



Banc Ceannais na hÉireann  
Central Bank of Ireland

---

Eurosystem

# Household Credit Market Report

## 2018

# Household Credit Market Report 2018

Published: October 2018.

The Central Bank of Ireland's *Household Credit Market Report* (HCMR) is compiled by the Macro Financial Division.<sup>1</sup> 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.<sup>2</sup> 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 an updated view of the financial resilience of mortgaged Irish households. Box 2 provides an overview of mortgage arrears by county and depth of arrears. Box 3 focuses on the relationship between borrower age and borrower debt burdens.

## Executive Summary <sup>1</sup>

- Household debt-to-disposable-income (DTI) declined to 133.3 in Q1 2018, reaching its lowest level since Q1 2004, but Irish households remain the fourth most indebted in the EU.
- The value of new mortgage lending stood at €2.01 billion in Q2 2018, a 22 per cent increase from Q2 2017.
- In H1 2018, the average loan size for new First-Time-Buyer (FTB) lending in Dublin was €273,953 compared to €185,987 for FTBs outside Dublin, while average incomes were €85,334 and €66,728 respectively.
- In Q2 2018, the share of new fixed rate lending continued to rise. Fixed rates of 3 years and over represented 48 per cent of new primary-dwelling-house (PDH) lending and those of 1-3 years accounted for a further 26 per cent.
- Almost 50 per cent of new first-time-buyer (FTB) loans by number had a loan term of between 30 to 34 years. For second-subsequent-buyers (SSB), 50 per cent of loans had a term that was under 25 years.
- The share of PDH loans in negative equity has fallen from a peak of 36.2 per cent in Q4 2012 to 7.3 per cent in Q4 2017.
- The share of non-mortgaged household purchases continues to decline but remains substantial at 29.5 per cent in H1 2018 (based on market value for households only).
- The number and share of loans in arrears continues to fall. 63,402 loans were in arrears of over 90 days in Q2 2018, down from 72,610 in Q2 2017.

<sup>1</sup>Enquiries and comments relating to this document should be addressed to: Macro-Financial Division, Central Bank of Ireland, PO Box 559, Dublin 1. Email: MFDadmin@centralbank.ie

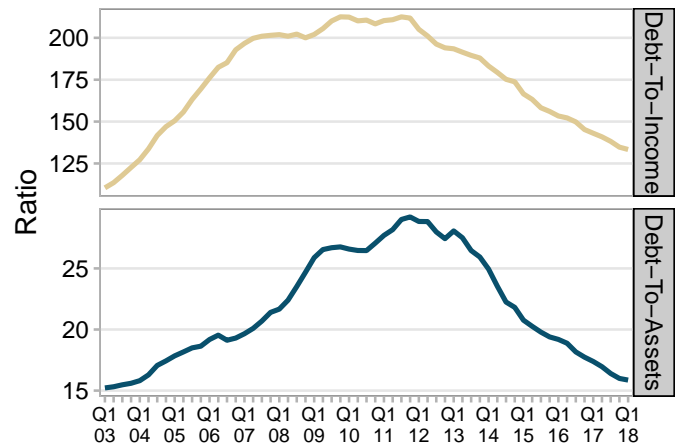
<sup>2</sup>Appendix A provides detailed information on all data sources used in the report. Appendix B provides a glossary of key terms and abbreviations. Figures may differ from previous HCMR versions where revisions have taken place or where underlying data samples have changed. Figures are compiled on a 'best effort' basis.

# 1. Household Debt

Figure 1 presents the household debt-to-disposable income ratio (DTI) and the debt-to-asset ratio (DTA). The DTI declined from 143 in Q1 2017 to 133.3 in Q1 2018, reaching the lowest level since Q1 2004. A downward trend is also evident in the DTA ratio. It decreased from 17.4 in Q1 2017 to 15.9 in Q1 2018. Both indicators suggest a continued improvement in the sustainability of household balance sheets. At end-Q1 2018, household debt stood at €140.2bn, or €28,869 per capita.<sup>a</sup>

<sup>a</sup>See :[Quarterly Financial Accounts, Q1 2018](#).

**Figure 1 | Household Debt-to-Asset and Debt-to-Income Ratios, Q1 2003-Q1 2018**

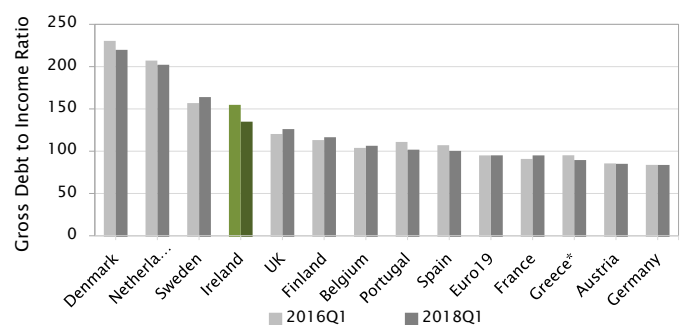


Source: Central Bank of Ireland, Quarterly Financial Accounts. Note: Assets refers to total financial assets plus estimated housing assets. The latter estimate is based on the size and value of the housing stock. Data on the value of housing is obtained from the CSO's 'Residential Property Price Index'. 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 2 presents the DTI ratio for selected European countries to provide a benchmark for Ireland's position internationally. Notwithstanding the significant reduction in recent years, Ireland's DTI ratio remains the fourth highest in this comparison group.<sup>a</sup> Further reductions in the DTI ratio would reduce financial vulnerabilities.

<sup>a</sup>International comparisons should be considered with caution as DTI ratios can mask differences in net wealth and savings.

**Figure 2 | Debt-to-Income Ratios Across Countries, Q1 2016 and Q1 2018**



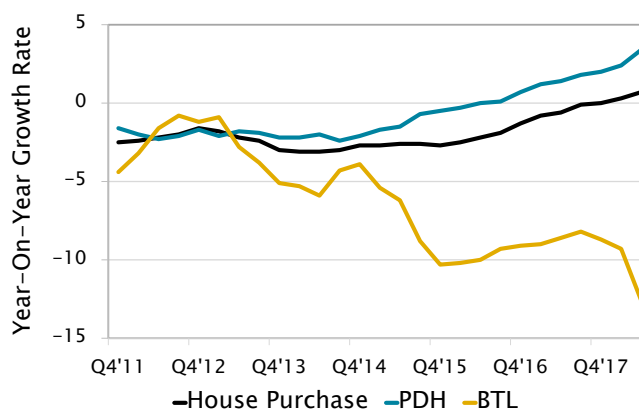
Source: Central Bank of Ireland, Quarterly Financial Accounts and ECB Statistical Data Warehouse (SDW). Note: Debt-to-income ratios excluding Ireland taken from ECB SDW. \* indicates most recent data is for Q4 2017

## 2. Developments in Mortgage Credit

### 2.1 Mortgage Credit Growth Rates

Figure 3 shows that mortgage credit advanced to Irish resident households for PDH mortgages by resident credit institutions increased at an annual rate of 3.4 per cent in Q2 2018. This represents an increase in the growth rate in PDH mortgage credit following a period of prolonged deleveraging. Loans for BTL purposes declined at an annual rate of -12.6 per cent. Lending for house purchase was positive but small (0.7 per cent) in June 2018.

**Figure 3 | Per Cent Year-on-Year Change in Mortgage Credit by Dwelling Type, Q4 2011-Q2 2018**



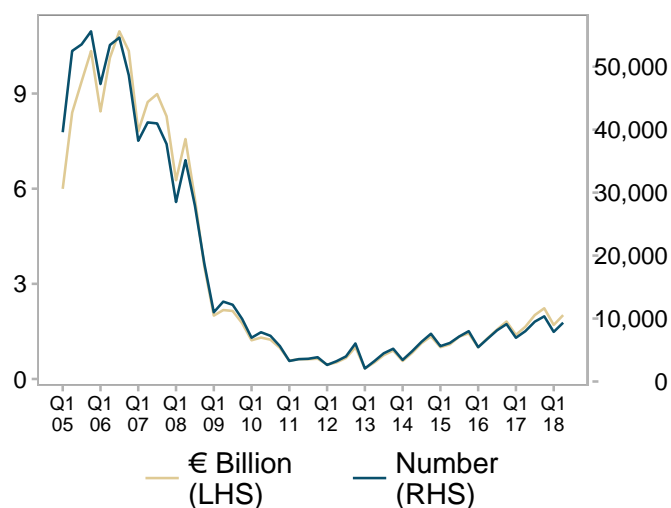
Source: Central Bank of Ireland, *Private Household Credit and Deposits*, table A.18.1; *Credit, Money and Banking Statistics*, table A.5.1.

### 2.2 New Lending

#### 2.2.1 Overview of New Lending

Figure 4 presents data on new mortgage lending from the Banking Payments Federation of Ireland (BPF). The value of new lending stood at €2.01bn in Q2 2018. This increased from €1.65bn in Q2 2017, an increase of 22 per cent. The number of new loans increased from 7,998 in Q2 2017 to 9,339 in Q2 2018. This represents a 17 per cent expansion. While lending volumes have increased they remain well below levels seen in the 2005-2007 period.

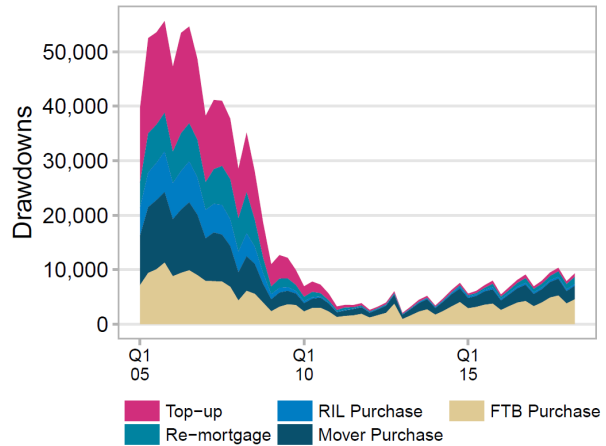
**Figure 4 | New Mortgage Lending by Loan Count and Balance, Q1 2005-Q2 2018**



Source: Banking and Payments Federation Ireland.

Figure 5 presents new mortgage lending by loan type. Since 2009, the highest share of mortgage borrowing has been undertaken by FTBs. In Q2 2018, FTBs accounted for 48.7 per cent of new loans, Movers accounted for 26.7 per cent of new loans with 3.6 per cent for Residential Investment Lettings (RIL), 14 per cent for re-mortgages and 7 per cent for Top-ups.

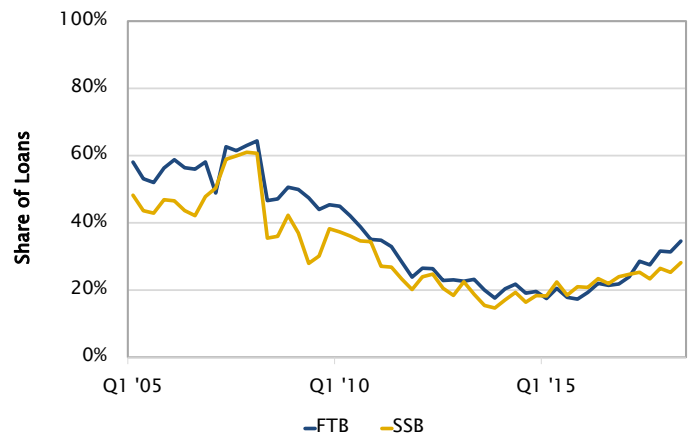
**Figure 5 | Breakdown of New Mortgage Lending (Drawdowns) by Credit Type, Q1 2005-Q2 2018**



Source: Banking and Payments Federation Ireland.

Figure 6 presents the share of lending by number for FTBs and SSBs that was for the purchase of a newly constructed property. Approximately 35 per cent of purchases by FTBs were for a new property in Q2 2018, in comparison with 28 per cent for SSBs. The highest share of new properties for both FTBs and SSBs was in Q1 2008, where 64 per cent of purchases by FTBs and 61 per cent of purchases by SSBs were for a new property.

**Figure 6 | Share of new property purchases by Borrower Type, Q1 2005-Q2 2018**

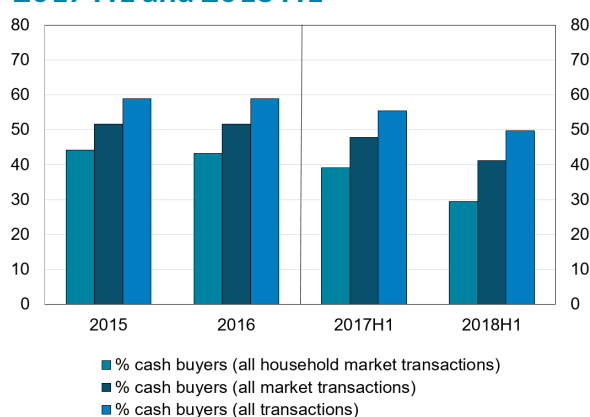


Source: Banking and Payments Federation Ireland. Note: New Property Purchases refer to the purchase of a newly constructed property

Figure 7 provides some context on the share of non-mortgaged financed residential property transactions. The share of cash purchases is presented using three measures; (i) 'Household market transactions', (ii) 'All market transactions' and (iii) 'All transactions'.<sup>a</sup> The share of non-mortgaged household transactions continues to decline but remains substantial at 29.5 per cent in 2018 H1, down from 44.2 per cent in 2015.

<sup>a</sup>for a detailed description of each measure please see Item 1 in Appendix 1.

**Figure 7 | Financing of Household Residential Property Transactions by share and type of cash buyers, 2015, 2016, 2017 H1 and 2018 H1**



Source: CSO, BPFi and Central Bank of Ireland calculations. Figures for 2015 and 2016 are based on annual totals, figures for 2017H1 and 2018H1 are based on figures for the first 6 months of each year. Note: These numbers are estimates using BPFi/CSO/CBI Data. Figures are adjusted for the number of self-builds in the data.

## 2.2.2 New Lending in H1 2018

Table 1 provides information on the average loan and borrower characteristics of new lending to FTBs and SSBs split into two categories; Dublin and Non-Dublin. Across both borrower types, the average loan size, property value and income were higher for borrowers purchasing properties in Dublin, than those purchasing outside of Dublin. The average originating loan-to-income (OLTI) was also higher for Dublin borrowers, with an average OLTi for FTBs of 3.4, close to the 3.5 limit of the mortgage measures and an OLTi of 2.9 for SSBs. In contrast, borrowers outside of Dublin had a slightly higher average originating loan-to-value (OLTV) compared to those in Dublin. The average term for FTBs was 29-30 years, whereas the average loan term for SSBs was lower at 23-24 years. The average age of FTBs was slightly higher in Dublin, at 35 years compared to 34 for Non-Dublin. For SSBs, the average age was 41 years, regardless of location.

**Table 1 | Overview of New Lending, H1 2018**

	All	FTB Dublin	FTB Non-Dublin	SSB Dublin	SSB Non-Dublin
<b>Loan Characteristics</b>					
Loan Size (€)	223,025	273,953	185,987	289,669	198,960
Property Value (€)	333,649	368,951	242,453	533,260	334,736
OLTV (%)	74.8	78.4	80.2	66.4	67.2
OLTI (%)	2.9	3.4	2.9	2.9	2.4
Term (%)	27	30	29	24	23
<b>Borrower Characteristics</b>					
Income (€)	85,545	85,334	66,728	123,713	95,015
Age(Years)	37	35	34	41	41

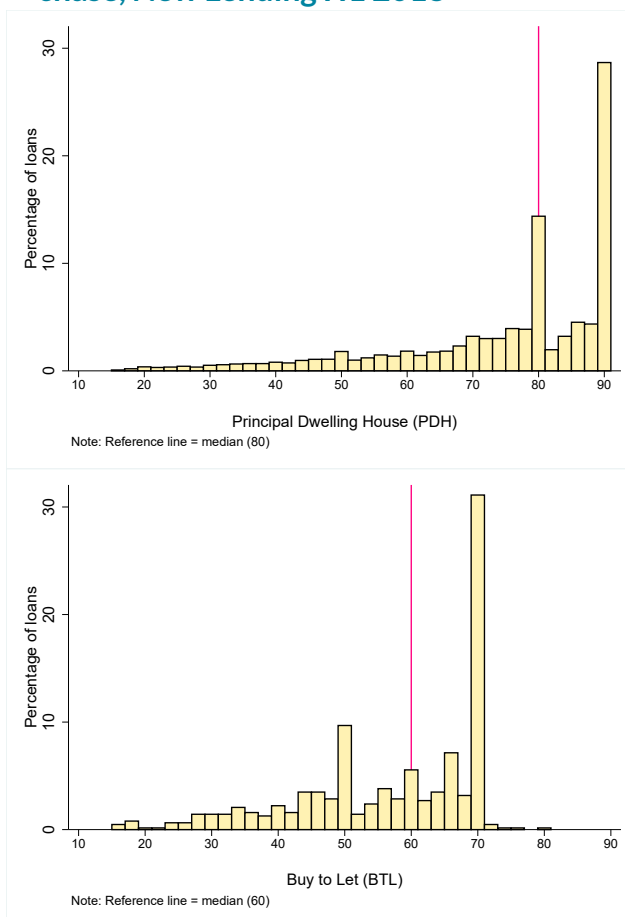
Source: Central Bank of Ireland, Monitoring Template data (MTD). Note: Income refers to the total gross income of all borrowers on the mortgage. Note: Sample is new property purchase loans and self-builds only.

Figure 8 shows the distribution of Originated Loan-to-Value (OLTV) ratios for new lending for H1 2018. The distributions are shown separately for PDH and BTL borrowers. The largest volume of loans are issued at around 80 and 90 per cent OLTV in line with the LTV limits under the mortgage regulations. There was very little lending to PDH borrowers at an OLTV greater than 90 per cent. For BTLs, the largest number of loans originated at a 69-70 per cent OLTV, consistent with the limit of 70 per cent OLTV for BTL lending.

Figure 9 presents the distributions of originated debt-service-to-income ratios (DSR) for FTBs and SSBs respectively for H1 2018. FTBs had higher median 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. Compared to SSBs, relatively few FTBs have a DSR less than 0.1. For both borrower types, very little new lending occurs where the DSR exceeds 0.3.<sup>a</sup>

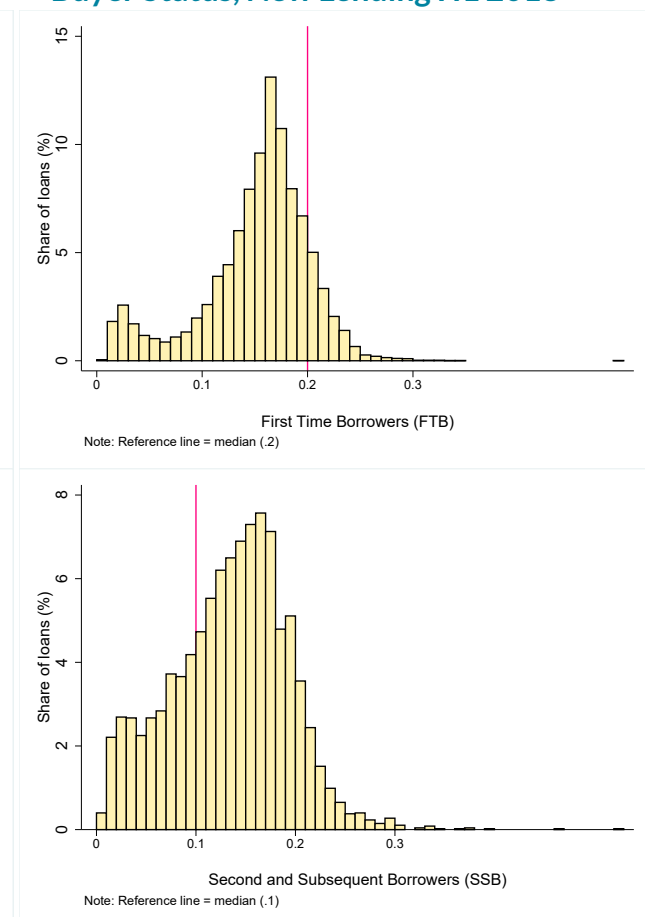
<sup>a</sup>DSR is calculated using the mortgage installment relative to income where total household gross income is defined as basic annual gross income before taxes, excluding rental income. Debt refers to mortgage debt only.

**Figure 8 | Distribution of Originated Loan-to-Value Ratios by Type of Purchase, New Lending H1 2018**



Source: Central Bank of Ireland, MTD.  
Note: Outliers trimmed from sample.

**Figure 9 | Distribution of Originated Debt-Service-to-Gross-Income by Buyer Status, New Lending H1 2018**



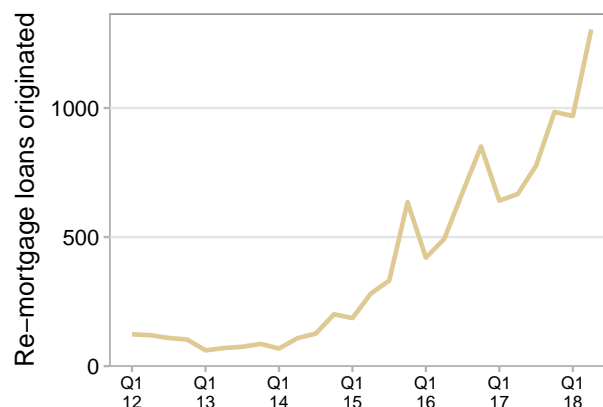
Source: Central Bank of Ireland, MTD.  
Note: Outliers trimmed from sample.

## 2.2.3 Loan Refinancing

Figure 10 displays the trend in the number of re-mortgage loans between Q1 2012 and Q2 2018. This data is taken from the breakdown of New Mortgage Lending (Drawdowns) by credit type from the Banking and Payments Federation Ireland.<sup>a</sup> We observe an increasing trend in the number of re-mortgage loans from Q2 2014 onwards. The number of re-mortgaged loans stood at 1,304 as at Q2 2018, an increase of 196 per cent year-on-year.

<sup>a</sup>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.

**Figure 10 | Number of Re-mortgage Loans, Q1 2012-Q2 2018**



Source: Banking and Payments Federation Ireland (BPFi).

Table 2 presents summary statistics for refinancing (switcher) mortgage lending for the period January to June 2018 inclusive. The average loan size of new refinance mortgages was €227,900. The average LTV across all loans was 58 per cent and the average LTI was 2.4. The interest rate on refinanced loans was 3.0 per cent on average and the average loan term was 22 years. Average gross income of borrowers with refinanced PDH mortgage loans was €101,712.<sup>a</sup>

<sup>a</sup>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 2 | Refinanced Mortgage Overview, H1 2018**

	All
No. Loans	2,015
<b>Loan Characteristics</b>	
Loan Size (€)	227,900
Property Value (€)	411,131
LTV(%)	58.0
LTI	2.4
Loan Term (Years)	22
Interest Rate (%)	3.0
<b>Borrower Characteristics</b>	
Income(€)	101,712
Borrower Age(Years)	40

Source: Central Bank of Ireland, MTD.



## 2.2.4 Equity Release and Top-Ups

Table 3 presents an overview of the equity releases and top-ups granted between January and June 2018. The average loan size of equity releases/top-ups was €84,729. The average new facility LTV (taking into account the borrower's total exposure following the equity release/top-up) was 57.7 per cent and average LTI at the facility level was 2.4. The interest rate on equity release/top-up loans was 3.2 per cent on average and the average loan term was 21 years. The average gross income of borrowers with equity releases/top-ups was €108,077. The average age of equity release/top-up borrowers was 42 years. 1,170 equity releases/top-ups were granted during H1 2018 with a total value of €98.4mn. Approximately 81 per cent of these loans were for renovation purposes.

## 2.2.5 Loan Terms over Time

Figure 11 shows the percentage of new loans (by number) for FTBs and SSBs who have a loan term of less than 25 years, 25 to less than 30 years, 30 to less than 35 years and 35 plus years. For FTBs, loan terms of between 30 and less than 35 years were the single biggest category of loans in H1 2018, at almost 50 per cent. For SSBs, loan terms of less than 25 years were the single most common category, at c.50 per cent in H1 2018. Loan terms of 35 years and over have not generally been agreed since 2015. The share of loans of 30 years and over has fallen from almost two thirds in 2006 to just under half in 2018H1 for FTBs, while for SSBs it has fallen from about a third to around a fifth over the same period.

**Table 3 | Equity Release/Top-Up Overview, H1 2018**

	All
No. Loans	1,170
<b>Loan Characteristics</b>	
Loan Size (€)	84,729
Property Value (€)	438,572
LTV (%)	57.7
LTI	2.4
Loan Term (Years)	21
Interest Rate (%)	3.2
<b>Borrower Characteristics</b>	
Income(€)	108,077
Borrower Age (Years)	42
<b>Loan Purpose</b>	
Renovation	81%
Other	19%

Source: Central Bank of Ireland, MTD.

**Figure 11 | Loan Terms over Time for FTBs and SSBs, 2006 - H1 2018**



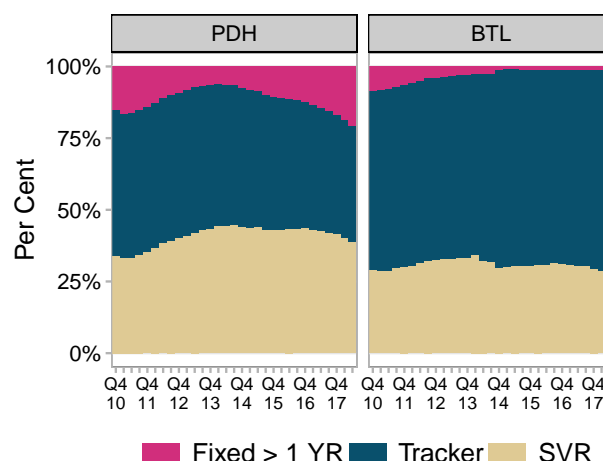
Source: Central Bank of Ireland LLD and MTD

## 2.3 Interest Rates

### 2.3.1 Interest Rates on Outstanding Loans

Figure 12 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 Q2 2018, for PDH loans, 39 per cent of the balance of loans were contracted to SVR and up to 1 year fixed interest rates. A further 40 per cent of the balance had tracker rates and the remaining 21 per cent were fixed-rate contracts of over 1 year maturity. The share of fixed rate lending over 1 year has increased in recent years from a low of 6 per cent in 2014. For BTL loans, a majority were tracker rate mortgages (70 per cent) with SVR and up to 1 year fixed rates being the second largest type of rate structure (29 per cent). Approximately 1 per cent of BTL loans were on fixed rates of over 1 year.

**Figure 12 | Rate Type on Mortgage Credit Outstanding Stock , Q4 2010-Q2 2018**



Source: Central Bank of Ireland, Credit, Money and Banking Statistics, tables A.18.1 and A.18.2.

Table 4 presents the average interest rate on outstanding PDH and BTL mortgages by interest rate type. As of Q2 2018, the average standard or LTV variable rate on PDH mortgages was 3.62 per cent. This rate has declined from 3.78 per cent in Q2 2017. The average rate on outstanding tracker PDH mortgages stood at 1.08 per cent in Q2 2018. The tracker rate on BTL mortgages stood at 1.07 per cent in Q2 2018. Fixed rates on PDH and BTL mortgages varied by term duration and have also fallen compared to one year earlier, other than BTL fixed rates of over 3 year maturities where volumes are small.

**Table 4 | Average Interest Rate on Mortgage Credit Outstanding Stock by Rate Type, Q2 2018**

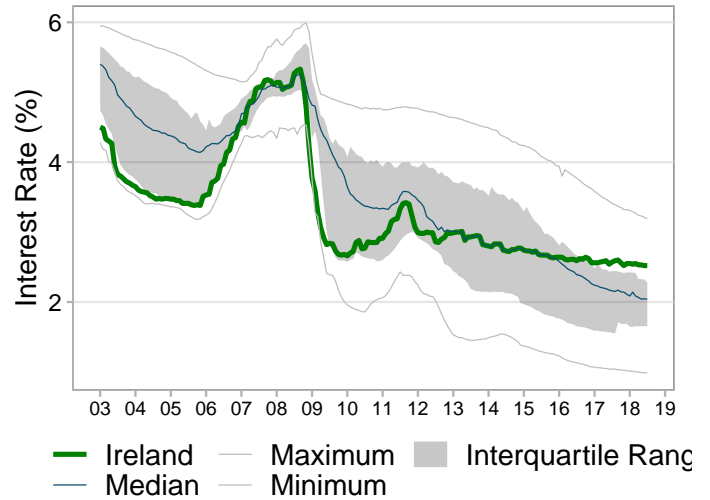
Average Rate	PDH		BTL	
	Q2 '17	Q2 '18	Q2 '17	Q2 '18
SVR or LTVV	3.78	3.62	4.38	4.25
Tracker	1.04	1.08	1.09	1.07
<i>Fixed</i>				
Up to 1 year	3.53	3.22	na	na
1 to 3 Years	3.47	3.23	4.37	4.25
over 3 years	3.24	3.15	2.72	3.18

Source: Central Bank of Ireland, Retail Interest Rates, table B.3.1.

To provide an international comparison, Figure 13 presents interest rates on the stock of outstanding mortgages for Ireland and a group of select European countries.<sup>a</sup> Percentiles and the sample maximum and minimum are also displayed. The interest rate on current outstanding mortgages in Ireland was 2.52 per cent as of July 2018, relatively unchanged from one year earlier. Interest rates in Ireland remain high relative to the sample median in other European countries presented even as the interquartile range narrows. 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 4. Figure 13 aggregates across these categories. In addition to differences in interest rates, part of the cross-country variation can 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.

<sup>a</sup>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 13 | Interest Rates on Current Outstanding Mortgages, European Comparison, January 2003-July 2018**



Source: European Central Bank, MFI Interest Rates.

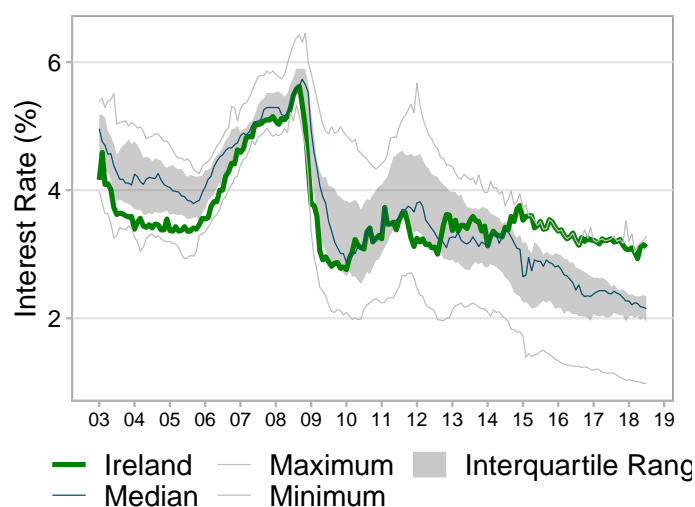
## 2.3.2 Interest Rates on New Loans

Figure 14 presents interest rates on new loans for house purchase for Ireland and the median across a group of selected European countries.<sup>a</sup> Percentiles and the sample maximum and minimum are also presented. The interest rate in Ireland as of July 2018 was 3.1 per cent, the second highest after Greece. 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 along with other structural factors such as credit risk and competition.<sup>b</sup>

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

<sup>b</sup>Note: Data include within-bank restructured mortgage contracts and renegotiated loans (mortgage switchers) and do not only capture the interest rates on new mortgage drawdowns. New mortgage rates (excluding restructures) are provided in Table 5.

**Figure 14 | Interest Rates on New House Purchase Loans, Jan 2003-July 2018**



Source: European Central Bank, MIR.

Table 5 depicts the average interest rates on new PDH and BTL mortgages along with the accompanying share of new lending by value. As of Q2 2018, the average rates on new PDH standard or LTV variable rate loans and fixed rate loans of 1 to 3 years both stood at 3.13 per cent. These rates have declined by 21 basis points and 11 basis points, respectively, since the same quarter in 2017. The share of PDH lending rates fixed over 3 years was 48 per cent in Q2 2018, with a further 26 per cent of new PDH lending fixed between 1 and 3 years. In contrast, Standard or LTV variable rate loans have fallen to 24 per cent of new PDH loans.

**Table 5 | New Mortgage Lending Rates and Share by Volume, Q2 2018**

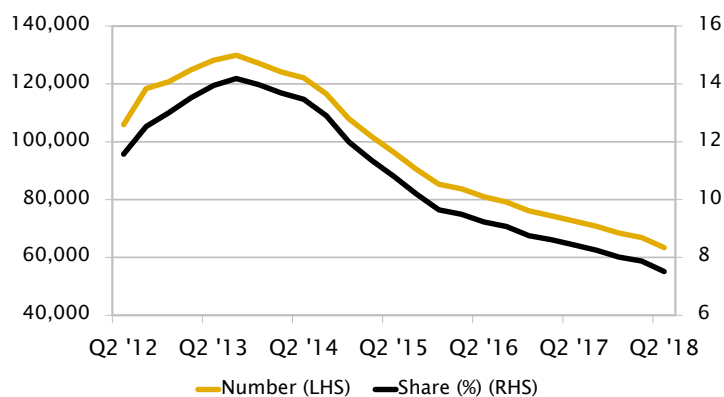
	PDH		BTL	
	Q2 '17	Q2 '18	Q2 '17	Q2 '18
<b>Lending Rates</b>				
Standard or LTV Variable	3.34	3.13	4.73	4.72
% of Vol.	48	24	90	84
Fixed Up to 1 Yr	3.44	3.18	-	-
% of Vol.	6	3	-	-
Fixed 1 to 3 Yrs	3.24	3.13	4.18	4.47
% of Vol.	29	26	4	7
Fixed over 3 Yrs	3.44	3.02	5.01	4.57
% of Vol.	18	48	6	8

Source: Central Bank of Ireland, Retail Interest Rates, table B.3.1. Note: Data excludes restructured loans.

## 2.4 Household Vulnerability and Mortgage Arrears

Figure 15 presents the total number and share of outstanding mortgage loans in arrears of over 90 days-past-due (dpd) for all residential loans (i.e. the sum of PDH and BTL loans). The number and share of outstanding loans in arrears continued to fall in Q2 2018. There were 63,402 loans in arrears of over 90 days in Q2 2018, down from 72,610 in Q2 2017. In Q2 2018, 7.5 per cent of all residential mortgage loans outstanding were in arrears of over 90 days. The overall number of mortgage arrears peaked at 129,914 in Q3 2013 or approximately 14.2 per cent of all loan balances over 90 dpd.

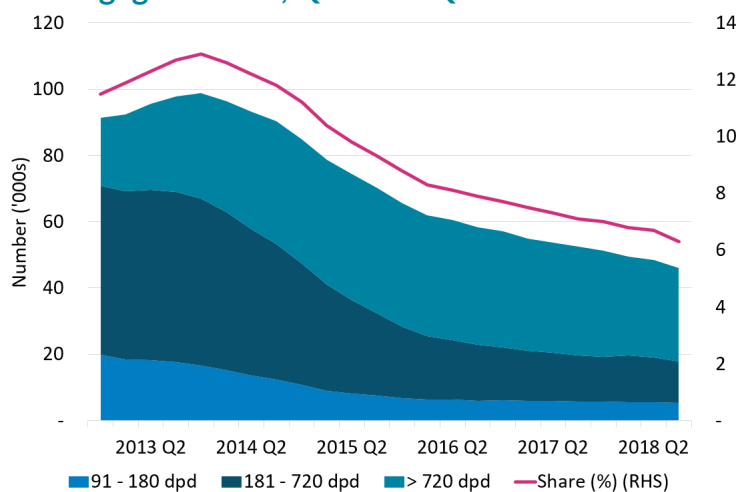
**Figure 15 | Number and Share of Overall Mortgage Arrears over 90dpd, Q2 2012-Q2 2018**



Source: Central Bank of Ireland, Mortgage Arrears Statistics.

Figure 16 presents the total number, share and depth of outstanding PDH mortgage balances in arrears over 90dpd. As of Q2 2018, the number of PDH mortgages in arrears over 90dpd amounted to 46,008 (left-axis). This represents 6.3 per cent of the number of outstanding PDH stock (right-axis). The number of mortgages in arrears over 90dpd peaked at 98,736 in Q3 2013 or 12.9 per cent of the outstanding stock of PDH mortgages by number. Despite the overall decline in the total number of PDH arrears, a large percentage of loans in arrears are in long-term arrears. In Q2 2018, 28,237 of total PDH arrears were more than 720 dpd. A further 12,448 were between 181 and 720 dpd, with 5,323 in arrears of between 91 and 180 dpd.

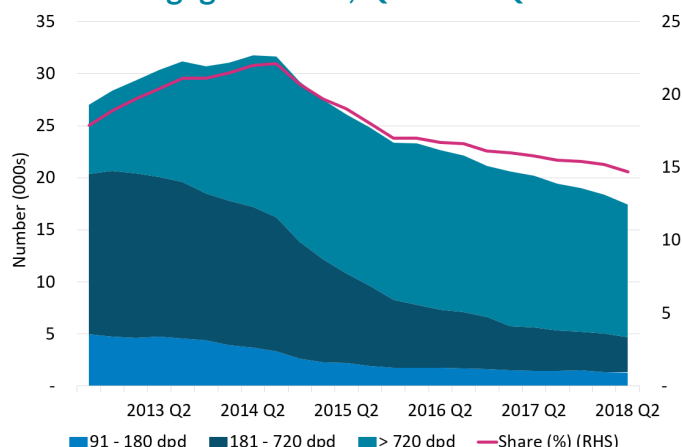
**Figure 16 | Number, Share and Depth of PDH Mortgage Arrears, Q3 2012-Q2 2018**



Source: Central Bank of Ireland, Mortgage Arrears Statistics.

Figure 17 presents the total number and share of outstanding BTL balances in arrears over 90dpd as well as the depth of BTL arrears by number. As of Q2 2018, the total number of BTL mortgages in arrears over 90dpd was 17,394 (left-axis), representing 14.7 per cent by number of the total outstanding BTL loan stock (right-axis). As of Q2 2018, 12,732 BTL loans were in long-term arrears of greater than 720 dpd. A further 3,367 of loans were in arrears of between 181 and 720 dpd and 1,295 were in arrears of between 91 and 180 dpd.

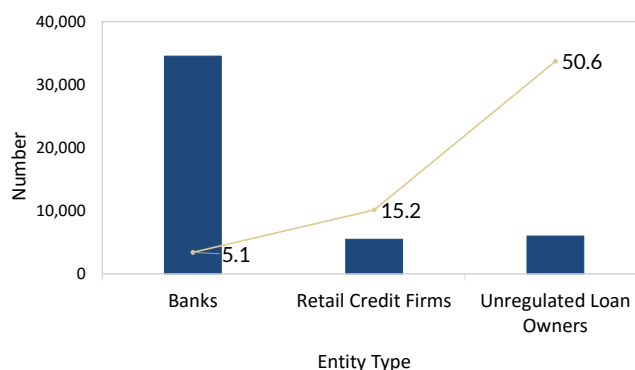
**Figure 17 | Number, Share and Depth of BTL Mortgage Arrears, Q3 2012-Q2 2018**



Source: Central Bank of Ireland, Mortgage Arrears Statistics.

Figure 18 presents the number of outstanding PDH mortgages in arrears of over 90 days past due along with the share of PDH mortgage arrears by the type of entity, including banks, retail credit firms (RCFs) and unregulated loan owners. As at Q2 2018, there were 34,546 outstanding PDH mortgages at banks that were greater than 90dpd, with 5,474 at RCFs and 5,988 at unregulated loan owners. These figures correspond to approximately 5.1 per cent of outstanding PDH mortgages at banks being in arrears of 90 days past due, with the figures for RCFs and unregulated loan owners at 15.2 and 50.6 per cent respectively.

**Figure 18 | PDH Mortgage Loan Accounts in arrears of 90dpd and share of PDH mortgages in arrears of 90dpd by entity type, Q2 2018**

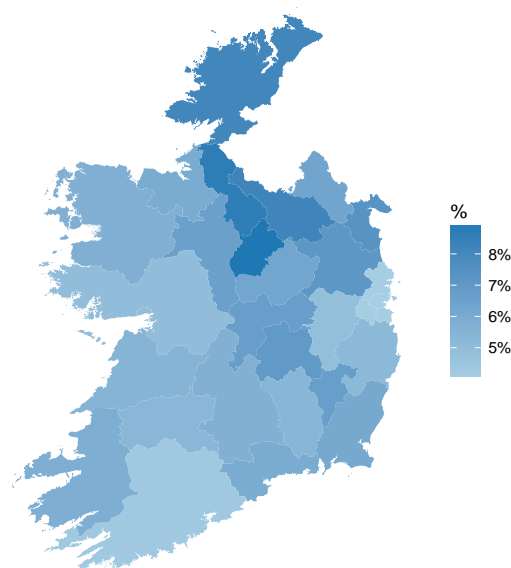


Source: Central Bank of Ireland

Figure 19 presents the percentage of loans that were in arrears by county in December 2017 from a sample of 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.<sup>a</sup>

<sup>a</sup>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. 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.

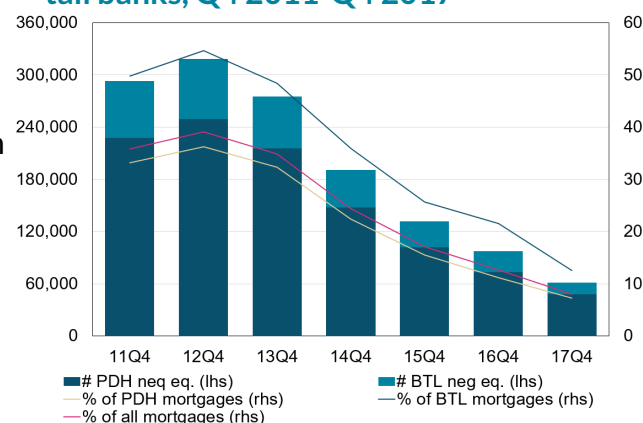
**Figure 19 | Arrears Rates on All Residential Mortgages by County (Per Cent of Loans), December 2017**



Source: Central Bank of Ireland, Loan Level Data. Note: The map includes data for three banks only. Note: It does not cover the full population of banks and non-bank entities from the official mortgage arrears statistics

Figure 20 presents the percentage of loans in negative equity by number for PDH, BTL and overall residential mortgages for Irish Retail Banks from Q4 2011 to Q4 2017. During that time, the share of PDH loans in negative equity has fallen from a peak of 36.2 per cent in Q4 2012 to 7.3 per cent in Q4 2017. The share of BTL loans in negative equity has fallen from 54.6 per cent to 12.6 per cent over the same period, while the share of overall loans in negative equity has fallen from 39.1 per cent to 8 per cent.

**Figure 20 | Negative equity at Irish retail banks, Q4 2011-Q4 2017**



Source: Central Bank of Ireland Data. Irish retail banks refer to the five banks offering retail banking services within the Irish State: Allied Irish Banks plc, The Governor and Company of the Bank of Ireland, Permanent TSB, KBC Bank Ireland plc and Ulster Bank Ireland Designated Activity Company.

Table 6 presents the share of loans in arrears and in negative equity for both PDH and BTL loans as of December 2017. These figures are calculated using a sample of the Central Bank of Ireland's LLD and cover the following institutions: AIB, Bank of Ireland and Permanent TSB. For PDH loans, 91 per cent of loans were both in positive equity and performing, 5 per cent were in negative equity and performing, 3 per cent were in arrears and positive equity, and 2 per cent were in negative equity and arrears. For BTL loans, 80 per cent of loans were both in positive equity and performing, 10 per cent were in negative equity and performing, 6 per cent in arrears and positive equity, and 4 per cent in negative equity and arrears.<sup>a</sup>

<sup>a</sup>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.

Figure 21 presents the total number of outstanding mortgage modifications by the type of arrangement up to Q2 2018 for both PDH and BTL mortgages. For PDH loans, the most commonly occurring arrangement types were arrears capitalisations and permanent split mortgages.<sup>a</sup> For BTLs, the most common arrangements were arrears capitalisations followed by reduced payment schemes.

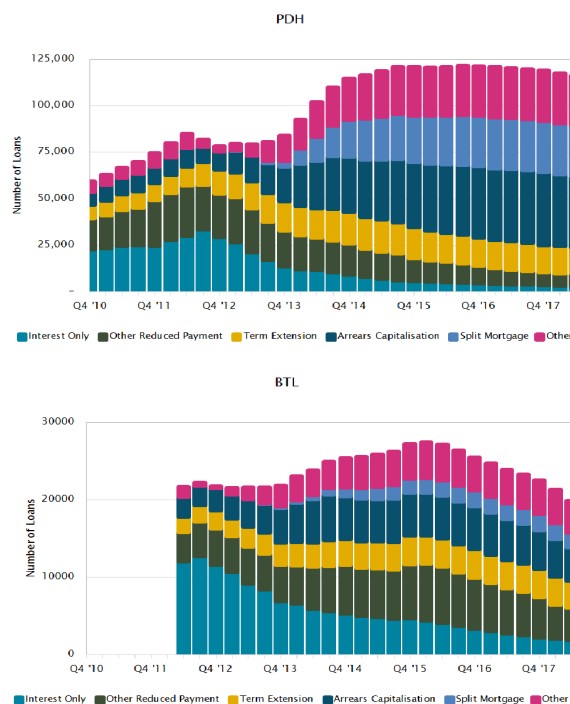
<sup>a</sup> Where a mortgage is split into a warehoused and non-warehoused component, this is reported at account level, as is the case for all other restructure types. This implies that one split mortgage will likely be reported as two accounts.

**Table 6 | Split of Loans by Negative Equity and Arrears Status, December 2017**

		PDH	
		Positive equity	Negative equity
Performing	Arrears	91%	5%
	Arrears	3%	2%
		BTL	
		Positive equity	Negative equity
Performing	Arrears	80%	10%
	Arrears	6%	4%

Source: Central Bank of Ireland, Loan Level Data.

**Figure 21 | Total Outstanding Restructured Mortgage Accounts by Type, Q4 2010-Q2 2018**



Source: Central Bank of Ireland, Mortgage Arrears Statistics.



Table 7 outlines the percentage of modified loans meeting the terms of the arrangement, both in total and for each specific type of modification as of Q2 2018. Overall for PDH loans, 87.1 per cent were meeting the terms of the arrangement. The equivalent figure for BTL was 88.0 per cent. There is variation across modification type in the percentage of borrowers meeting the terms of the arrangements.

**Table 7 | Percentage of Modifications Meeting Arrangement Terms, Q2 2018**

	PDH	BTL
Arrears Capitalisation	80.6	74.2
Deferred Interest Scheme	76.2	NA
Interest Only - over one year	94.6	93.7
Interest Only - up to one year	89.8	80.7
Payment Moratorium	97.9	98.4
Permanent Interest Rate Reduction	86.4	0
Reduced Payment (greater than interest only)	82.0	91.4
Reduced Payment (less than interest only)	77.9	74.5
Split Mortgage	93.4	93.5
Temporary Interest Rate Reduction	91.5	98.1
Term Extension	93.5	94.8
Other	85.8	89.9
<b>Total</b>	<b>87.1</b>	<b>88.0</b>

Source: Central Bank of Ireland, Mortgage Arrears

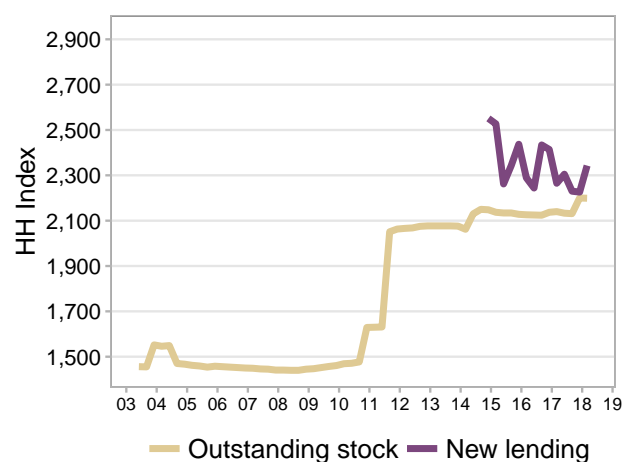
Statistics. Note: It should also be noted that some categories reflect only a small number of arrangements, particularly in the case of BTL accounts.

## 2.5 Mortgage Market Structure

Figure 22 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. This measure includes banks who are no longer actively lending. A HHI indicator based on the market share of new mortgage lending is available from December 2014.<sup>a</sup> This series indicates a higher level of concentration reflecting the exit of a number of players from new lending activity and / or reduced lending by some remaining banks.

<sup>a</sup>The series is based on new mortgage agreements and excludes renegotiated credit where a customer has switched products within a bank, negotiated a better rate, changed term, etc. See Sherman M., Box A: Competition in the Irish Mortgage Market, Central Bank of Ireland Quarterly Bulletin 2017 Q3.

**Figure 22 | Concentration Index for Irish Mortgage Lending, Q1 2003-Q2 2018**



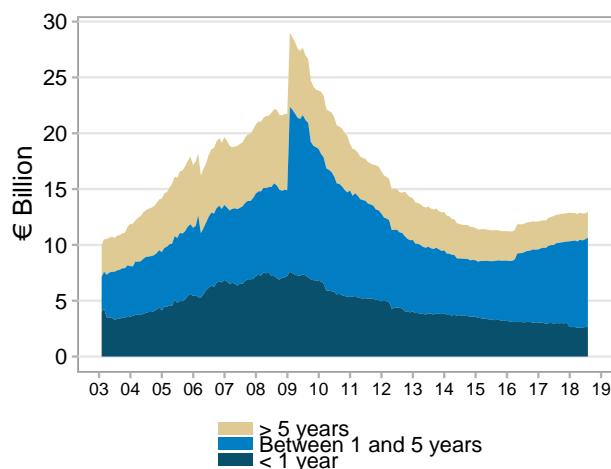
Source: Central Bank of Ireland confidential data.

### 3. Non-Mortgage Household Credit

Figure 23 presents the stock of credit outstanding for consumer lending by Irish resident credit institutions by duration of the loan.<sup>a</sup> Consumer credit of less than one year stood at just over €2.6bn in July 2018. Loans of 1 to 5 year terms stood at approximately €7.9bn in July 2018. Consumer loans of over 5 years stood at €2.3bn in July 2018. Differences across time periods may be affected by portfolio re-balancing and other compositional issues. For Irish households, the stock of consumer credit represents a relatively small fraction of outstanding debt.

<sup>a</sup>Please note that these data are compiled from resident credit institutions only.

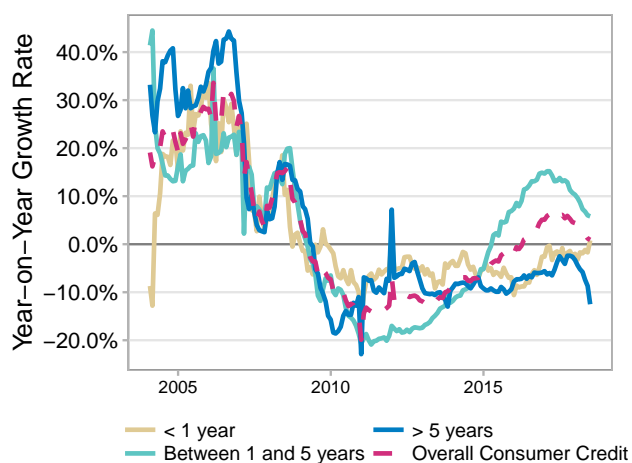
**Figure 23 | Outstanding Stock of Consumer Credit, January 2003-July 2018**



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. Credit Unions entered the reporting population in January 2009.

Figure 24 shows the growth rates in consumer credit from 2004 onwards for different lending terms. The growth rate in consumer credit of all loan durations turned negative in the first half of 2009 and extensive deleveraging occurred. The growth rate on loans of between 1 and 5 years duration became positive from early 2015 and remains positive at 5.6 per cent in July 2018. The growth rate on loans of less than 1 year became positive in June 2018, at 0.8 per cent and remains positive at 0.5 per cent in July 2018. However, the growth rate on loans greater than 5 years duration continues to be negative at -11.6 per cent as of July 2018.

**Figure 24 | Growth Rate in Consumer Credit, January 2004-July 2018**

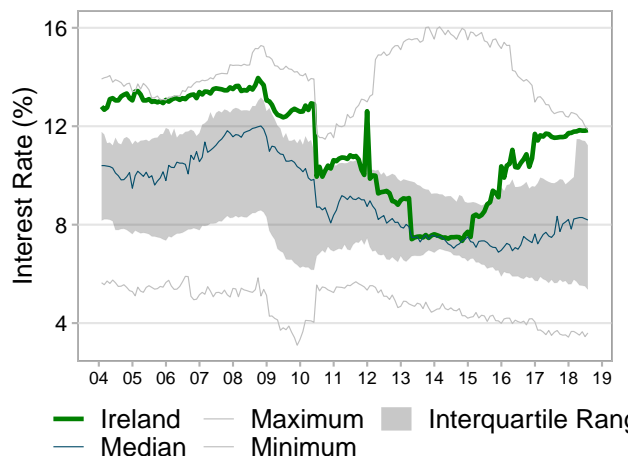


Note: These data are taken from CBI Credit, Money and Banking table A.5.1. Note: These growth rates have been adjusted to account for compositional issues.

Figure 25 presents interest rates on consumer credit (comprising revolving loans and overdrafts and convenience and extended credit card debt) for Ireland and the median across a group of selected European countries.<sup>a</sup> Percentiles and the sample maximum and minimum are also displayed. As of July 2018, the interest rate on consumer credit in Ireland was 11.84 per cent, the second highest relative to the other European countries included.

<sup>a</sup>Included countries are: AT, DE, ES, FI, FR, GR, IE, IT, LU, NL and PT.

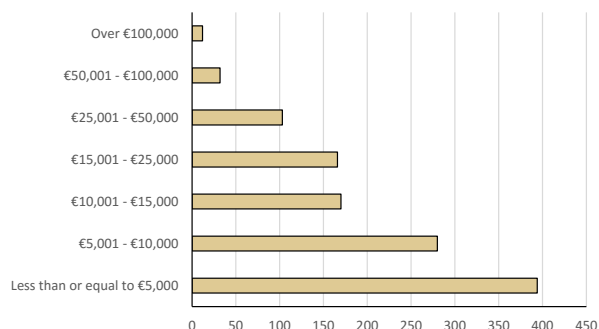
**Figure 25 | Interest Rates on Consumer Credit, European Comparison, January 2004-July 2018**



Source: European Central Bank.

Figure 26 presents the value of new loans advanced by credit unions. Credit unions advanced more smaller loans than larger loans. In the six months to March 2018, credit unions advanced €394 million of loans for less than or equal to €5,000. Loans of over €100,000 advanced by credit unions amounted to €12 million. The total amount of credit advanced by credit unions during this time period was €1,157 million.

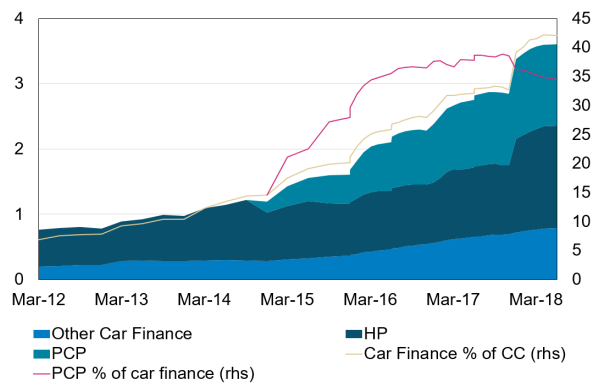
**Figure 26 | Credit union lending, value of new loans advanced by the amount of loans(€ millions) - March 2018**



Source Central Bank of Ireland, Data submitted to RCU.  
 Note: Data on new loans is year-to-date and represents new lending for the six months to March 2018.

Figure 27 presents the stock of car financing by type of financing. As at June 2018, hire purchase financing consisted of the largest amount of personal financing by value at approximately €2.8bn, of which €1.2bn was for personal contract plan (PCP) financing. Other car finance stood at €0.8bn. Personal contract plan financing represented 35 per cent of car financing as of June 2018. Total car finance as a share of consumer credit has increased from 8 per cent in June 2012 and reached 42 per cent in June 2018.

**Figure 27 | Stock of Car Finance, March 2012 - June 2018**



Source: Central Bank of Ireland. Note: Outstanding amounts of Hire Purchase (HP), Personal Contract Plan (PCP) and Other Car Finance plotted on the left hand side, Car finance share of Consumer Credit (CC) and PCP share of car finance plotted on the right hand side. Please note that this data is compiled from resident credit institutions only. Some credit providers, that do not fall under the authority of the Central Bank, may be providing car financing operations, such as Personal Contract Plans (PCPs) or direct-from dealer-financing. This data may not have been reported to the Central Bank under this return, and as such may not be captured by these figures.

## Box 1: The financial resilience of mortgaged Irish households; update to Q2 2018 <sup>1</sup>

This box examines the debt service burdens of owner-occupied new mortgage loans, originated since the introduction of the Central Bank of Ireland's mortgage measures. The debt service ratio of each loan is calculated as the ratio of monthly mortgage repayments to estimated monthly after-tax income. A threshold for a "high DSR" is set at 35 per cent to identify loans whose repayment burden represents a high share of their net income and thus those households who may be more vulnerable to adverse shocks.

The analysis splits each year's cohort of loans into quarters and looks at the share of loans in two groups: those that originate with a DSR above 35 per cent and those whose DSR would surpass 35 per cent under a hypothetical adverse shock. Two shocks are applied: first, each loan's interest rate is increased by 242 bps, in accordance with adverse scenario paths previously used by the Central Bank of Ireland in stress-testing exercises; second, all incomes are assumed to fall by 20 per cent.

Figure 28 presents the share of loans in each quarter that originated with a DSR above 35 per cent and whose DSR would exceed 35 per cent under the adverse interest rate shock outlined above. We observe variation in the share of 'at risk' loans across quarters, with the highest share of vulnerable loans observed between Q2 2017 and Q2 2018. Figure 29 displays the share of loans in each group following an assumed fall of 20 per cent in all incomes. The overall share of vulnerable loans is lowest between Q4 2015 and Q1 2017 varying between 14 and 16 per cent across these quarters. Similar to the interest rate shock, a small increase in the share of vulnerable loans is observed up to Q2 2018.

Figure 28: Interest rate shock of 242 bps

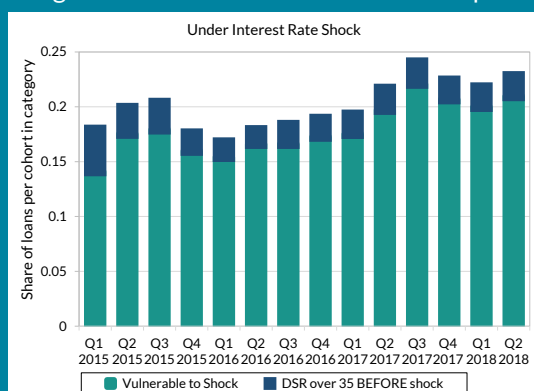
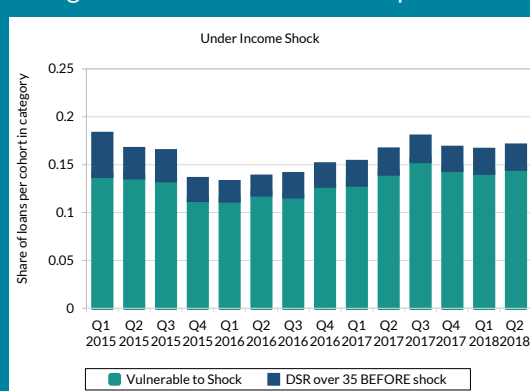


Figure 29: Income shock of 20 per cent



<sup>1</sup>Box author: Christina Kinghan Email: [christina.kinghan@centralbank.ie](mailto:christina.kinghan@centralbank.ie)

## Box 2: Mortgage arrears by county and duration of arrears <sup>1</sup>

The official mortgage arrears statistics show that the number of mortgages in arrears over 720 dpd has continued to fall in Q2 2018 but that this cohort represents 5 per cent of the stock of combined PDH and BTL mortgages outstanding and 47 per cent of arrears by number. This box focuses on the regional dimension of arrears by examining variation in the depth of arrears and in median arrears balances by county.

Using a sample of loan level data from three Irish banks, Figure 30 shows the depth of arrears at a county level.<sup>2</sup> The chart highlights the distribution between early (30-90 dpd) and later stage arrears (e.g. over 720 dpd). Overall arrears rates (over 30 dpd) are lowest as a percentage of mortgages outstanding in Dublin and Cork and highest in the Border and Midlands regions.

The share of mortgages in arrears over 720dpd ranges from 2.5 per cent in Dublin to over 6 per cent in Leitrim. The percentage of mortgages in arrears over 5 years ranges from around 1 per cent in Dublin and Cork to 3.7 per cent in Leitrim.<sup>3</sup> As discussed in Donnery et al (2018) such mortgages are likely to be the most difficult to resolve given deep borrower distress.<sup>4</sup>

Figure 31 presents median mortgage arrears balances by county for the subset of borrowers who are in long term mortgage arrears of anything over 720dpd. Median arrears balances are highest in Dublin and the surrounding commuter belt, reflecting higher property prices and mortgages sizes. O'Malley (2018) discusses the characteristics of this group in more detail.

Figure 30: Mortgage arrears by county

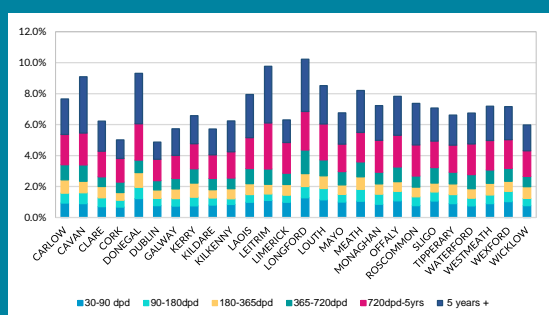
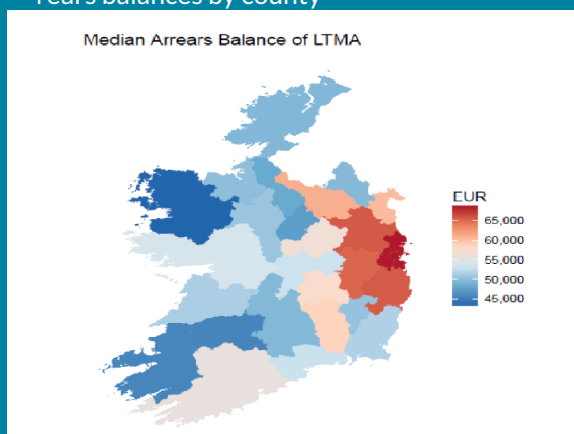


Figure 31: Median long term mortgage arrears balances by county



<sup>1</sup>Box author: Jane Kelly and Terry O'Malley Email: jane.kelly@centralbank.ie

<sup>2</sup>The sample does not cover the full population of banks and non-bank entities from the official mortgage arrears statistics.

<sup>3</sup>This is as a percentage of mortgages outstanding in that county. Absolute numbers are higher in Dublin reflecting the greater population and mortgage concentration, see O'Malley (2018).

<sup>4</sup>Donnery, S., Fitzpatrick, T., Greaney, D., McCann, F., and O'Keeffe, M., "Resolving Non-Performing Loans in Ireland: 2010-2018." Central Bank of Ireland Quarterly Bulletin 02 2018, pp. 54-70.

<sup>5</sup>Charts are created using Central Bank of Ireland loan level data. LTMA are for the 720+ cohort.

## Box 3: Borrower ages in the mortgage market<sup>1</sup>

The characteristics of Irish mortgage borrowers have been changing over time. This box focuses on one aspect of that change, namely the increase in borrower age at loan origination and how this could potentially affect borrowers' debt burdens as they approach retirement age, using a sample of loan level data from 3 banks.

Figure 32 shows that Irish borrowers have been getting older since the late 2000s. Average borrower age has increased by 3 to 4 years reaching around 34 for FTBs and 41 for SSBs in 2017. This pattern is not unique to Ireland and also arises in many other European countries.<sup>2</sup> This may reflect various factors including population aging, household choice between renting and owning and the time taken to save for a deposit as house price growth continues to surpass income growth in many European cities.

Mortgage terms are longer in Ireland relative to many other European countries. The average mortgage term was 29 years for FTBs and 24 years for SSBs in Ireland in the first half of 2018. By comparison, a typical mortgage term was 18 years in France and 25 years in Germany according to Hypostat.<sup>3</sup> By combining age at origination and mortgage term, we calculate a proxy for borrower age when the mortgage is due to be redeemed, assuming no lump sum or early repayments or additional borrowing. Figure 33 shows that the share of FTBs aged 65-70 has increased for loans originated in 2017 compared to 2003 although the share of borrowers aged over 70 has fallen in recent years as the popularity of 40 year mortgage terms has dwindled.

Figure 32: Mean Borrower Age, 2003-2017

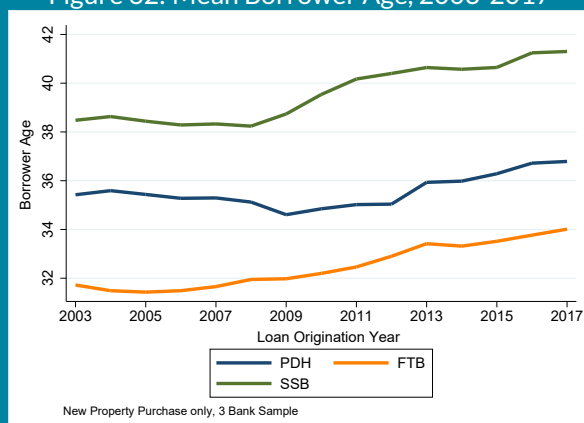
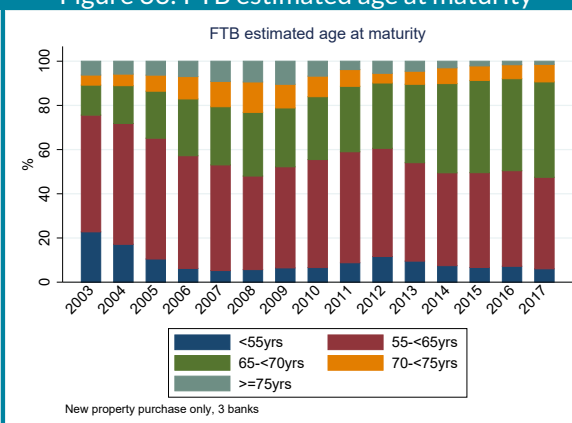


Figure 33: FTB estimated age at maturity



<sup>1</sup>Box author: Jane Kelly Email: jane.kelly@centralbank.ie

<sup>2</sup>For example, average FTB age in England has risen from 32 in London in 2005/06 to 34.1 in 2016/17 and from 30.6 outside London to 33.1 during the same period. See [Average Age FTBs England](#). Kelly, Le Blanc and Lydon (forthcoming) document similar euro area trends.

<sup>3</sup>See European Mortgage Federation Hypostat 2018.

## Appendix 1: Data Sources

### Data Sources and Definitions:

- Figure 7: 'Household market transactions' includes residential dwelling purchases by FTB and former owner-occupiers and other household buyers (i.e. BTLs) which have occurred 'at arms-length' and at market value. 'All market transactions' includes 'household market transactions' as well as residential dwelling transactions made by non-households such as private companies, charitable organisations, and state institutions. 'All transactions which consists of 'All market transactions' and all household and non-household non-market transactions, i.e. transactions which may not have been at arms length at a lower than market value.
- Central Bank of Ireland [Credit and Banking Statistics](#), [Interest Rate Statistics](#) and [Quarterly Financial Accounts](#) aggregate statistics, loan-level data collected by the Central Bank of Ireland from the Irish domestic banks, consolidated data collected in accordance with the Central Bank of Ireland's QFSR reporting requirements, the Banking and Payments Federation Ireland and the Central Statistics Office. For cross-country comparisons, the report also draws on data from the European Central Bank, Monetary Financial Institution (MFI) Statistics.
- The loan data presented from the *Credit and Banking Statistics* 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 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 AIB, BOI and PTSB. For mortgages, loans in 'Arrears' are defined as loans greater than 90 days past due. 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 AIB, BOI, Ulster Bank, KBC and PTSB. 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 H1 2017. Second, a sample of refinanced loans, which refers to borrowers who switched mortgage provider with or without increasing their loan amount in H1 2017. Third, borrowers who obtained a new top up or equity release in H1 2017. Outliers are trimmed from the full sample of MTD at the 1st and 99th percentile.
- Financial Conditions of Credit Unions: 2013-2018 Issue 3, August 2018
- Central Bank of Ireland [Residential Mortgage Arrears and Repossession Statistics](#).
- Herfindahl-Hirschman Indices are calculated using the bank-level data used to compile the Central Bank of Ireland's [Credit and Banking Statistics](#).
- Banking and Payments Federation Ireland, [Mortgage Drawdowns Report](#). This report has been compiled including published data available at, or before, the 1st of October 2018.



## Appendix 2: 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
MIR	Mortgage Interest Rate
Tracker	Mortgage interest rate that automatically changes in line with the a contracted policy rate
LTV	Loan to Value
LTI	Loan to Income
LTMA	Long Term Mortgage Arrears
HCMR	Household Credit Market Report
RCF	Retail Credit Firms
DPD	Days Past Due

