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Long-Term Mortgage Arrears in Ireland

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Abstract

Approximately 29,000 residential mortgages in Ireland have accumulated at least two years worth of missed payments as of March 2018. In this paper, I analyse a sample of these mortgages in long-term arrears. By end-2017, the number of loans entering long-term mortgage arrears slowed to its lowest rate since the crisis began. The number of loans leaving long-term arrears has also generally slowed. Roughly half of the loans leaving long-term arrears in 2017 are due to voluntary and involuntary loss-of-ownership, compared with less than a third three years ago. The remaining long-term arrears mortgages have an average arrears balance of €66,000 and the estimated average loan-to-value ratio is close to 90%. The balances in arrears are on average around one fifth of the estimated value of the property.

1 Introduction

Accompanying the overall decline in mortgage arrears in recent years has been an increase in the number of cases of long-term arrears: accounts with greater than 720 days worth of missed payments. As of March 2018, around 29,000 mortgages remain in this category. These long-term arrears cases have steadily risen to become the largest component of Irish mortgage arrears, comprising 41% of all arrears cases in the latest data. Though the number of loans entering long-term mortgage arrears has slowed to its lowest level since the Irish crisis began, the number of loans departing has also slowed. Beyond aggregate statistics, little is publicly known about these long-term cases.

The aim of this article is first to document the recent movements in and out of long-term mortgage arrears (Section 2). In Section 3, I discuss some potential reasons why long-term arrears cases persist despite the improving economy and falling overall arrears rates. In

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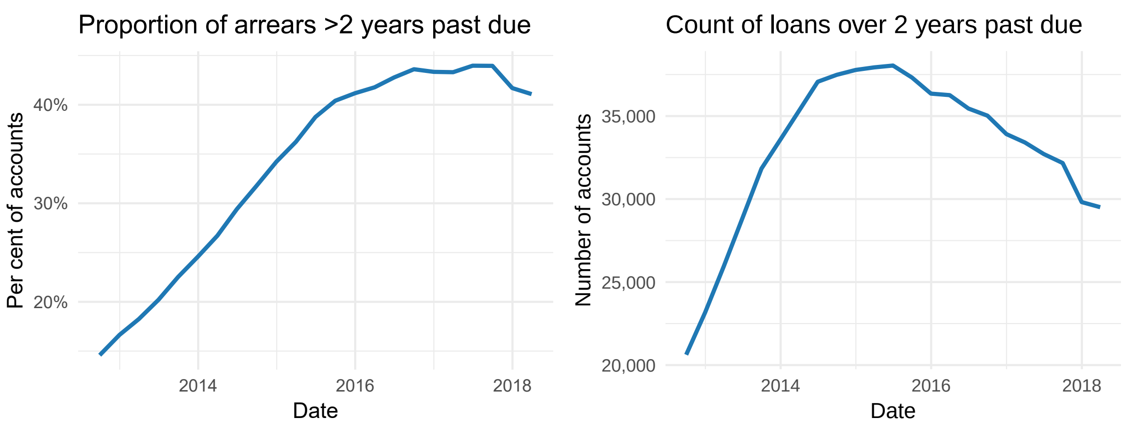
Section 4, I describe a sample of long-term mortgage arrears loans: Where are they? How much is owed? What are their contractual payments? To better understand the reasons for long-term arrears, in Section 5 I compare them to the group of loans that previously defaulted but are now performing. The final section provides a discussion on the banks' strategies for resolving these long-term arrears cases.

2 Long-Term Mortgage Arrears, 2013-Present

Since the peak of the mortgage default crisis, long-term mortgage arrears (LTMA) have grown to become the largest component of overall arrears cases. Though the LTMA cases account for roughly 40% of the overall figure, the absolute number of loans in LTMA has fallen steadily since 2015 (Figure 1).

Figure 1: Long-term mortgage arrears statistics.

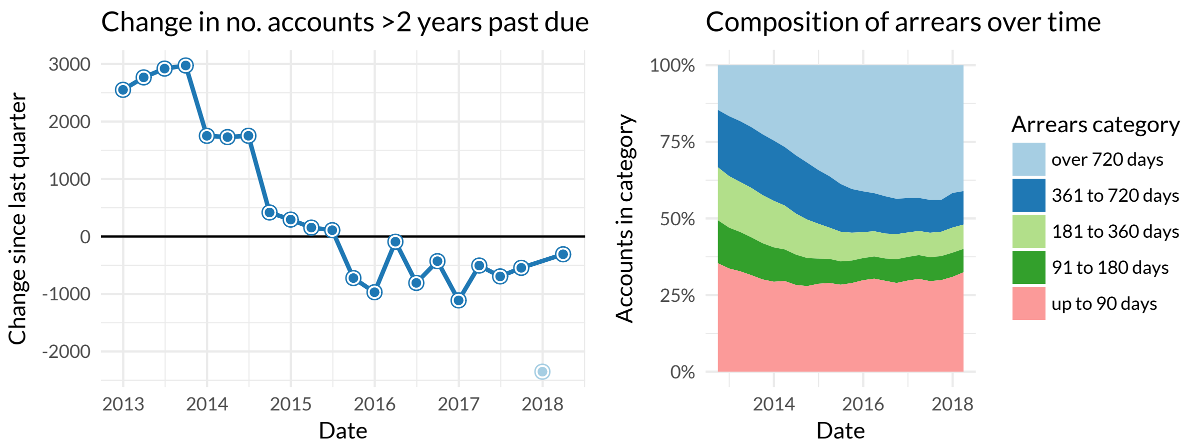


Left panel shows long-term cases as a percentage of all accounts in any arrears. Right panel shows the number of accounts in long-term arrears. Loans for primary dwelling homes only. *Source:* Central Bank of Ireland Mortage Arrears and Repossessions Statistics, Q1 2018.

The pace of reduction of LTMA has begun to slow in the past four quarters. The left panel of Figure 2 shows the quarter-on-quarter change in the number of accounts in long-term arrears. In 2015, the number of long-term arrears loans began to fall, but the quarterly change has moved towards zero in recent periods, reflecting a slowdown in improvements. The right panel of Figure 2 shows the changing composition of arrears cases over time. There is a trend towards larger shares at both the bottom and top of the arrears categories; the intermediate arrears categories of three months to two years of missed payments have shrunk. In previous work, McCann (2018, Figure 5) has shown that longer-term arrears loans are less likely to reduce the balance of arrears in future, when compared with loans in earlier stages of arrears. The right panel of Figure 2 is the result of this process: a build up of loans in the deepest state of mortgage arrears.

A loan can leave long-term mortgage arrears one of two ways: cure or exit. A cure is when the borrower pays down the arrears balance through either regular overpayment or a

Figure 2: Long-term arrears, 2013-2018.



Left panel shows the quarterly change in the number of accounts greater than two years past due. Trend line excludes one recent data point, coloured in light blue. This change is due to a re-classification of arrears by a reporting credit institution, rather than a meaningful change in the number of long-term arrears cases. Right panel shows the evolution of the composition of arrears in the last five years. *Source:* Central Bank of Ireland Mortage Arrears and Repossessions Statistics, Q1 2018.

windfall, or the bank modifies the loan. The borrower then instantaneously or gradually clears the arrears. The second way for a loan to leave long-term arrears is through exit. Loss of ownership, including voluntary sale, trade-down and collateral repossession, constitutes exit.

Other solutions such as mortgage-to-rent are also methods of exit because the borrower's loan is paid off and is no longer an outstanding debt. Under a mortgage-to-rent agreement, the borrower remains in the property as a tenant of the loan purchaser. The borrower no longer has a claim to property, nor any remaining mortgage debt to service.

Sales of defaulted mortgages by banks are exits from the bank's point-of-view, but not from the borrower's. The borrower still owes the outstanding debt and is afforded the same consumer protections, in line with the Central Bank of Ireland's Code of Conduct on Mortgage Arrears.

2.1 Entry and Exit: Individual Loan Data

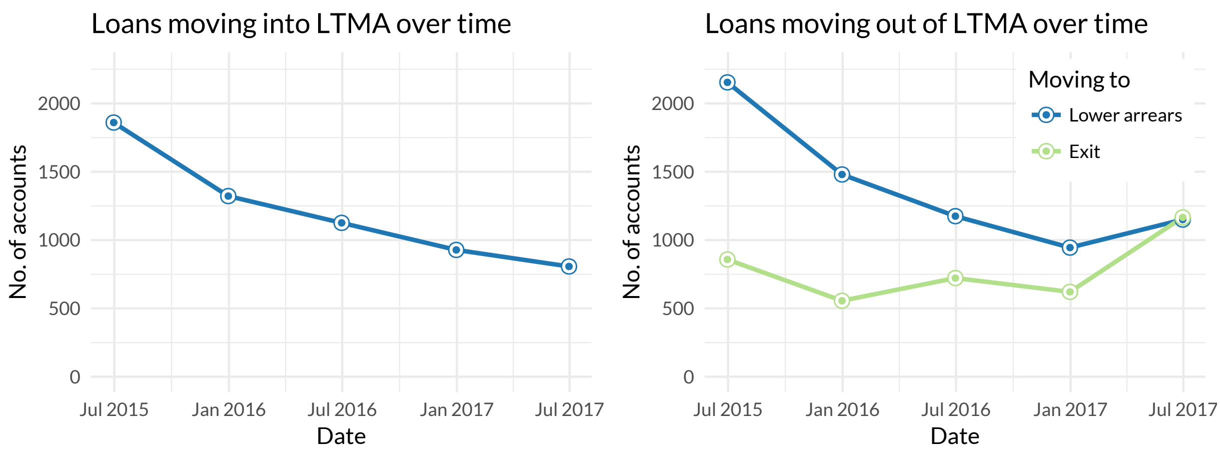
How then have the reductions in long-term arrears in Figure 1 come about? To answer this question, I track the status of mortgage loans in long-term arrears in the Central Bank's loan-level database over the period July 2015 to December 2017. These data are a snapshot of all outstanding mortgages at the five main banks, taken at six-monthly intervals beginning late 2011. To be in long-term mortgage arrears in this article, a mortgage must have an arrears balance greater than two years worth of missed monthly payments. The ratio of unique borrowers to mortgage accounts is roughly 80%, because a borrower may have multiple loans. For every five loans in the data, there are four associated households.

I analyse long-term arrears in the primary dwelling mortgage market only: mortgages taken out on the primary home of the borrower, rather than for investment purposes. Note that these loan-level data are not fully representative of the entire mortgage market, as the sample is limited to the portfolios of the five main banks in Ireland. The conclusions from this analysis are therefore limited to this sample of loans. Today, some loans in the individual loan sample are no longer outstanding items on the balance sheets of the banks. This is due to the sale of portfolios of non-performing loans by banks between December 2017 and the time of writing. It is important to note that these LTMA cases have not been resolved, but transferred from one loan owner to another. During the sample period however, the exit cases are due to voluntary and involuntary loss-of-ownership and not loan sales. The latest Residential Mortgage Arrears & Repossessions Statistics release (Central Bank of Ireland, 2018) shows that 73% of all primary-dwelling mortgages in long-term arrears are held by the main banks; the rest are split between unregulated loan owners (19%) and other retail credit firms (8%).

Figure 3 documents the movements in and out of LTMA in the past three years. Each data point records the number of loans that either moved into or out of long-term arrears in the following six months.

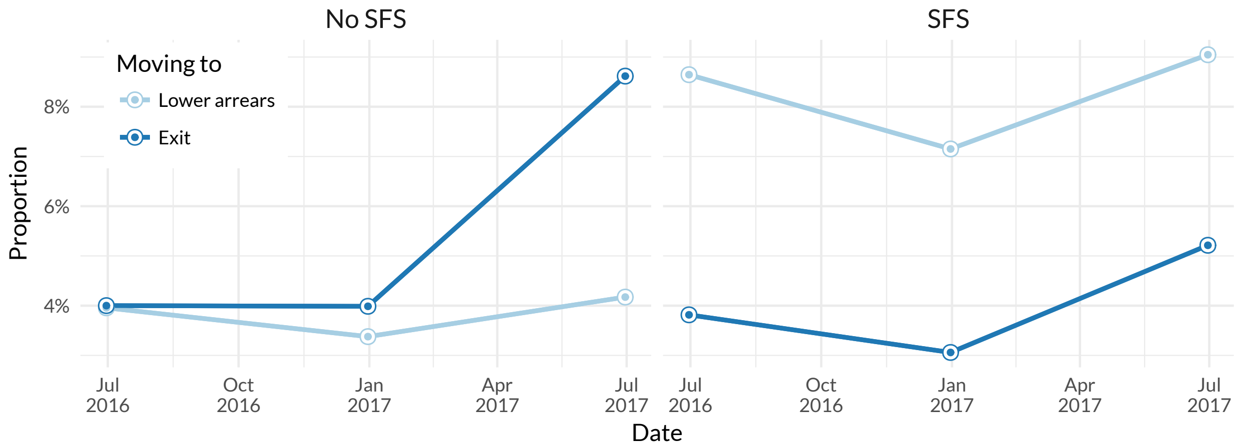
The left panel of Figure 3 shows that loans continue to move into long-term arrears, but that the number moving into this category has declined since 2015. In the six months from July 2017 to December, around 800 loans became long-term arrears cases. The right panel shows the numbers leaving LTMA over time by the two channels. In the latest data for this sample, exit has become just as important as cure. Departures from LTMA during 2015 and 2016 were mostly due to loans moving to lower arrears states (cure), either by the borrower overpaying or the bank modifying the terms of the mortgage.

Figure 3: Movement of mortgages in and out of long-term arrears since 2015.



Each data point is the number of mortgages in the sample making the six-monthly transition in or out of LTMA in the next six months. Left panel shows the six-month transitions into LTMA. These are the number of mortgages that entered LTMA in the six months after the date on the x-axis. Right panel shows transitions out of LTMA, separated into those that leave due to exit and those that reduce their arrears under the 720 days past due threshold. *Source:* Central Bank of Ireland Loan-Level Data.

Figure 4: Loans leaving long-term mortgage arrears July 2016-December 2017.



Left panel shows loans with no SFS form attached, and right panel shows loans with SFS form. I use the presence of an SFS form to measure engagement by borrowers. Each data point is the proportion of loans in LTMA at that time period that leave LTMA status sometime in the next 6 months. *Source:* Central Bank of Ireland Loan-Level Data.

To measure the association between borrower engagement in the renegotiation process and exit/cure out of LTMA, I follow McCann (2018) and categorise borrowers as engaged when I observe that the borrower has completed the Standard Financial Statement form (SFS) and non-engaged otherwise. The Code of Conduct on Mortgage Arrears 2013 requires regulated lenders and credit servicing firms to use the SFS to obtain financial information from borrowers in arrears or pre-arrears as part of the Mortgage Arrears Resolution Process. Absence of an SFS should imply that the borrower has not attempted to resolve the arrears through the formal process.

Figure 4 shows the past two years of movements out of LTMA by exit and cure, split according to whether borrowers have ever completed an SFS at each time of observation. For the SFS cases, loans are twice as likely to end up in a lower arrears state six months later, compared to exit. The growth in exits is due to loans without an SFS form. Previously, they had been equally likely to exit and cure, with transition rates around 4% each 6 months. These patterns demonstrate the importance of borrower engagement with the arrears resolution process and the lack of an alternative to loss-of-ownership for those not engaging.

3 Some Economics of Non-Performing Loan Resolution

Why do these long-term arrears cases continue to persist? A first answer is that the current legal system makes it difficult for banks to repossess collateral to resolve these loans and so LTMA are the product of a long repossession process. Long-term arrears are indeed rare internationally, where repossession proceedings are usually shorter. But repossession is not the only way to resolve a defaulted mortgage. In fact, mortgage arrears have fallen substantially since 2013 absent high rates of repossession. The majority of loans have returned to performing by modification (McCann, 2018).

Repossessions can be costly for lenders, requiring both time and resources. Why then haven't these long-term arrears cases been renegotiated so that borrowers can start repaying?

In economic theory, modification happens when both lender and borrower deem a hypothetical renegotiated loan to be better than their alternatives: repossession or wait-and-see. Due to the costs, repossession is often not an appealing resolution strategy for most loans in arrears. However, when the borrower truly cannot pay a reasonable renegotiated loan, then repossession will be in the lender's interest. For borrowers, the alternative to successful renegotiation is wait-and-see, either by not engaging with the lender or not accepting unfavourable renegotiation. Wait-and-see behaviour may be desirable to some borrowers and their banks because of the uncertainty of house prices and the length of time it takes to repossess a property. Agreeing the terms of renegotiation or voluntary sale today comes at the cost of a potentially more favourable outcome tomorrow. For example, if house prices rise next year, then both the bank and the borrower benefit because some debt can be potentially paid off through the sale of the more valuable property. But wait-and-see also comes with costs. Borrowers continue to accumulate debt through missed interest payments and face continued uncertainty about repossession. By keeping capital tied up in non-performing loans, banks forfeit the opportunity to do profitable new lending.

Simple economic reasoning therefore predicts two reasons for these long-term arrears cases: banks do not foresee further gain from modification over repossession or borrowers prefer to wait-and-see rather than accept potentially onerous terms of renegotiation. The intuition for this economic argument is that if modifying these LTMA cases was the least costly strategy for lenders, they would have done so. If borrowers could afford and were willing to pay a new renegotiated mortgage, they would have successfully renegotiated the contract with the lender.

Reality however might not be as straightforward as this simple economic analysis suggests. The preceding arguments break down if there are other factors prohibiting lenders and borrowers from mutually beneficial modification. There has been considerable academic debate about the existence and nature of these factors in the United States.

Willen (2014) has argued that a lack of information leads to mutually beneficial modifications not happening. He argues that because banks cannot fully distinguish borrowers who can pay relatively large renegotiated mortgages from those who can pay relatively small ones, they choose to repossess rather than risk losing money on the costly modifications where the borrower could have paid more. In Ireland, this should matter less due to the Code of Conduct on Mortgage Arrears. Borrowers who wish to apply for a modification must provide considerable detail on their current finances to the lender through the SFS. But Irish banks do not know the financial circumstances of borrowers who have not engaged so far and cannot modify the contract of a borrower who has not engaged in the resolution process. McCann (2018) has estimated the number of non-engagers to compose 40% of long-term arrears mortgages in Ireland.

A related concern is the potential moral-hazard cost of mortgage modifications: forgiving debt may incentivise nondistressed borrowers to default in order to get a similar deal. Mayer et al. (2014) provide evidence from the U.S that moral-hazard costs of poorly designed modification programmes exist. However, it is possible for banks to devise modification programmes that discourage or inhibit strategic default. In Ireland, borrowers tempted to default in order to receive favourable treatment must provide detailed information on their income and expenditure to the bank, through the SFS.

Some researchers argue that government-run modification programmes in the U.S. failed to achieve their goals because lenders have limited resources in dealing with modifications (Agarwal et al., 2017). The line of reasoning is that lenders may not have the capacity to efficiently deal with these complex arrears cases. For example, they may lack the necessary trained specialists, lawyers and financial analysts. In Ireland, Donnery et al. (2018) have separately stressed the importance of operational capacity in efficiently dealing with arrears cases.

4 A Description of Current Long-Term Arrears Cases

In this section, I present summary statistics for LTMA loans outstanding in the individual loan data, measured at December 2017. All loans in the sample have arrears balances greater than 720 days worth of missed payment as of 31st December. Table 1 shows summary statistics for this group of loans. Each row shows the average and distribution of nine variables of interest.

The average euro amount of missed payments is €66,409. There is considerable dispersion in this figure: 10% of the LTMA cases have accumulated over €129,148 worth of missed payments and half have arrears of more than €52,544. The average outstanding loan amount is €206,064, inclusive of missed payments and accrued interest. These figures are summed in cases where borrowers may have two or more loans secured against the same property.

The average LTMA case has a high loan-to-value ratio (LTV), due to high initial leverage; possible house price falls; non-amortisation of principal; and accumulation of interest. The average LTV (88.9%) is close to the limit of acceptable leverage in the Central Bank's recent macroprudential measures for new mortgages, currently set at 90% for first-time homebuyers. The median LTV is 91% and a quarter exceed 120%. It is not clear how much of the estimated value of the home these borrowers could realise in practice because these figures are estimated using the Central Statistics Office residential property price index. It is therefore possible that the growth in actual market value of the properties in the last few years lags behind the index, making these estimates overly optimistic.

Interest rates are distributed roughly evenly between the market tracker and standard variable rates, the median rate being 3.7%. The average contracted monthly installment is €848. The average age of the loan borrowers is 49 and 10% are over 62. The average loan has 15 years left to maturity, while 10% are 3 years or less to loan maturity.

In the final row, I show an estimate of how the arrears balances alone compare to the value of the property. The average LTMA loan has arrears outstanding of around 23% of what the property is estimated to be worth.

Table 1: Summary statistics of loans in long-term arrears, as of December 2017.

	Average	Percentile				
		10%	25%	50%	75%	90%
Arrears Balance (Euro)*	66,409	18,462	30,980	52,544	82,793	129,148
Oustanding Loan Balance (Euro)*	206,064	56,436	122,391	196,193	275,012	361,964
Loan-to-Value Ratio (%)*	88.9	23.8	56.2	91.0	119.7	146.1
Interest Rate (%)	2.8	0.9	1.2	3.7	4.3	4.5
Monthly Installment (Euro)	986	152	437	848	1,283	1,994
Borrower age (Years)	49.2	38	42	48	56	62
Term Remaining (Years)	14.9	3	9	16	22	25
Estimated Property Value (Euro)	278,562	136,004	176,336	235,470	320,673	476,070
Arrears / Estimated Value (%)	23.2	3.9	9.6	19.7	33.0	47.1

*Combined for borrowers with multiple loans secured against the same property.

Source: Central Bank of Ireland Loan-Level Data.

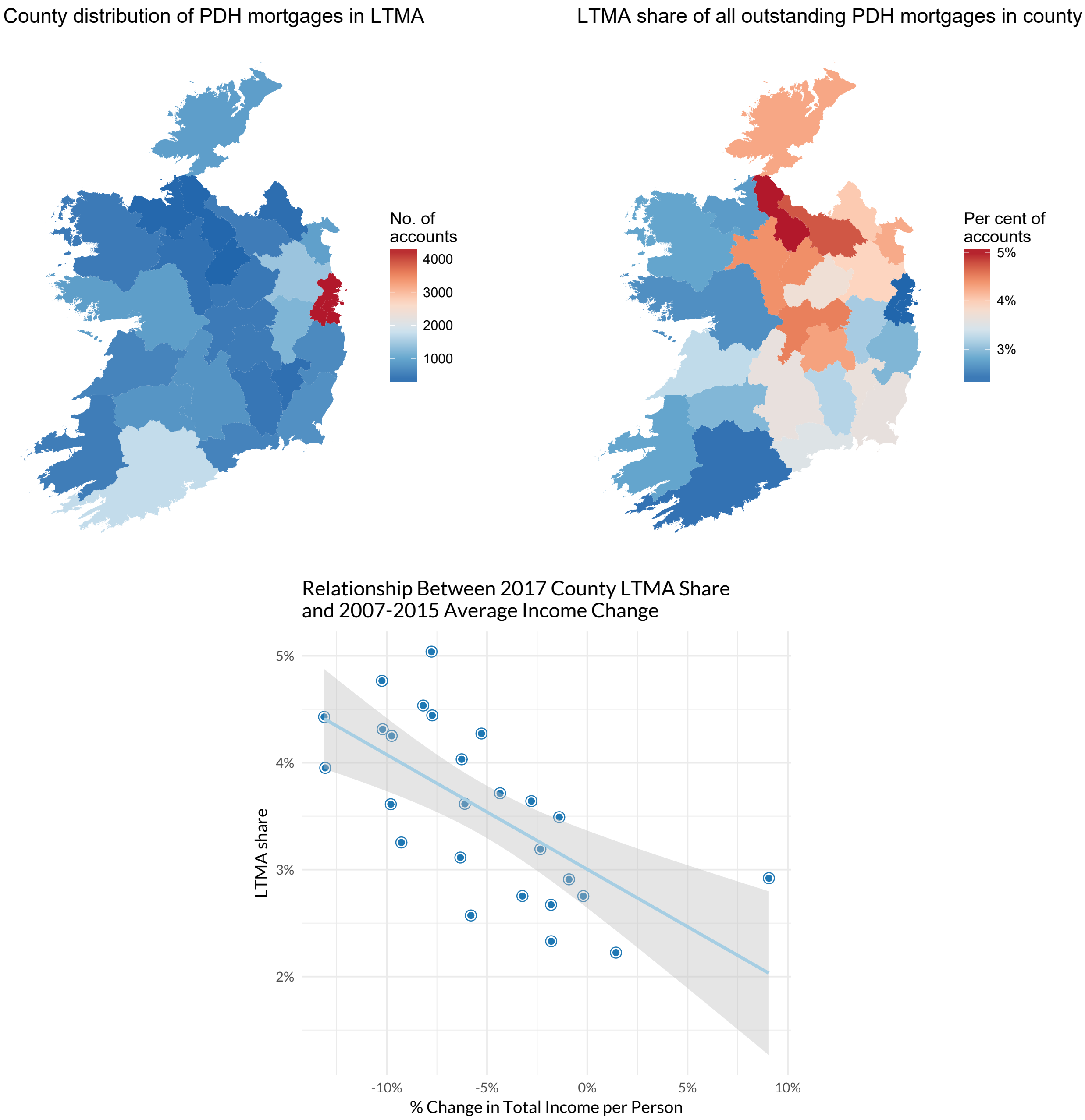
Figure 5 shows a map of where LTMA cases are located. As with the greater part of the overall mortgage market, Dublin has the largest number. The midlands and border regions of Ireland are however *disproportionately* represented in the distribution of long-term mortgage arrears. In particular, Leitrim and Cavan have close to 5% of their overall mortgage markets composed of long-term mortgage arrears cases. The final panel of Figure 5 shows the correlation between the 2007-2015 change of average income per person in a county and the long-term arrears share of its mortgage market. The counties with the highest LTMA shares are generally those with the largest falls in income since 2007.

5 Factors Associated with Long-Term Mortgage Arrears

To understand the factors associated with long-term arrears, I compare them to another cohort of defaulted loans from this crisis: those currently performing once again. Both groups experienced some change in financial circumstances that led them to default in the first place. Cured loans however had their arrears balances cleared: either through the borrower's own capacity or through modification.

Examining the differences between the cured-defaulters and LTMA borrowers should offer some clues about what factors matter for LTMA. Previous work has shown that large mortgage payments and falls in income are associated with deeper states of mortgage arrears (Kelly & McCann, 2015).

Figure 5: Location of long-term mortgage arrears.



Left map shows the number of accounts in each county where collateral is located, for the sample that are in long-term mortgage arrears. Right map shows how these numbers compare to the overall mortgage population in each county in the sample. Bottom chart shows the correlation between county-level LTMA rates in December 2017 and county-level falls in total income per person over the period 2007-2015. *Source:* Central Bank of Ireland Loan-Level Data *and* Central Statistics Office Estimates of Household Income by County and Region.

Figure 6 shows a series of histograms comparing the financial characteristics of cured loans and LTMA as of December 2017. The first panel shows percentages of loans in each group originated in each year, between 2002 and 2008. The LTMA loans are more likely originated in the peak of the credit boom years of 2006 and 2007, though the differences are not large.

For the remaining panels, each is a comparison between two groups: loans that defaulted between 2011 and 2017 and subsequently cured, and those loans that remain in LTMA today. In the remainder of the panels, all loans in the sample were originated between the years 2005 to 2007, to keep the comparison as close as possible in other terms.

Note that these relationships do not necessarily have a causal interpretation. A high loan-to-value ratio may mean that a loan has a greater risk of negative equity and therefore default. It may also be that riskier borrowers took out higher LTV ratio mortgages, and these risky borrowers were more likely to suffer lasting falls in income after the recession.

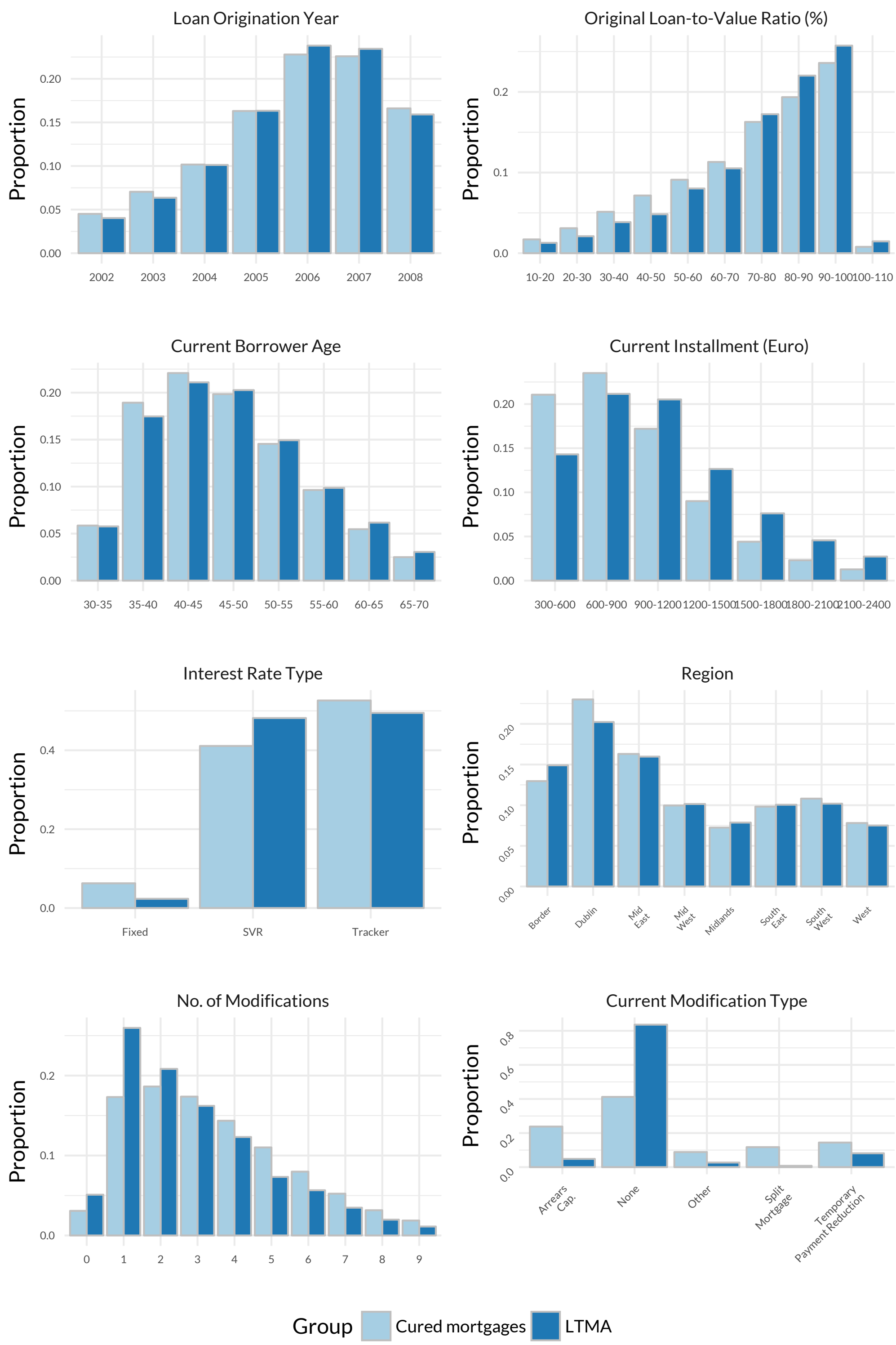
Figure 6 shows long-term arrears cases were more likely to be originated at higher loan-to-value ratios. Borrowers with long-term arrears are also likely to be older than their cured counterparts. The LTMA borrowers tend to have higher monthly installment amounts. They may not have received the same payment forgiveness as the cured loans on average, but may also have taken out larger loans, loans of shorter maturities or higher interest rates. Regardless of the mechanism, they have substantially larger payment burdens on their loans than those who cured. The LTMA group are also slightly more likely to have standard variable interest rates.

Cured borrowers are more likely to be in Dublin. Again, this may signify that they had higher re-employment probabilities, consistent with the findings in Figure 5. Cured borrowers also tended to receive more mortgage modifications. 5% of all cured loans received at least one modification and the comparable number for LTMA is not much different. However, cured loans on average received more; LTMA loans were much more likely to receive one or two modifications. This could be because no further modifications were issued after an unsuccessful initial modifications. This is consistent with early modifications being trialled to gauge the success of permanent ones. These differences are reflected in the final panel: about 80% of LTMA loans have no current modification, compared with 40% of cured. A large number of cured loans had their arrears capitalised, effectively adding the missed interest payments on to the outstanding balance and setting arrears to zero.

6 Proposed Solutions for Long-Term Mortgage Arrears

Given the slowing rate of cure and increased exit, what will happen to the remainder of the LTMA cases? The Central Bank collects information from lenders about how they currently intend to resolve these arrears cases. 67% of the sample of loans analysed in this paper are linked to potential loss-of-ownership by the borrower. This compares with only

Figure 6: Comparison between long-term arrears and cures.



Each panel shows a comparison between two groups of loans: loans that defaulted at some point since 2011 and have since cured, and loans that are currently in long-term arrears. Proportions on the y-axis are the within-group proportions falling into that category. For all panels except the first, loans are limited to those originated between 2005 and 2007, to keep the comparison close on other terms. *Source:* Central Bank of Ireland Loan-Level Data.

Table 2: Solutions proposed by banks for long-term mortgage arrears cases, at December 2017.

Resolution	Proportion
Restructure	15%
Loss of Ownership (including Trade Down)	67%
of which	
Voluntary	11%
Personal Insolvency Arrangement	4%
None	13%

Note that these solutions are not binding and could change depending on borrower circumstances. *Source:* Central Bank of Ireland Loan-Level Data.

10% of loans that are currently in the earlier stages of default i.e. less than two years past due. Around one in ten of the loss-of-ownership LTMA cases are voluntary, where the borrower has agreed to sell or downsize. Note that these data include only the proposed solutions as of December 2017 and may change in future. For example, a borrower who has previously not engaged with the modification process might still successfully renegotiate the terms of the loan.

Table 2 shows a breakdown of the proposed solutions. 15% have either been restructured or a sustainable restructure has been proposed by the bank. Such restructures may conceivably result in a cure, but the 15% is likely to be an upper bound on the proportion that will cure, due to the probability of re-default. As of March 2018, 15% of modifications in the whole mortgage market are not currently meeting the terms of their arrangement (Central Bank of Ireland, 2018).

Table 3 shows some differences in loan characteristics between the proposed loss-of-ownership cases and restructures. The loss-of-ownership cases have higher arrears balances, possibly due to lower rates of modification. They are slightly younger and tend to have larger current loan-to-value ratios, close to 20 percentage points higher. They have similar property valuations on average, suggesting higher value properties are not disproportionately marked for potential repossession.

7 Conclusion

While the number of mortgages in long-term arrears continues to fall, the pace of reduction each quarter has begun to slow. For the first time, as many loans are exiting the portfolio of the main banks as are "curing" to lower arrears states.

Most long-term arrears cases are highly leveraged and have accumulated arrears balances in excess of €50,000 in the sample I analyse. They tend to be disproportionately located in areas with the largest falls in income since the mid 2000s, though many are in Dublin.

Table 3: Average value of financial and borrower characteristics by proposed solution.

	Proposed Solution	
	Loss of Ownership	Restructure
Arrears Balance (Euro)	63,259	52,796
Borrower Age (Years)	48.8	50
Tracker Rate (%)	37	43
Total Modifications	2.62	3.50
Loan-to-Value Ratio (%)	98.3	77.8
Current Property Valuation (Euro)	287,217	289,508
Dublin Property (%)	20.4	22.4

Source: Central Bank of Ireland Loan-Level Data

The long-term arrears cases tend to have received a smaller number of modifications than their counterparts that cured out of default and are less likely to be currently modified. Two-thirds of remaining LTMA cases are proposed to be resolved by loss of ownership, though this outcome is not guaranteed. Borrowers who have at some point engaged with their lender are more likely to leave LTMA to a lower arrears category, while those yet to engage feature disproportionately in the sample of loans exiting by loss-of-ownership.

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