loans by Loan Count, December 2011 to December 2015



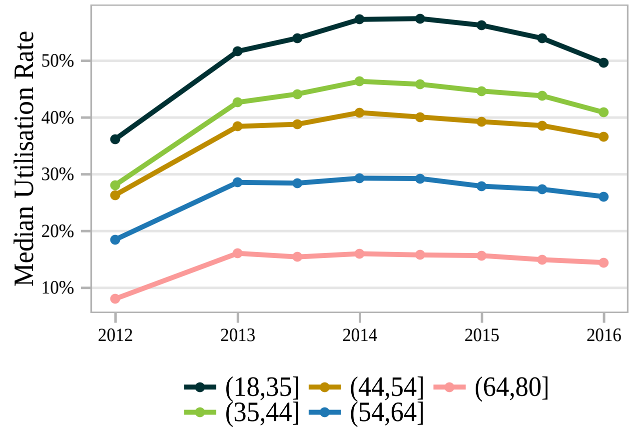
Source: Central Bank of Ireland, Loan Level Data.

Figure 35 presents the share of the total number of loans in arrears for revolving facilities as well as secured and unsecured consumer term loans. Arrears rates for consumer loans are on a declining trend. The arrears rate for unsecured term loans was highest at just over 12.1 per cent of loans. Term secured loans had the second highest arrears rate at approximately 7.1 per cent while revolving loans had an arrears rate of approximately 3.6 per cent.*

*Note that revolving loans may have significantly lower arrears rates by count than term loans due to low utilization rates on revolving facilities i.e. credit card accounts with no usage.

Figure 36 presents the average utilisation rate on credit cards by the age of the borrower. Each data point is calculated at the drop date of the CBI LLD which covers the period December 2011 to December 2015. Credit card utilisation is generally higher for younger borrowers possibly reflecting higher financial sophistication or liquidity constraints. There was also an increase in credit card utilisation between 2012 and 2013 for all age groups.

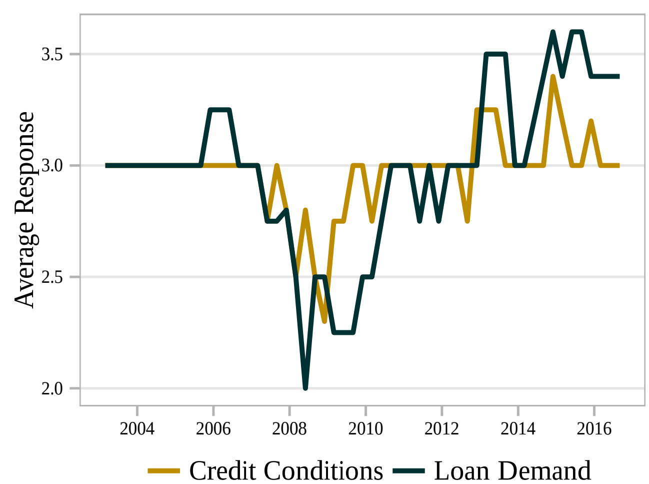
Figure 36. Credit Card Utilisation Rate by Borrower Age, December 2011 to December 2015



Source: Central Bank of Ireland, Loan-Level Data.

Figure 37 presents average response from bank loan officers to questions on credit conditions and credit demand for consumer lending from the CBI/ECB Bank Lending Survey. Each respondent indicates whether credit conditions have changed in the following manner: 1 = Tightened considerably, 2 = Tightened somewhat, 3 = Remained basically unchanged, 4 = Eased somewhat, and 5 = Eased considerably. For credit demand, respondents answer: 1 = Decreased considerably, 2 = Decreased somewhat, 3 = Remained basically unchanged, 4 = Increased somewhat, and 5 = Increased considerably. The responses indicate that in recent quarters, credit demand and supply conditions for consumer loans remained stable.

Figure 37. Loan Demand and Credit Conditions for Consumer Loans, Q1 2003 - Q2 2016



Source: Central Bank of Ireland, Bank-Lending Survey.

Box 1: The Financial Resilience of Mortgaged Irish Households[c]

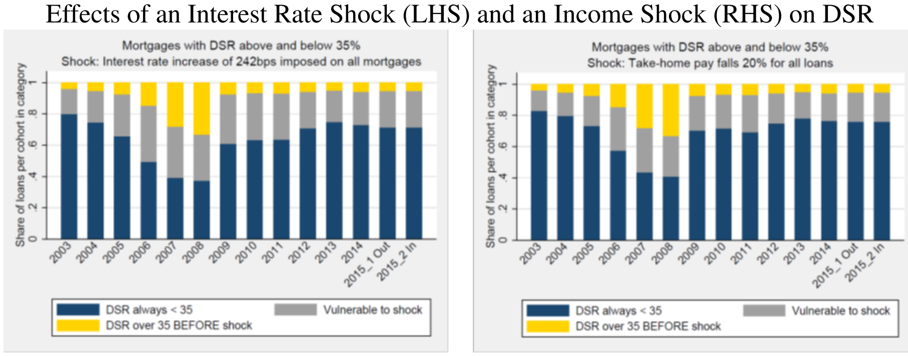
Ensuring the resilience of households to adverse financial shocks is a core feature of the Central Bank's Financial Stability mandate. The originating features of households' mortgage contracts represent one of the key determinants of this financial resilience. In periods where originated mortgages are issued at higher levels of leverage or lower levels of affordability, this cohort of new mortgaged households immediately faces a greater degree of vulnerability to a given financial shock.

A direct metric to measure financial vulnerability is to relate the monthly installment on a new mortgage contract to the net monthly income of the household: the **Debt Service Ratio (DSR)**. Assessing the impact of hypothetical external shocks to households' debt service capacity is an oft-used method for measuring household financial vulnerability. A prominent and relevant example is the Swedish Finansinspektionen's *Report: The Swedish Mortgage Market*. In an Irish setting, a similar exercise has previously been carried out by McCarthy and McQuinn (2011).[a] We use the Central Bank of Ireland Loan Level Data (LLD) to apply two shocks to each year's cohort of originated mortgages issued by four Irish banks from 2003 to 2015: firstly the European Banking Authority's adverse interest rate scenario for 2015 banking stress tests (a 242 basis point increase in all interest rates, which leads to a recalculation of each mortgage's monthly installment); secondly an across-the-board cut in net monthly income of 20 %.

We then group loans into three categories: a) DSR is below 35 %[b] both before and after the shock is applied (the "resilient" group); b) DSR was originated below 35 but rises above after shock (vulnerable to the shock); and c) DSR was already above the threshold before shock (vulnerable at origination).

The results are illustrated below. The Irish mortgage market has become more resilient in the aftermath of the crisis: the share of resilient loans has remained between 70 and 75 % since 2012. These levels of resilience at origination were last seen in 2003 and 2004. The resilience of the 2015 cohort appears to represent a continuation in the pattern of high-resilience mortgage origination, rather than with any particular additional change.

Effects of an Interest Rate Shock (LHS) and an Income Shock (RHS) on DSR



[a] Yvonne McCarthy Kieran McQuinn, 2011. "How Are Irish Households Coping with their Mortgage Repayments? Information from the Survey on Income and Living Conditions," The Economic and Social Review, Economic and Social Studies, vol. 42(1), pages 71-94.

[b] The figure of 35 % is taken as a benchmark above which the DSR is high enough to lead to financial vulnerability. This figure is arrived at from a combination of internal Central Bank analysis on the evolution of default rates at differing DSR levels, as well as banking industry rules of thumb.

[c]Box author: Fergal McCann. Email: fergal.mccann@centralbank.ie

Box 2: Monitoring Template Data of the Central Bank of Ireland[a]

Submission of monitoring templates data is required from lenders in order to monitor complicance with the Central Bank of Ireland macroprudential Regulations. These Regulations aim to limit the loan-to-value (LTV) and loan-to-income (LTI) ratios applying to new residential mortgage lending and are part of the Central Bank's macroprudential toolkit. The measures were introduced to strengthen the resilience of households and banks to financial shocks and to reduce the risk of future bank credit and house price spirals.

Lenders who advance at least €50 million of residential loans over the six-month reporting period are required to submit detailed loan-level information on all loans covered by the regulations. To date, five lenders met this criteria and returned Monitoring Templates to the Central Bank of Ireland for the reporting period of the 9th February to 31st December 2015 and also for the period January to June 2016. These were Allied Irish Bank (AIB, including the Educational Building Society (EBS)), Bank of Ireland (BoI), Permanent TSB (PTSB), Ulster Bank Ireland (UBIL) and KBC Bank Ireland (KBC). In the main body of the report we have used the these data to review the detail on new lending between January to June 2016. This is the first HCMR that draws on these data. Previous reports drew on different loan-level data with a different scope and context. Therefore to provide a comparison point for the data presented in this report, we include the table below which presents comparable data for the period Feb 9th to Dec 31th 2015.

Overview of New Lending - Feb 9th to Dec 31th 2015

	Overall	**FTB**	**SSB**	**BTL**
Number of Loans	12,801	7,124	4,934	743
Average Loan Characteristics				
Loan Size (€)	181,770	172,955	204,263	120,439
LTV	72.4	78.7	65.8	54.8
LTI	2.6	2.8	2.4	–
Loan Term	26	29	24	19
Interest Rate	3.7	3.8	3.5	4.9
Average Borrower Characteristics				
Income(€)	82,269	64,789	104,461	–
Borrower Age	37	33	41	–

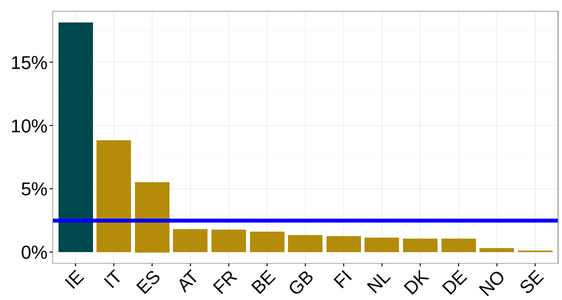
Over this period, total lending was approximately €4.6 billion with 78.1 per cent provided for new property purchase loans, 9.4 per cent allocated for refinance/switchers, 2.7 per cent for equity release or top-ups and 9.7 per cent for other lending activities. Approximately 56 per cent (€2.6 billion) of these loans were subject to the new mortgage Regulations. The remaining 44 per cent were exempt, primarily due to pre-Regulation mortgage approval. Detailed information on these loans has been previously provided in the Economic Letter 'Macroprudential Measures and Irish Mortgage Lending: A Review of Recent Data' which is available on the Central Bank's website. We focus here on key loan and borrower characteristics of new mortgage loans, as a point of reference to the information on new mortgage loans in H1 2016 detailed in the report.

[a]Box author: Christina Kinghan. Email: christina.kinghan@centralbank.ie

Box 3: Mortgage Default: A European Comparison[c]

In 2016, the EBA, in cooperation with the ECB, ESRB, EC, and the competent authorities from all relevant national jurisdictions, carried out a stress test of 51 EU and EEA banks. The stress test was designed to assess the resilience of the EU banking sector in a consistent way. The sample of banks included in the stress test covered 70 per cent of the banking sector in the EU but included only large banks. Similar to previous EBA exercises, the stress test yielded substantial data on the 51 banks.

The figure below compares the aggregated mortgage default ratio[a] of all Irish lending portfolios by any of the 51 banks with similar portfolios in the other EU countries. We observe that Irish mortgage lending portfolio default ratio remains the highest compared to selected other European countries. It must be noted, however, that due to the sample selection process, certain countries were not in the sample.



Mortgage Default Ratio (%) by Country, December 2015

Further, using data released on the same 51 banks as part of the EBA's 2014 stress test, the table below highlights the evolution of the default ratio, coverage ratio on the default stock and share of mortgage lending over the two year period.[b]. Here we see that the Irish lending portfolios' end 2015 aggregate default ratio decreased significantly compared to the aggregate default ratio at end 2013 (-2.9 percentage points). The coverage ratio on the default stock remains one of the highest in the sample (34 per cent), but this has decreased compared to end 2013. Furthermore, lenders to the Irish economy continue to be heavily concentrated in mortgage lending and their mortgage share as percentage of their total lending portfolios has increased since end 2013, representing 65 percent of total.

Comparison of Mortgage Portfolios by Country, Dec. 2015 and change vs. Dec. 2013 (△)

Country	AT	BE	DK	FI	FR	DE	IE	IT	NL	NO	ES	SE	GB
Default Ratio '15	1.8%	1.6%	1.0%	1.2%	1.7%	1.0%	18.1%	8.8%	1.1%	0.3%	5.5%	0.1%	1.3%
△ [%p]	-0.6%	0.1%	0.1%	0.4%	0.1%	-0.5%	-2.9%	1.8%	-0.1%	-0.1%	-0.3%	-0.1%	-0.6%
Coverage Ratio - Default '15	28.5%	10.7%	15.2%	5.3%	31.2%	24.3%	33.8%	30.2%	12.2%	9.1%	34.4%	4.9%	13.2%
△ [%p]	-3.0%	-0.0%	-0.6%	1.0%	0.5%	-3.7%	-4.0%	-0.8%	-1.9%	-0.2%	7.4%	0.4%	3.1%
Share of Lending '15	23.5%	35.9%	45.7%	44.7%	37.7%	30.3%	64.9%	27.0%	58.0%	41.4%	46.6%	49.3%	51.9%
△ [%p]	-1.4%	-1.7%	0.0%	-1.1%	2.5%	2.6%	12.7%	3.7%	1.1%	-0.0%	3.5%	1.5%	2.3%

[a]The default ratio is defined as default stock divided by default stock + non-default stock. AIB; BOI; KBC; Ulster and Lloyds make up portfolios included in IE.Mortgage Portfolios correspond to the EBA Exposure classes: 4120,5000 - 5100. For details on the exposure classes see: http://www.eba.europa.eu/documents/10180/1519986/Metadata-for-the-website.xlsx

[b]The share of lending is the share of mortgage lending over the total lending, where we define total lending as the sum of the following EBA exposure classes: 4120+5000-5100+3200+4110+4310+3000-3200+4200+4320

Appendix A: Data Sources

Information from the following sources is used:

- Central Bank of Ireland: Credit, Money and Banking Statistics. The loan data presented from this source represents securitised and non-securitised loans from Irish resident financial institutions. This is a lower bound figure as it does not include Irish banks that were previously in the reporting population to the CBI but have since left the market and banks whose mortgage loan books have been sold to non-banks or sub-prime mortgages.
- Central Bank of Ireland: Retail Interest Rate Statistics.
- Central Bank of Ireland: Quarterly Financial Accounts.
- Central Bank of Ireland Loan-Level Data: This data set provides information on a wide range of loan characteristics including outstanding balances, loan terms and loan repayment for the population of mortgage and consumer loans at Allied Irish Banks, Bank of Ireland, KBC Bank Ireland, Ulster Bank and Permanent TSB (unless otherwise stated). Loans in 'Arrears' are defined as loans greater than 90 days past due and/or impaired. Data covering non-mortgage loans are only available for AIB, Bank of Ireland and Permanent TSB.
- Central Bank of Ireland loan-level data from the Monitoring Template Data: This data provides information on a wide range of loan and borrower characteristics including outstanding balances, loan terms and loan repayment for the population of mortgage loans with an origination data from the 1st of January 2015 to the 31st of June 2016 at Allied Irish Banks (including the Educational Building Society), Bank of Ireland, Ulster Bank Ireland, KBC Bank Ireland and Permanent TSB. These 5 lenders advanced at least €50 million of residential loans over the last 6 months and submitted this information to the Central bank of Ireland for regulatory purposes as prescribed by the macroprudential Regulations introduced by the Central Bank of Ireland on the 9th February 2015.
- Central Statistics Office, Household Finance and Consumption Survey 2013: This survey collects a range of household information in 2013 for 4,000 households in Ireland. It is conducted by the Household Finance and Consumption Network which consists of survey specialists and economists from the European Central Bank, the national central banks and a number of national statistical institutes.
- Central Bank of Ireland: Mortgage Arrears Statistics.
- European Central Bank, Monetary Financial Institution (MFI) Statistics.
- Eurostat, Population Statistics are used in calculating per capita values.
- European Systemic Risk Board Report, Report on residential real estate and financial stability in the EU, December 2015
- Herfindahl-Hirschman Indices are calculated using the bank-level data used to compile the Central Bank of Ireland's Credit, Money and Banking Statistics.
- Banking and Payments Federation Ireland, New Lending Statistics.

This report has been compiled including published data available at, or before, the 1st November 2016.

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Appendix B: Glossary of Key Terms and Abbreviations

The following are key terms used in this document:

BTL	Buy-To-Let
CBI	Central Bank of Ireland
CC	Consumer Credit
CLTV	Current Loan-to-Value
DSR	Debt-Service-to-Income Ratio
EBA	European Banking Authority
ECB	European Central Bank
FMP	Financial Measures Programme
FTB	First Time Buyer
IO	Interest Only Mortgage
LLD	Loan Level Data held by Central Bank of Ireland
MTD	Monitoring Template Data held by Central Bank of Ireland
NP	Non-performing loan
OL	Other Loan
OLTV	Originating Loan-to-Value Ratio
PDH	Principal Dwelling House
REV	Revolving Loan such as Overdraft or Credit Card
RIL	Retail Investment Loan for Residential Property Purchase
RRE	Residential Real Estate
SSB	Second and Subsequent Borrowers
SVR	Standard Variable Rate
Tracker	Mortgage interest rate that automatically changes in line with the a contracted policy rate