



Banc Ceannais na hÉireann  
Central Bank of Ireland

Eurosystem



# Review of residential mortgage lending requirements

Mortgage Measures  
2017

## Important information

This report discusses the annual review of the Central Bank of Ireland ("Central Bank") requirements in relation to residential mortgage lending as contained in the Central Bank (Supervision and Enforcement) Act 2013 (Section 48), (Housing Loan Requirements) Regulations 2015 (S.I. No. 47 of 2015, as amended by S.I. No. 568 of 2016) ("the Regulations"). The report also provides information on the development of certain policy matters giving rise to amendments to the Regulations.

This report is for information purposes only. It is not the policy of the Central Bank to provide legal advice on matters arising pursuant to the Regulations and any information in this report should not be construed as legal advice or a legal interpretation of the Regulations. It is a matter for any regulated financial service provider who may fall within the scope of the Regulations to seek legal advice regarding the application or otherwise of the Regulations to their particular set of circumstances. This report should not be taken as a substitute for legal advice. For further information, and avoidance of doubt, relevant entities should consult the text of the Regulations, as amended, directly.

The Central Bank has a range of supervisory and enforcement powers available to it in circumstances where a regulated financial service provider fails to comply with the requirements in the Regulations. Nothing in this report should be construed so as to constrain the Central Bank from taking action where it is deemed to be appropriate.

Data used in this report are as were available at 31 October 2017.



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# 1 Introduction

This report presents the main findings arising from the 2017 Review (the Review) of the Central Bank's macroprudential mortgage market measures. Introduced in February 2015, the measures aim to increase both bank and borrower resilience and mitigate the risks of credit-house price spirals emerging. These aims are achieved by limiting the volumes of high loan-to-value (LTV) and high loan-to-income (LTI) mortgage lending.<sup>1</sup> The mortgage market measures are not designed to target a particular level of, or growth rate in, residential property prices. The Regulations form an integral part of the Central Bank's macroprudential policy framework which, as the designated macroprudential authority, is the means through which the Central Bank seeks to mitigate the impact of systemic risk.

The Central Bank is committed to an annual review of the mortgage market measures to ensure they continue to meet their objectives of increasing bank and borrower resilience and damping the pro-cyclicality of credit and house prices. Having these measures as a permanent feature of the Irish mortgage market is expected to reduce both the probability and severity of future crisis episodes. Within the context of its mandate, the Central Bank is committed to ensuring the role played by mortgage credit in wider housing market developments remains sustainable into the future.

The 2017 Review considered the appropriate calibration of the measures given current conditions in and the outlook for the housing and credit markets, where the persistence of relatively low housing supply is affecting price and rental dynamics and new mortgage lending remains relatively low but is growing. The Review also took regard of any practical implementation issues indicated by the Central Bank's ongoing monitoring and supervision of regulated mortgage providers.

The outcome of this Review (Section 2) follows the analysis of a number of factors, which are summarised in the remainder of this report: Section 3 discusses mortgage and housing market developments; Section 4 presents details of the risk characteristics of recent mortgage lending; Section 5 outlines the refinement of the LTI allowance that will be in place from 1 January 2018; and Section 6 concludes. Further relevant details are available in the accompanying appendices.

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<sup>1</sup> For a discussion on the introduction and design of the mortgage market measures see Cassidy and Hallissey (2016), with further information on subsequent developments following the 2016 annual review available at <https://www.centralbank.ie/financial-system/financial-stability/macro-prudential-policy/mortgage-measures>.

## 2 Outcome of the 2017 Review

Developments in the broader housing market have been characterised by the low level of supply and the related effects on prices and rents. On balance, the evidence emerging from the Review does not point toward unsustainable developments in the joint dynamics of credit and house prices at this point in time. The risk characteristics of new mortgage lending have evolved in-line with market developments over the last year. By containing higher-risk mortgage lending, the LTV and LTI limits on new mortgages reduce both the probability of default and the loss given default. As a result, the core parameters of the measures - the LTV and LTI limits - will remain unchanged in 2018.

The analysis conducted during the Review has highlighted that the framework would be improved by specifying separate allowances for lending above the LTI limit to first-time buyers (FTBs) and second and subsequent buyers (SSBs). This follows the decision following the last Review to specify separate allowances for lending above the LTV limit to these two groups. Under the current rules, the potential exists for excessively large proportions of lending to either FTBs or SSBs to be above the 3.5 LTI limit. In the context of potential developments in borrower leverage during a rising market, having separate allowances for FTBs and SSBs more effectively contains lending at high LTI ratios (i.e. above 3.5) and at the higher end of the current LTV ratio limits (90 per cent for FTBs and 80 per cent for SSBs). Enhancing the framework with separate LTI allowance in tandem with the existing separate LTV allowance will, amongst other benefits, enable a more comprehensive mitigation of risks across both categories of PDH borrower. It will further support a proactive and pre-emptive response by the Central Bank to any future adverse lending developments in either borrower group.

From January 2018, up to 20 per cent of the value of new lending to FTBs and 10 per cent of the value of new lending to SSBs, will be permitted to be above the 3.5 LTI limit. These allowances closely reflect current lending trends and the refinement is not expected to have a significant impact on the functioning of the market.

This refinement to the LTI allowances and one technical adjustment to the Regulations relating to the valuation of collateral for certain loans will take effect on 1 January 2018. The aim of the technical amendment is to provide clarity to the appropriate valuation estimate to be used by banks when calculating the LTV on residential mortgages issued for construction purposes when more than one valuation estimate is available. While the Central Bank is satisfied that the dominant current practice in the market is prudent, this amendment to the Regulations supports that practice and removes unnecessary ambiguity. These changes, outlined in more detail in Box 1, will improve the overall implementation of the framework in terms of its sustainability and effectiveness. To provide context with respect to the overall framework, Table 1 details the mortgage market measures and shows the changes that are effective from 1 January 2018.

**Box 1: Changes to the Regulations**

- The amount of new lending allowable in a given year above the 3.5 LTI limit for primary dwelling home (PDH) mortgages will now be considered separately for first-time buyers (FTBs) and second and subsequent buyers (SSBs), with 20 per cent of the value of new lending to FTBs and 10 per cent of the value of new lending to SSBs, respectively, being allowed above the limit.
- When calculating the value of the collateral in the case of all mortgages issued for purchasing land with the intention to construct a building, or issued to fund construction of a building, lenders will be required to take the lower of the estimated market value of the property after completion of all works or the sum of the site cost plus the cost of works, as estimated at the time of entering into the loan agreement.<sup>2</sup>

*All changes will be effective from 1 January 2018.*

**Table 1: Details of the LTV and LTI Regulations**

<b>LTV Limits</b>	<b>For primary dwelling homes:</b>	FTBs: 90%	5% of new lending to FTBs allowed above 90%
		Non-FTBs: 80%	20% of non-FTB new lending allowed above 80%
	<b>For buy-to-let borrowers (BTLs):</b>	70% LTV limit	10% of new lending allowed above the BTL limit
<b>LTI Limit</b>	<b>For primary dwelling homes:</b>	3.5 times income	<b><u>Until 31/12/17</u></b> 20% of new PDH lending above the LTI limit is allowed
			<b><u>From 1/1/18</u></b> 20% of new lending to FTBs allowed above 3.5 limit 10% of non-FTB new lending allowed above 3.5 limit
<b>Exemptions</b>	<b>From LTV limit:</b> Borrowers in negative equity	<b>From LTI limit:</b> BTL borrowers	<b>From both limits:</b> Switcher mortgages Restructuring of mortgages in arrears

<sup>2</sup> Further background information is included in Appendix G.



### 3 Mortgage and housing market developments

This section discusses housing and mortgage market developments in recent quarters and how they relate to the calibration of the mortgage measures for 2018. The mortgage market measures are not designed to target a particular level of, or growth rate in, residential property prices or in housing output, which are the result of many factors beyond mortgage provision. In this Review, particular attention is given to developments in housing activity and prices in the context of the wider economic environment and the relative role of mortgage credit in that environment. It is important to consider such developments in assessing the appropriate calibration of the mortgage measures to mitigate the risk of adverse feedback loops between mortgage lending and house price dynamics emerging.

Although they remain elevated, overall household vulnerabilities have been declining. Irish mortgage loans are gaining an increasing share of the still contracting loan-book of retail banks operating in the State. Across a wide range of indicators, housing and mortgage market activity has strengthened (see Appendices A-D), although this is not reflected in any substantial growth in the stock of mortgage lending. Growth in the number and value of new mortgages has increased, albeit from a relatively low base and still reflecting an adjustment from their post-crisis trough. This increase in new lending has for the most part been matched by households continuing to repay existing loans, leading to relatively muted increases in the stock of PDH mortgages (1.4 per cent on an annual basis in Q2 2017) while BTL mortgages continue to decline.

Some scope remains for further increases in the absolute level of new mortgage lending in the near term, as the evidence does not point toward excessively buoyant housing and credit market activity or the emergence of a credit-price spiral in the housing market. In this context, it is important to ensure that the mortgage measures framework is sufficiently flexible and appropriately calibrated to promote the sustainability of expected increases in lending.

While not being a target of the measures, there has been a renewal of upward pressure on residential property prices, as national figures exhibit four consecutive months of annual growth in excess of 10 per cent. There has also been a rise in house price expectations for the coming years among property market professionals (Central Bank/SCSI Property Price Survey, Q3 2017).

Both actual and expected price dynamics are heavily influenced by the low levels of supply for both newly-built and second-hand homes. Low levels of supply is also a dominant feature of the rental market. These supply shortages arise at a time when the broader economic environment is favourable, with rising employment, incomes and population trends reinforcing the demand for housing. Leading indicators of residential construction activity are signalling a steady rise in housing output over the medium-term, which should contribute to easing property price inflation. Given these factors, the analysis conducted during this Review suggests that the level of house prices prevailing in the market is consistent with broader economic developments, although monitoring of the relative impact of the expected supply response and broader demand conditions will remain important.

Residential property transactions and turnover rates have been increasing gradually but remain below historical averages. Non-household buyers, such as investment funds and approved housing bodies, remain important market participants. Reflecting in part to the prominence of non-household buyers, the proportion of non-mortgage financed transactions is estimated to be substantial at up to 55 per cent of total residential property transactions in H1 2017 (see also Appendix C). Prices related to those non-mortgage financed transactions appear to have risen at a faster pace than prices for mortgage-financed transactions and are contributing to overall price dynamics in the market.



## 4 Developments in the risk profile of new mortgage lending

In this section, we provide details on the risk profile of new mortgage lending in H1 2017 (see also Appendices E and F).<sup>3</sup> In particular, we examine developments in borrower leverage during H1 2017 in comparison to H1 2016, the use of the allowances to exceed the LTV and LTI limits by the different borrower groups (FTBs, SSBs and BTLs) and trends over time in LTV and LTI ratios. H1 2017 represented the first half year of lending that incorporated the changes announced following the 2016 Review. Continued monitoring of the distribution of LTV and LTI ratios, as well as the use of the allowances permitted as part of the mortgage measures, is particularly relevant when determining whether banks or borrowers are becoming excessively vulnerable to possible future financial shocks.

The total value of new mortgage lending by the five institutions reporting loan-level data to the Central Bank for H1 2017 rose by 33 per cent relative to H1 2016. The corresponding increase in the volume of new mortgages was 22 per cent. In total, 14,997 new loans were originated in H1 2017. Lending for PDH purposes dominated (97 per cent) with BTL lending remaining relatively subdued (3 per cent).

In examining the risk characteristics of new mortgage lending since the conclusion of the 2016 Review, slight increases in average LTV and LTI ratios for FTBs and SSBs are observed, in addition to a slight increase in the average LTV for BTL borrowers. This increase in average leverage can be partly explained by house price and income developments over the period. Importantly, in the context of limiting high leverage lending, the compression of the upper ends of both LTV and LTI distributions present over most recent years has remained in the H1 2017 data.

Lending to FTBs above the 90 per cent LTV limit was minimal in H1 2017. In contrast, 20 per cent of the aggregate value of SSB lending exceeded the 80 per cent LTV limit for SSBs. This represents an increase from H1 2016, when 14 per cent of the value of SSB lending exceeded the LTV limit. Regarding the LTI limit on PDH lending, 18 per cent by value exceeded the 3.5 limit in H1 2017. This compares with 12 per cent in H1 2016. While the proportion of LTI allowances issued to FTBs has remained relatively similar to previous periods (72 per cent by value), the share of FTB loans being issued with an LTI allowance has risen to 24 per cent (by value) in H1 2017, from 16 per cent in H1 2016. Meanwhile the proportion of SSB loans (by value) with an LTI allowance was 10 per cent in H1 2017, compared with 7 per cent in H1 2016.

<sup>3</sup> See Central Bank of Ireland [Economic Letter, Vol 2017, No. 13, Kinghan et al. \(2017\)](#) for a fuller discussion on H1 2017 new mortgage lending. The data used therein, as well as that referred to in this Section, are drawn from detailed loan-by-loan supervisory returns which are submitted by mortgage providers to the Central Bank in order to monitor compliance with the Regulations. These returns, known as Monitoring Templates, are required to be submitted by lenders who advance at least €50 million of residential loans over a six-month period. At present, five lenders meet that criteria: Allied Irish Banks PLC, The Governor and Company of Bank of Ireland, KBC Bank Ireland PLC, Permanent TSB PLC, and Ulster Bank Ireland DAC.

## 5 Refining the LTI allowances

Allowances to exceed the LTI limit have formed an integral part of the framework of the mortgage measures since their introduction. The allowances acknowledge that higher LTI mortgages can be appropriate in certain circumstances. For example, such allowances might be appropriate for younger borrowers who are at an early stage in their income lifecycle, or for borrowers who take out a larger loan in order to purchase a better located property, thus reducing transport costs and improving overall sustainability. Arising from the first Review of the mortgage measures in 2016, separate LTV allowances were introduced for FTBs and SSBs. However, the LTI allowance remained pooled across the two groups. In the analysis conducted as part of the 2017 Review, a number of advantages of separate LTI allowances for FTBs and SSBs were highlighted. As a result, separate LTI allowances will be introduced for these two groups with effect from 1 January 2018.

With this refinement, the framework will set an allowable maximum of 20 per cent of the value of new lending to FTBs and 10 per cent of the value of new lending to SSBs, respectively, above the LTI limit. This represents a change from the current system of allowances, whereby 20 per cent of overall PDH lending is currently permitted to exceed the LTI cap of 3.5 times gross income.

Having different LTI allowances for FTBs and SSBs will increase the flexibility of the mortgage measures and will enable proactive and pre-emptive responses to adverse lending developments should they arise in either borrower group. By increasing the flexibility of the measures in this manner, it will also enhance the effectiveness of the measures in meeting their objectives by minimising the potential for excessive amounts of lending to either cohort being allowed above the LTI limits. Under the current rules, based on H1 2017 lending patterns, there would have been potential for upwards of 38 per cent of FTB lending to exceed 3.5 LTI (in the event of all allowances being given to FTBs) or up to 42 per cent of SSB lending to exceed 3.5 LTI (in the event of all allowances being allocated to SSBs).<sup>4</sup> In the context of potential developments in borrower leverage during a rising market, it also contains the joint incidence of lending at high LTI ratios (i.e. above 3.5) and at the higher end of the current LTV ratio limits (90 per cent for FTBs and 80 per cent for SSBs).

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<sup>4</sup> As noted above, the actual outturn in H1 2017 saw 24 per cent of the value of FTB loans and 10 per cent of the value of SSB loans with an LTI allowance.

Enhancing the framework with separate LTI allowances, in tandem with the existing separate LTV allowances, enables a more comprehensive mitigation of risks across both categories of PDH borrowers. Moreover, separate LTI allowances for FTBs and SSBs should make the lending process operationally simpler and can be easily understood.

An allocation of 20 per cent of the value of lending for FTBs and 10 per cent for SSBs closely reflects currently observed lending trends for both FTBs and SSBs (see Chart 1 and Chart 2 below). A larger share of lending at high LTIs for FTBs relative to SSBs reflects how FTBs tend to be younger and at an earlier stage in their income lifecycle relative to SSBs, and therefore being more likely to experience income growth over the term of their loan. Nevertheless, it is deemed prudent to limit the extent to which lending at high LTIs can be extended to either category of borrower, acknowledging their different characteristics.

Chart 1: Distribution of FTB LTI Ratio 2006 – H1 2017

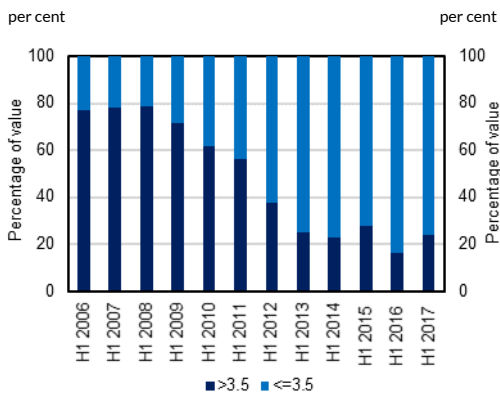
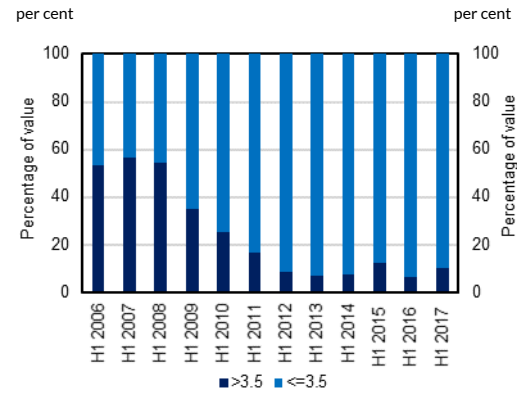


Chart 2: Distribution of SSB LTI Ratio 2006 – H1 2017



Source: Central Bank of Ireland Loan Level Data (2006-2014) and Monitoring Templates Data (2015 – H12017)  
 Note: Percentages are based on the value of lending in each group. LTI distributions are based on a four-bank view from 2006 to 2014.

## 6 Conclusions

The macroprudential mortgage measures continue to be an integral part of the Central Bank's macroprudential policy framework. By limiting high LTV and LTI lending in the market, the Central Bank seeks to promote financial stability and protect the system as a whole from the damaging impact of systemic risks related to excessive and unsustainable credit growth materialising. These measures strengthen the resilience of banks and borrowers to future financial shocks and dampen the pro-cyclicality between mortgage lending and property prices.

Based on the outcome of the 2017 Review, the main parameters of the measures will remain unchanged in 2018. A number of factors have been considered when establishing the 2018 stance. Rising incomes, low interest rates, high rents and post-crisis adjustment dynamics of supply are currently contributing to significant house price pressures. At the same time, new mortgage lending is also expanding. However, the analysis conducted as part of the 2017 Review suggests that house price and mortgage lending developments in aggregate are not indicative of unsustainable developments at present. Lending at higher LTV and LTI ratios relative to 2016 is found to be broadly consistent with overall economic developments, and risky lending remains contained by the measures.

However, a refinement to the framework has been identified that will promote the sustainability and effectiveness of the measures in meeting their objectives. Separate LTI allowances for FTBs and SSBs are complementary to the existing differentiation for these borrower groups with respect to the LTV allowance. This refinement of the LTI allowance, and setting the thresholds to 20 per cent for FTBs and 10 per cent for SSBs, enables a more comprehensive mitigation of risks across both categories of PDH borrowers.

These new LTI allowances will take effect from 1 January 2018, alongside the technical amendment on collateral valuation for certain mortgage loans detailed in Box 1.

The Central Bank considers ongoing evaluation an essential part of the macroprudential policy framework and the Bank has committed to an annual review of the mortgage market measures. Such reviews provide a regular assessment of the effectiveness of the measures in mitigating the systemic risks related to mortgage lending. As the macroprudential authority, the Central Bank stands ready to recalibrate the parameters of these measures, and other macroprudential policy tools as may be appropriate, to ensure that these continue to remain relevant and effective in promoting the long-term sustainability of Irish mortgage lending.

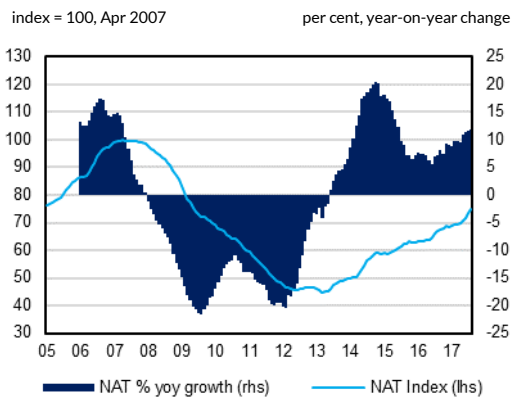
## Appendices

### A. Residential property prices

While not being an objective target of the mortgage market measures, understanding the dynamics of residential property prices form an important part of the analysis when assessing systemic risks in the mortgage market.

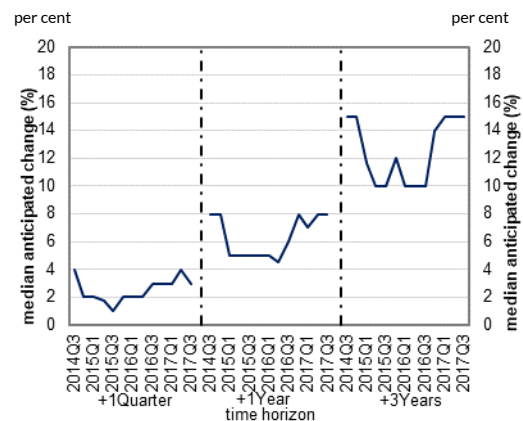
Residential property prices rose steadily in 2016 and this has carried through to 2017. National house prices increased by 11.8 per cent annually to August 2017, up from 7.2 per cent a year earlier (Chart A1). While Residential Property Price Index (RPPI) figures from the CSO registered four consecutive months of double digit house price growth to August 2017 at the national level, prices for both national and Dublin areas were approximately 25 percentage points below their respective 2007 peak values.

Chart A1: CSO RPPI and annual change: National



Source: CSO.  
Latest observation: August 2017

Chart A2: Median expected change in National residential property prices over a 1 Quarter, 1 Year, and 3 Year time horizon



Source: CBI/SCSI Residential Property Price Survey, 2017Q3.  
Note: Chart provides details of the results from the past 13 surveys (2014Q3 to 2017Q3). Number of observations vary from survey to survey.

Expectations of house price growth have strengthened since the previous Review, according to the findings from recent Central Bank/SCSI surveys of property market experts (Chart A2). According to survey respondents, the primary factors underpinning continued expected house price growth are supply constraints in both new and second-hand stock, in addition to favourable macroeconomic conditions. Results from other market research such as the 2017Q3 Daft.ie House Price Report also highlight the lack of supply as the primary factor in determining expected house price appreciation.<sup>5</sup>

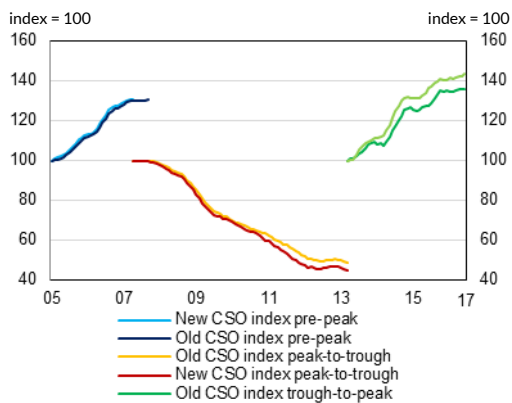
A notable feature of the residential property market in recent years is the proportion of transactions that are not financed by mortgage lending (see Appendix C for further detail). Given their relative importance in terms of activity, it is useful to consider whether the price developments differ for mortgage and non-mortgage financed transactions. Until mid-2016 the CSO RPPI was calculated based on mortgage-financed transactions only.

<sup>5</sup> See Box A1 below for empirical analysis of house price developments relative to broader economic determinants.

However, with improved data availability, the CSO has more recently produced the RPPI based on all transactions. The relative dynamics of the RPPI vintages for the period up to the peak of the market in 2007, from the 2007 peak to trough in 2013, and from that trough to mid-2016 when the older method was replaced is shown in Chart A3. It can be seen that there is some difference in the indices for mortgage only and total transactions during the decline in the market and in the subsequent recovery. Prices for non-mortgaged financed transactions seem to have declined more than those for mortgage-financed transactions when market prices as a whole were falling. In contrast, from trough to mid-2016, prices for non-mortgage financed transactions appear to have risen to a greater extent than mortgage-financed transactions. While the level of prices for non-mortgage financed transactions may be lower than for mortgage-financed transactions, their relative share in overall activity and their apparently more volatile dynamics is a salient feature of the market at present.

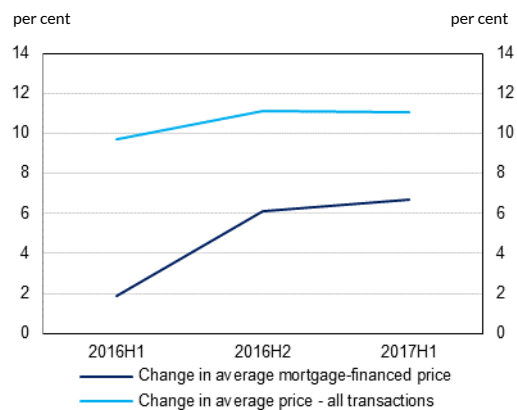
For a more recent comparison, we can examine the average price developments based on mortgage-financed purchases from the Central Bank’s Monitoring Template data<sup>6</sup> and the total transactions based average price in the RPPI (Chart A4). While there are some caveats owing to definitional issues, coverage and property mix, the different dynamics in average prices between the two groups over the past eighteen months is relatively substantial, with the average mortgage-financed price increasing by 6.7 per cent in the year to H1 2017 whereas the average price for all transactions was 11.1 per cent.<sup>7</sup>

Chart A3: Comparison of CSO new (mortgage and non-mortgage financed) and old (mortgage only) RPPI indices



Source: CSO RPPI.  
Latest observation: June 2016.

Chart A4: Developments in average prices for total and mortgage-financed residential property transactions.



Source: CSO RPPI (Average Total Price) and Central Bank of Ireland Monitoring Templates Data (Mortgage-Financed Price).  
Note: Average (all transactions) price is not based on a hedonic price index. Mortgage financed price series is based on average collateral value for in-scope PDH loans on new property purchases during each time period, where no outliers have been removed. Data exclude self-builds.

Developments in household income, employment levels, housing supply relative to the demographic profile of the population and the real costs of borrowing, are conventionally regarded as among the key determinants of house price movements. Box A1 considers the level of residential property prices relative to what would be expected given these and other determining factors. The extent to which observed prices do not align with what

<sup>6</sup> See Appendix E and references therein for more detail on the Monitoring Template data.

<sup>7</sup> Both the mortgage and non-mortgage financed series discussed are not comparable to the official RPPI measure as they are both simple averages and not quality or property-mix adjusted. The official measure of house price growth published in the RPPI is based on a hedonic index, which accounts for factors such as quality and property-mix.

would be expected given these and other factors can be indicative of the current state of the financial or property market cycle and misalignments might point towards

unsustainable developments that may be prone to correction. Experience of the last financial crisis, amongst others, highlights the vulnerability of both banks and borrowers to negative house price corrections, especially for lending originated at higher LTV and LTI ratios around the peak of the cycle.<sup>8</sup>

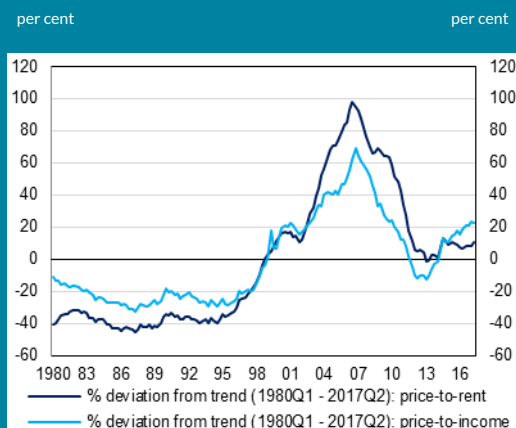
### Box A1: Measures of residential property price misalignment

Central Bank of Ireland staff assess the sustainability of Irish residential property price developments in a number of ways. Simple statistical indicators complement a model-based approach as part of the Central Bank’s suite of early warning indicators for assessing residential real estate risk.<sup>1</sup> This Box presents the latest findings from this suite of tools, with a particular focus on developments since they were considered during the 2016 Review.<sup>2</sup>

#### Simple statistical indicators

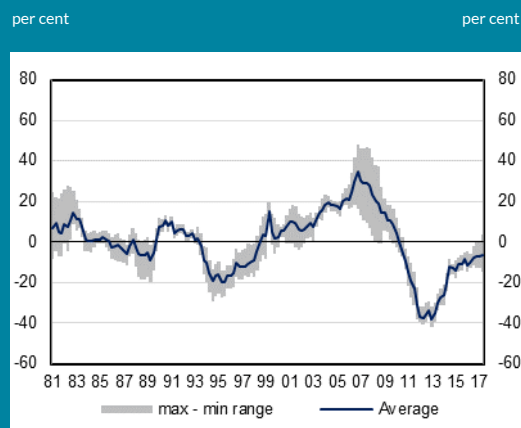
House price-to-rent and house price-to-income ratios are calculated between 1980Q1 and 2017Q2, and compared to their long run average values (Box Chart A1). Overall, a similar pattern is apparent in both series, with the index rising above the long-run average during 1999 and continuing to increase until reaching a peak in late-2006/2007. Following the financial crisis both series fall back toward their long-run average and indeed below it in the case of the price-to-income index. Both series began to increase once more from 2013/14, reflecting the strong rebound in house prices. More recently, the house price-to-income ratio has maintained its upward momentum, while the relative strength of residential rent inflation throughout 2015/16 has resulted in a more stable house price-to-rent ratio. As of 2017Q2 the price-to-income index was almost 23.2 per cent above its long-run average. The corresponding figure for the price-to-rent index was 10.5 per cent.

**Box Chart A1: Deviation of house price-to-rent & house price-to-income indices from long run average values**



Source: CSO and Central Bank of Ireland calculations

**Box Chart A2: Model based measure of Irish house price misalignment**



Source: Central Bank of Ireland calculations

<sup>8</sup> See, for example [Hallissey, Kelly and O'Malley \(2014\)](#).



### *Empirical approaches*

As well as the statistical methods outlined above, two additional empirical approaches are used to assess recent house price developments from a systemic risk perspective. The first adopts a recursive unit root approach to investigate if there are emerging signs of explosive or bubble-like behaviour in house prices.<sup>3</sup> The second uses reduced-form econometric techniques to model real Irish house prices as a function of a number of variables considered fundamental economic determinants of house price dynamics and tests if actual prices are in line with estimated values. The difference between actual prices and these fundamental price estimates shows the potential misalignment between actual and fundamental prices. If prices are persistently out-of-line with fundamentals, a correction may be likely in the future. Three different models are used in this exercise, thereby reducing the possibility of an evaluation of the market being dependent on modelling choices.<sup>4</sup>

The estimated average, maximum and minimum percentage misalignment from the reduced-form models are presented in Box Chart A2. According to these findings, actual house prices have been below the average fundamentally determined residential property value since early 2010. However, the degree of misalignment is diminishing, having gone from almost minus 38 per cent in 2013Q1, to minus 11.3 per cent in 2016Q2, to minus 6.1 per cent in 2017Q2. Counterfactual analysis conducted as part of the Review using the results of these reduced-form econometric models suggests this is a reflection of the growth in disposable income and employment, the low interest rate environment and weak housing supply response, factors which have supported the pace of actual and estimated fundamental house price growth in recent quarters.

### *Conclusion*

This Box provides updated findings from the suite of statistical and empirical techniques that the Central Bank uses to assess recent house price developments. While traditional metrics such as house price-to-rent and house price-to-income ratios are currently above historical averages, the empirical techniques employed do not provide substantial evidence of emerging bubble-like, unsustainable or unexplainable price behaviour up to 2017Q2. However on-going vigilance and careful monitoring of house price developments in the period ahead will remain essential. The model-based estimates point toward a continuing decrease in negative misalignment between fundamentally determined values and actual house prices. Time lags for some data sources and the sensitivity of some model results to revisions in the data incentivise frequent updating of these approaches.<sup>5</sup> As well as this, these approaches cannot be taken in isolation, and consideration must also be given to other relevant factors such as fiscal incentives and changes in credit conditions when examining price developments.

<sup>1</sup> For more information on the background and methodology underlying these approaches, see [Kennedy, O'Brien and Woods \(2016\)](#).

<sup>2</sup> Model results are sensitive to changes in the underlying data. In this regard, revisions to some series following the publication of results from Census 2016 have resulted in notable differences between earlier updates of the model and the output for 2017Q2.

<sup>3</sup> Results and further details of this approach are available on request. As per Phillips, Shi & Yu (2015), a right-sided Augmented Dickey Fuller (ADF) Test is applied to data on Irish residential property prices and the house price to rent and house price to income ratios (between 1980Q1 and 2017Q2). The identification and dating of periods of mildly explosive behaviour, where they exist in the data, is facilitated by this methodology, making it a potentially useful early warning tool for detecting unsustainable price developments. The results over the full sample show that while there was a period of explosive behaviour prior to the market peak in 2007, in more recent years there is no clear evidence of emerging bubble-like behaviour using the recursive unit root approach.

<sup>4</sup> Model 1 includes data on disposable incomes, the level of housing stock per capita and the average real mortgage interest rate. Model 2 includes data on the number of people in employment, the share of the population in the household formation cohort (25-44 years of age) and the average real mortgage interest rate. Model 3 is based on an annual measure of mortgage affordability and the level of housing stock per capita.

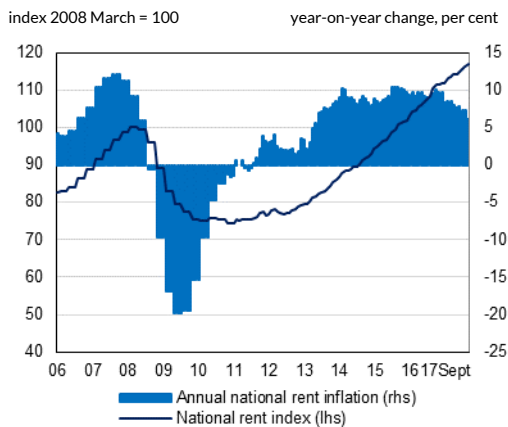
<sup>5</sup> These misalignment estimates are part of a suite of systemic risk indicators which is now regularly published by the Central Bank in the [Systemic Risk Pack](#).

## B. Rental market

Increasing demand and low levels of supply have contributed to strong residential rent growth in recent years. The introduction of Rent Pressure Zones in December 2016 may have served to ease rental inflation somewhat. Annual private rents were 6 per cent higher in September 2017, compared to an annual growth rate of 9.3 per cent in September 2016 (Chart B1). Despite the slowing rate of rental inflation, the private rent index is at its highest recorded value, approximately 17 per cent above its previous 2008-peak.

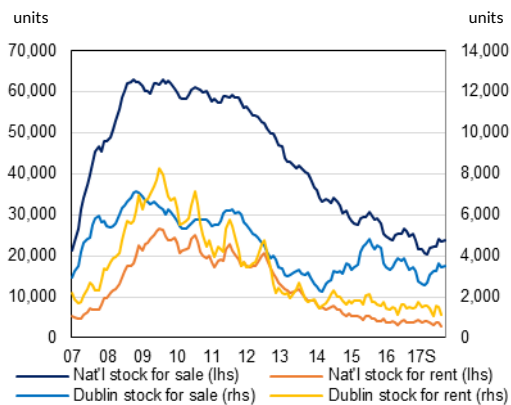
A reduction in the availability of rental properties across the country is a leading factor underpinning the growth in rents. Daft.ie analysis highlights that in August 2017, there were fewer than 3,000 properties to rent nationwide, which represents the lowest figure on record since Daft.ie data collection began in 2006 (Chart B2). In Dublin, there were only approximately 1,100 properties available to rent which is more than a 20 per cent decline since August 2016.

Chart B1: CSO private rent index



Source: CSO and Central Bank of Ireland calculations.

Chart B2: Stock listed for sale or rent on Daft.ie



Source: Daft.ie

Latest observation: Sales stock - September 2017. Rent stock - August 2017

Alongside the reduction in supply, the continuing pace of employment growth is a key demand side driver of rental growth. Kennedy *et al* (2016b) showed that the level of rents were above their equilibrium value based on the key determinants of employment and supply of properties. More recent updates to that analysis confirm that this continues to be the case, with the pace of rental growth being more sensitive to employment and housing stock dynamics in the current environment than in previous periods.<sup>9</sup>

## C. Housing market activity

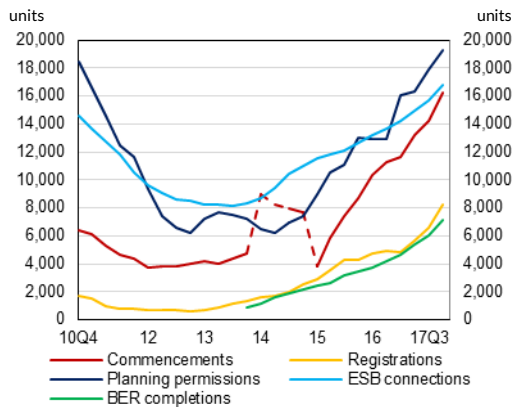
Housing market activity is heavily influenced by the supply of new builds coming on-stream and the level of turnover of existing stock. With regard to new-builds, construction output has shown signs of increase in recent quarters. While there is a lack of consensus on the estimated number of new housing units, due to conflicting data from various sources, growth is evident across all sources (Chart C1). The leading indicators of residential construction activity, such as building commencements and planning permissions continue to signal a steady rise in housing output over the medium-term. While rising incomes, low interest rates, high rents and post-crisis adjustment dynamics are currently contributing to house price growth and rent pressures, the prospect of future expansion in housing supply should restrain price growth over the medium

<sup>9</sup> Keenan and Sheenan (forthcoming).

term. Ongoing monitoring of the impact of this increased supply on prices, relative to the expected path for housing demand, will be necessary.

The number of residential property transactions is relatively low compared to recent historical trends but figures have been rising gradually since mid-2016.<sup>10</sup> CSO data show a year-on-year increase of 6.7 per cent in the number of houses sold in the 12 months to Q2 2017 (c. 56,600). The housing turnover rate, which represents the number of transactions as a share of the total housing stock, was at 2.7 per cent for 2016. The ratio is below the 4 to 5 per cent rate that is estimated by international commentators to be typical of a well-functioning housing market.<sup>11</sup> However, the current low turnover rate in Ireland is not particularly unique when compared to European peers (Chart C2). Measured growth in the turnover rate is attributable to the gradual increase in the level of transactions relative to a slower rate of increase in stock as development activity in the construction sector is still impaired by the legacy of the financial crisis.

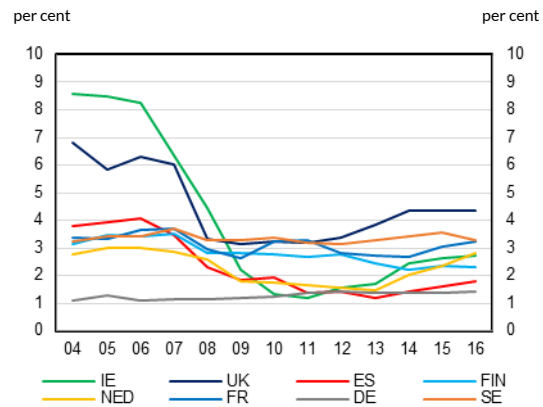
Chart C1: Residential construction activity: (rolling annual total)



Source: Department of Housing, Planning and Local Government, CSO and Goodbody Stockbrokers.

Notes: The adoption of new building codes from March 2014 resulted in a significant front-loading of commencements in the first quarter of 2014, the impact of which remained in the statistics until 2015Q1. This period is represented by the jagged red line.

Chart C2: Cross-country residential property turnover: transactions as a percentage of housing stock



Source: CSO, Hyposat and Central Bank of Ireland calculations.

Notes: UK 2015 and 2016 housing stock figures are estimates based on long-run average annual increase in housing stock (1991-2014).

As noted in Appendix A, non-mortgage financed transactions have been a significant feature of the Irish market in recent years. This is potentially due to a number of factors, including the relative mix of house buyer (Chart C3). The type of buyer can be broken down by households and non-households. Households are private individuals purchasing as FTBs, SSBs or BTL investors.<sup>12</sup> Non-households would include investment funds, real estate investment trusts (REITs), local authorities or approved housing bodies. In general, it would be expected that households would have a greater recourse to mortgage-financing than non-household purchasers. Not all housing transactions undertaken by households, however, can be considered arms-length market transactions and may be at a lower value than market value. Again, in this instance, recourse to mortgage finance may be lower. For household buyers in market transactions, which account for the majority of overall housing transactions (Chart C3), recourse to mortgage-financing may be expected, but in certain circumstances may not be required (e.g. purchasing a smaller property with equity built-up in a previous property). At the same time, the transactions data published by the CSO does not include the cohort of potential mortgage-financed activity that are households with self-builds.

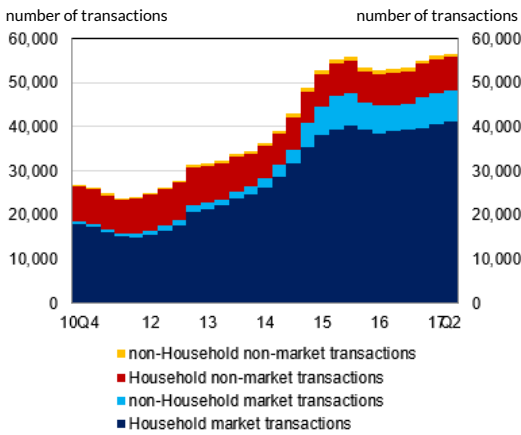
<sup>10</sup> See Coates et al. (2016).

<sup>11</sup> TEGoVA (2012). Country-Specific Legislation and Practice – Country Chapter: Ireland.

<sup>12</sup> The breakdown of household purchases between FTBs, SSBs and BTLs, was approximately 40 per cent, 40 per cent and 20 per cent, respectively for a time during 2010 and 2011. Since then SSBs have tended to account for around half of all household transactions, with FTBs and BTLs accounting for c. 25 per cent each.

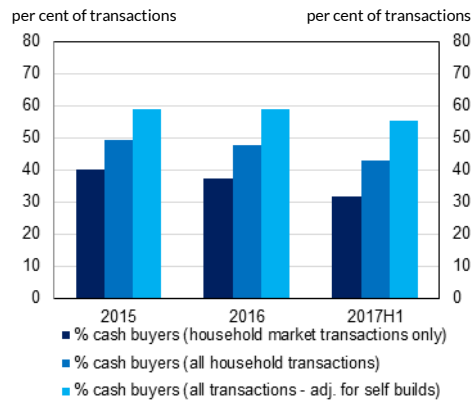
With all these distinctions, and without a unified official dataset to compare, it is possible to establish a number of different estimates of the proportion of mortgage and non-mortgage financed, or cash buyers (Chart C4). Looking at the narrowest category, household buyers for arms-length market transactions, the proportion of cash buyers is estimated at just over 30 per cent in H1 2017, down from 40 per cent in 2015. When non-market transactions are included the proportion rises to 43 per cent in H1 2017. Considering the broadest possible category of both household and non-household transactions, which is pertinent for market-wide developments, the proportion of cash buyers rises to 55 per cent in the most recent half-year period, having been circa 60 per cent in both 2015 and 2016.

Chart C3: Breakdown of CSO transactions by category



Source: CSO and Central Bank of Ireland calculations.

Chart C4: Share of non-mortgage financed buyers per market segment

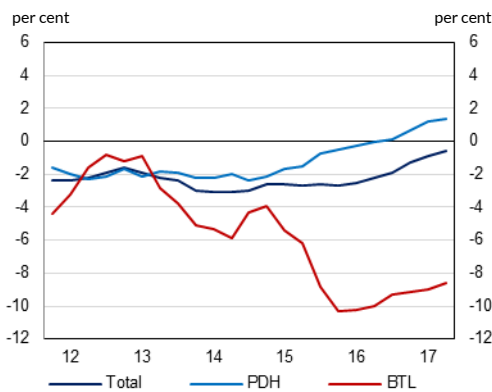


Source: CSO and Central Bank of Ireland calculations.

### D. Mortgage market activity

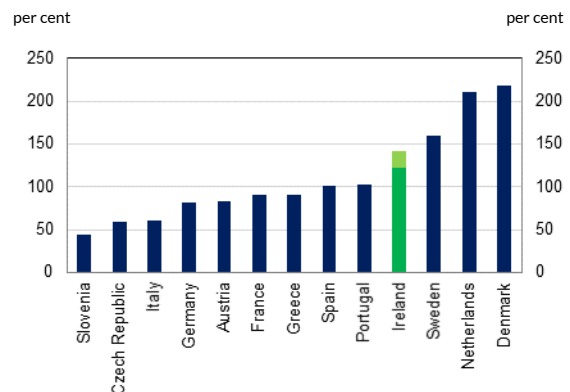
The outstanding amount of mortgage lending had decreased by 0.6 per cent over the year to end-Q2 2017, although diverging trends had emerged between lending for principal dwelling (PDH) and buy-to-let (BTL) purposes (Chart D1). For the first time since the onset of the last financial crisis, PDH mortgage lending is now increasing on an annual basis (1.4 per cent in Q2 2017), while BTL lending continues to contract.

Chart D1: Annual rate of change in outstanding mortgages (PDH, BTL, TOTAL)



Source: Central Bank of Ireland, Table A.18.1.

Chart D2: Household debt to disposable income cross country with mortgage split for IE

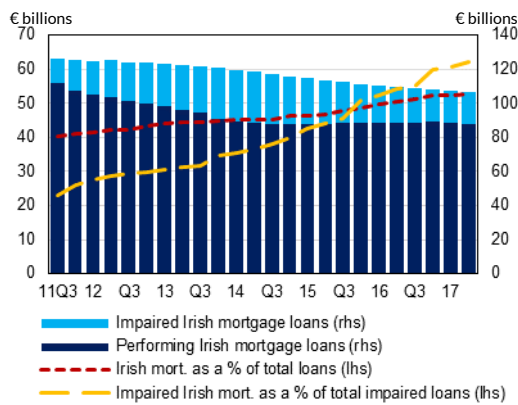


Source: ECB, CSO and Central Bank of Ireland calculations.  
 Note: For Ireland, dark green bar refers to ratio of mortgage debt to disposable income ratio and light green bar refers to non-mortgage debt to disposable income..

The prospect of growth in the total stock of bank-based mortgage lending comes as overall household debt continues to decline and indicators of aggregate household vulnerability continue to improve (Chart D2). Household debt-to-disposable income for Irish households remains relatively high, however, when compared to European peers. Mortgage debt accounted for 86 per cent of overall household liabilities in 2017 Q2, broadly equivalent to the same period in 2016.

Irish retail banks' loan-books are heavily, and increasingly concentrated in property-related lending, with approximately 53 per cent of the outstanding value of loan exposures being Irish mortgages (Chart D3).<sup>13</sup> This share has increased over recent quarters, as the decline in overall loan exposures has been more pronounced than that of Irish mortgages. Alongside this, there has been a decline of 25 per cent in the value of new mortgage lending by these banks outside the Irish market, predominantly to the UK post the Brexit referendum, pointing towards geographical concentration. Despite some improvement in asset quality, the impairment rate for Irish residential mortgage exposures remains elevated at 17.7 per cent, and accounts for 62 per cent of total impairments (Chart D3).<sup>14</sup>

Chart D3: Irish retail banks residential real estate lending



Source: Central Bank of Ireland QFSR regulatory data.

Mortgage drawdowns for housing transactions continue to increase, according to data from the Banking and Payments Federation of Ireland (BPMFI). Total drawdowns in the BPMFI data for the first six months of 2017 amounted to €2.7 billion, up from €2 billion in H1 2016, as the pace of increase in drawdowns has picked up relative to that evident in 2016.

New mortgage lending drawdowns remain markedly below the pre-crisis peak, which was just under €28 billion for the year ending Q3 2006. While those levels of new mortgage lending were ultimately unsustainable in absolute terms, the current levels of drawdowns are likely still adjusting from their post-crisis trough. Analysis in Keenan and O'Brien (forthcoming) suggests that levels of new mortgage lending relative to household disposable income in 2016 was below what would have been expected given structural determinants such as demographic factors and measures of institutional capacity with that

<sup>13</sup> Irish retail banks refers 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. Property-related lending usually refers to loans to the residential and commercial real estate sectors. According to the QFSR regulatory return, at 2017Q2 the value of outstanding loans was c. €202 billion, of which Irish mortgages accounted for €106.5 billion.

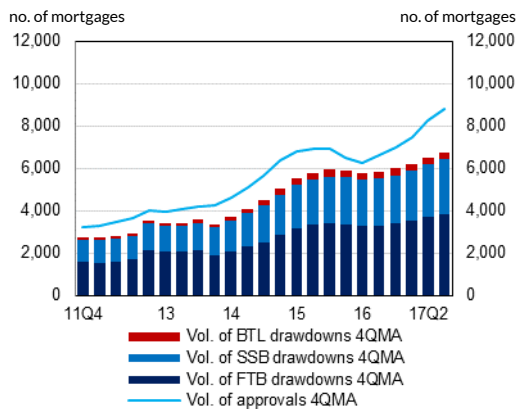
<sup>14</sup> These figures differ slightly from the official published Central Bank of Ireland Mortgage Arrears Statistics, which are compiled on a resident basis using a larger sample of credit institutions.

gap likely only to have closed somewhat during 2017.<sup>15</sup> As a result, scope remains for sustainable increases in the volume of new mortgage lending over the near-term.

Mortgage approvals also continue to increase. However, the transition of these approvals into drawdowns is dependent on actual housing transactions taking place. Given the current low level of new housing stock and turnover of existing housing stock in the market, it is likely that there is currently surplus levels of borrowers with loan approval which may only transition gradually to drawdown (Chart D4).

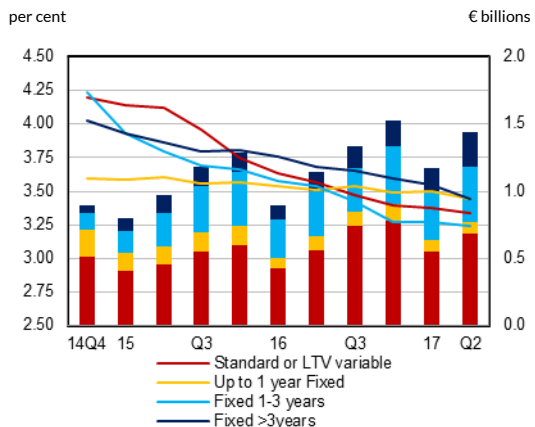
As the absolute level of new mortgage lending continues to increase, the distribution of that lending across interest rate categories has also shifted relative to what was experienced in the years preceding the crisis. During the second quarter of 2017, 46 per cent of new mortgage agreements were on a fixed rate basis, up from 42 per cent in Q2 2016 and from 21 per cent in the final quarter of 2014 (Chart D5). While fixing over a longer duration is becoming increasingly popular amongst new mortgage borrowers, the majority of the fixed rate mortgages written in Q2 2017 (c.60 per cent) were fixed for a period of 1 to 3 years, with a typical interest rate of 3.24 per cent. The comparative interest rate on new mortgages fixed for more than 3 years, or for variable rate mortgages were 3.44 and 3.34 per cent respectively.

Chart D4: Volume of mortgage approvals and drawdowns



Source: BPF and Central Bank of Ireland calculations  
 Notes: Data refer to mortgage drawdowns for housing transactions only, i.e. mortgages to FTBs, mover purchasers and RILs.

Chart D5: Proportion of new (PDH) mortgage business at fixed/floating rates and the prevailing interest rate



Source: Central Bank of Ireland calculations.  
 Notes: Lines represent interest rates (lhs) while bars represent volumes (rhs).

<sup>15</sup> This analysis estimates the benchmark new mortgage lending to household gross disposable income ratio to be approximately 10 per cent, with the most recent value of the indicator (2017 Q2) being approximately 6 per cent. Note that this indicator is not directly mappable to individual households LTI ratios, as it is based on National Accounts data.

### E. Insights from Monitoring Template data - H1 2017 lending developments

The total value of new lending in H1 2017 reported to the Central Bank for the purposes of monitoring compliance with the Regulations rose by 33 per cent, with increases in the number of loans of 21 per cent when compared to H1 2016. The proportion of loans being issued to FTBs was 48 per cent in H1 2017, broadly equivalent to H1 2016, whereas the share of SSB and BTL loans was 47 and 5 per cent, respectively.

A slight increase is observed in LTV and LTI ratios in H1 2017 compared to one year earlier (H1 2016). The histograms below provide details of the LTV and LTI distributions for FTBs and SSBs in H1 2017 relative to H1 2016. Chart E1 shows the LTV distribution among FTBs. While the shapes of both distributions are similar, more lending occurred at an 89-90 per cent LTV in H1 2017 (38 per cent by volume) relative to H1 2016 (32 per cent). Chart E2 shows the LTI distribution among FTBs in both periods. Similar to LTV, there is evidence of a higher share of lending at LTI ratios above 3.5 in H1 2017 relative to H1 2016, although the overall shape of the distribution in H1 2017 is broadly unchanged relative to H1 2016. In H1 2017, 20 per cent of the volume of FTB lending took place at an LTI greater than 3.5; the corresponding figure in H1 2016 was 13 per cent.

Chart E1: FTB LTV H1 2016 vs H1 2017

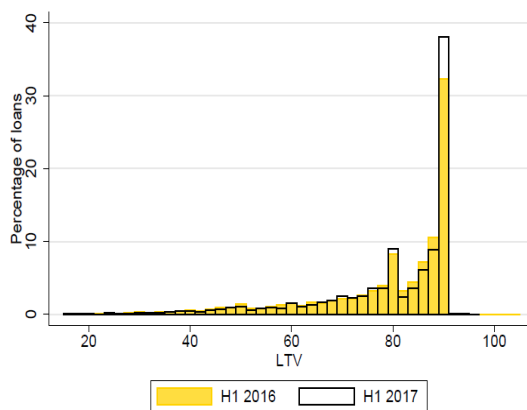


Chart E2: FTB LTI H1 2016 vs H1 2017

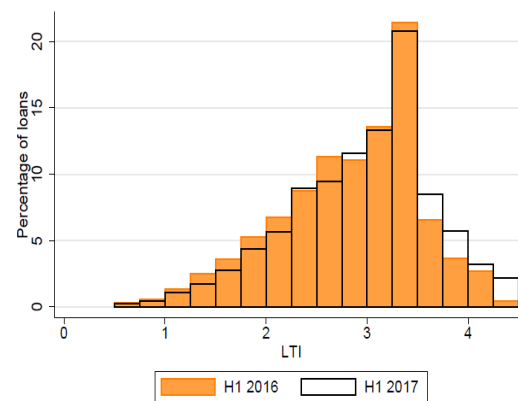


Chart E3: SSB LTV H1 2016 vs H1 2017

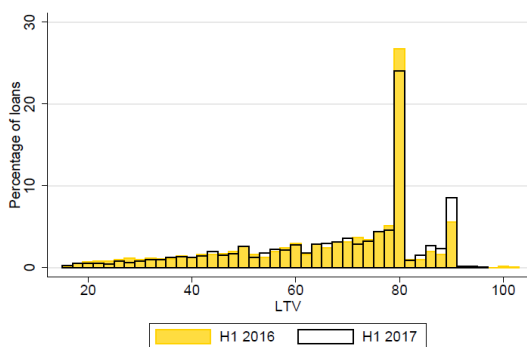
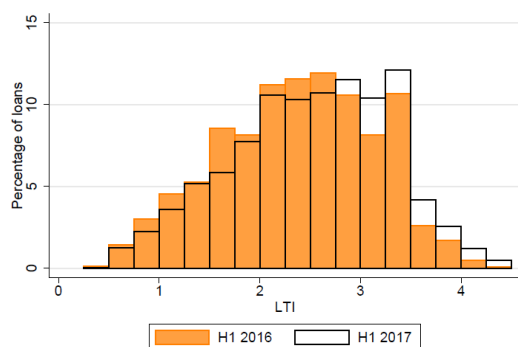


Chart E4: SSB LTI H1 2016 vs H1 2017



Source: Central Bank of Ireland MTD.

Note: Excludes outliers at 1<sup>st</sup> and 99<sup>th</sup> Percentile. Sample is new property purchase & self-build loans only.



Chart E3 shows the LTV distribution for SSBs in H1 2017 relative to H1 2016. There is evidence of increased lending at an 89-90 per cent LTV in H1 2017 (9 per cent of the volume of SSB lending took place at an 89-90 per cent LTV in H1 2017 relative to 6 per cent in H1 2016). Chart E4 displays the distribution of LTI ratios for SSBs in H1 2017 relative to H1 2016. We observe an increase in the share of loans with an LTI ratio between 2.75 to 4.5 times gross income, compared to H1 2016.

The increase in average leverage observed over the period is not unexpected given the increase in house prices and incomes over the period (Box E1 explores this in more detail). This shift is further evident from Charts E5 and E6, which show that the proportion of the value of lending at relatively high LTV and LTI ratios has increased in H1 2017 compared to the previous year under the measures for both FTBs (Chart E5) and SSBs (Chart E6).

Chart E5: Proportion of FTB lending by value in different quadrants based on LTV and LTI limits

	LTI < 3.5	LTI ≥ 3.5
LTV ≥ 90%	2016: 18.2% 2017: 22.9%	2016: 1.0% 2017: 5.2%
LTV < 90%	2016: 62.5% 2017: 50.4%	2016: 18.2% 2017: 21.5%

Source: Calculations using Central Bank data. Percentages are based on the value of lending in each group. 2017 figures refer to H1 only

Chart E6: Proportion of SSB lending by value in different quadrants based on LTV and LTI limits

	LTI < 3.5	LTI ≥ 3.5
LTV ≥ 80%	2016: 31.6% 2017: 32.8%	2016: 1.9% 2017: 2.9%
LTV < 80%	2016: 60.0% 2017: 55.7%	2016: 6.5% 2017: 8.5%

Source: Calculations using Central Bank data. Percentages are based on the value of lending in each group. 2017 figures refer to H1 only

To provide context, Charts E7 to E11 show the evolution of LTV and LTI ratios over the period 2006 to H1 2017 for FTBs, SSBs and BTLs.<sup>16</sup> Notwithstanding the slight increase in LTV and LTI ratios noted above for H1 2017, it is clear that in the context of developments over recent years there has been no considerable change in mean LTV and LTI ratios since the introduction of the mortgage measures. However, the reduction in high LTV and LTI ratios relative to pre-crisis periods and the compression at the upper end of the LTV and LTI distributions has remained.

<sup>16</sup> No LTI chart for BTLs is shown as BTL borrowers are not subject to LTI restrictions under the Regulations.

Chart E7: FTB LTV Over Time

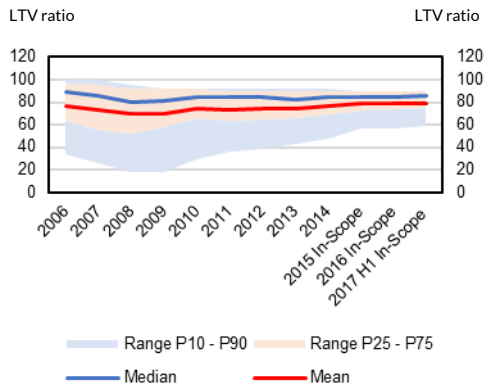


Chart E8: FTB LTI Over Time

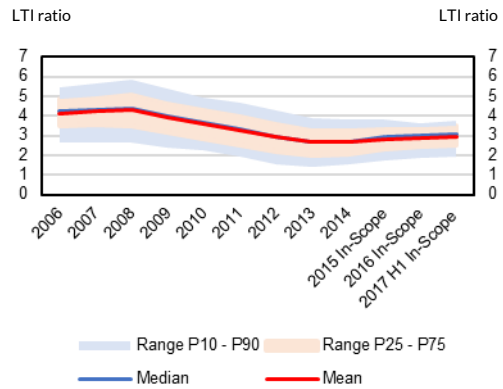


Chart E9: SSB LTV Over Time

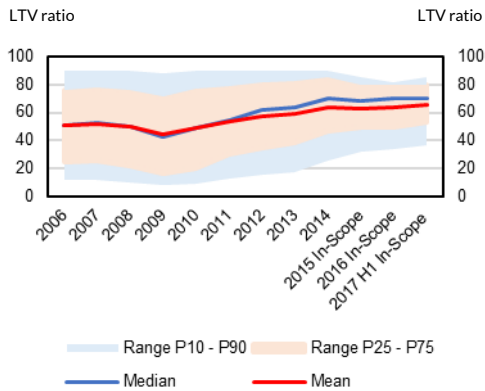


Chart E10: SSB LTI Over Time

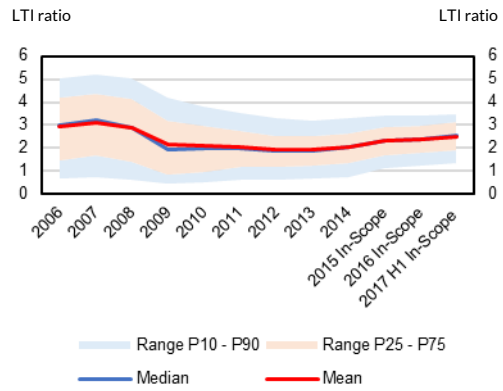
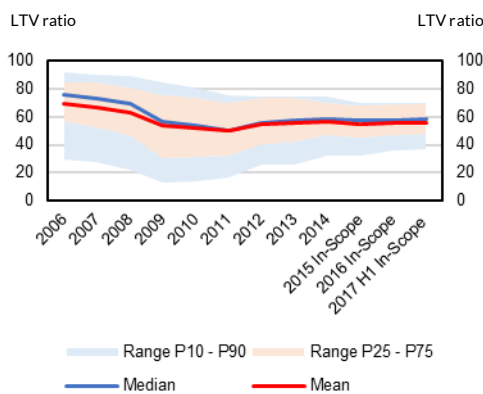


Chart E11: BTL LTV Over Time



Source: Central Bank of Ireland MTD.  
Note: Excludes outliers at 1<sup>st</sup> and 99<sup>th</sup>. LTI data up to 2015 is for four banks.

### Box E1: Simulated LTV and LTI Distributions for FTBs

This Box examines the evolution of LTV and LTI distributions for FTBs under certain assumptions regarding house prices and income growth. This allows for a comparison of observed LTV and LTI distributions with those that might have reasonably occurred based on developments with house prices and incomes alone. In particular, this exercise examines the extent of the distributional shifts between H1 2016 and H1 2017.

#### Method

The approach adopted is to apply certain assumptions on house price and income growth to H1 2016 lending and compare the outcome to the observed H1 2017 lending. The approach employs the simplifying assumption that: the H1 2017 cohort of borrowers has identical characteristics to the H1 2016 cohort of borrowers. With this assumption, H1 2016 lending is translated to produce an estimated (evolved) version of H1 2017 lending using the following equations:

$$Income_{H1\ 2017*} = Income_{H1\ 2016} * Income\ growth\ (regional\ level) \quad (1)$$

$$Property\ Value_{H1\ 2017*} = Value_{H1\ 2016} * house\ price\ growth\ (regional\ level) \quad (2)$$

$$Deposit_{H1\ 2017*} = Deposit_{H1\ 2016} * Income\ growth\ (regional\ level) \quad (3)$$

$$Loan_{H1\ 2017*} = Property\ Value_{H1\ 2017*} - Deposit_{H1\ 2017*} \quad (4)$$

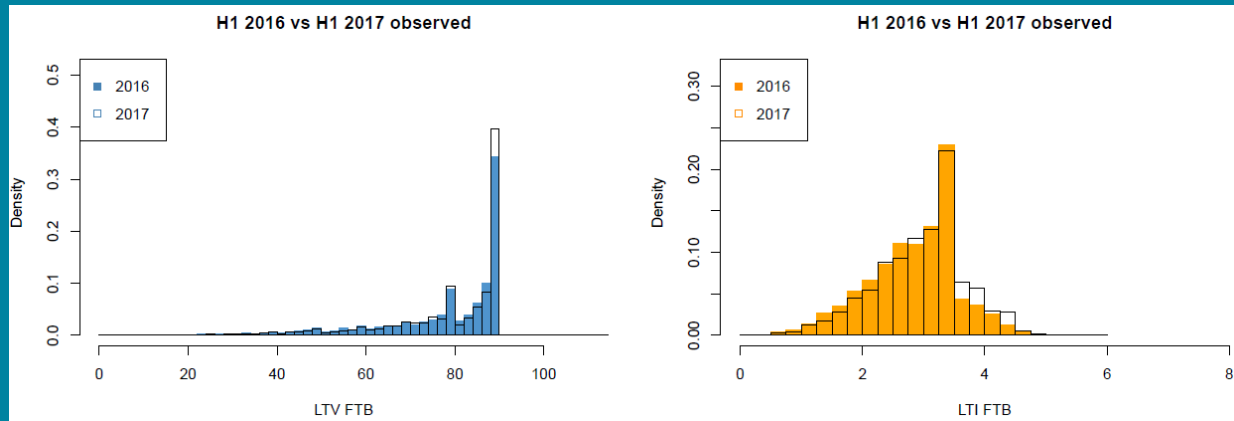
Note: The growth rates in incomes and house prices are obtained by comparing the differences between actual H1 2017 mortgage lending and actual H1 2016 mortgage lending using data provided by 5 banks reporting loan-level data under the macroprudential mortgage measures. \* denotes estimated (evolved) measure.

#### Findings

The results are displayed in Box Charts E1 and E2 in the form of histograms. Firstly, Box Chart E1 shows the distributions of actual mortgage lending in H1 2016 and H1 2017 for both LTV and LTI ratios for FTBs. Compared to H1 2016, there was an increase in leverage (both LTV and LTI) in H1 2017. This is evident by the greater share of lending in the right of the distributional charts for H1 2017 in both cases.

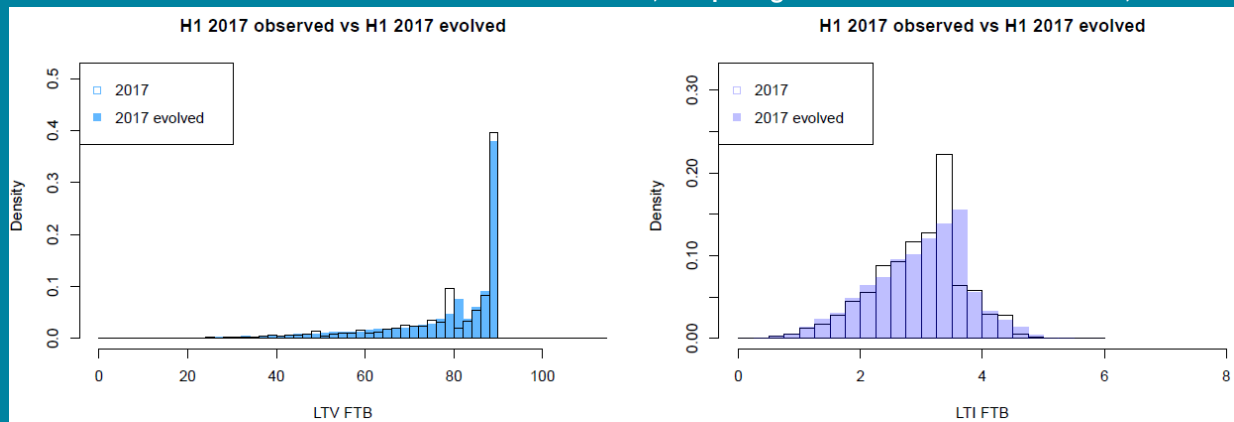
Box Chart E2 compares actual H1 2017 lending with the estimated H1 2017 lending obtained using the above assumptions on house price and income growth. In this case, the histograms show that the actual observed LTV and LTI distributions for FTBs have evolved broadly in line with increases in house prices and income levels over the period.

**Box Chart E1: Observed LTV and LTI distributions for FTBs, comparing H1 2016 and H1 2017.**



Source: Central Bank of Ireland MTD.

**Box Chart E2: Evolved LTV and LTI distributions for FTBs, comparing for the observed distributions, 2017 H1**



Source: Central Bank of Ireland MTD and author calculations based on Central Bank of Ireland MTD.

## F. Use of allowances

The Regulations allow for a certain amount of lending in excess of the limits. Such allowances are in recognition that higher LTV and LTI ratios may be appropriate in certain circumstances and ease market access issues for credit worthy borrowers who would otherwise be constrained by the Regulations. Table F1 presents an overview of total new mortgage lending in H1 2017. The red boxes emphasise the proportion of lending that was originated above the respective LTV or LTI caps.

In H1 2017, less than 1 per cent (30 loans) of the aggregate value of new FTB lending at the five institutions exceeded the LTV limit of 90 per cent (5 per cent per institution is permitted under the Regulations). In H1 2016, under the previous sliding scale LTV limit for FTBs, 8 per cent of the value of FTB lending was accounted for by an LTV allowance. In the case of SSBs, 20 per cent of the aggregate value of new lending in H1 2017 exceeded the LTV limit for this group (20 per cent of new lending is allowed per institution). In H1 2016, approximately 14 per cent of the value of SSB lending was accounted for by allowances to exceed the LTV limits. SSB borrowers with an LTV allowance in H1 2017 had higher average incomes relative to those SSB borrowers without an allowance, had a higher tendency to draw down a fixed rate mortgage, to be a couple, and to live in Dublin.

Regarding LTI allowances, total PDH loans (FTB and SSB) with an LTI allowance were 18 per cent of the aggregate value of new lending in H1 2017. This represents an increase relative to H1 2016 (12 per cent). FTBs accounted for 72 per cent of LTI allowances in H1 2017 (1,336 loans), with the remaining 28 per cent accounted for by SSBs (506 loans).

The proportion of the value of loans to FTBs with an LTI allowance rose to 24 per cent in H1 2017, from 16 per cent in H1 2016. Meanwhile the proportion of SSB loans (by value) with an LTI allowance was 10 per cent in H1 2017, compared with 7 per cent in H1 2016. FTBs with an LTI allowance in H1 2017 had on average larger loans issued for more expensive properties than FTBs without an LTI allowance, and had a higher tendency to be single and live in Dublin. A similar pattern is evident when comparing SSBs with and without LTI allowances in the period.

Table F1: H1 2017 Lending and Use of LTV and LTI Allowances by Borrower Group

	Total Value	No. Loans	% Value		
			H1 2017	H1 2016	2016
<b>Total Lending</b>	<b>3,054</b>	<b>14,997</b>	<b>100</b>	<b>100</b>	<b>100</b>
In-Scope Lending*	2,826	13,940	93	93	92
of which:					
<b>PDH Lending</b>	<b>2,736</b>	<b>13,237</b>	<b>97</b>	<b>96</b>	<b>97</b>
FTB Lending	1,443	7,210	53	51	51
of which FTB over LTV Cap	6	30	0.4	8	9
SSB Lending	1,293	6,027	47	49	49
of which SSB over LTV Cap	255	884	20	14	15
<b>PDH Lending LTI **</b>					
FTB Lending	1,443	7,210	52	51	50
of which FTB over LTI Cap	350	1,336	24	16	18
SSB Lending ***	1,327	6,198	48	49	50
of which SSB over LTI Cap	137	506	10	7	8
<b>BTL Lending</b>	<b>90</b>	<b>703</b>	<b>3</b>	<b>4</b>	<b>3</b>
BTL over LTV Cap	2	11	2	2	2
<b>Exempt from Regulations</b>	<b>227</b>	<b>1,057</b>	<b>7</b>	<b>7</b>	<b>8</b>

Source: Central Bank Monitoring Templates Data. \* This figure excludes negative equity loans which are in-scope for LTI purposes only.

\*\* Total PDH loans (FTB + SSB) over the LTI allowance were 18 per cent in H1 2017.

\*\*\* Includes negative equity loans in-scope for LTI allowances.

## G. Technical amendment – collateral valuation

The aim of this technical amendment is to provide clarity to the appropriate valuation estimate to be used by banks when calculating the LTV on residential mortgages issued for construction purposes.

In some instances, banks have more than one valuation estimate available to them at the time of agreeing loans issued for construction purposes. These valuations can be based on either the cost of the site plus estimated construction costs, or the projected value of the property once all works have been completed.

Under the Regulations as currently drafted, banks may use the market value of the site plus estimated construction costs for the purposes of valuation. This may result in a higher valuation estimate than the projected value of the property once all works have been completed. By using a higher valuation estimate, the bank would minimise the LTV for a given construction related loan, which may not be most reflective of the actual leverage position of the borrower.

The Central Bank is satisfied that the more prudent approach of using the lowest valuation estimate and reflecting a more appropriate LTV for these construction-related loans is the dominant practice in the market. In order to ensure that the current prudent practice continues to be followed, the Regulations are being amended to remove any unnecessary ambiguity.

## References

- Central Bank of Ireland (2016), "Review of residential mortgage lending requirements".
- Christina Kinghan, Paul Lyons, and Yvonne McCarthy (2017), "Macroprudential Measures and Irish Mortgage Lending: Insights from H1 2017", Central Bank of Ireland, *Economic Letter* No. 13.
- Dermot Coates, Joe McNeill, and Brendan Williams (2016), "Estimating cash buyers and transaction volumes in the residential property sector in Ireland, 2000-2014", Central Bank of Ireland, *Quarterly Bulletin* 3, July 2016.
- Enda Keenan and Martin O'Brien (forthcoming), "New mortgage lending activity in a comparative context"
- Enda Keenan and Lisa Sheenan (forthcoming), "An Analysis of Irish Residential Rents using Linear and Non-Linear Approaches"
- Gerard Kennedy, Eoin O'Brien, and Maria Woods (2016a), "Assessing the sustainability of Irish residential property prices: 1980Q1-2016Q2", Central Bank of Ireland, *Economic Letter* No. 11.
- Gerard Kennedy, Lisa Sheenan, and Maria Woods, (2016b), "Modelling Irish rents: recent developments in historical context", Central Bank of Ireland, *Economic Letter* No. 14.
- Mark Cassidy and Niamh Hallissey (2016), "The introduction of macroprudential measures for the Irish mortgage market", *Economic and Social Review*, 47 (2), pp. 271-297.
- Niamh Hallissey, Robert Kelly, and Terry O'Malley (2014), "Macro-prudential tools and credit risk of property lending at Irish banks", Central Bank of Ireland, *Economic Letter* No. 10.
- Peter Philips, Shu-Ping Shi and Jun Yu (2015), "Testing for multiple bubbles: historical episodes of exuberance and collapse in the S&P500", *International Economic Review*, 2011, 52(1).



## Glossary

ADF	Augmented Dickey-Fuller Test
BPFI	Banking and Payments Federation Ireland
BTL	Buy-to-Let
CSO	Central Statistics Office
ECB	European Central Bank
FTB	First-Time Buyer
LTI	Loan-to-Income ratio
LTV	Loan-to-Value ratio
MTD	Monitoring Template Data
PDH	Primary Dwelling House
QSFR	Quarterly Summary Financial Return
REIT	Real Estate Investment Fund
RIL	Residential Investment Letting
RPPI	Residential Property Price Index
SCSI	Society of Chartered Surveyors Ireland
SSB	Second-and-Subsequent Buyer



T: +353 1 224 6000  
E: [enquiries@centralbank.ie](mailto:enquiries@centralbank.ie)  
W: [www.centralbank.ie](http://www.centralbank.ie)



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