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COVID-19 payment breaks on residential mortgages

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Abstract

This note describes the characteristics of Irish owner-occupier mortgages at the five major retail banks that were on COVID-19 payment breaks at the end of May 2020. We identify three factors that are particularly related to the prevalence of payment breaks. First, a history of mortgage forbearance or non-performance is strongly associated with payment breaks; about 40 per cent of mortgages on payment breaks had a prior modification. Second, loans originated during the mid-2000s peak of mortgage lending were more likely than the average loan to have payment breaks, whereas mortgages from the 2010s were less likely than average to have payment breaks. Finally, there is a close relationship between payment breaks and high loan-to-income ratios at origination, especially among more recent vintages of lending.

1 Introduction

By 29 May 2020, over 67,000 COVID-19 payment breaks applied to owner-occupier mortgages in Ireland at the five major retail banks, covering nine billion euro in loan balances and over fifty thousand households. One in nine owner-occupier mortgages was on a payment break, illustrating the scale of the economic shock caused by the COVID-19 pandemic. By late August 2020, Central Bank of Ireland internal estimates suggested that more than half of mortgage payment breaks remained in place. Payment breaks have allowed borrowers to reschedule mortgage servicing and to smooth their consumption during a period of lower household incomes, while deferring loan interest and repayment to the future.

In this note, we use loan-level data from the five major retail banks in Ireland, as at 29 May 2020, to identify characteristics of residential mortgages that are associated with COVID-19 payment breaks. The analysis suggests that loan forbearance and performance history are the strongest available predictors of payment breaks. Mortgages with a history of forbearance were more than twice as likely to have had a payment break as loans never forborne; in total, 40 per cent of mortgages with payment breaks have had a forbearance. Furthermore, although industry sector of employment is not provided in loan-level data, it is probable that borrowers working in sectors significantly affected by COVID-19 have been more likely to apply for payment breaks.

Other predictors of payment breaks include high loan-to-income ratios at origination, mid-2000s originations, Dublin commuter belt locations and counties where higher shares of workers were receiving Pandemic Unemployment Payment in May 2020. The loans with the fewest payment breaks include early-2010s originations, loans close to scheduled maturity, loans with low loan-to-value ratios and loans in arrears more than three months past due.

Section 2 explains the payment break programme and policy. Section 3 describes the data used in this note. Section 4 shows the overall prevalence of payment breaks. Section 5 outlines the

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mortgage characteristics that are associated with the prevalence of payment breaks. Section 6 concludes the note.

2 COVID-19 payment break policy in Ireland and Europe

A payment break is an agreement between a borrower and a firm to postpone all or part of the loan repayments for an agreed period. In response to the economic shock caused by COVID-19, Irish retail banks and non-bank mortgage owners agreed an industry-wide payment break framework in early March.² In the case of residential mortgage borrowers affected by COVID-19, these credit providers agreed to offer liquidity relief through payment breaks lasting up to six months. In addition, credit unions have offered payment breaks to their members on a case-by-case basis.

The Banking and Payment Federation Ireland (BPMFI), the industry representative group for Irish banks, promotes consistency of the payment break offers across different firms. The Central Bank of Ireland, in turn, has set out its supervisory expectations about payment breaks programmes.³

In April 2020, the European Banking Authority (EBA) issued guidelines for COVID-19 payment break programmes by banks in the European Union (European Banking Authority, 2020). Until the end of September 2020, a payment break conforming to the guidelines will not cause a mortgage to be classified as defaulted or forborne. This ensures that lenders can offer short-term relief to borrowers without triggering a re-classification of the loan's underlying ability to repay, which would involve an immediate loss.

3 Data description

The five major retail banks reported payment breaks for their Irish residential mortgage customers as at 29 May 2020 to the Central Bank of Ireland. The mortgages described in this note as "having a payment break" include all payment breaks approved by 29 May. By the end of August 2020, Central Bank of Ireland internal estimates suggested that more than half of mortgage payment breaks at retail banks remained active.⁴ This figure includes borrowers who extended an initial three-month break to a total of six months.

These records do not include loans owned by retail credit firms and credit servicing firms, even if banks originally issued the mortgages. Non-bank mortgages in Ireland are more likely to have a history of mortgage arrears, because many banks sold some of their non-performing loans (NPL) to non-banks, albeit to a limited extent.⁵ For this reason, the mortgages assessed in this note tend to have experienced lower arrears rates than the average mortgage in Ireland.

The most common payment break is a full moratorium: a pause in interest payments and repayments of the balance of the loan. Some lenders extended a small share of short-term interest-only arrangements. A minority of payment breaks included partial repayments of the loan balance. Each type of arrangement complies with the EBA guidelines.

Payment break data match records of residential mortgage accounts at the five major retail banks as at 31 December 2019. These provide a rich profile of loans and borrowers that allow us to assess conditions in the period leading up to the COVID-19 economic shock. However, current labour

² The Central Bank of Ireland's Financial Stability Review (2020) describes the broader economic impacts of the pandemic.

³ For more, see the Central Bank's [letter of 8 June 2020 to regulated firms](#).

⁴ A formal Central Bank data release about payment break expirations to August is forthcoming.

⁵ McCann and McGeever (2018) calculate that the exit rate of owner-occupier NPL from bank balance sheets, including loan sales, was at or below 5 per cent per year in 2012-17. More recently, the Central Bank of Ireland's Residential Mortgage Arrears Statistics show that in March 2020, 18 per cent of non-bank mortgages by value were classified as being currently "restructured" to make payment terms more manageable for borrowers, compared to just 9 per cent of mortgages at banks.

market information is not available. It is considered likely that industry sector of employment of the borrower would be a powerful predictor of payment breaks, because different sectors have been affected to different degrees by economic problems arising from COVID-19. For example, Byrne, Coates, Keenan and McIndoe-Calder (2020) show that Pandemic Unemployment Payment recipients represented over 70 per cent of pre-COVID-19 employment in the “accommodation and food service” sector, but less than 10 per cent in sectors like “human health”.

Aggregate statistics presented in this note will describe shares of total outstanding loan balances, unless otherwise specified. Balances are measured as at 31 December 2019. Therefore, loans issued in 2020 are not included in the assessment.

4 Prevalence of payment breaks on 29 May 2020

Table 1 shows exposures in millions of euro at each stage of the COVID-19 payment break process on 29 May 2020. As applies to all tables and charts, this describes mortgage accounts at the five major retail banks.

In total, 11.5 per cent of mortgage lending had a payment break request on file, whereas the remainder had no record of a request. The applicant approval rate was 96 per cent, leading to 11.1 per cent of total lending approved for a payment break. Just under 4 per cent of requests were cancelled or were awaiting a decision. The rejection rate was 0.3 per cent. Almost all payment breaks approved by 29 May were active on that date, but some had expired, or were yet to begin.

Table 1: Payment break request and detailed payment break status as at 29 May

| | Balance (€ m) | Share, % |
|-----------------------------------|---------------|--------------|
| Total | 94,940 | 100.0 |
| No request | 84,019 | 88.5 |
| Payment break: active | 10,042 | 10.6 |
| Payment break: approved & pending | 176 | 0.2 |
| Payment break: expired | 246 | 0.3 |
| Request under consideration | 207 | 0.2 |
| Request cancelled | 213 | 0.2 |
| Request rejected | 36 | 0.0 |

Table 2 shows that private dwelling house (PDH) borrowers are slightly more likely to have payment breaks than buy-to-let (BTL) borrowers.

Table 2: Payment breaks by borrower type

| | Accounts | Payment breaks | % | Balance (€ bn) | Payment break balance (€ bn) | % |
|-----------------------------------|----------------|----------------|-----------|----------------|------------------------------|-----------|
| Total | 748,249 | 73,960 | 10 | 94.94 | 10.46 | 11 |
| PDH: First-time buyer | 248,794 | 23,804 | 10 | 35.47 | 3.60 | 10 |
| PDH: Second-time/subsequent buyer | 425,383 | 43,530 | 10 | 49.19 | 5.79 | 12 |
| Buy-to-let | 74,072 | 6,626 | 9 | 10.28 | 1.08 | 10 |

The remainder of this note will cover only PDH mortgages at the five major retail banks. Payment breaks to this group cover over 67,000 accounts and 9.4 billion euro of balances.

In loan-level data, each account belongs to a mortgage facility: a group of accounts secured on the same property. A borrower may have multiple mortgage accounts when different balances are due to be paid down at different interest rates, such as hybrid, top-up or split mortgages. COVID-19 payment breaks may apply to any or all of the accounts held by a borrower.

An owner-occupier mortgage is secured on the borrower’s main residence, so the number of mortgage facilities is likely to match the number of households with mortgages. Table 3 uses this logic to estimate the number of owner-occupiers with payment breaks. Over 54,000 PDH mortgage facilities have a payment break, just below ten per cent of the total. This is likely to correspond to

the number of households with home loans that have benefitted from payment breaks.

Table 3: PDH mortgage facilities with and without payment breaks

| | Mortgage facilities | Share, % |
|-----------------------|---------------------|--------------|
| Total PDH | 561,169 | 100.0 |
| PDH: No payment break | 506,887 | 90.3 |
| PDH: Payment break | 54,282 | 9.7 |

5 Characteristics of owner-occupier mortgages with payment breaks

5.1 Forbearance and performance history

Current and past loan forbearance⁶ are the strongest available predictors of COVID-19 payment breaks at retail banks. Over 20 per cent of owner-occupier mortgage exposure has a history of forbearance or modification. The share of payment break residential mortgages with a forbearance history is double the overall average, at 40 per cent: €3.6 billion of home loans have a record of forbearance, whereas €5.8 billion was never forborne.

Table 4 shows that, by value, 21 per cent of lending with a current forbearance, and 18 per cent of lending with a past forbearance, has a payment break. Only 9 per cent of loans with no history of forbearance have a payment break. Therefore, loans with forbearance history are more than twice as likely to have a payment break when compared to loans that were never forborne.

Table 4: Payment breaks by forbearance history of loans

| | Balance (€ bn) | Payment break balance (€ bn) | % |
|---------------------|----------------|------------------------------|-----------|
| Total | 84.66 | 9.39 | 11 |
| Never forborne | 66.13 | 5.79 | 9 |
| Previously forborne | 10.11 | 1.80 | 18 |
| Currently forborne | 8.42 | 1.80 | 21 |

Tables 5 and 6 show that the forbearance effect holds regardless of current or historic loan performance. A history of non-performance increases the likelihood that a loan has a payment break. However, this is only true among loans that are not in arrears over 90 days past due (dpd). For borrowers in arrears and not in a performing restructured loan, lenders were guided to consider payment breaks on a case-by-case basis, and to grant a payment break if it were an appropriate short-term support for the borrower.

Table 5: Payment breaks by forbearance history and current performance of loans

| | Balance (€ bn) | Payment break balance (€ bn) | % |
|---------------------------------|----------------|------------------------------|-----------|
| Total | 84.66 | 9.39 | 11 |
| Performing; Never forborne | 65.26 | 5.73 | 9 |
| Performing; Previously forborne | 7.51 | 1.48 | 20 |
| Performing; Currently forborne | 4.87 | 1.05 | 22 |
| Non-performing | 7.03 | 1.14 | 16 |

⁶ Namely, modification of the loan agreement, such as the repayment schedule or the interest rate, or other concessions made by lenders, toward borrowers facing difficulties in meeting their financial commitments.

Table 6: Payment break propensity as a percentage of total outstanding balance, by forbearance and performance records

| Total | Never NPL | Previously NPL | Currently NPL: not over 90dpd | Currently NPL: over 90 dpd |
|---------------------|-----------|----------------|-------------------------------|----------------------------|
| Never forborne | 9 | 14 | 12 | 4 |
| Previously forborne | 18 | 22 | 25 | 7 |
| Currently forborne | 19 | 22 | 24 | 15 |

Finally, Table 7 shows that non-performing loans in deep arrears are least likely to have a payment break. The highest frequencies of payment breaks are among NPL in arrears but less than three months past due. Many of these loans have active forbearance measures. By contrast, many borrowers in deep arrears were not making payments before COVID-19, so it is not clear that payment breaks would be the appropriate response to most of these cases of payment difficulties. O'Malley (2018) documents that low engagement rates between banks and borrowers are historically associated with long-term mortgage arrears.

Table 7: Payment breaks by NPL depth of arrears

| | Balance (€ bn) | Payment break balance (€ bn) | % |
|-------------------|----------------|------------------------------|-----------|
| Total | 84.66 | 9.39 | 11 |
| Performing | 77.63 | 8.25 | 11 |
| NPL: 0 dpd | 2.85 | 0.64 | 22 |
| NPL: 1-90 dpd | 0.71 | 0.19 | 26 |
| NPL: 91-365 dpd | 0.91 | 0.16 | 18 |
| NPL: 366-720 dpd | 0.48 | 0.05 | 11 |
| NPL: Over 720 dpd | 2.07 | 0.10 | 5 |

The power of forbearance history in predicting payment breaks raises the question of whether we are observing correlation or causation. Banks offered payment breaks to any applicant affected by COVID-19 and making repayments on their agreed schedule. Nonetheless, borrowers facing different financial conditions may have had different tendencies to apply for payment breaks.

Forbearance history is likely to be associated with the propensity of a loan to have a payment break due to common factors underlying both tendencies. Borrowers who encountered repayment difficulties due to intrinsic vulnerabilities are likely to remain vulnerable even after recovering to make full payments. For this reason, there is empirical evidence that a record of loan modification has a strong role in predicting a loan's future arrears status (Gaffney and McCann, 2019). However, if borrowers with experience of modification become familiar with the process and its benefits, forbearance history may itself cause borrowers to be more likely to apply for future modifications like payment breaks.

It is difficult to distinguish between these two possibilities with the available evidence. Accordingly, it is not possible to demonstrate any explanatory power of modification experience beyond correlation. Similarly, the other relationships presented here cannot be interpreted as conclusive evidence that any individual factor causes borrowers to seek payment breaks, without regard to correlations with the other factors involved.

5.2 Loan origination date, maturity date and borrower age

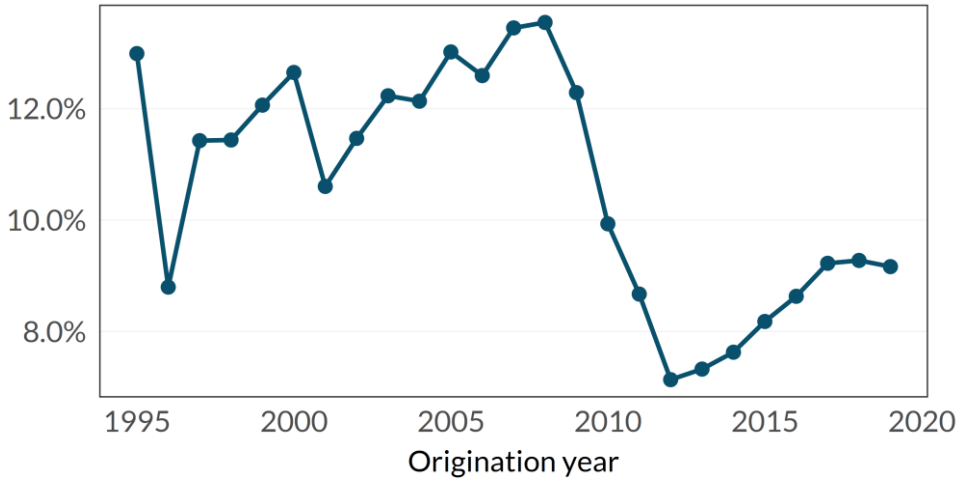
By origination date, payment breaks are most common among loans originated during the peak of residential mortgage credit in the mid-2000s. In total, 53 per cent of all payment breaks in the analysis are on mortgages originated between 2004 and 2008.

Chart 1 shows the share of mortgages with payment breaks within each year of origination. The highest propensities are for loans issued in 2008 and 2009: just under 14 per cent of these loans have payment breaks. The lowest propensities are in the early 2010s, when credit standards were restrictive and lenders issued few mortgages. Around 7 per cent of loans issued in 2012 and 2013

have payment breaks. Loans issued since the introduction of the mortgage measures in 2015 are less likely than the average mortgage to be on a payment break.

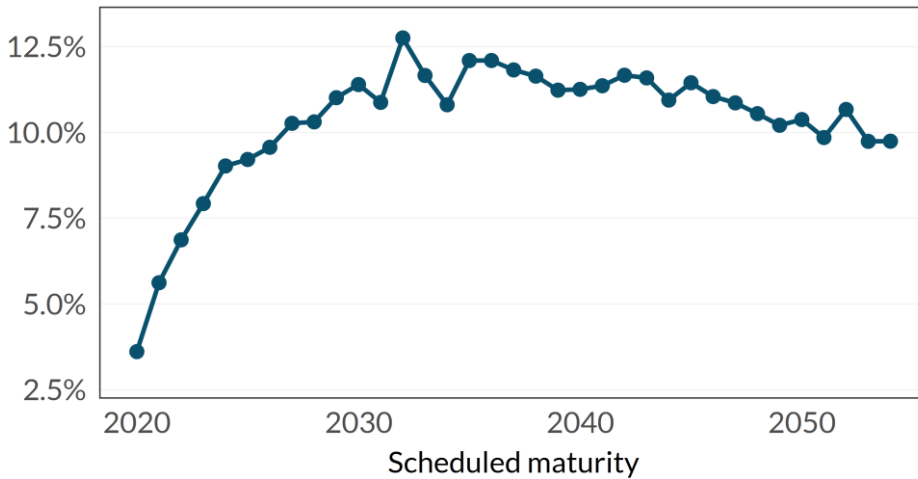
If familiarity with forbearance makes borrowers more inclined to seek a payment break, as suggested in the previous subsection, this would partly explain why new borrowers with loans issued in the 2010s were less likely to apply for payment breaks. However, over the longer term, underwriting standards also varied, and borrowers in the 2010s may simply have been less likely to work in roles affected by COVID-19 in 2020.

Chart 1: Payment break propensity by year of origination



Mortgages due to mature in the next three years are much less likely to have a payment break than others. For these loans, the term of a payment break would comprise a large share of the remaining time to maturity. Payment break propensity at maturities beyond 2025 varies within a narrow range from year to year. The most distant maturities have slightly lower payment break rates, probably because they mainly contain loans originated in the 2010s.

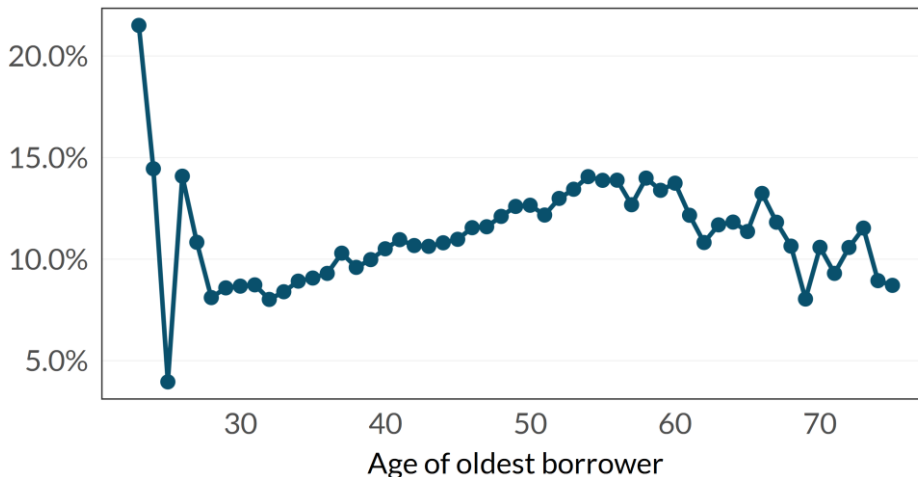
Chart 2: Payment break propensity by year of scheduled maturity



Borrower age is closely correlated with loan maturity date, because many loans are scheduled to mature when the borrower is between 65 and 68 years of age. Payment break propensity by age follows a similar pattern to maturity date and origination year. Borrowers between 50 and 60 years of age are more likely to have borrowed in the mid-2000s, and are more likely to have a payment break. Beyond age 60, borrowers are more likely to be close to mortgage maturity.

There is evidence that payment breaks are more common than average among the very youngest borrowers, aged under 28. However, the sample is small, containing only one thousand mortgages, compared to tens of thousands at each year of age between 35 and 60.

Chart 3: Payment break propensity by age of oldest borrower



5.3 Region

Most counties are close to the national average rate of payment breaks on owner-occupier mortgages, with a small number of exceptions. Chart 4 shows that counties Meath and Kerry have the highest shares of mortgage payment breaks, followed by Louth and Wicklow, then Donegal and Wexford. Meath, Louth and Wicklow are Dublin commuter counties with many mid-2000s mortgages, which were shown in the previous subsection to have high rates of payment breaks. Kerry, Donegal and Wexford have large shares of employment in the “accommodation and food service” industry sector, which was strongly affected by business closures due to COVID-19.

Chart 5 shows that most counties with high payment break shares also had high rates of Pandemic Unemployment Payment at its national peak on 5 May, according to [DEASP statistics](#). Recipients of the payment are shown as a share of the labour force by county, which is available for the year 2016.

Chart 4: Payment break propensity by county

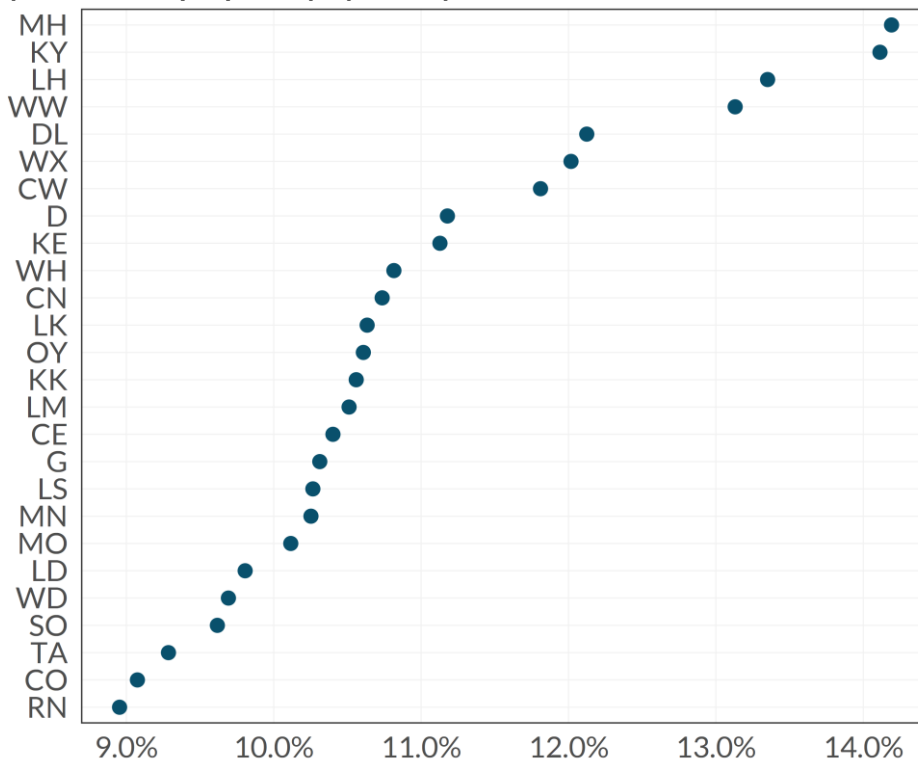
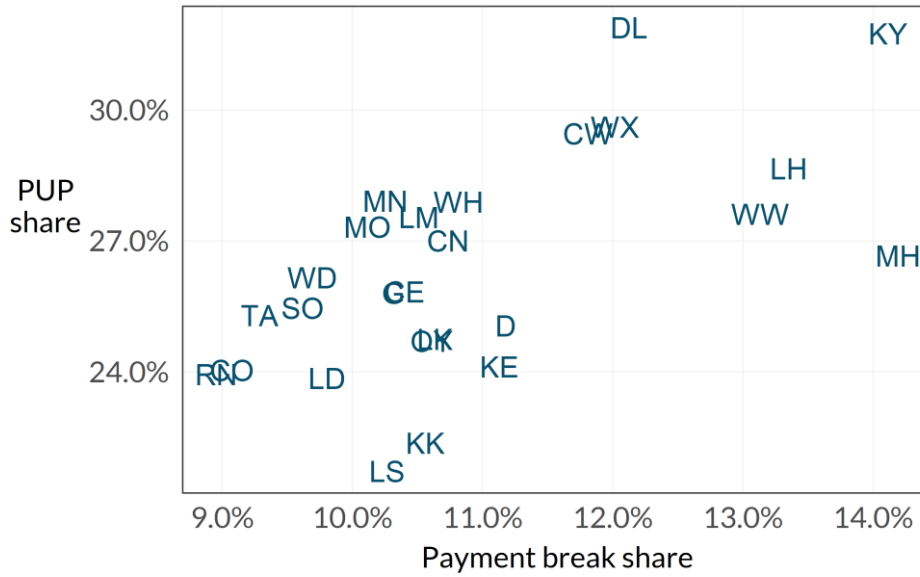


Chart 5: Payment break and Pandemic Unemployment Payment propensities by county

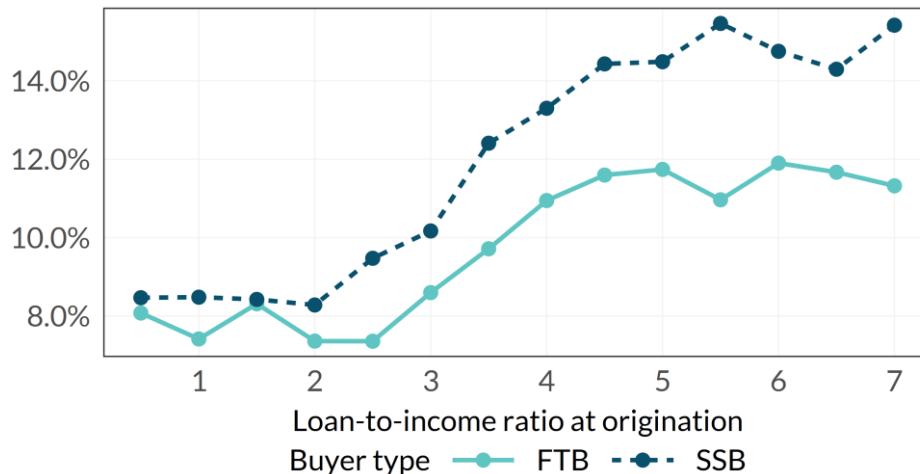


Note: “PUP share” shows Pandemic Unemployment Payment (PUP) recipients on 5 May 2020 as a share of the labour force in each county in the Census of Ireland 2016.

5.4 Credit conditions at origination: LTI, incomes and LTV

Loan-to-income ratio (LTI) at origination is closely correlated with the tendency of loans to have a payment break.⁷ The payment break share almost doubles between LTI 2 and 4.5. The increase is particularly strong among second- and subsequent-time buyers (SSB), and slightly less among first-time buyers (FTB). Because LTI is also correlated with debt-service ratios as a share of income, this means borrowers with the highest repayment burdens at origination are most likely to have applied for a payment break in 2020. Higher repayment burdens as a share of income may have led borrowers to seek assistance to cope with COVID-19 income shocks. Alternatively, borrowers with pre-existing sensitivities to COVID-19 due to income or employment type may simply have sought higher loan-to-income ratios when choosing a mortgage.

Chart 6: Payment break propensity by loan-to-income ratio at origination

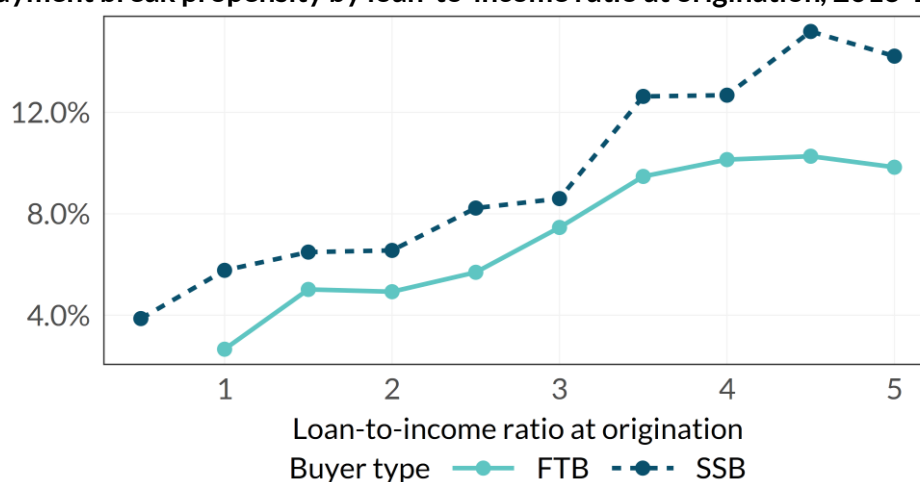


Note: Each data point represents loans with LTI at origination in a bracket of width 0.5, ending at and including the value depicted in the chart.

⁷ The majority of owner-occupier mortgage records include household income at origination and LTI, including all mortgages issued under the Central Bank of Ireland’s mortgage measures. Among a minority of mortgage records, original income and LTI are not available to the authors. Such mortgages are excluded from the analysis in this subsection.

The effect of LTI is especially strong in recent years (see Chart 7) and weaker in earlier years. More recent income data may better reflect the circumstances of borrowers in 2020, when compared to the original incomes of mid-2000s mortgage borrowers.

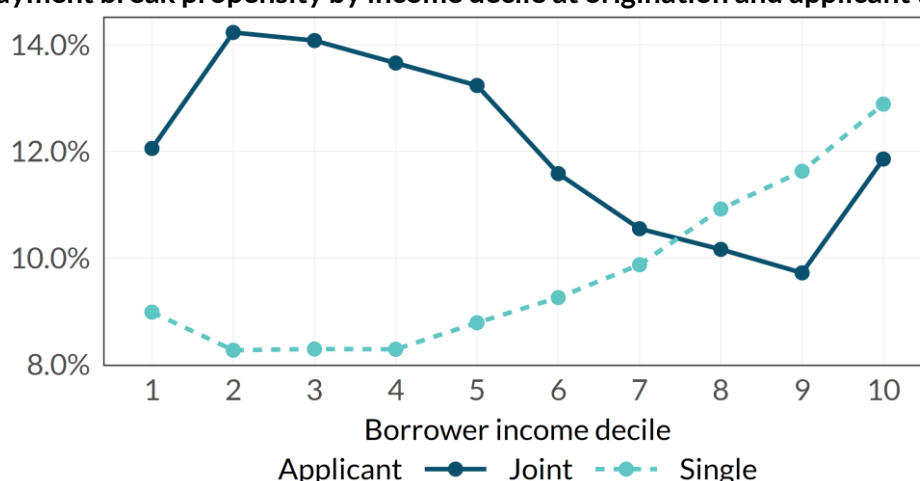
Chart 7: Payment break propensity by loan-to-income ratio at origination, 2016-19 originations



Note: Each data point represents loans with LTI at origination in a bracket of width 0.5, ending at and including the value depicted in the chart. LTI above 5 is not depicted due to small loan volumes at those levels in 2016-19.

In Chart 8, the population of mortgage borrowers in each year is sorted by income and grouped into ten deciles, with decile 1 containing the lowest 10 per cent of borrower by income each year, decile 2 containing the next-lowest 10 per cent, and so on.⁸ There is no consistent relationship between payment breaks and position in the income distribution at origination. Payment breaks are most common among joint applicants on low incomes and among single applicants on high incomes. In each group, there is an increase in the top decile.

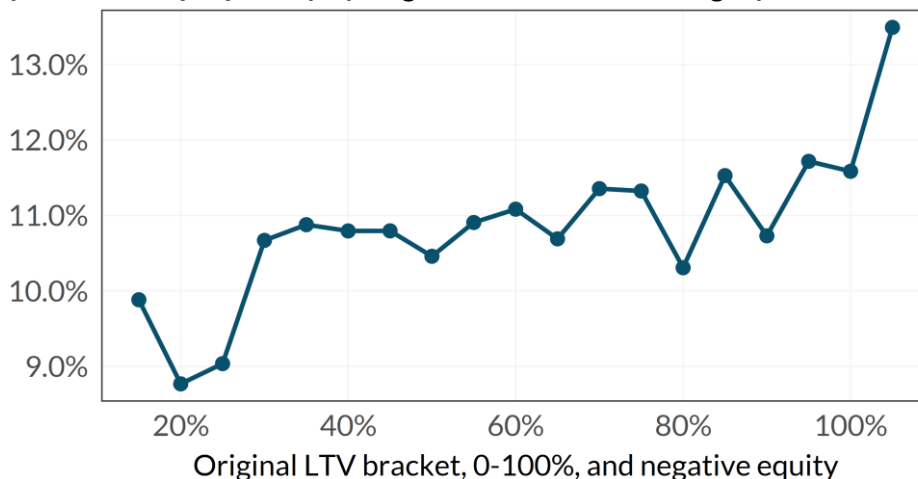
Chart 8: Payment break propensity by income decile at origination and applicant type



In contrast to LTI, loan-to-value ratio (LTV) at origination is not strongly associated with payment break propensity, except at the lowest and highest levels, which are sparsely populated. In particular, loans originated in negative equity are typically restructures of pre-existing distressed mortgages.

⁸ Note that Irish mortgage borrowers have typically earned higher incomes than the national average. In particular, the lowest two deciles of borrower incomes tend to be close to the average household income.

Chart 6: Payment break propensity by original loan-to-value category



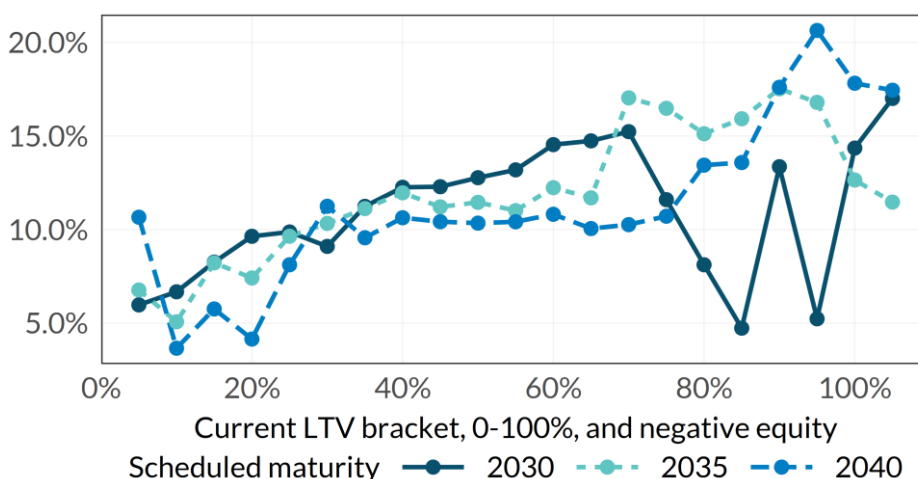
Note: The final data point represents all negative-equity loans. Each other data point represents loans with LTV at origination in a bracket of width 5%, ending at and including the value depicted in the chart.

5.5 Housing equity

Owner-occupiers in Ireland pay down their mortgages over time, so current LTV is strongly determined by the life cycle of the loan. Loans with high current LTV tend to have more payment breaks, corresponding to Chart 2, which showed that few loans close to maturity have payment breaks.

Chart 10 shows three lines, each comparing the payment break propensity by LTV across loans falling due in the same year, to control for the correlation between LTV and the life cycle of the loan. It is evident that the smallest loans by LTV still tend to have lower shares of payment breaks, even when the scheduled maturity date is many years away. However, at higher levels of LTV, the pattern varies from year to year, and no one relationship exists through time.

Chart 10: Payment break propensity by current loan-to-value category and buyer type, for different loan maturities



Note: The final data point represents all negative-equity loans. Each other data point represents loans with LTV in a bracket of width 5%, ending at and including the value depicted in the chart.

5.6 Other possible factors in payment break applications

Payment breaks are more common among joint applicants than single applicants (11.7 per cent of balances versus 9.2 per cent), and among mortgages sourced through a broker than those sourced through other channels (12.4 per cent of balances versus 10.6 per cent). However, broker-

originated loans were also much more likely to have been originated in the mid-2000s than at other times, so this finding may be conflating overall original credit conditions with broker originations. There is no apparent correlation of payment breaks with interest rate type or level.

6 Conclusion

COVID-19 payment breaks provided immediate cash flow relief to households and businesses across Ireland in the wake of the pandemic. This note examined the credit and borrower characteristics of owner-occupier mortgages that had a payment break at the end of May 2020. In particular, loans with forbearance history were more than twice as likely to have a payment break when compared to those never forbore. Nonetheless, the pandemic affected many borrowers who had never experienced mortgage difficulties before. Most loans that received a payment break had no history of arrears or forbearance, and almost 90 per cent of loans that received a payment break were performing in December 2019.

By August 2020, almost half of payment breaks on residential mortgages had ended with a return to full payments. In these cases, the initial economic shock of COVID-19 to repayment capacity seems to have been temporary. As more information becomes available, the conditions of other borrowers remaining on payment breaks, or unable to service mortgages after the end of short-term relief, will remain a topic for assessment and consideration.

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