

Household Credit Market Report

H1 2017



Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

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 Appendix A provides detailed information on all data sources used in the report. Appendix B provides a glossary of key terms and abbreviations. Figures may differ from previous HCMR versions where revisions have taken place or where underlying data samples have changed.

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. Box 1 provides a comparison of mortgage downpayments and savings for house purchase across selected European countries.

Executive Summary

- Irish households continued to reduce their debt-to-income and debt-to-asset ratios during Q4 2016 but indebtedness remains high in a European context.
- The pace of decline in overall mortgage credit continued to slow in March 2017, while growth in consumer credit remained positive. In Q4 2016, the year-on-year growth rate in mortgage credit for Principal Dwelling Houses (PDHs) was positive, but remained negative for Buy-to-Let (BTL) loans.
- New mortgage approvals and drawdowns increased year-on-year in Q1 2017 by value and volume. First Time Buyers (FTBs) continue to account for the largest share of new lending (circa 48 per cent).
- In Q1 2017, the average standard (SVR) or LTV (Loan-to-Value) variable interest rate on PDH mortgages in Ireland stood at 3.75 per cent on outstanding loans. This represented a fall from 3.94 per cent in Q1 2016. For outstanding tracker rate mortgages the average rate was 1.03 per cent.
- The average SVR or LTV variable rate for new lending stood at 3.38 per cent in Q1 2017. This was down from 3.63 per cent in Q1 2016.
- For the period July to December 2016, the average loan-to-value ratio on new lending for FTBs was 79.0 per cent and the average loan-to-income ratio was 2.9. The corresponding figures for Second and Subsequent Borrowers (SSBs) were 66.3 per cent and 2.4 respectively. These ratios were largely unchanged compared to the first half of 2016. For refinanced (switcher) loans, the average LTV was 57.5 per cent.
- For FTBs, 52 per cent of new lending was agreed at fixed rates between July and December 2016, of which 39.6 per cent were fixed for over 1 year maturity. Variable rates were more common among SSBs and BTLs, at 53 and 91 per cent of new lending respectively.
- The overall value of mortgages in arrears continues on a downward trend, falling to €16.6bn in Q4 2016. This represents approximately 13.4 per cent of total mortgage balances.
- The arrears rate on non-mortgage loans is also on a declining trend. As of June 2016, arrears rates ranged from approximately 3.3 per cent on revolving facilities (credit cards and overdrafts) to 12.1 per cent for unsecured term loans.

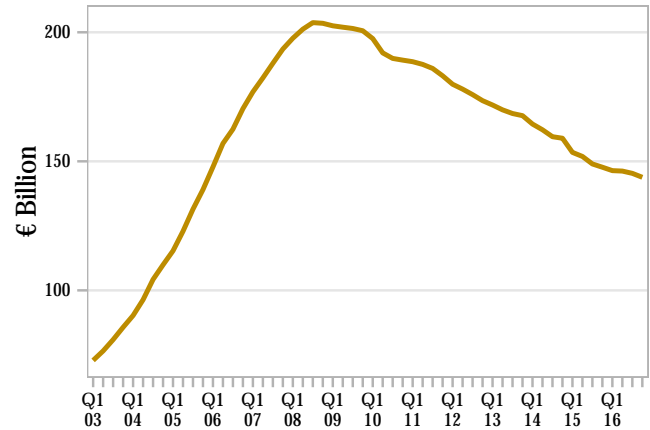
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1 Overview

Figure 1 presents the total outstanding balance of household debt. Household debt stood at €143.8bn in Q4 2016, declining by €3.9bn year-on-year. Per capita, household debt stood at €30,199. Household debt has declined every quarter since its peak of €203.7bn in Q3 2008 and has fallen by 29 per cent since then. Total debt in Q4 2016 comprised short-term debt (up to one year or payable on demand) of approximately €4.2bn and long-term debt (greater than one year maturity) of €139.6bn.* Short-term debt has fallen by a greater percentage (70 per cent) than long-term debt (26 per cent) since Q3 2008, albeit from a lower base.

*See [Quarterly Financial Accounts for Ireland 2016 Q3](#).

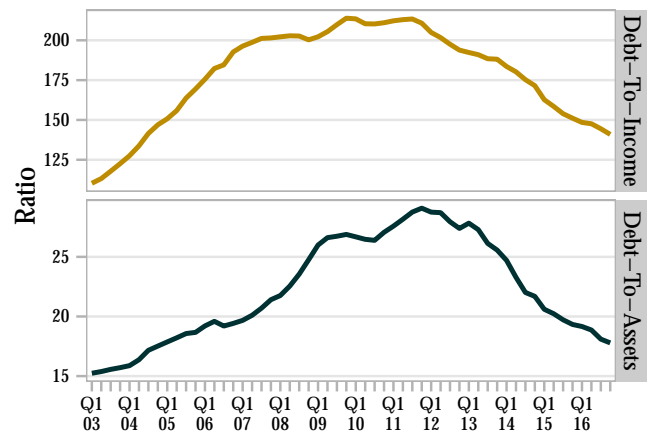
Figure 1. Outstanding Household Debt, Q1 2003-Q4 2016



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 DTI declined from 151.1 in Q4 2015 to 140.9 in Q4 2016. The fall in Q4 2016 reflects both debt reduction and income growth. A downward trend is also evident in the DTA ratio. It decreased from 19.3 in Q4 2015 to 17.8 in Q4 2016. Both indicators suggest a continued improvement in the sustainability of household balance sheets.

Figure 2. Household Debt-to-Asset and Debt-to-Income Ratios, Q1 2003-Q4 2016



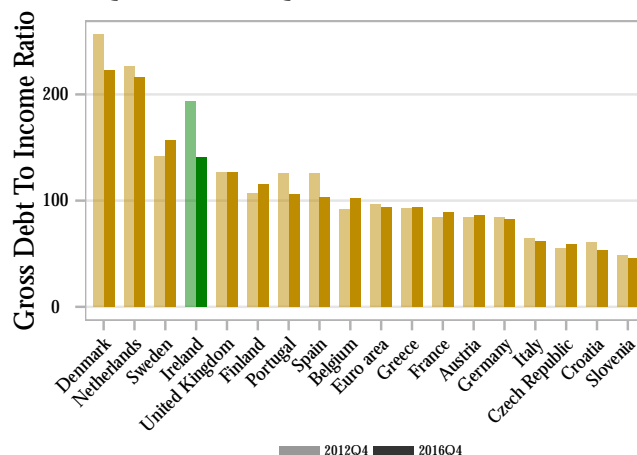
Source: Central Bank of Ireland, *Quarterly Financial Accounts*.

Note: Assets refers to total financial assets plus estimated housing assets. Disposable income is the annualised four quarter moving average of quarterly disposable income adjusted for the change in net equity of households in pension funds reserves.



Figure 3 presents the DTI ratio for selected European countries to provide a benchmark for Ireland’s position internationally. Notwithstanding the significant reduction since Q4 2012, Ireland’s DTI ratio stood at 140.9 in Q4 2016, which was the fourth highest in this comparison group. Further reductions in the DTI ratio would reduce financial vulnerabilities.

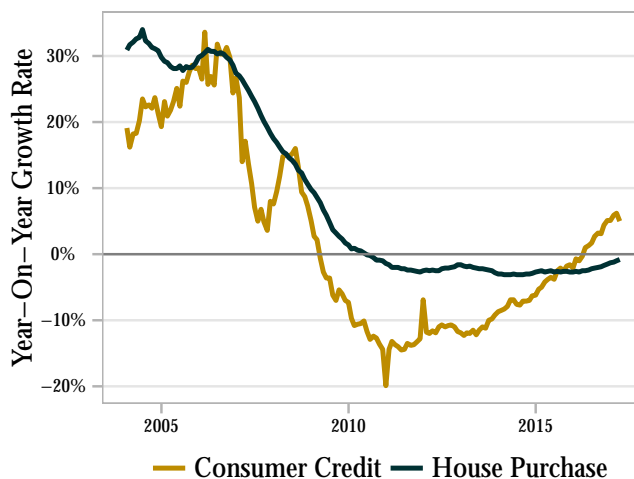
Figure 3. Debt-to-Income Ratios Across Countries, Q4 2012 and Q4 2016



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.

Figure 4 documents the year-on-year percentage change in 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 -0.8 per cent in March 2017, down from -2.5 per cent one year ago. This indicates an easing in the pace of contraction. The percentage change in consumer credit was positive and stood at 5.0 per cent in March 2017.

Figure 4. Per Cent Year-on-Year Change in Credit for House Purchase and Consumer Credit, January 2004 - March 2017



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

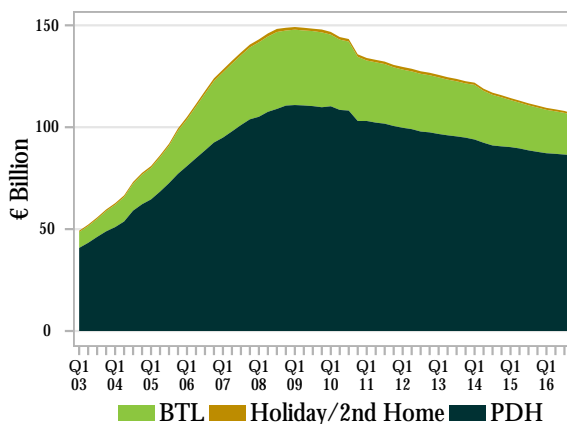


2 Developments in Mortgage Credit

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 €86.2bn, BTL loans to €19.6bn and holiday or second home loans to €0.9bn in Q4 2016.

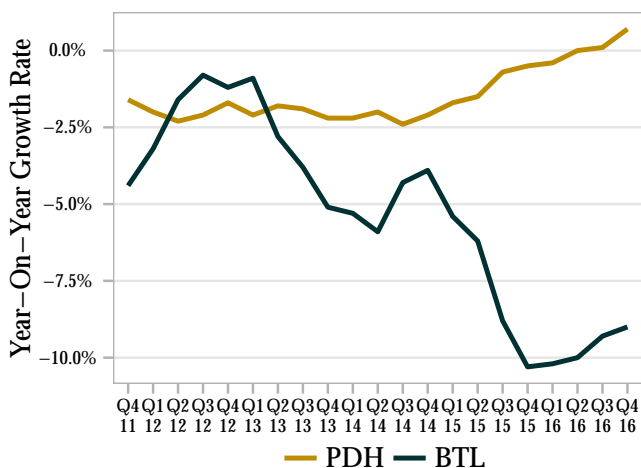
Figure 5. Outstanding Mortgage Credit by Dwelling Type, Q1 2003-Q4 2016



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 that mortgage credit advanced to Irish resident households for PDH mortgages by resident credit institutions increased at an annual rate of 0.7 per cent in Q4 2016. This represents an increase in the growth rate in PDH mortgage credit following a period of prolonged deleveraging. In contrast, loans for BTL purposes declined at an annual rate of -9.0 per cent.

Figure 6. Per Cent Year-on-Year Change in Mortgage Credit by Dwelling Type, Q4 2011-Q4 2016



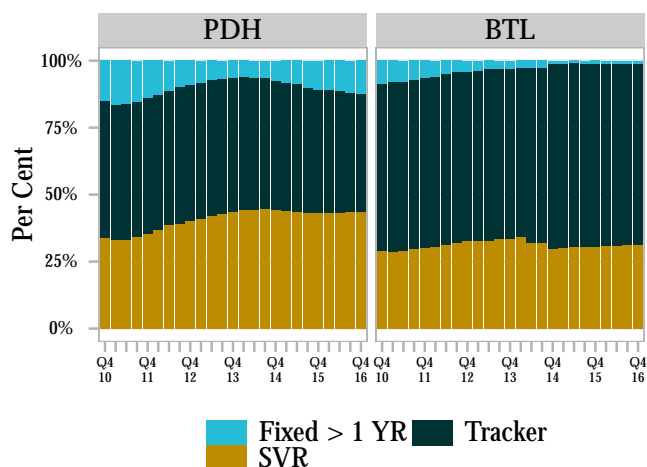
Source: Central Bank of Ireland, *Private Household Credit and Deposits*.



2.2 Interest Rates on Outstanding Loans

Figure 7 presents the breakdown of outstanding PDH and BTL loans by interest rate type; standard variable rate and up to 1 year fixed rate (SVR), Fixed rate (over 1 year) and Tracker rate. As of Q4 2016, for PDH loans, 44 per cent of the balance of loans were contracted to SVR and up to 1 year fixed interest rates. A further 44 per cent of the balance had tracker rates and the remaining 13 per cent were fixed-rate contracts of over 1 year maturity. (The latest data on new lending, by comparison, shows over 40 per cent of new PDH lending has been agreed at fixed rates of over 1 year maturity.) For BTL loans, a majority were tracker rate mortgages (68 per cent) with SVR and up to 1 year fixed rates being the second largest type of rate structure (31 per cent). Approximately 1 per cent of BTL loans were on fixed rates of over 1 year.

Figure 7. Rate Type on Mortgage Credit Outstanding Stock, Q4 2010-Q4 2016



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

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 and BTL mortgages by interest rate type. As of Q1 2017, the average standard variable (SVR) or loan-to-value variable (LTVV) rate on PDH mortgages was 3.75 per cent. This rate has declined year-on-year from 3.94 per cent. The average rate on outstanding tracker PDH mortgages stood at 1.03 per cent in Q1 2017. The tracker rate on BTL mortgages stood at 1.06 per cent in Q1 2017. Fixed rates on PDH and BTL mortgages varied by term duration.

Table 1. Average Interest Rate on Mortgage Credit Outstanding Stock by Rate Type, Q1 2017

Average Rate	PDH	BTL
Standard or LTV Variable	3.75	4.20
Tracker	1.03	1.06
Fixed		
1 to 3 Years	3.53	4.40
over 3 years	3.34	2.78

Source: Central Bank of Ireland, Retail Interest Rates.

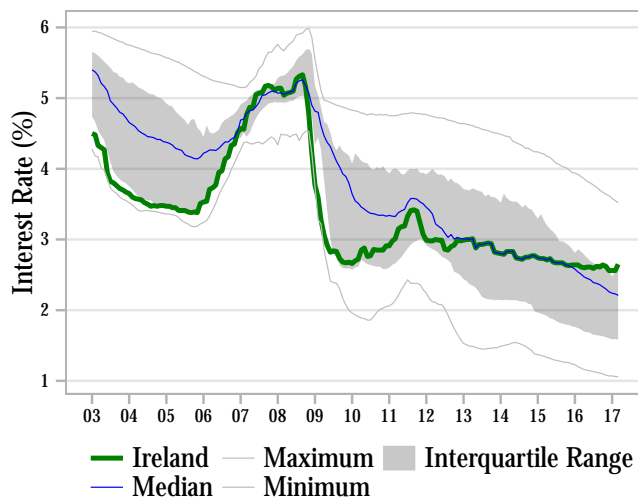


To provide an international comparison, Figure 8 presents interest rates on the stock of outstanding mortgages for Ireland and the median across a group of select European countries.* Percentiles and the sample maximum and minimum are also displayed. The interest rate on current outstanding mortgages in Ireland was 2.65 per cent as of March 2017, relatively unchanged from one year earlier. Interest rates in Ireland remain high relative to the sample median in other European countries presented.

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 across 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-March 2017



Source: European Central Bank, MFI Interest Rates.

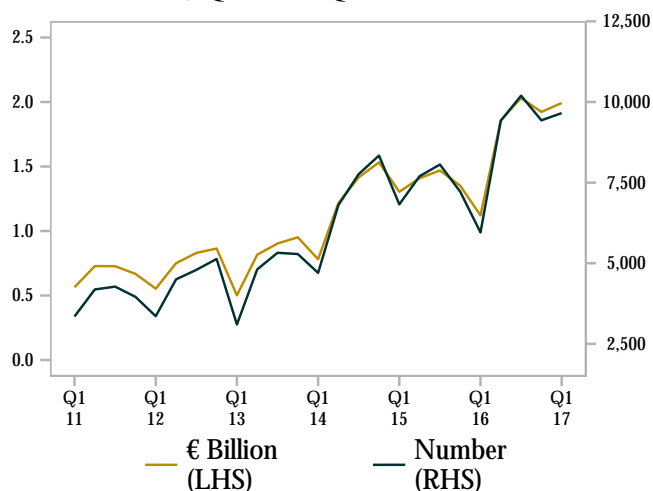


2.3 Mortgage Approvals and New Lending

2.3.1 Overview of New Lending

Figure 9 presents data on approvals for new mortgage lending from the Banking and Payments Federation Ireland (BPFI). The value of new mortgage loan approvals totalled €2.0bn during Q1 2017. This increased from €1.1bn during Q1 2016. The number of new loan approvals totalled 9,655 during Q1 2017. This figure was 5,956 during Q1 2016.

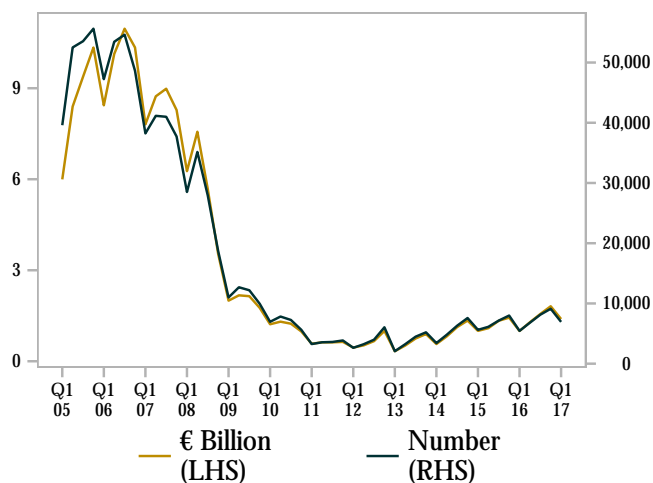
Figure 9. New Mortgage Approvals by Count and Balance, Q1 2011-Q1 2017



Source: Banking and Payments Federation Ireland.

Figure 10. New Mortgage Lending by Loan Count and Balance, Q1 2005-Q1 2017

Figure 10 presents data on new mortgage lending from the BPFI. The value of new lending stood at €1.39bn in Q1 2017. This increased from €1.0bn in Q1 2016, an increase of 39 per cent. The number of new loans increased from 5,447 in Q1 2016 to 6,939 in Q1 2017. This represents a 27 per cent expansion. Lending volumes remained well below levels seen in the 2005-2007 period.

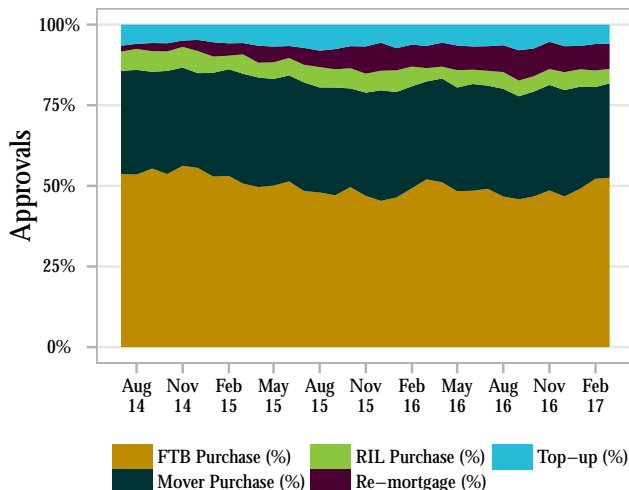


Source: Banking and Payments Federation Ireland.



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). During March 2017, FTBs accounted for 52.5 per cent of new approvals, Movers accounted for 29.3 per cent of new approvals with 4.5 per cent for RIL, 7.8 per cent for re-mortgages and 5.9 per cent for Top-ups.

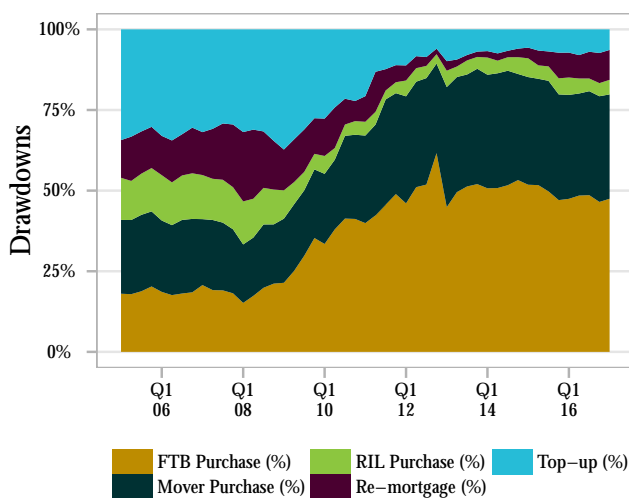
Figure 11. Breakdown of New Mortgage Approvals (Count) by Credit Type, July 2014-March 2017



Source: Banking and Payments Federation Ireland.

Figure 12. Breakdown of New Mortgage Lending (Drawdowns) by Credit Type, Q1 2005-Q1 2017

Figure 12 presents new mortgage lending by loan type. The categories used are the same as those for mortgage approvals. Since 2009, the highest share of mortgage borrowing has been undertaken by FTBs. In Q1 2017, FTBs accounted for 47.5 per cent of new loans, Movers accounted for 32.4 per cent of new loans with 4.5 per cent for RIL, 9.3 per cent for re-mortgages and 6.4 per cent for Top-ups.

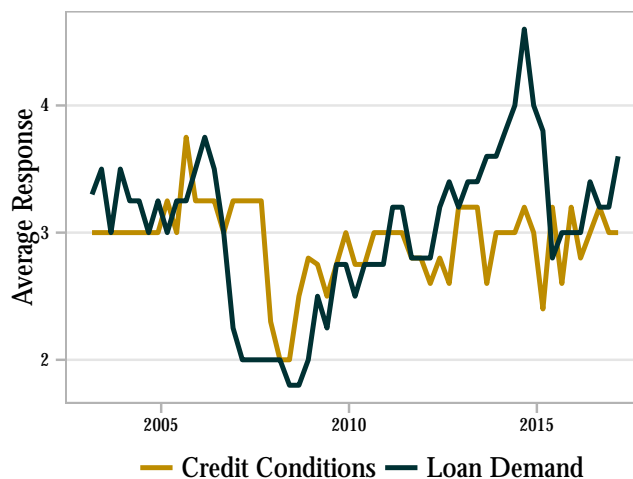


Source: Banking and Payments Federation Ireland.



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 Central Bank of Ireland / Eurosystem 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 loan demand for house purchase increased over the period 2013 to mid-2014 but stabilised in 2015. While credit standards remained unchanged in Q1 2017, loan demand increased. Housing market prospects, consumer confidence, the level of interest rates and the regulatory and fiscal regime are reported to have contributed to the increase in loan demand. The regulatory and fiscal regime is reported to include both the changes in the macroprudential mortgage measures and the impact of the "Help to Buy" incentive on demand.

Figure 13. Loan Demand and Credit Conditions for House Purchase Loans, Q1 2003-Q1 2017



Source: Central Bank of Ireland / Eurosystem Bank Lending Survey.



2.3.2 New Lending for Home Purchase

Summary statistics for new mortgage lending for the period July to December 2016 inclusive are shown in Table 2. These data are taken from the loan-level Monitoring Template Data (MTD) submitted to the Central Bank to monitor compliance with the mortgage regulations.* The average loan size of new mortgages was €197,611. Average loan sizes were larger for SSBs relative to FTBs. The average LTV across all loans was 73.0 per cent and the average LTI was 2.7. FTBs had a higher average LTV and LTI relative to SSBs. The average loan term was 27 years, with FTBs having a higher average term. Average gross income of all borrowers was €83,186. For FTBs, average income was €67,999 and for SSBs it was €105,979.

* See [Mortgage Measures](#) and Kinghan et al, 2017, Economic Letter, Vol 2017, No. 6. Detailed information on the mortgage lending covered by the MTD is provided in Appendix A.

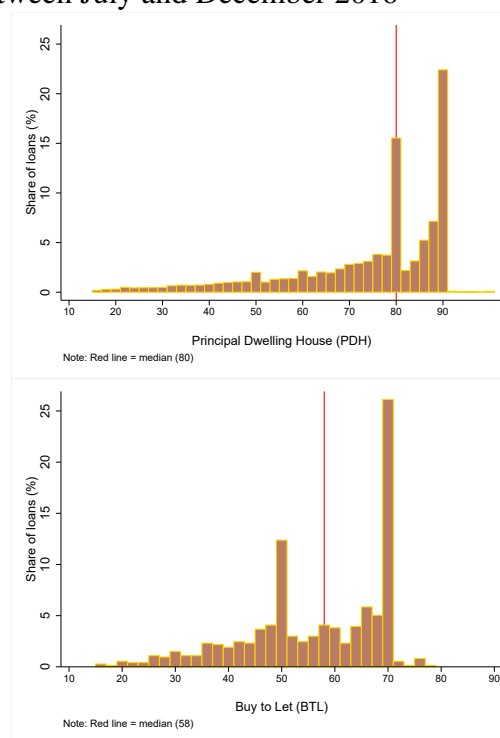
Table 2. Overview of New Lending, July - December 2016 - Monitoring Template data (MTD). (average characteristics)

	All	FTB	SSB	BTL
Loan Characteristics				
Loan Size (€)	197,611	190,001	219,961	119,885
LTV (%)	73.0	79.0	66.3	56.0
LTI	2.7	2.9	2.4	1.4
Loan Term (Years)	27	29	24	18
Interest Rate (%)	3.5	3.5	3.2	4.8
Borrower Characteristics				
Income (€)	83,186	67,999	105,979	106,287
Borrower Age (€)	36	33	41	45

Source: Central Bank of Ireland, MTD.

Figure 14 shows the distribution of Originated Loan-to-Value (OLTV) ratios for new lending between July and December 2016. The distributions are shown separately for PDH and BTL borrowers. The distribution for PDH spikes at around 80 and 90 per cent OLV in line with the LTV limits under the mortgage regulations. There was very little lending to PDH borrowers at an OLV greater than 90 per cent. For BTLs, the distribution spiked at the 69-70 per cent OLV, consistent with clustering at the limit of 70 per cent OLV for BTL lending.

Figure 14. Distribution of Originated Loan-to-Value Ratios by Type of Purchase, New Lending Between July and December 2016



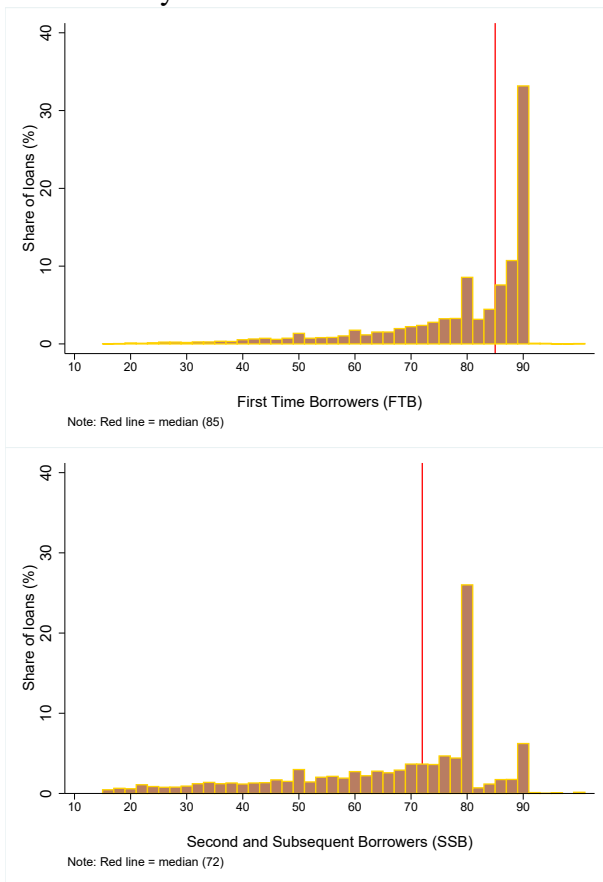
Source: Central Bank of Ireland, MTD. Note: Observations below 16 and above 100 LTV have been censored at these values.



Figure 15 breaks down the PDH distribution of OLV ratios by buyer status for new mortgages from the MTD between July and December 2016. These data refer to all PDH new loans across FTBs and SSBs. The median LTV for FTBs was 85 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 applied (prior to 1 January 2017).* For SSBs, the median LTV was 72 per cent.

*Please see Appendix A for details.

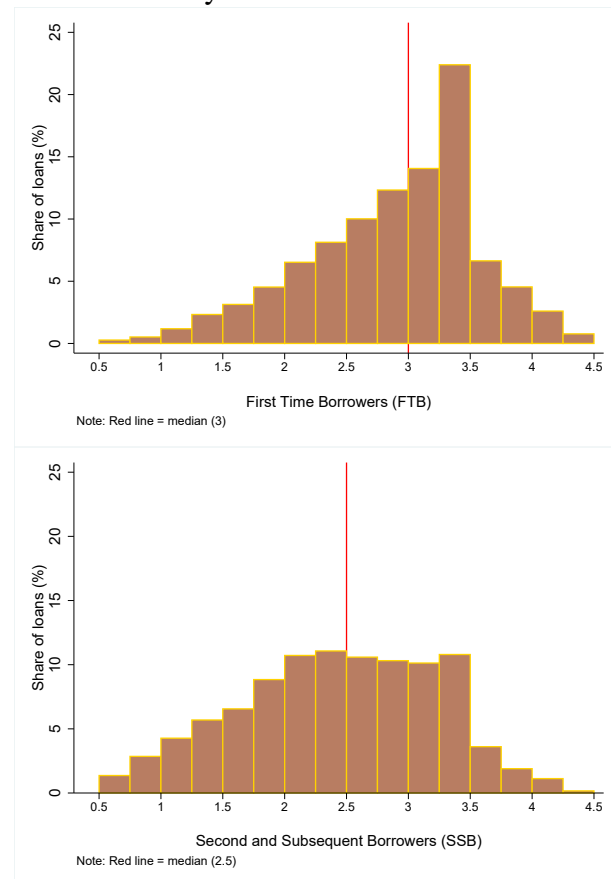
Figure 15. Distribution of Originated Loan-to-Value Ratios by Buyer status, New Lending Between July and December 2016



Source: Central Bank of Ireland, MTD. Note: Observations below 16 and above 100 LTV have been censored at these values.

Figure 16 breaks down the PDH distribution of Originating Loan-to-Income (OLTI) ratios by buyer status for new mortgages from the MTD between July and December 2016. As is the case for the OLV 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 around 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 2.5 times gross income. The distribution of LTI for SSBs was much more dispersed with no noticeable spike around the 3.5 limit.

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



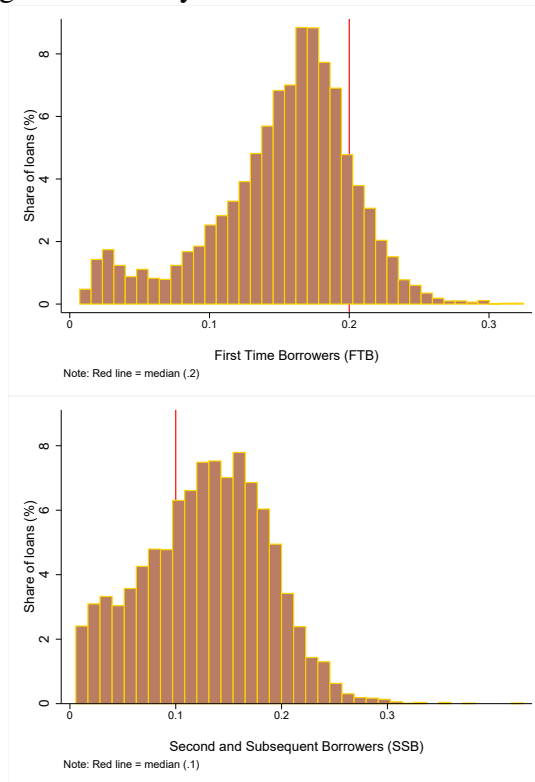
Source: Central Bank of Ireland, MTD. Note: Values below 0.5 LTI have been censored at a value of 0.5.



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

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 ratios (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 FTBs 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.*

*DSR is calculated using the mortgage instalment relative to income where total household gross income is defined as basic annual gross income before taxes, excluding rental income. Debt refers to mortgage debt only.



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 as was evident from the 52.4 per cent of FTBs on this interest rate regime. SVR rates were more prevalent amongst SSBs and BTLs, with 53.4 and 91.1 per cent of borrowers in both groups agreeing this type of interest rate, respectively. Overall, circa 9 per cent of borrowers contracted a fixed rate for one year only.

Table 3. New Mortgage Lending by Purchase and Interest Rate Type, July - December 2016

	Overall	FTB	SSB	BTL
<i>Total Lending (€mn)</i>				
SVR	1,512	742	687	83
Fixed	1,316	817	491	8
Fixed 1 Year	266	199	67	0.5
<i>Share of Total Lending (%)</i>				
SVR	51.5	47.6	53.4	91.1
Fixed	44.8	52.4	38.2	8.9
Fixed 1 Year	9.0	12.8	5.2	0.6

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 greater than 1 year up to 3 years, fixed rates greater than 3 years and fixed rates of up to 1 year combined with 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.* The majority of mortgages with a fixed interest rate were clustered between the values of 3.5 and 3.75 per cent.†

*An outlier is a value outside the quartile range.

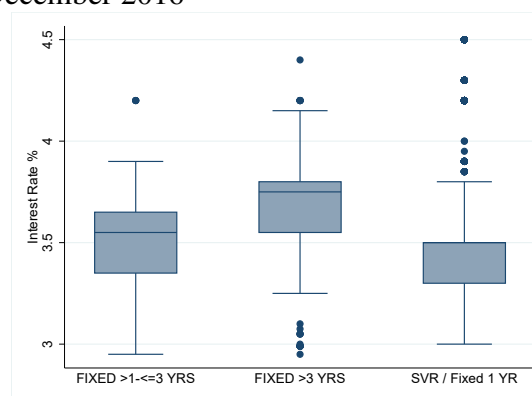
†This chart is based on a sample comprised of new property purchase and self-build loans only.

Figure 19 presents interest rates on new loans for house purchase for Ireland and the median across a group of selected European countries.* Percentiles and the sample maximum and minimum are also presented. The interest rate in Ireland as of March 2017, at approximately 3.2 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.†

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

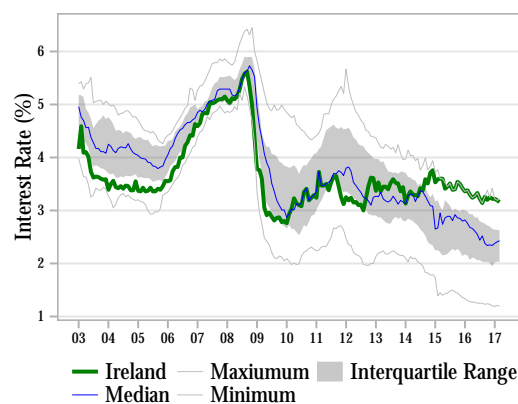
†Note: Data include within-bank restructured mortgage contracts and renegotiated loans (mortgage switchers) so do not only capture the interest rates on new mortgage drawdowns. New mortgage rates (excluding restructures) are provided in Table 4.

Figure 18. Distribution of New Mortgage Lending Rates for First Time Buyers July 2016-December 2016



Source: Central Bank of Ireland, MTD.

Figure 19. Interest Rates on New House Purchase Loans, Jan 2003 - March 2017



Source: European Central Bank, MIR.



Table 4 depicts the average interest rates on new PDH and BTL mortgages. As of Q1 2017, the average Standard or LTV Variable rate on new PDH mortgages stood at 3.38 per cent, while the rate on equivalent BTL mortgages was 4.77 per cent. These rates have declined by 25 basis points and 13 basis points, respectively, since the same quarter in 2016. Fixed-rate mortgage rates have also fallen relative to the same quarter in 2016.

2.3.3 Loan Refinancing

Figure 20 displays the trend in the number of refinanced loans between Q1 2012 and Q1 2017. This data is taken from the breakdown of New Mortgage Lending (Drawdowns) by credit type from the Banking and Payments Federation Ireland.* We observe an increasing trend in the number of refinanced loans from Q1 2014 onwards. The number of refinanced loans stood at 644 as at Q1 2017, an increase of 53 per cent year-on-year.

*The BPFi defines a re-mortgage as a mortgage loan which is issued by one lender to refinance an existing mortgage with another lender. This may or may not include further equity release.

Table 5 presents summary statistics for refinancing (switcher) mortgage lending for the period July to December 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 €215,359. The average LTV across all loans was 57.5 per cent and the average LTI was 2.3. The interest rate on refinanced loans was 3.3 per cent on average and the average loan term was 22 years. Average gross income of borrowers with refinanced PDH mortgage loans was €104,545.*

*Refinances refer to borrowers who switched mortgage provider and either maintained the same loan amount or increased the amount borrowed. This data does not include borrowers who refinanced with their existing bank.

Table 4. New Mortgage Lending Rates, Q1¹⁴ 2017

	PDH	BTL
Lending Rates		
Standard or LTV Variable	3.38	4.77
Fixed Rate		
1 to 3 Years	3.27	4.43
Over 3 Years	3.55	4.89

Source: Central Bank of Ireland, Retail Interest Rates.

Note: These data exclude restructured arrangements.

Figure 20. Number of Refinanced Loans, Q1 2012 to Q1 2017



Source: Banking and Payments Federation Ireland (BPFi).

Table 5. Refinanced Mortgage Overview, July to December 2016

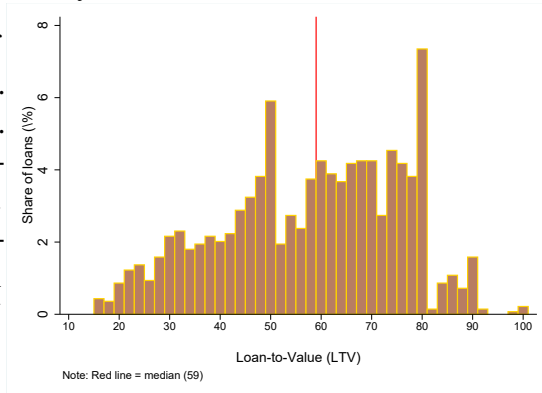
	All
Loan Characteristics	
Loan Size (€)	215,359
LTV (%)	57.5
LTI	2.3
Loan Term (Years)	22
Interest Rate (%)	3.3
Borrower Characteristics	
Income (€)	104,545
Borrower Age (Years)	41

Source: Central Bank of Ireland, MTD.



Figure 21. Refinanced Mortgage Loan-to-Value,¹⁵ July to December 2016

Figure 21 shows the distribution of loan-to-value of refinanced mortgages between July to December 2016. The median LTV for refinanced loans was 59 per cent. There was considerable dispersion across the distribution, with the highest share of lending occurring at circa 80 per cent LTV. Only a small number of refinanced loans had an LTV greater than 80 per cent. A large number of loans were clustered around an LTV of 50 per cent.



Source: Central Bank of Ireland, MTD. Note: Observations below 16 and above 100 LTV have been censored at these values.

2.3.4 Equity Release and Top-Ups

Table 6 presents an overview of the equity releases and top-ups granted between July and December 2016. The average loan size of equity releases/top-ups was €76,757. The average new facility LTV (taking into account the borrower’s total exposure following the equity release/top-up) was 57.1 per cent and average LTI at the facility level was 2.2. The interest rate on equity release/top-up loans was 3.5 per cent on average and the average loan term was 20 years. The average gross income of borrowers with equity releases/top-ups was €106,081. The average age of equity release/top-up borrowers was 42 years, which is higher than that for new property purchase loans.

Table 6. Equity Release/Top-Up Overview, July to December 2016

	All
Loan Characteristics	
Loan Size (€)	76,757
LTV (%)	57.1
LTI	2.2
Loan Term (Years)	20
Interest Rate ()	3.5
Borrower Characteristics	
Income (€)	106,081
Borrower Age (Years)	42

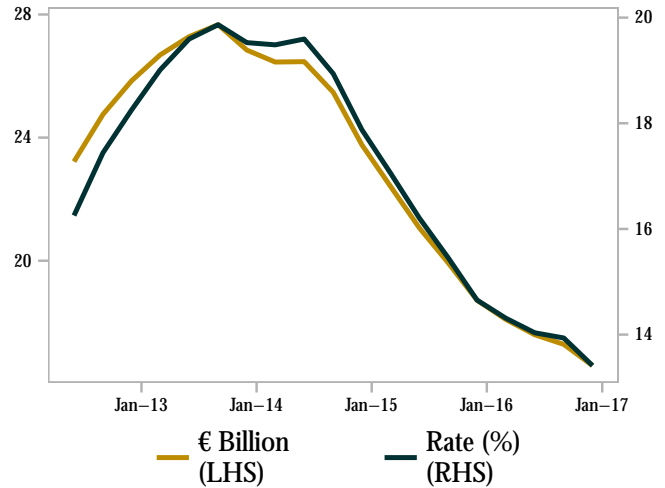
Source: Central Bank of Ireland, MTD.



2.4 Household Vulnerability and Mortgage Arrears

Figure 22 presents the total value of outstanding mortgage balances in arrears across both PDH loans and BTL loans. As of Q4 2016, €16.6bn worth of loans were in arrears, down from €18.7bn in Q4 2015. In Q4 2016, 13.4 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 circa €27.7bn in Q3 2013 or approximately 19.9 per cent of all loan balances.

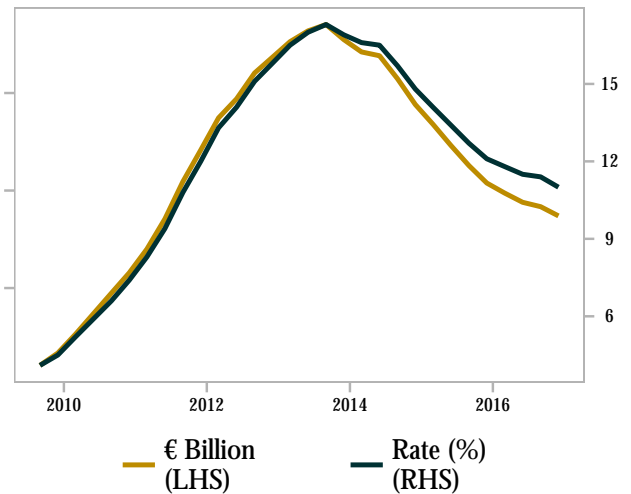
Figure 22. Mortgage Arrears by Rate and Balance, Q2 2012-Q4 2016



Source: Central Bank of Ireland, Mortgage Arrears Statistics.

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. As of Q4 2016, the value of mortgages in arrears amounted to €11bn. This accounts for 11 per cent of the value of the outstanding stock. The value of mortgages in arrears peaked at just over €18.8bn in Q3 2013. This represented just over 17.3 per cent of the total value of the outstanding stock of mortgages.

Figure 23. PDH Mortgage Arrears by Rate and Balance, Q3 2009-Q4 2016

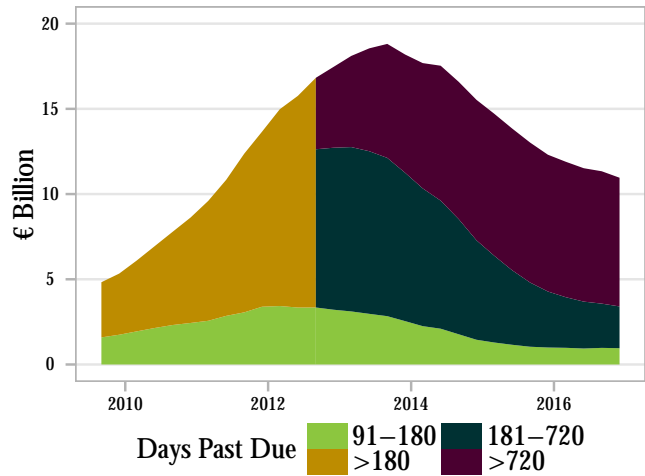


Source: Central Bank of Ireland, Mortgage Arrears Statistics.



Figure 24. PDH Mortgage Arrears by Depth of Arrears, Q3 2009-Q4 2016

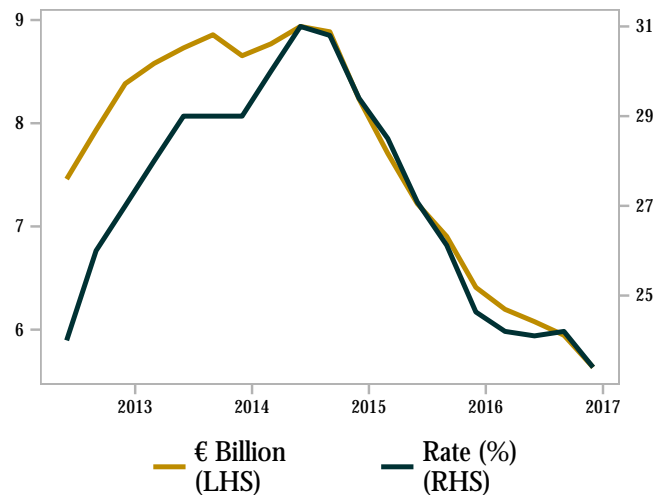
Despite the overall decline in the total volume of PDH arrears, a large percentage of loans in arrears are in long-term arrears. Figure 24 presents the value of mortgages in arrears by the depth of arrears. In Q4 2016, €7.6bn of total arrears were more than 720 days-past-due (dpd). A further €2.5bn were between 180 and 720 dpd, with approximately €1bn in arrears between 90 and 180 dpd.



Source: Central Bank of Ireland, Mortgage Arrears Statistics.

Figure 25. BTL Mortgage Arrears by Default and Balance, Q2 2012-Q4 2016

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 Q4 2016, the total balance of BTL mortgages in arrears was approximately €5.6bn, representing 23.4 per cent of the total outstanding credit stock for BTLs.

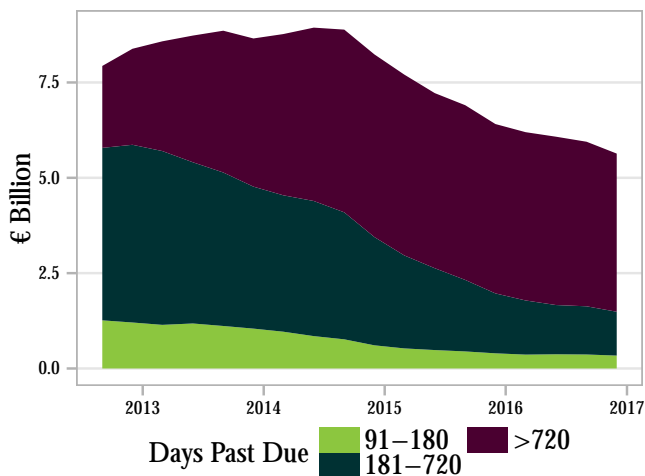


Source: Central Bank of Ireland, Mortgage Arrears Statistics.



Figure 26. BTL Arrears by Depth of Arrears, Q2 2012-Q4 2016

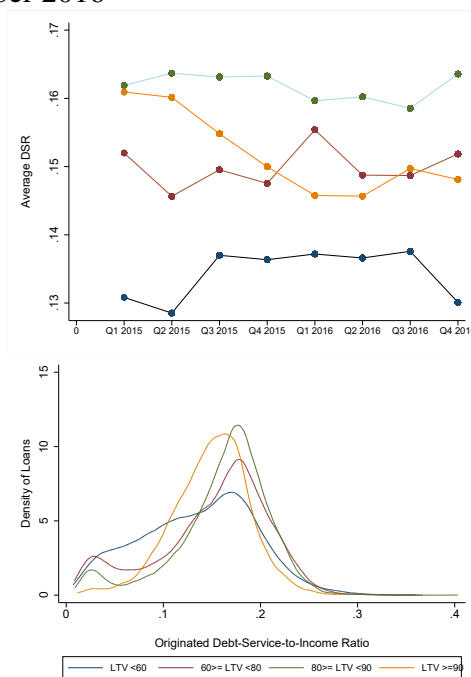
Figure 26 presents the balance of BTL loans in arrears by the duration of arrears. As of Q4 2016, approximately €4.1bn of loans were in long-term arrears of greater than 720 dpd. A further €1.1bn of loans were in arrears of between 180 and 720 dpd. Approximately €0.3bn were in arrears of between 90 and 180 dpd. The trend is towards an increasing share of mortgages in long-term arrears, which is similar to that for PDH mortgage arrears.



Source: Central Bank of Ireland, Mortgage Arrears Statistics.

Figure 27. Originated Debt-Service-to-Income across LTV ranges for First Time Borrowers, New Lending Between February 2015 and December 2016

OLTV and DSR ratios indicate a borrower’s degree of vulnerability to negative equity and cash-flow problems, respectively. Figure 27 presents the evolution of DSRs from Q1 2015 to Q4 2016 for different ranges of OLTV. The top plot presents the average DSR for different OLTV groups. On average and at origination, loans with lower LTV (less than 60 per cent) have also exhibited lower DSR since 2015. 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. There was more dispersion in the DSR distribution of low OLTV loans.*



Source: Central Bank of Ireland, MTD.

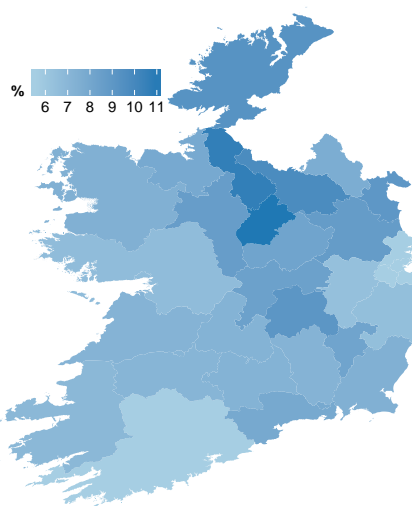
*This chart is based on a sample comprising new property purchase and self-build loans only.



Figure 28 presents the percentage of loans that were in arrears by county in June 2016 from the Central Bank Loan-Level Data (LLD). The data are collated from the loan-by-loan information on the following institutions: AIB, Bank of Ireland and Permanent TSB. There was considerable variation across counties in Ireland. Arrears rates were the lowest in large urban centers with higher default rates in counties in the Border and Midlands regions.*

*Note that these data are taken from the Central Bank of Ireland's Loan Level Data. The map includes data for three banks only. For the purposes of this map, a loan is classified as being in arrears if it is greater than 90 days past due on its payments. The chart cannot be compared to previously published versions due to changes in the definition of arrears - see Appendix A for further details. Both PDH and BTL loans are included. The map reflects the number of loans in arrears divided by the total number of loans in each county and loans are assigned to a county on the basis of their collateral location.

Figure 28. Arrears Rates on All Residential Mortgages by County (Per Cent of Loans), June 2016



Source: Central Bank of Ireland, Loan Level Data.

Table 7 presents the share of loans in arrears and in negative equity for both PDH and BTL loans as of June 2016. These figures are calculated using the Central Bank of Ireland's LLD and cover the following institutions: AIB, Bank of Ireland and Permanent TSB. For PDH loans, 84 per cent of loans were both in positive equity and performing, 10 per cent were in negative equity and performing, 3 per cent in arrears and positive equity, and 2 per cent in negative equity and arrears. For BTL loans, 71 per cent of loans were both in positive equity and performing, 16 per cent were in negative equity and performing, 7 per cent in arrears and positive equity, and 7 per cent in negative equity and arrears.*

*Negative Equity loans are defined as those with a current LTV, as reported by the banks, that is greater than 100. A loan is classified as being in arrears if it is greater than 90 days past due on its payments. The numbers may differ from previous versions of the HCMR where changes to the underlying populations and definitions have taken place. Please see Appendix A for more details.

Table 7. Split of Loans by Negative Equity and Arrears Status, June 2016

		PDH	
		Positive equity	Negative equity
Performing		84%	10%
	Arrears	3%	2%
		BTL	
		Positive equity	Negative equity
Performing		71%	16%
	Arrears	7%	7%

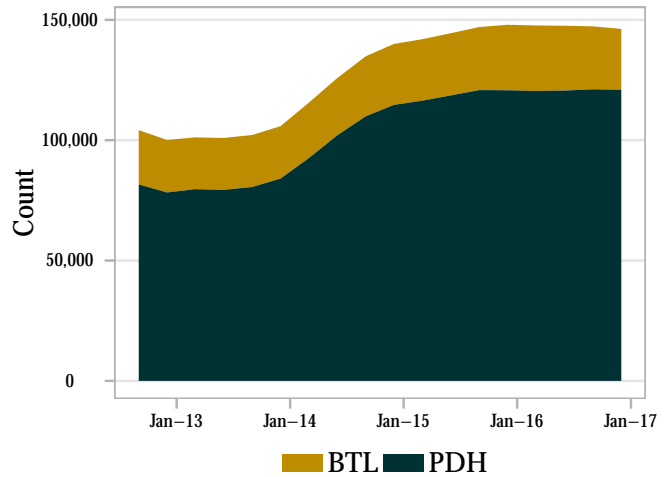
Source: Central Bank of Ireland, Loan Level Data.



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.* Up to Q4 2016, there were 120,944 PDH modifications provided by financial institutions to borrowers. This represents an increase from 120,739 in Q4 2015. The total number of modifications for BTLs stood at 25,292 in Q4 2016. This figure was 27,209 in Q4 2015.

*Borrowers both in arrears and without arrears may get a modification.

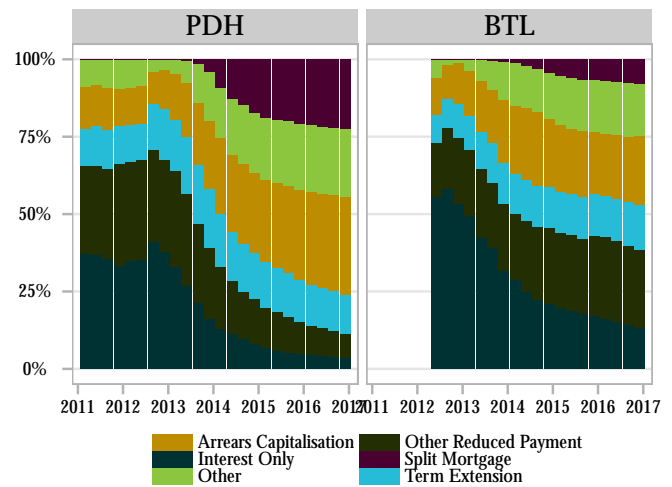
Figure 29. Total Restructured Mortgage Accounts, Q3 2012 - Q4 2016



Source: Central Bank of Ireland, Mortgage Arrears Statistics.

Figure 30 presents the total number of mortgage modifications by the type of arrangement up to Q4 2016 for both PDH and BTL mortgages. For PDH loans, the most commonly occurring arrangement types were arrears capitalisations and permanent split mortgages. The share of interest only schemes and reduced payment arrangements fell further during Q4, to 11 per cent, indicating a continuing move out of short term arrangements. For BTLs, the most common arrangements were reduced payment schemes.

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



Source: Central Bank of Ireland, Mortgage Arrears Statistics.



Table 8. Percentage of Modifications Meeting Arrangement Terms, Q4 2016

	PDH	BTL
Arrears Capitalisation	77.5	65.8
Deferred Interest Scheme	73.1	100
Interest Only - over one year	94.8	93.9
Interest Only - up to one year	87.3	79.5
Payment Moratorium	94.0	95.9
Permanent Interest Rate Reduction	56.7	0.0
Reduced Payment (greater than interest only)	90.9	94.4
Reduced Payment (less than interest only)	72.5	87.3
Split Mortgage	93.9	94.6
Temporary Interest Rate Reduction	92.3	94.7
Term Extension	92.9	93.5
Other	87.2	90.0
Total	86.9	86.4

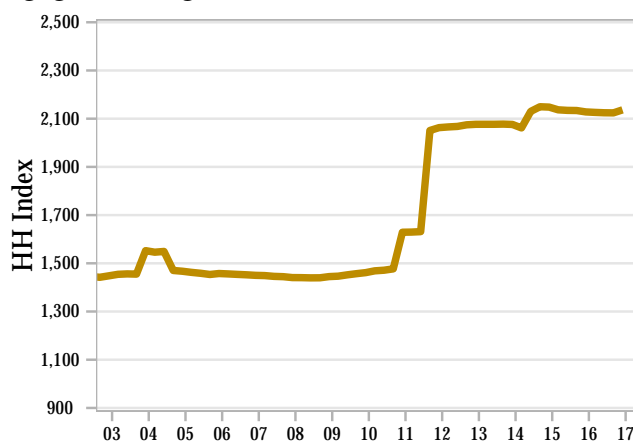
Table 8 outlines the percentage of modified loans meeting the terms of the arrangement, both in total and for each specific type of modification as of Q4 2016. Overall for PDH loans, 86.9 per cent were meeting the terms of the arrangement. The equivalent figure for BTL was 86.4 per cent. There is variation across modification type in the percentage of borrowers meeting the terms of the arrangements.

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.

2.5 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 - Q4 2016

Source: Central Bank of Ireland confidential data.

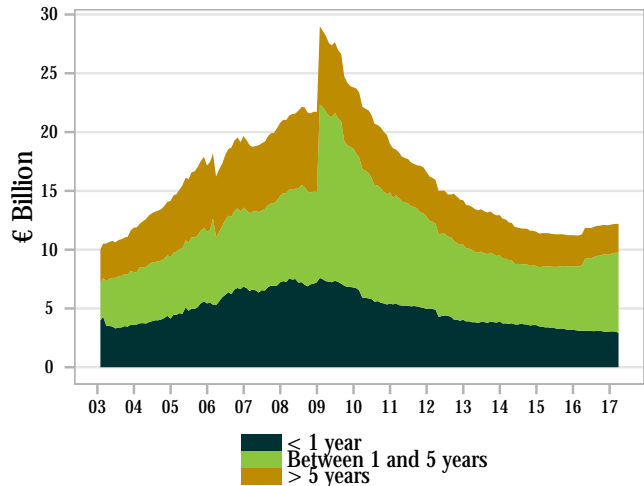


3 Non-Mortgage Household Credit

Figure 32 presents the stock of credit outstanding for consumer lending by Irish resident credit institutions by duration of the loan.* Consumer credit of less than one year stood at €2.931bn in March 2017. Loans of 1 to 5 year terms stood at €6.81bn in March 2017. Consumer loans of over 5 years stood at €2.45bn in March 2017. Differences across time periods may be affected by portfolio re-balancing and other compositional issues.

*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.

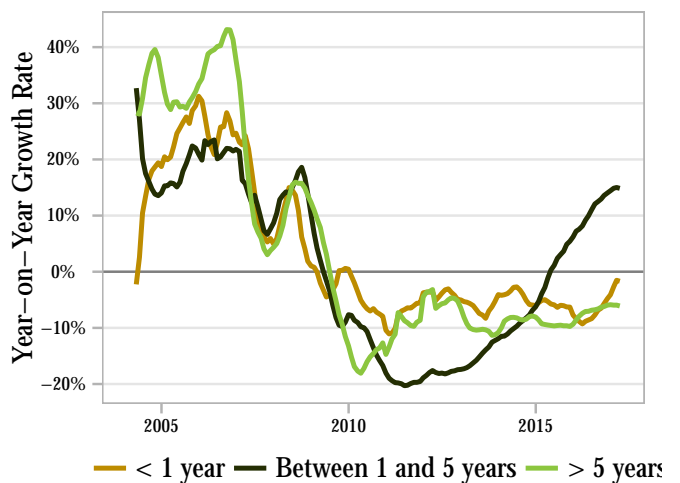
Figure 32. Outstanding Stock of Consumer Credit, 2003 - 2017



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 33 shows the growth rates in 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 less than 1 year and of greater than 5 year duration continues to be negative, there has been a positive recovery in credit between 1 and 5 year duration. The growth rate on these loans was 14.3 per cent in March 2017, up from 9.0 per cent year-on-year. Loans of less than 1 year and of greater than 5 years duration experienced growth rates of -3.3 per cent and -6.5 per cent respectively as of March 2017.

Figure 33. Growth Rate in Consumer Credit, 2004 - 2017



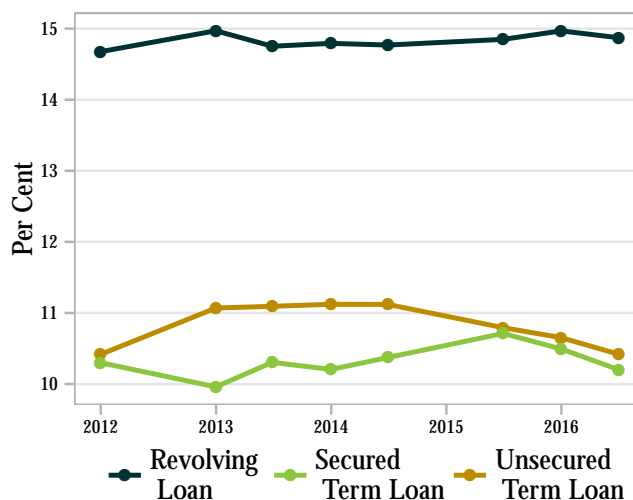
Source: Central Bank of Ireland, Credit, Money and Banking Statistics. Note: These data are taken from CBI statistical table A.5.1. Note: These growth rates have been adjusted to account for compositional issues.



Figure 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.* As of June 2016 (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 10.2 and 10.4 per cent respectively.

*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 June 2016

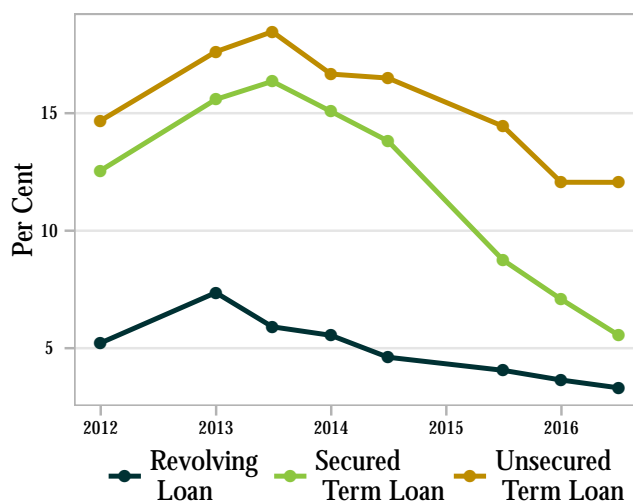


Source: Central Bank of Ireland Loan-Level Data. Note: Data cover AIB, BOI and PTSB.

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 5.6 per cent while revolving loans had an arrears rate of approximately 3.3 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. Arrears cases in the non-mortgage data are identified where the banks have classified the loan as non-performing. This definition differs from that used for mortgage loans, where a loan is classified as being in arrears if it is greater than 90 days past due on its payments. See Appendix A for further details.

Figure 35. Non-performing loans as a share of Consumer Loans by Loan Count, December 2011 to June 2016



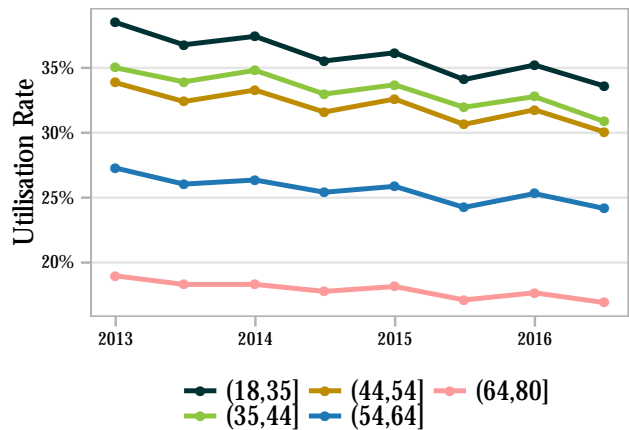
Source: Central Bank of Ireland, Loan Level Data. Note: Data cover AIB, BOI and PTSB.



Figure 36. Credit Card Utilisation: Weighted Mean by Borrower Age, December 2012 to June 2016

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 2012 to June 2016. Credit card utilisation is generally higher for younger borrowers possibly reflecting higher financial sophistication or liquidity constraints.*

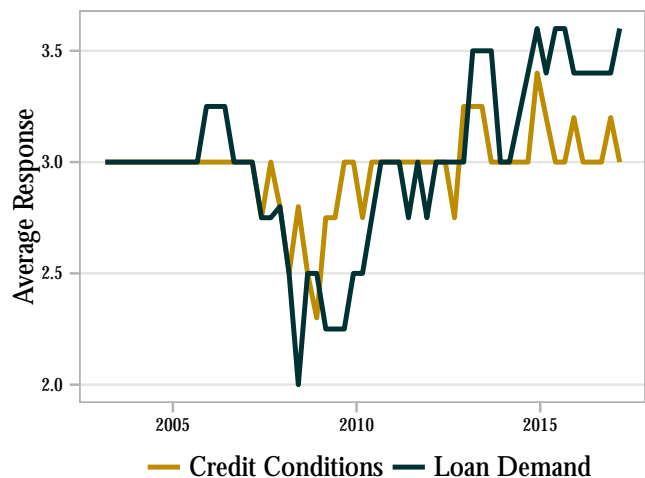
*Utilisation rate is calculated as the total outstanding balance aggregated at the age-cohort level divided by the total loan limit also aggregated at the cohort level. It is the proportion of available credit drawn down in each cohort. Note: A similar figure released as part of previous Household Credit Market Reports showed the cohort-level average of loan-level utilisation rates which is different from what is presented in this issue.



Source: Central Bank of Ireland, Loan-Level Data. Note: Data cover AIB, BOI and PTSB.

Figure 37 presents average response from bank loan officers to questions on credit conditions and credit demand for consumer lending from the Central Bank of Ireland / Eurosystem 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 credit demand has increased in recent quarters, while credit standards on lending for consumer credit remained unchanged in Q1 2017.

Figure 37. Loan Demand and Credit Conditions for Consumer Loans, Q1 2003 - Q1 2017



Source: Central Bank of Ireland / Eurosystem, Bank Lending Survey.



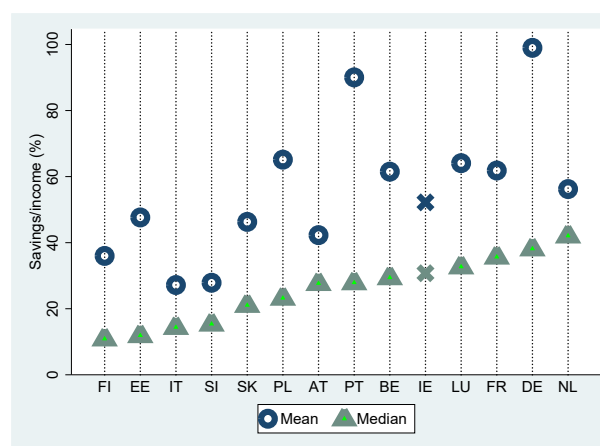
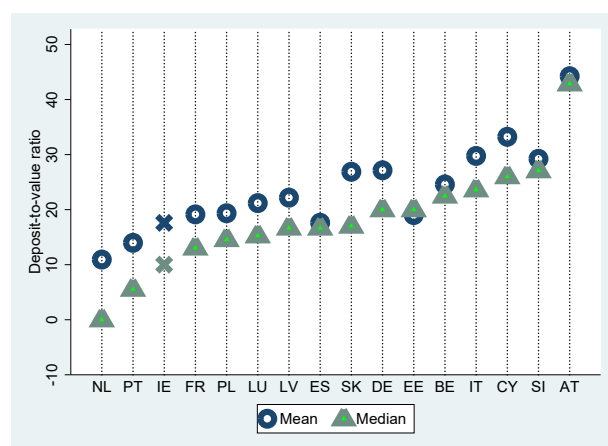
Box 1: Home purchases, downpayments and savings, a cross country comparison

Limits on Loan-to-Value (LTV) ratios for property purchases have become an increasingly important lever of macroprudential policy in recent years. However, comparative cross-country data on mortgage downpayments and savings of borrowers, which could shed light on the economic and social impact of such policies, remains relatively scarce. We use survey data (the 2016 Household Finance and Consumption Survey (HFCS, wave 2, conducted 2013 - 2014) to compare Irish downpayments and savings patterns with those of home-buyers in other European countries - prior to the introduction of the Irish mortgage regulations.

Chart A compares the cross country mean and median ratio of the downpayment relative to the house purchase price (DTV ratio) for mortgaged borrowers who purchased a home between 2008 and 2014 who were aged under 40 at the time of purchase.^a The median DTV ratios are generally grouped in the 10 to 20 per cent range and Ireland is towards the lower end, with the Netherlands at the bottom and Austria at the top, followed by Slovenia and Cyprus.

Chart A: Downpayments-to-value ratio

Chart B: Value of savings (€'000s)



Source: Authors' calculations using HCFS data.

The survey also contains information on *prospective* home-buyers – that is, households who cite home purchase as a reason for saving. The propensity to save for home purchase is highest amongst private renters aged between 26 and 40 at around one-third of such households in Ireland and in selected European countries. Chart B plots the median and mean ratio of savings to gross household income for these households. For many countries, the median ratio of savings to gross income is in the range of 20 to 30 per cent as at the survey date (2013/2014), with Ireland towards the upper end of this range.

Notwithstanding significant differences in housing, mortgage and rental markets, this analysis does not suggest that Irish FTBs are a significant outlier when it comes to downpayment and savings patterns during the 2008-2014 and 2013/2014 periods respectively. Nonetheless, newly introduced macroprudential policies across Europe, as well as other factors (for example the low interest rate environment) may be affecting such patterns.

^aSee [Home purchases, downpayments and savings](#), Jane Kelly and Reamonn Lydon, Economic Letter, Vol 2017, No. 2, for details. Box author: Jane Kelly. Email: jane.kelly@centralbank.ie



Appendix A: Data Sources

Information from the following sources is used:

- Data for the Household Credit Market Report 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 Eurosystem/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).
 - 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. For further information on outstanding mortgage credit stocks specifically, please refer to the Central Bank of Ireland [Quarterly Bulletin No. 1 2016](#) Box A: Enhancements to Household and Non-Financial Corporation Bank Lending Series in Money and Banking Statistics by Martina Sherman and the [Statistical release on the 30th September 2016](#) on Money and Banking Statistics.
 - Central Bank of Ireland: [Retail Interest Rate Statistics](#).
 - Central Bank of Ireland: [Quarterly Financial Accounts](#).
 - Central Bank of Ireland Loan-Level Data (LLD): 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 and Permanent TSB. For mortgages, loans in ‘Arrears’ are defined as loans greater than 90 days past due. This is a change from previous HCMRs where loans were classified as in ‘Arrears’ if they were greater than 90 days past due and/or impaired. The rationale for this change is to align the definition with that used as part of the Central Bank of Ireland’s official statistics on mortgage arrears. Data covering non-mortgage loans are available for AIB, Bank of Ireland and Permanent TSB. Loans in arrears for consumer data are classified as non-performing by the lending institution. The loans included in this population are those submitted to the Central Bank in the consumer tapes of the loan-level data submissions. Loans with a missing current outstanding balance are omitted as are loans not classified as term or revolving status. The data are included in this report on a best efforts basis. Figures and tables based on the LLD may differ from previous HCMR versions where revisions have taken place or where underlying data samples have changed. Time series comparisons across reports are not advised and will be presented within specific reports where possible.
 - 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 at Allied Irish Banks (including the Educational Building Society), Bank of Ireland, Ulster Bank Ireland, KBC Bank Ireland and Permanent TSB. This report draws on three samples of loans from the monitoring templates data (MTD). First, a sample of new lending comprised of new property purchase loans and self-build loans that originated in H2 2016. Second, a sample of refinanced loans, which refers to borrowers who switched mortgage provider without or without increasing their loan amount in H2 2016. Third, borrowers who obtained a new top up or equity release in H2 2016. Outliers are trimmed from the full sample of MTD at the 1st and 99th percentile.
 - 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.
 - 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, [Mortgage Drawdowns and Mortgage Approvals Report](#). Approvals are aggregated to a quarterly basis.
- This report has been compiled including published data available at, or before, the **16 May 2017**.

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

