



Interest-only mortgages in Ireland

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Abstract

This Economic Letter analyses original interest-only mortgages in Ireland. While interest-only arrangements have been widely used as a means of temporary forbearance to deal with the current mortgage arrears crisis, mortgages were also originated on interest-only terms during the height of the boom. The analysis shows that original interest-only mortgages were mainly issued to buy-to-let (BTL) investors on tracker mortgages, between 2005–2008 at high loan-to-value ratios (LTVs). They are more likely to be to Dublin borrowers and for apartments than standard mortgages and the arrears rates are higher. A significant number are due to revert to principal-and-interest repayments in the next few years. The resulting higher repayments could lead to an increase in mortgage arrears.

1 Introduction

The scale of mortgage arrears remains a significant threat to the Irish economic recovery. Though the growth of early stage arrears has moderated, 16.6 per cent of residential mortgages on Primary Dwelling Homes (PDH) and 29.9 per cent of BTL mortgages, by value, were at least 90 days past due in Q1 2014.² To help resolve the Irish mortgage arrears crisis, it is important to analyse structural issues which may affect the risk of delinquency.

This paper explores the structure and condition

of the original interest-only segment of the mortgage market as a number of the features suggest they could become problematic and deserve special attention.

In Ireland, interest-only (IO) mortgages consist of two broad categories.³ The first group consists of mortgages originated on IO terms for a pre-determined period, which have not been modified (“original interest only”).

The second group includes borrowers who initially pay principal-and-interest (P&I), but subsequently move to IO terms (“subsequent interest

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²For more information see Central Bank of Ireland (CBI) Residential Mortgage Arrears and Repossessions Statistics, March 2014 [CBI Mortgage Arrears Statistics](#).

³These are loans where the borrower only pays interest repayments for a period of years and the principal remains unchanged. By contrast, borrowers who repay principal-and-interest reduce the outstanding balance on their loan.

⁴As the banks initial efforts to resolve the arrears crisis proved largely inadequate, a target-based framework, known as Mortgage Arrears Resolution Targets (MART) was published by the CBI in March 2013. Under the framework, banks must propose and conclude sustainable arrangements for a certain percentage of distressed mortgage debtors, by a set date. The

only"). The switching of repayment terms to IO has been widely used as a means of temporary forbearance to deal with the mortgage arrears crisis.⁴

In this Letter, we show that original IO mortgages account for a relatively small proportion of the market, at approximately 8 per cent by value of the Irish residential mortgages of the three Domestic (PCAR) credit institutions, at the end of June 2013.⁵ However, relative to standard P&I mortgages, a significantly higher share of original IO loans were originated between 2005 and 2008 to Dublin BTL borrowers on tracker interest rates.

The IO term was often offered to BTL investors for an initial period of ten years. The loans were designed to generate investor payoff through capital appreciation, on the assumption of growing house prices, with the interest component serviced through the rental yields. This type of product is particularly vulnerable to house price falls and changes in rental yields.⁶ While falling interest rates eased some of the pressure of declining house and rental prices during the crisis, the reset period for a significant number of these loans is due in the next 24 months, resulting in a shortfall if the properties are sold or a large rise in repayment burden if switched to P&I.

Consistent with the strategy of capital appreciation payoff, another distinguishing feature is that the holders of a significant number of BTL original IO loans will be beyond retirement age when the loans switch to P&I, although the payment switch date is generally much further away for this group and gives the borrowers time to plan accordingly. In terms of performance, original IO mortgages are currently more likely to be in arrears and in negative equity than the standard P&I segment.

The paper proceeds as follows. Section 2 summarises the data, while section 3 presents stylised facts on the differences between typical P&I and original IO mortgages. Section 4 provides estimates of negative equity on original IO loans; the

step up in repayment burden should the loans revert to P&I when the interest only term expires and borrower age profiles when the loans revert to these higher repayments. Section 5 concludes.

2 Data

This Economic Letter uses loan-level data, collected by the CBI from the Irish residential mortgage books of the three Domestic (PCAR) credit institutions, as at the end of June 2013. This micro-level dataset contains details on approximately 648,000 residential mortgages, with an outstanding balance in excess of €90.5 billion.⁷ This represents roughly two thirds of the overall Irish mortgage market. The information provided is a mixture of "point in time" data, reflecting the situation at 30th June 2013, and original data, gathered at the time the mortgage was drawn down.

3 Stylised Facts

The vast majority of mortgages approved in Ireland have traditionally been on an amortizing basis, whereby borrowers are subject to monthly P&I repayments - almost 82 per cent of the full sample by value (Figure 1).

During the period 2005-2008, however, IO arrangements became particularly popular with some sections of the market, such as BTL investors. The latter often took on multiple properties which were used as further collateral (Doyle, 2009). In the sample, 15 per cent of mortgages by value are subject to IO repayments - 8.2 per cent of the book are original IO, while the remainder are IO loans which involve some element of modification.⁸

Table 1 compares the key characteristics of the outstanding P&I mortgage and original IO mortgage books. The majority of original IO loans are

targets for sustainable proposals and concluded arrangements for Q2 2014 are 75 per cent and 35 per cent of borrowers respectively, with more than 90 days arrears. For more details see Box 6 Central Bank of Ireland Macro-Financial Review, 2013:II.

⁵The institutions are Allied Irish Bank, Bank of Ireland and Permanent TSB.

⁶The peak to trough fall in national house prices was 50.9 per cent and occurred between September 2007 and March 2013. By April 2014, the fall from peak had moderated to 46.3 per cent. The private rental index peaked in February 2008 and fell to its lowest point in December 2010, recording a peak to trough fall of 25.6 per cent. By April 2014, the rental index had recovered somewhat to lie 11.6 per cent below peak.

⁷For each loan there are details on the borrower (e.g. age), loan terms (e.g. outstanding mortgage balance, monthly repayments, maturity, repayment type, loan purpose, interest rate, performance) and underlying collateral (e.g. property type, current value, location etc.). For a more detailed description of the dataset, see Kennedy & McIndoe Calder (2012).

⁸Another 3 per cent of the book are classified as 'Other', consisting of a combination of repayments which are less than IO, or greater than IO but less than a full P&I instalment.

found to be to BTL borrowers on tracker mortgages, originated between 2005 and 2008, with a higher share of Dublin properties and apartments than P&I loans. This could have implications for mortgage distress in this segment, given the higher rates of BTL mortgage arrears and the sharper than average decline in the price of Dublin apartment units, notwithstanding the recent increase in Dublin prices.⁹

The average loan maturity for original IO and P&I loans is similar at 22 and 24 years respectively. However, peak loan maturities are significantly more concentrated for original IO loans, with 50 per cent maturing between 2030 and 2033.

4 Arrears and Repayment Burdens

4.1 Arrears

At the end of June 2013, the loan level data show that 24 per cent of total outstanding balances, were in arrears, with 17 per cent at least 90 days past due.¹⁰ Details of the arrears rates across segments are presented in Table 2. In general, the arrears rates are higher amongst IO loans than their P&I counterparts, particularly for loans over 360 days arrears. This failure of IO borrowers to meet their repayments is concerning given the reduced repayment burden they face whilst on IO terms and the prevalence of low cost tracker mortgages among these borrowers.

The table also includes information on BTL borrowers with former original IO loans that have already switched to P&I. This shows that arrears rates are highest among this group. For example, the *at least 90 days* arrears rate is almost double that of other BTL borrowers.¹¹

There are also notable regional differences (Table 3). For instance, in the Border region, almost a third of IO loan balances are more than 90 days past due, compared to approximately 18 per cent of P&I loans. In Dublin, 18 per cent of IO balances

are more than 90 days past due, relative to 12 per cent of the value of P&I loans.

This evidence gives further weight to concerns regarding the ability of IO borrowers, due to switch to P&I in the short term, to service higher repayment burdens. Improved macroeconomic conditions may help ameliorate these pressures to some extent.

4.2 Negative Equity and LTV ratios

Loan to value ratios (LTVs) at the time of origination are higher for IO borrowers than P&I borrowers on BTL properties (86 per cent versus 71 per cent on average), but lower on PDH properties.

The extent of negative equity in the sample at end June 2013 is measured using the “current LTV” submitted in the data and illustrated in Figure 2. Despite some tentative signs of price stability returning to the property market throughout 2013, particularly in Dublin, approximately 55 per cent of mortgage balances were in negative equity. There is, however, also a sizeable portion of the overall P&I book with a degree of positive equity.

As IO mortgages had higher original LTVs and do not involve the repayment of principal and thus the reduction of the outstanding amount owed, it is no surprise to see a much higher LTV rate for IO mortgages in general and a much higher percentage of IO loans in negative equity, at 82 per cent, compared to P&I loans. The higher degree of IO mortgage origination during the peak years of the housing boom and higher share of BTLs would also be contributory factors. The analysis suggests that house and rental price developments will be particularly important in this segment.

4.3 Arrears and Equity

While a significant number of borrowers are experiencing negative equity, the majority of these continue to meet their mortgage repayments as they fall due (Figure 3). The situation is graver for those facing both arrears and negative equity. This

⁹While Dublin prices remain 49 per cent below their 2007 peak value, compared to 47 per cent in the rest of Ireland, they rose 16 per cent in 2013. Strong demand and limited supply of housing units after several years of low levels of residential construction activity and limited credit availability combined with a rebound in rental values may exert further upward pressure on Dublin prices in the months ahead.

¹⁰The equivalent official statistics published by the CBI for June 2013 show that 26 per cent of the total outstanding balance, was in arrears. In addition to the three Domestic (PCAR) credit institutions, Ulster Bank, KBC and ACC are also covered by the official data.

¹¹Where possible, examining the arrears profile of loans that switched to P&I in the last 12 months shows relatively more arrears between 1-360 days, whereas loans that switched over a year ago exhibit relatively more arrears of over 360 days.

represents 14 per cent and 26 per cent of P&I and IO outstanding balances respectively. Of these, it is the individuals with repayments more than 90 days past due, represented by the light green area of Figure 3, which are in the most distress.

4.4 Repayments and Interest Only End Dates

Table 2 and Table 4 show that although arrears rates and outstanding balances are higher on original IO than P&I loans, median interest rates and repayments are generally substantially lower. This reflects the high share of tracker mortgages and the lack of principal repayments among original IO loans.

The difficulty for original IO borrowers, however, is that when the interest-only period expires the repayment burden will increase significantly even assuming ECB policy rates and thus tracker rates remain low. A significant number (43 per cent by value) are due to come off their IO terms in the next 24 months (Figure 4).

The available data allow the monthly repayment on original IO loans to be estimated assuming a switch to full P&I at the end of the IO term. Figure 5 illustrates the substantial upward shift in the distribution of repayment obligations. For example, the median monthly instalment is estimated to increase over four fold from €397 to €1715.

Given the high share of BTLs among IO loans, it is worth comparing rental values to repayment obligations. The median monthly IO repayment at June 2013 ranges from €326 in the Midlands to €470 in Dublin.¹² According to Daft.ie data for 2014Q1, the average monthly rent ranged from €400 in Leitrim to approximately €1,230 in Dublin. This would be sufficient to cover median IO repayments. However, following a switch to P&I terms, the median estimated repayment ranges from €1290 in the Border region to €2050 in Dublin. Current average rents would therefore be insufficient to meet estimated median repayments, although if rents continue to rise this may help some of these borrowers.

Current borrower income data are not available in the micro dataset to facilitate analysis of

whether borrowers will be able to meet the step-up in repayments from disposable income but given the higher arrears rates for original IO loans this substantial step up in repayments is of concern.

4.5 Borrower age profiles

A significant number of BTL original IO borrowers (44 per cent) will be beyond retirement age when their loans are due to start paying P&I (Table 5). Many of these borrowers will have very little time to repay the loans once they switch to P&I. Nonetheless, there is a substantial period in the interim (on average 14 years) to establish strategies to cope with the additional repayment burdens facing these borrowers into their retirement. House and rental price developments will also play a role.

In the PDH segment, 24 per cent of original IO borrowers will be past retirement age once their loans switch to P&I terms (Table 6).

Finally, for the group of borrowers who are due to come off their IO terms in the next 24 months, just under a quarter will be beyond retirement age. The current arrears rate and LTV ratio of this group is also favourable relative to the original IOs due to switch to P&I after 2016.¹³

5 Conclusions

In this paper, detailed micro data are used to provide insights into the original IO mortgage market in Ireland. The main findings are that original IO loans account for less than one in ten loans and are mainly to BTL investors on tracker mortgages, originating between 2005-2008, with higher levels of negative equity and arrears than traditional P&I loans.

The analysis raises a number of concerns about this market segment. *First*, the IO period expires for 43 per cent of these loans in the next 24 months. The concern is that when they do, some borrowers may experience difficulty meeting the higher repayment schedule. Evidence suggests that the switch from IO to P&I has tended to trigger arrears in the past for these borrowers, with the over 90 days arrears rates much higher than for other BTL borrowers.

¹²It is preferable to use median repayment amounts as average repayment amounts are skewed by high value mortgages in the sample data. The comparisons are made here with published average rental data as median rental values are not available.

¹³The current arrears rate is 22 per cent by value, while the balance weighted average LTV ratio is 137 per cent. The arrears rate, average LTV ratio and proportion of borrowers beyond retirement age at the payment switch date for the original IOs due to switch to P&I after 2016 are 31 per cent, 147 per cent and 59 per cent, respectively.

A *second* concern is the age-profile of these borrowers: a significant number will be at retirement age when the loans are due to switch to P&I. Thus, at a time when most people are switching to a reduced income, repayments on their debt will increase significantly. One mitigating factor is that there is scope for house price appreciation before this happens. The average age of these borrowers is 52; taking a 13-year horizon, and an average

LTV of 150 per cent, house prices would need to increase at an average annual rate of 3.2 per cent. For comparison, the average annual nominal house price increase from 1950 to 2013 was 7.6 per cent.

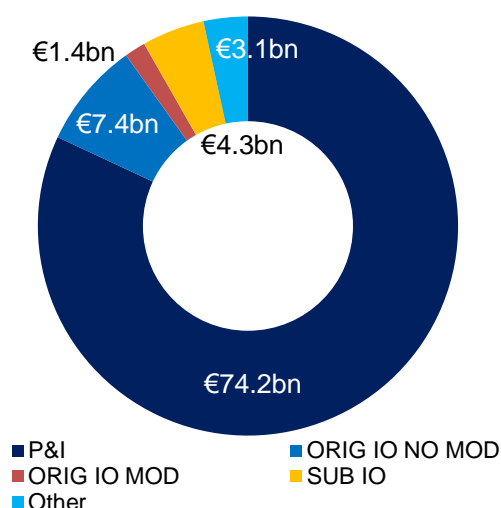
The analysis indicates that developments in the labour market, income levels and house and rental prices will be particularly important for this segment. It also underlines the importance for lenders to monitor original IO term maturities.

References

- [1] Doyle, N. (2009), "Housing Finance Developments in Ireland, page 75-88, Quarterly Bulletin 4, Central Bank of Ireland.
- [2] Kelly, R. (2011), "The Good, The Bad and The Impaired - A Credit Risk Model of the Irish Mortgage Market," *Central Bank of Ireland Research Technical Paper 13RT11*.
- [3] Kennedy, G. and T. McIndoe Calder, (2012), "The Irish Mortgage Market: Stylised Facts, Negative Equity and Arrears," *Quarterly Bulletin Articles, Central Bank of Ireland*, pages 85-108, February.

Figures

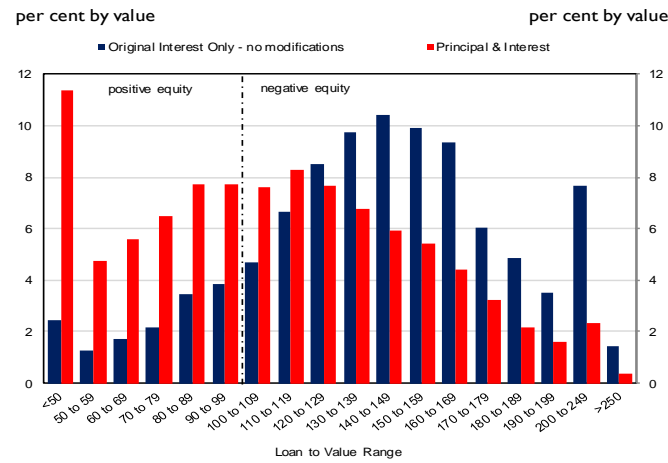
Figure 1: All Mortgage Loans, June 2013



Source: Authors calculations based on Central Bank of Ireland data.

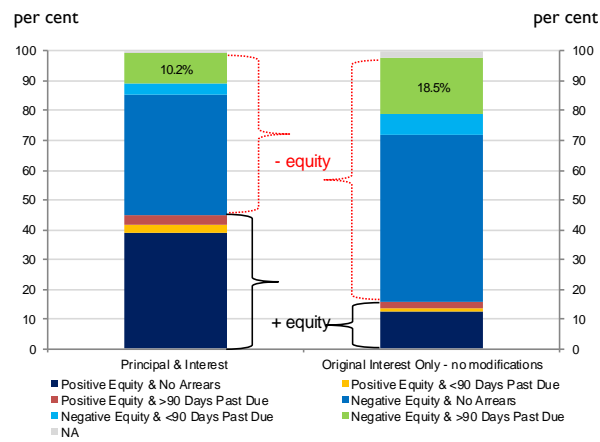
Note: P&I represent the cohort of mortgage loans making principal & interest repayments. ORIG IO NO MOD loans have been on interest only terms since their origination (without modification). ORIG IO MOD represents the cohort of mortgage loans making interest only payments - these loans were originated as interest only, moved to principal & interest repayments for a period, but were modified back to interest only. SUB IO represents the cohort of mortgage loans making interest only payments but started out as making principal & interest repayments. OTHER represents the remaining cohort of mortgage loans. The focus of this paper is the P&I and ORIG IO NO MOD cohorts.

Figure 2: Equity Position by Repayment Type



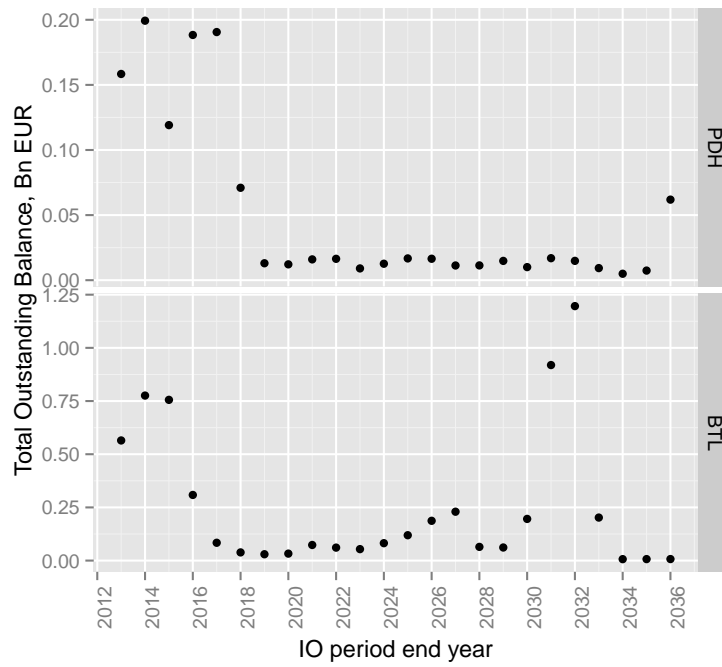
Source: Authors calculations based on Central Bank of Ireland data.

Figure 3: Overlap of Mortgage Arrears & Negative Equity, June 2013



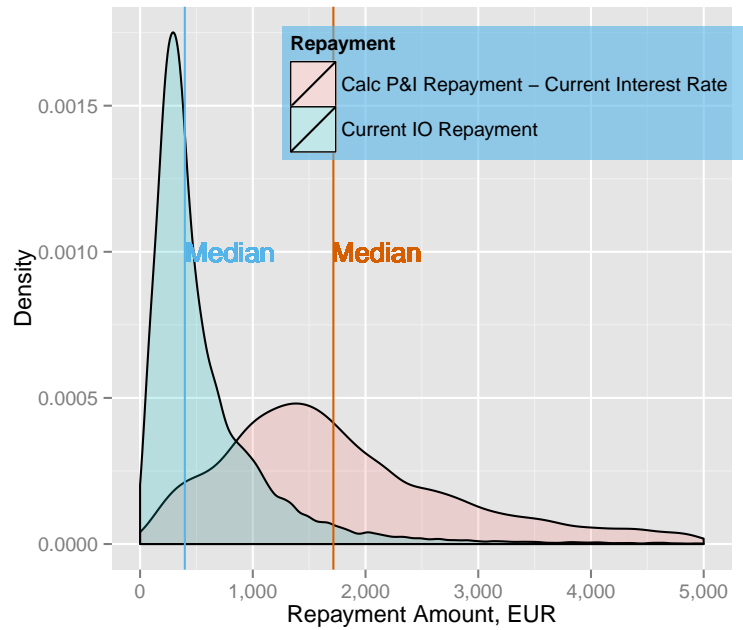
Source: Authors calculations based on Central Bank of Ireland data.

Figure 4: IO Period End Dates



Source: Authors calculations based on Central Bank of Ireland data.

Figure 5: Repayment Distributions



Source: Authors calculations based on Central Bank of Ireland data.

Table 1: Mortgage Market Characteristics by Repayment Type

	Principal & Interest		Original Interest Only	
	balance (€bn)	% of category balance	balance (€bn)	% of category balance
Total	74.2	-	7.4	-
Loan Purpose				
PDH	64.1	86.4	1.3	17.3
BTL	10.1	13.6	6.1	82.7
Interest Type				
Fixed	6.6	8.9	0.1	0.8
Standard Variable Rate	30.1	40.6	1.0	14.0
Tracker	37.5	50.5	6.3	85.2
Origination				
Pre-2005	14.5	19.5	0.7	9.2
2005-2008	46.2	62.2	6.6	88.7
Post-2008	13.6	18.3	0.2	2.1
Location				
Border	6.3	8.5	0.5	6.8
Dublin	25.6	34.5	3.6	48.1
Mid-East	10.1	13.6	0.7	8.8
Midland	3.2	4.4	0.2	3.1
Mid-West	4.4	5.9	0.3	4.5
South-East	7.4	9.9	0.6	7.5
South-West	9.8	13.2	0.9	12.8
West	5.7	7.6	0.5	7.0
NA	1.7	2.3	0.1	1.3
Unit Type				
Apartment	7.1	9.6	1.9	25.1
House	51.8	69.8	4.8	64.9
Other	15.3	20.6	0.7	10.0

Source: Authors calculations based on Central Bank of Ireland data.

Table 2: Mortgage Arrears by Repayment Type

	Principal & Interest (<i>originated as P&I</i>) % of category balance	Original Interest Only (<i>originated as IO</i>) % of category balance	Principal & Interest (<i>originally non-modified IO</i>) % of category balance
All Loans			
All Arrears, <i>of which</i> :	22.6	30.2	31.7
1 to 90 days past due	7.2	8.7	6.4
90 to 360 days past due	5.9	6.1	8.0
360+ days past due	9.5	15.3	17.4
PDH			
All Arrears, <i>of which</i> :	22.3	24.9	21.3
1 to 90 days past due	7.2	7.7	4.4
90 to 360 days past due	5.9	5.4	5.3
360+ days past due	9.3	11.8	11.6
BTL			
All Arrears, <i>of which</i> :	26.6	31.2	49.1
1 to 90 days past due	6.8	8.9	9.6
90 to 360 days past due	6.8	6.3	12.6
360+ days past due	13.0	16.1	26.9

Source: Authors calculations based on Central Bank of Ireland data.

Table 3: Arrears All Mortgages, Outstanding Balance Share by Region (%)

Region	No Arrs	90+DPD	No Arrs - IO	90+DPD - IO	No Arrs - PI	90+DPD - PI
Border	0.70	0.21	0.59	0.32	0.74	0.18
Dublin	0.78	0.15	0.74	0.18	0.82	0.12
Mid-East	0.73	0.19	0.69	0.21	0.76	0.17
Mid-West	0.76	0.17	0.67	0.23	0.81	0.13
Midland	0.69	0.23	0.62	0.28	0.73	0.20
South-East	0.75	0.18	0.69	0.24	0.78	0.15
South-West	0.78	0.15	0.70	0.21	0.84	0.11
West	0.75	0.19	0.61	0.32	0.81	0.13

Source: Authors calculations based on Central Bank of Ireland data.

Table 4: Median Payment Characteristics

	Principle & Interest	Original Interest Only (All)	Original Interest Only (Trackers)
Interest Rate	4.3%	1.6%	1.6%
Outstanding balance	€102,000	€246,000	€261,000
Monthly instalments	€692	€397	€363

Source: Authors calculations based on Central Bank of Ireland data.

Table 5: Age Profile at IO period end, BTL, June 2013

Borrower Age	IO Period Remaining (mnths)	Remaining Post-IO Mortgage Term (mnths)	Current LTV (%)	IO end year	Current Outstanding Bal EUR bn	Share
<= 65	98.73	99.99	147.62	2021	3.24	0.56
66-70	159.94	28.86	145.46	2026	0.99	0.17
71-75	167.56	11.22	147.70	2026	0.85	0.15
>75	182.82	3.66	145.55	2028	0.65	0.11
>65	168.54	16.21	146.25	2027	2.49	0.44

Source: Authors calculations based on Central Bank of Ireland data.

Table 6: Age Profile at IO period end, PDH, June 2013

Borrower Age	IO Period Remaining (mnths)	Remaining Post-IO Mortgage Term (mnths)	Current LTV (%)	IO end year	Current Outstanding Bal EUR bn	Share
<= 65	42.47	156.52	126.64	2016	0.90	0.76
66-70	108.44	30.35	113.95	2022	0.14	0.12
71-75	156.42	13.76	116.84	2026	0.10	0.08
>75	250.83	6.74	137.38	2033	0.04	0.03
>65	146.52	20.96	118.22	2,025	0.28	0.24

Source: Authors calculations based on Central Bank of Ireland data.