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Mortgage switching through the turning of the interest rate cycle

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Abstract

Mortgage switching, and the choice of contract type, can have important implications for borrower resilience to interest rate movements. In this Note, we focus on switching in the Irish mortgage market in the run-up to (August 2018-June 2022) and early phase of the European Central Bank's (ECB) contractionary monetary policy from July to December 2022. Using the Central Credit Register (CCR), we find that mortgage switching had been steadily increasing in the period of falling interest rates since 2018 but grew particularly quickly during the early months of the ECB's monetary policy tightening cycle. The increase in switching was primarily to and from fixed-rate contracts, and remained strong even as the immediate short-term monetary gains from switching were reducing, signifying borrower's forward-looking choices in seeking to avoid future increases in monthly repayments. We also find that non-banks were particularly important in leading interest rates downwards from 2019 to 2022, a trend which reversed abruptly once ECB policy rates rose. In terms of borrowers' financial outcomes, we find interest rate gains from mortgage switching of up to 1.3 pp, equating to annual savings worth €2,000 on average.

1 Introduction

Mortgage debt is one of the largest financial obligations for households, so interest rate costs and monthly repayments are critical for household financial resilience. While borrowers can choose optimal mortgage terms at origination, any future interest rate increase, including as a consequence of monetary policy tightening, can exacerbate household financial risks. For instance, a rise in interest rates has a direct effect on monthly household finances through increased debt servicing burden, known as the cash-flow channel (Kilstrom and Nilavongse, [2023](#); Floden et al., [2021](#); Hughson et al., [2016](#)). Thus, mortgage switching to a lender offering a cheaper interest rate is important from the microeconomic perspective of household financial resilience.³ A failure to switch or refinance can amplify the cash-flow channel and expose borrowers to the risk of arrears/default. From the macroeconomic standpoint, this may have implications for financial stability, while inefficiently high borrowing costs also impede households' capacity to consume and save.

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² Economist, Macro Financial Division, Central Bank of Ireland. All views expressed in this Note are those of the authors alone and do not represent the views of the Central Bank of Ireland. We would like to thank Mark Cassidy, Edward Gaffney, Paul Lyons, Vasileios Madouros, Fergal McCann, Laura Moretti, Cian O'Neill, Oana Peia, Luca Riva and Maria Woods for helpful comments and suggestions.

³ Alternately, borrowers can also reduce their repayment burden by refinancing their mortgage to a lower interest rate product, if available with the existing lender. In this research, we focus on only mortgage switching and not mortgage refinancing due to data limitations.

In this Note, we focus on switching in the Irish mortgage market in the run-up to (August 2018-June 2022) and early phases of the European Central Bank's (ECB) contractionary monetary policy from July to December 2022. After an extended period of expansionary monetary policy, the ECB increased its key policy rates to fight inflation. As a result, financial institutions adjusted their lending rates after July 2022. This monetary policy pass-through exposed a significant proportion of Irish mortgage borrowers to higher monthly repayments.

In Ireland, there are three main types of mortgage products, and the pass-through varies accordingly. First, tracker mortgages have a complete pass-through: mortgage rates increase or decrease by the same amount as the change in main refinancing operations (MRO) rate. Second, on Standard Variable Rate (SVR) mortgages the lender determines the pass-through of key policy rates. Third, fixed-rate mortgages have no pass-through for the duration of the fixed period. Thus, borrowers who had drawn fixed-rate mortgages in the years preceding the monetary policy contraction managed to insulate themselves from these changes. However, for the remaining SVR and tracker borrowers, with a combined share of 40% in Irish mortgage lending (Byrne et al. [2023](#)), switching mortgage to a lender offering fixed-rate mortgage or refinancing to a fixed-rate contract with the existing lender could lead to a lower interest rate.

Specifically, this research draws lessons on borrower resilience by comparing mortgage-switching volumes and composition (SVR, fixed-rate and tracker) in expansionary versus contractionary periods of the monetary policy cycle. Additionally, the use of granular data in this research allows us to focus on the cross-institutional movement of mortgages. Thus, we compare the monetary policy pass-through and mortgage switching across banks and active lending non-bank lenders, given the increasing mix of bank and non-bank household credit over recent years in Ireland. Finally, we measure the effect of switching activity on household finances, by estimating the interest rate as well as monetary gains from mortgage switching.

Our results suggest that mortgage switching was highly responsive to the ECB's monetary policy tightening. Starting in July 2022, mortgage-switching volumes increased significantly compared with previous years (August 2018-June 2022), despite a declining interest rate margin between the new (switcher) and the old (closed) mortgage. We find that mortgage switching was predominantly from SVR to low-interest fixed-rate mortgages from 2018 to early 2022; however, after July 2022, switching increased from fixed-rate and tracker mortgages to fixed-rate contracts. This captures the role of future interest rate expectations in financial decision making of Irish borrowers. The response to monetary policy tightening differed by lender type, whereby the average pass-through to mortgage interest rates by non-banks was much stronger than banks. As a result, switching activity from banks to non-banks reduced sharply after July 2022. Up until this date, switching towards non-banks had increased due to their lower lending rates, highlighting the cyclicity of non-bank lending as source of finance.

Forthcoming Central Bank research will shed light on switching developments during 2023, when market interest rates remained high. An update and extension of this research in the coming months will study switching levels during 2023, at a time when increasing market interest rates continued to squeeze potential savings from switching. Initial findings suggest that switching to non-bank lenders fell particularly sharply in 2023, while the retail bank share of switches continued to increase. The research will also show that borrowers of non-lending servicers have typically had much lower switching rates to other mortgage providers since 2017, but that switching away from this group has actually increased moderately during 2023, driven by switching by higher credit quality borrowers.

2 Data and Methodology

The analysis in this Note uses data from the Central Bank of Ireland's (CBI) Central Credit Register (CCR) from August 2018 to December 2022. The CCR is a rich source of all lending information for loans over €500 in Ireland with detailed information on loan type, amount, tenure, lender, interest rate and monthly instalments. However, a limitation of CCR data is the lack of an identifier for mortgage switching across individual borrowers. Therefore, a typical way to identify switching is to observe borrower changes over time and locate instances of mortgage termination (in advance of the planned end date), immediately followed by origination of a new mortgage contract. However, this approach is confounded by house-movers who terminate their existing mortgage contract in advance of the planned end date (when selling their house) followed by a new mortgage origination (for the new house).⁴

We develop an algorithm to disentangle mortgage switchers and house-movement in the CCR. The algorithm primarily relies on observing changes in the mortgage provider,⁵ the time difference between old (closed) and new (switcher) mortgage,⁶ and the change in mortgage amount at switching.⁷ Using these conditions, we identify 17,415 unique mortgage switching contracts originating from August 2018-January 2023. Here, it is important to note that this algorithm only captures mortgage switching across different lending institutions, and does not observe mortgage refinancing within the same lending institution.⁸

To validate the precision of our algorithm, we compare our sample with the stock of switcher contracts reported in the Banking and Payments Federation Ireland (BPMFI) and Monitoring Templates Data (MTD) of the CBI.^{9, 10} As shown in Figure 1, the CCR switcher sample closely follows and is quite representative of the BPMFI and MTD switcher population with coverage of around 54%.¹¹ Additionally, we retrieve sample of non-switchers from the CCR for the purpose of comparative analysis. There are over 101,000 active mortgage contracts originating in the timeframe of our analysis that never switch away from their original lender.

⁴ CCR does not record collateral value; therefore, it is not possible to monitor change in house value to identify instances of house-movement from simple mortgage switching.

⁵ Assigned as house-movement if the lender of the terminating (old) mortgage and originating (new) mortgage do not differ on the CCR.

⁶ We exclude cases with overlap/time-gap deeming them as pure house-movement, and not a typical mortgage switching that is reported without any overlap or time difference on the CCR.

⁷ For mortgage transitions across different lenders occurring without any time-difference or overlap, we compare the difference in mortgage balance with a threshold obtained from average monthly averages of top-up and equity release mortgages; categorising the mortgage transition as switching if the delta balance is below the threshold (and vice-versa for house-movement).

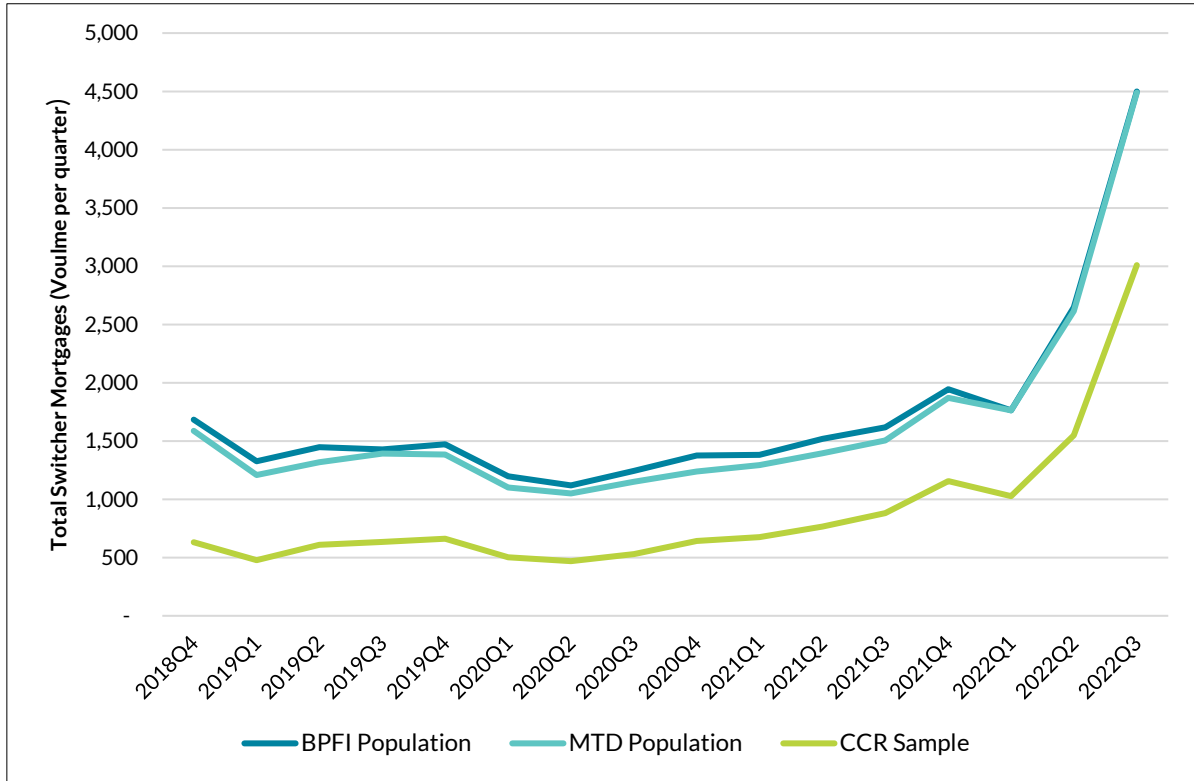
⁸ We are unable to capture mortgage refinancing because the algorithm exploits change in the mortgage contract identifier on CCR. Since, refinancing does not lead to any change in the contract identifier on CCR, it is not possible to observe refinancing to the same institution.

⁹ The comparison is done across the 8 institutions (5 main banks- BOI, AIB, PTSB, Ulster, KBC and 3 non-banks- Dilosk, Finance Ireland, and Avant Money) recorded in the MTD.

¹⁰ We do not use MTD switcher data because MTD reports switcher mortgages as part of the new stock of mortgages reported every six months with no information on the preceding mortgage held by the borrower.

¹¹ We are unable to identify the full switcher population from CCR because the algorithm excludes households with instances of 4 (or above) mortgage contracts; whereby more than one mortgage contracts may close or begin together (different lines of credit on the same house). However, we cover households with two mortgage contracts (where first terminates and the second begins) and three mortgage contracts with instances of two mortgages closing with a single switcher mortgage originating or vice-versa.

Figure 1: Comparison of CCR sample with MTD and BPFI population



3 Mortgage Switching Patterns

In the following sub-sections, we discuss mortgage switching patterns across banks and non-banks in the run-up to (September 2018-June 2022) and early phases (July - December 2022) of the ECB’s decision to tighten monetary policy. We also look at borrowers’ choice of contract type (SVR, fixed-rate, tracker) when the mortgage was switched.

We find that *Mortgage switching ...*

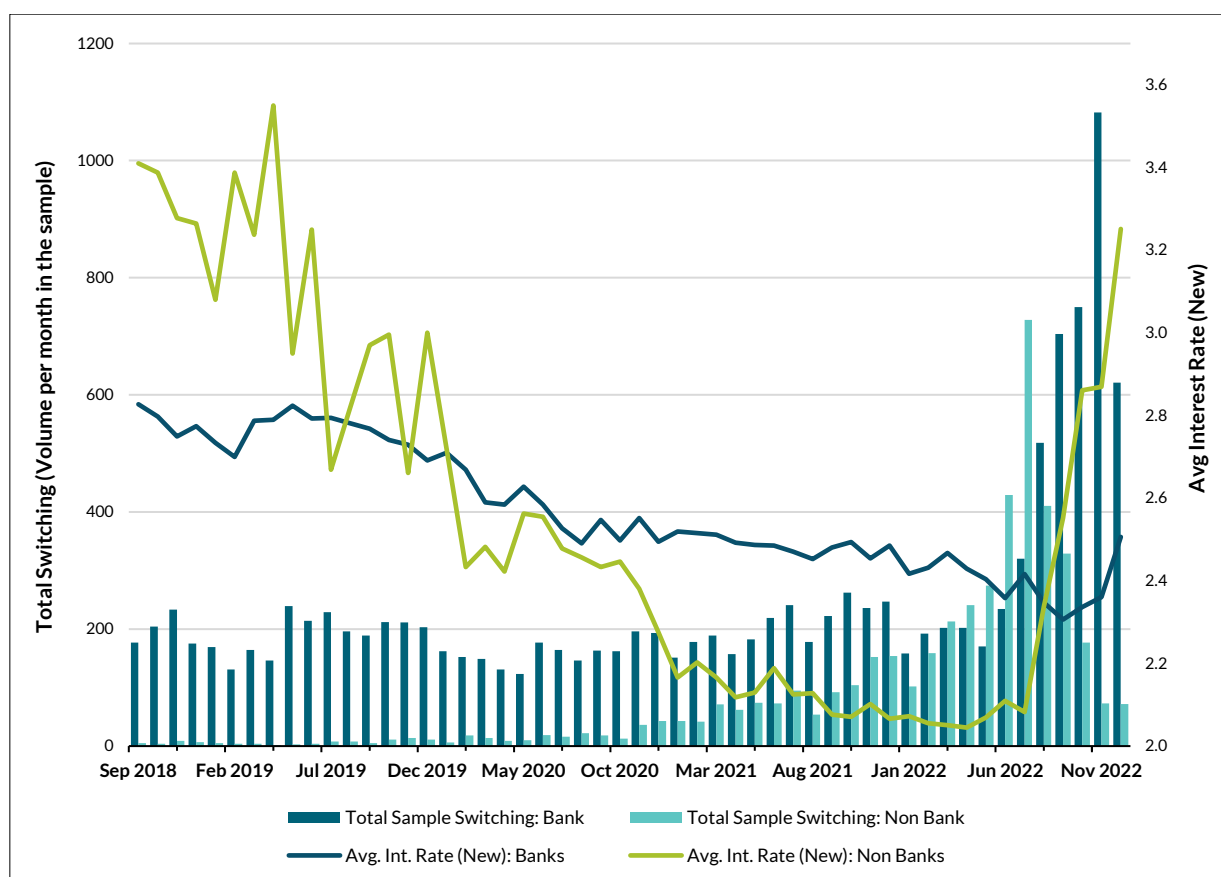
- ... *increased* sharply after July 2022 relative to periods preceding ECB monetary policy tightening (2018-July 2022).
- ... *towards* non-banks became increasingly popular starting 2020 due to lower lending rates offered vis-à-vis banks. However, there was a swift reversal after July 2022 due to a sudden increase in their interest rates.
- ... *towards* banks increased distinctly after July 2022. This was because banks continued to offer lower interest rates, reflecting slow pass-through of ECB policy rates into bank lending rates.
- ... *in majority*, was from SVR contracts to fixed-rate contracts from 2018 to early 2022. However, after July 2022, switching increased from fixed-rate and tracker mortgages to fixed-rate contracts. We attribute this borrower choice as a hedge against further interest rate increases.

3.1 Institutional Profile

Although quite stable until the end of 2020, mortgage switching, especially towards non-banks, increased steadily over the 2021-early 2022 period. As shown in Figure 2, the growing volume of mortgage switching towards non-banks seems to be strongly associated by cheaper lending rates between 2021 and June 2022.

Non-bank lending, however, is more cyclical to financial conditions and responds more rapidly to monetary policy changes (Fleckenstein et al., 2020; Adrian and Jones, 2018). In line with this, we observe a sharp increase in non-bank lending rates for new mortgages after the ECB’s contractionary monetary policy announcement in July 2022. In our sample, new mortgage rates from non-banks increased, on average, from 2% to around 3.3% over six months. However, the increase in bank lending rates for new mortgages over the same period was only marginal (from 2.4% to 2.5%).

Figure 2: Switcher Distribution towards Banks and Non-banks and Lending Rates (September 2018- December 2022)



Due to more favourable lending rates, mortgage switching to banks increased sharply after July 2022. This was caused by underlying differences in monetary policy pass-through across banks and non-banks. Since banks continued to offer lower interest rates despite a monetary policy tightening in July 2022, many borrowers promptly switched their mortgage to avoid an increase in their monthly repayment. At the same time, we observe a decline in switching to non-banks. This highlights a key advantage inherent in retail banking – due to more stable sources of deposit funding, banks in Ireland were able to more smoothly manage the pass-through of lending interest rates when compared to non-bank competitors with more cyclical funding sources.

3.2 Contract Type Analysis

We find that mortgage switching was primarily to low-interest fixed-rate mortgages at the turn of monetary policy cycle. The assessment of mortgage contract types in our sample suggests that on average, interest rates offered on fixed-rate mortgages were consistently lower than the SVR mortgages through 2018-2022 (see Figure A.1). This acts as a strong borrower incentive to switch from SVR to fixed-rate contracts. Figures 3 and 4 from our sample confirm this, suggesting a clear departure from SVR to fixed-rate contracts in the period 2018 to early 2022. However, in periods following the ECB’s monetary policy tightening, mortgage switching increased from fixed-rate and tracker mortgages to fixed-rate contracts.

Preference of fixed-rate mortgages, which do not experience monetary policy pass-through over the fixation tenure, may indicate borrowers’ response to insulate from future interest rate changes. The results here are in line with Devine et al. (2023) who confirm, using survey data from the CBI, that while pricing matters, interest rate expectations significantly determine choice between fixed-rate versus SVR contracts. Here, mortgage switching from old fixed-rate (Figure 3) to new fixed-rate contracts (Figure 4) potentially captures cases where borrowers on completion of their existing fixation terms switched to a new fixed-rate contract.¹²

Figure 3: Interest Rate Type of Old (Closed) Mortgage

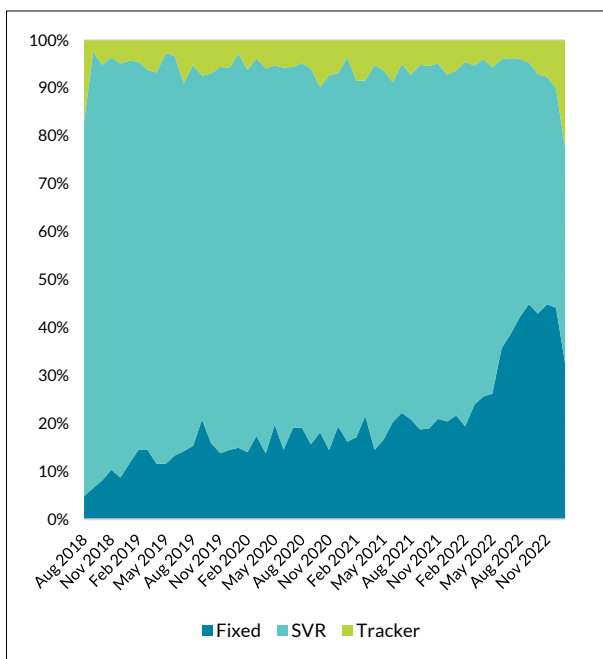
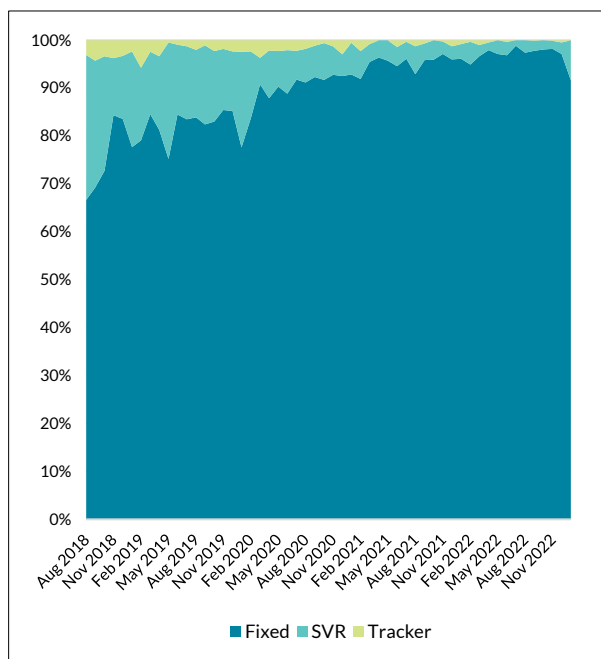


Figure 4: Interest Rate Type of Switcher (New) Mortgage



4 Mortgage Switching Outcomes

A large strand of the literature on Irish mortgage market establishes that there are potential gains from mortgage switching usually foregone due to consumer inertia (Devine et al., 2015; Byrne et al., 2020; McGowan et al., 2023). Failure to switch from SVR and tracker mortgages to lower-interest fixed-rate contracts exposes Irish borrowers to higher repayment risks. In the

¹² We observe this especially after ECB’s contractionary monetary policy announcement in July 2022. For instance, the share of old (closed) fixed-rate mortgages increased from 19% in February 2022 to 39% in July 2022, all way up to 44% in December 2022.

following sub-sections, we discuss outcomes of switching activity on household finances: primarily the interest rate and monetary savings across the two monetary policy regimes.

We find that *on average* ...

- ... *switcher interest rate savings* ranged from 0.8 percentage points (pp) to 1.3 pp from September 2018 to April 2022. In monetary terms, this equates to an average 12 months savings ranging from over €1,000 to just under €2,000.
- ... *switcher interest rate savings* declined after ECB’s monetary policy announcement, falling from 1.1 pp in July 2022 to 0.4 pp in December 2022. This decline is more severe across non-banks (1.2 pp in July 2022 to 0.4 pp in December 2022) versus banks (1 pp in July 2022 to 0.9 pp December 2022).

4.1 Switcher Interest Rate Saving

In the context of switching in the Irish mortgage market before the monetary policy tightening, we find interest rate savings ranging from 0.8 pp in September 2018 to 1.3 pp in April 2022. Using our sample, we first calculate individual switcher saving as the difference between the interest rate reported on the last CCR date of the old (closed) mortgage and the new interest rate on the first CCR date pertaining to the new (switcher) mortgage (Figure 5). Subsequently, we aggregate these values to derive monthly averages, as shown in Figure 6.

Figure 5: Switching Borrowers' Old vs. New Avg. Interest Rates

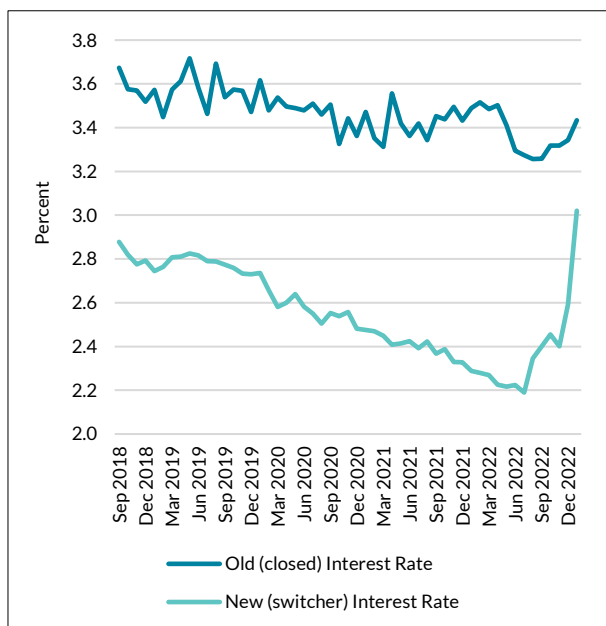
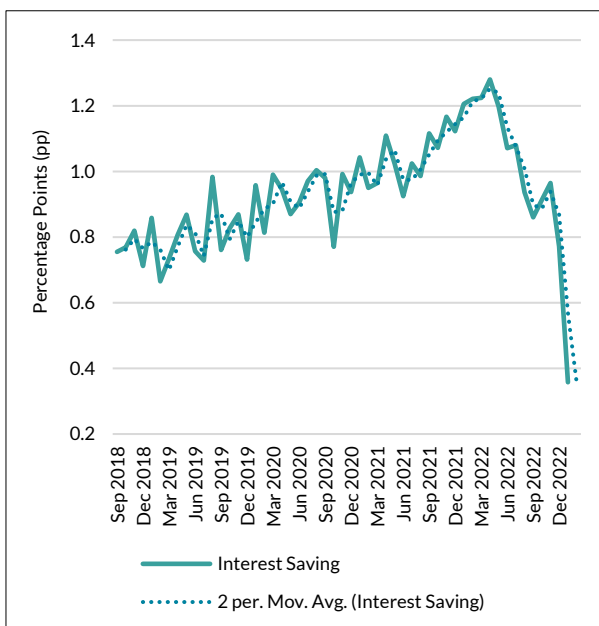


Figure 6: Switching Borrowers' Avg. Switcher Saving (pp)



The analysis suggests greater savings from switching to a non-bank before the monetary policy tightening in July 2022. Figure 7 and 8 suggest that average savings from switching to a non-bank increased from 0.1 pp in January 2019 to 1.4 pp in March 2022. In contrast, savings from switching to banks increased marginally from 0.8 pp in January 2019 to 1.1 pp in March 2022. This is in line with Figure 2, where we note that, on average, non-banks offered lower interest rates through 2019-July 2022. However, as shown in Figure 7, switcher savings from banks were more consistent and less volatile as compared to non-banks (Figure 8).

Figure 7: Avg. Interest Saving & Switching Volume (Banks)

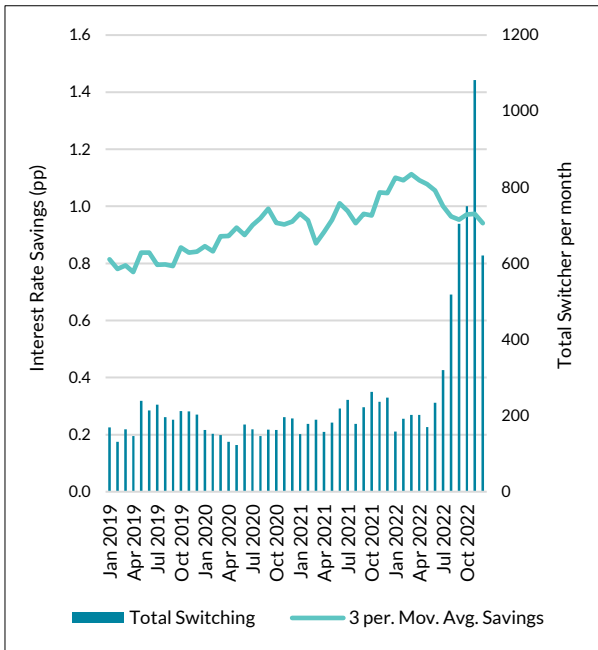
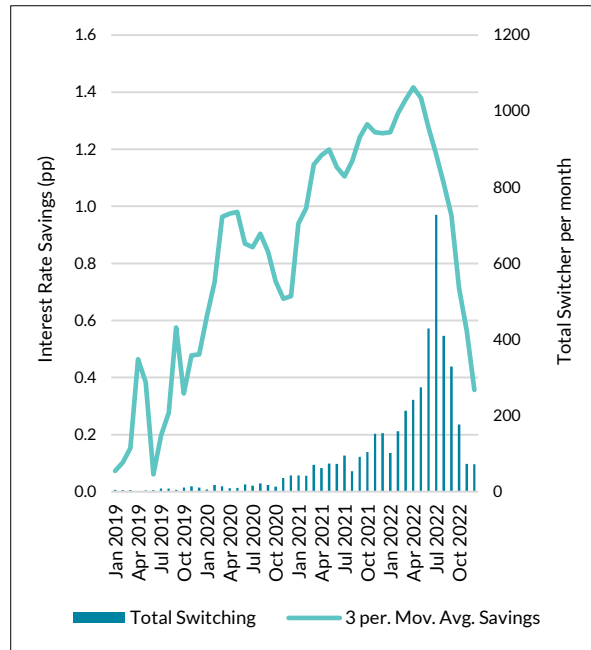


Figure 8: Avg. Interest Saving & Switching Volume (Non-Banks)



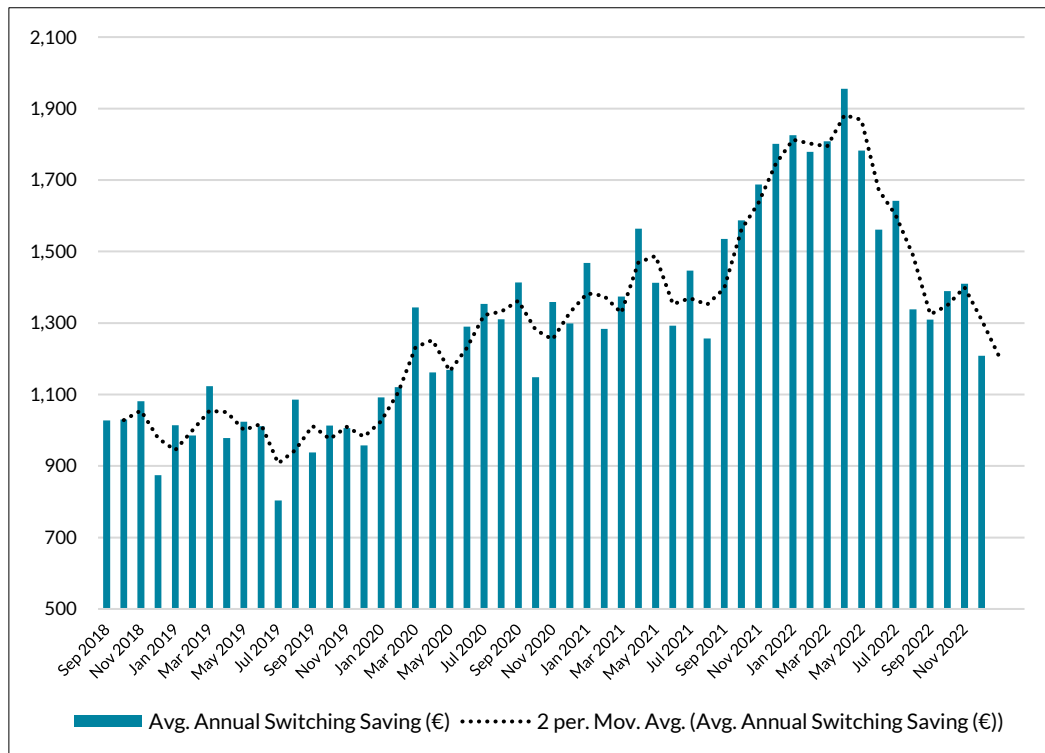
Our sample suggests that since ECB’s monetary policy tightening in July 2022, average switcher interest rate savings reduced from 1.1 pp in Jul’ 2022 to 0.4 pp in Dec’ 2022 (Figure 6). Much of this decline is attributed to stronger monetary policy pass-through to non-banks, whereby average switcher savings reduced from 1.2 pp in July 2022 to 0.4 pp in Dec’ 2022 (Figure 8). In contrast, monetary policy pass-through to banks was much slower, with average switcher savings declining only marginally from 1.0 pp in July 2022 to 0.9 pp in Dec’ 2022 (Figure 7).

4.2 Switcher Monetary Saving

Our assessment of annual monetary savings from mortgage switching range from €1,000 to just under €2,000 from September 2018- December 2022. We derive these as the difference between the monthly repayments using the new (switcher) interest rate versus the old interest rate prevailing on the closed mortgage.¹³ These monthly savings are then annualised and averaged across mortgage switching months, as shown in Figure 9. We find that switcher monetary savings had an upward trajectory in periods preceding monetary policy tightening. Monetary savings have reduced since then, in line with declining switcher interest rate savings shown Figure 6. Nonetheless, as noted in Figure 2 earlier, mortgage switching continued to increase, especially towards banks. We interpret this as borrowers’ preference to insulate from potential increase in future monthly repayments rather than preference for immediate monetary gains from switching.

¹³ We use loan amortisation formula ($Principle \div \{(1 + r)^n\} \div [r(1 + r)^n]$) to calculate old monthly loan payments (using r^{old} recorded on the closed mortgage on last CCR reference date) and new monthly loan payments (using r^{new} recorded on the switcher mortgage on first CCR reference date). Subsequently, the difference between the old and new monthly payments provides us with individual monetary savings, which is then multiplied by 12 to deduce annual monetary savings. We use amortisation formula instead of directly using monthly repayment amount recorded on the CCR because outstanding mortgage amount (*Principle*) can change upon switching. Hence, for consistency we use the financed amount of switcher mortgage as the common *Principle* for both old and new monthly repayment calculations. This allows us to limit the calculation of monetary savings as only an outcome of the change in interest rate and not a function of the mortgage amount.

Figure 9: Mortgage Switching Borrowers' Average Annual Savings (€)



Unlike interest rate savings, the extent of monetary savings depends directly on the size of mortgage.¹⁴ Hence, in Figure 10, we look at the distribution of mortgage switching savings across the 25th, 50th, 75th and 90th percentiles of mortgage size in our sample. For mortgage amounts at the median (p50), we find savings ranging from €1,000 to over €1,500 from September 2018-December 2022. Across the top mortgage percentile (p90), annual savings range from €2,000 to over €4,000; while for the lowest (p25), we find annual savings ranging from €500 to €1,000 in the sample period. It should be noted that the calculation of switcher monetary savings here does not take into account any breakage fees charged by the existing lender or the associated legal costs of mortgage switching in Ireland.¹⁵

To the best of our knowledge, calculation of actual savings from mortgage switching, representative of Irish mortgage market is a novel contribution of this research.¹⁶ Additionally, we provide a deep-dive into switchers' interest rates distribution relative to non-switchers, as shown in Figure 11.¹⁷ Our sample suggests a year-on-year decline in average interest rates for both groups, albeit the interest rate prevailing on switcher contracts is consistently lower vis-à-vis non-switchers. On average, this differential ranges from 0.2 pp to 0.5 pp in period ranging from September 2018- December 2022, signifying favourable lending rates for switchers in the Irish mortgage market.

¹⁴ This because change in monthly repayments are implicitly related to outstanding amount of mortgage.

¹⁵ Byrne et al. (2020) suggests legal fees of up to €1,200-€1,500 and valuation fees of €150 borne by borrowers when they switch mortgage. Additionally, there may be breakage fees, which depends upon the outstanding mortgage amount, mortgage contract type and remaining tenure.

¹⁶ Unlike previous studies such as Devine et al. (2015), Byrne et al. (2020), Devine (2022) that estimate foregone monetary amounts from failure to switch despite the availability of optimal market options, this Note provides actual calculation of the switching savings by borrowers, as recorded in our sample.

¹⁷ The non-switchers in the sample are mortgage borrowers who have spent at least 12 months on their existing contracts. We do not capture instances where non-switchers may have renegotiated mortgage terms with their existing lender.

Figure 10: Annual Euro Savings across Percentiles (€) Quantiles

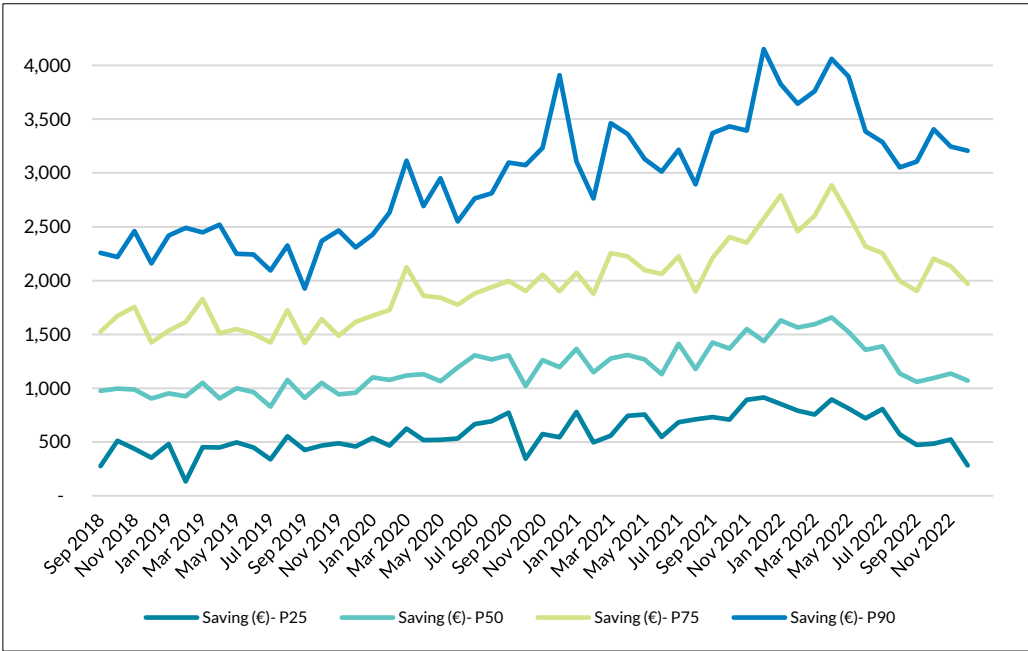
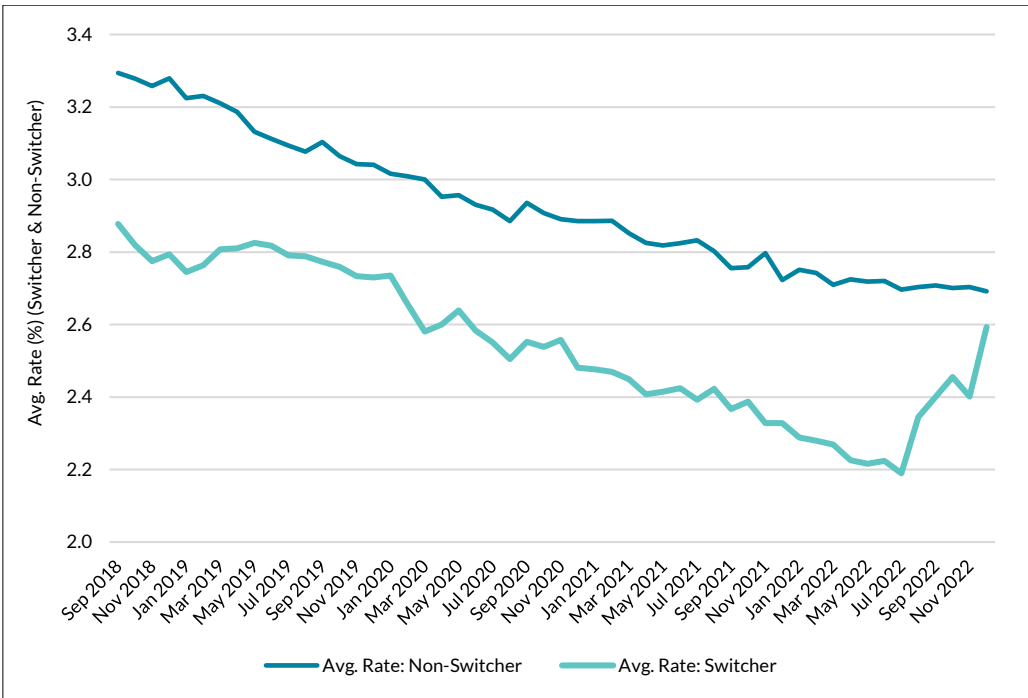


Figure 11: Average Interest Rate of Switcher versus Non-switcher Mortgage



5 Conclusion

Monetary policy affects households through a number of channels. One direct channel is through changes in interest rates, exposing mortgage borrowers to changed debt servicing costs. In this Note, we study how Irish mortgage borrowers insulated themselves from these risks in the years before and during the early period of the monetary policy tightening from July to December 2022. Primarily, we focus on mortgage switching using the CBI’s central credit register and look at the switching volume, contract types, and lending rates across banks and non-banks in Ireland.

We highlight that mortgage switching increased significantly, especially towards banks, following the start of ECB monetary tightening in July 2022. Moreover, our results suggest that borrowers increasingly moved towards lower-interest fixed-rate contracts to hedge against any future interest rate increases. In the current policy debate, this provides evidence on how Irish borrowers can and did react to expected future interest rate increases, and were particularly responsive to the very salient risk of imminent increases in their borrowing cost. It is important to highlight that this appears to have been a temporary reaction during the initial months of the monetary tightening period. Forthcoming CBI research will build on our work and show that switching rates fell substantially throughout 2023 as the period of monetary tightening continued.

Additionally, we measure the effect of mortgage switching on household finances by estimating the associated interest rate as well as monetary gains. We find evidence supporting substantial gains from mortgage switching, especially when switching to non-banks who appear to have led substantial downward price competition, in periods preceding monetary policy tightening. However, following the ECB announcement in July 2022, gains from non-bank switching reduced sharply due to increased lending rates. This reflects stronger monetary policy pass-through to non-banks. In contrast, transmission of monetary policy across banks was much slower, thus leading to only a marginal increase in average lending rates.

We conclude that the propensity of borrowers to switch their mortgage responds strongly to the prospect of expected losses from failure to do so. We confirm this from higher switching activity noted in our sample after July 2022, despite the immediate monetary benefits from switching declining as interest rates rose. In contrast, mortgage switching had been more modest in periods preceding the monetary policy tightening even though the immediate interest rate gains were much larger. We interpret this as borrowers' preference to insulate from potential increase in future monthly repayments by switching to fixed-rate contracts.

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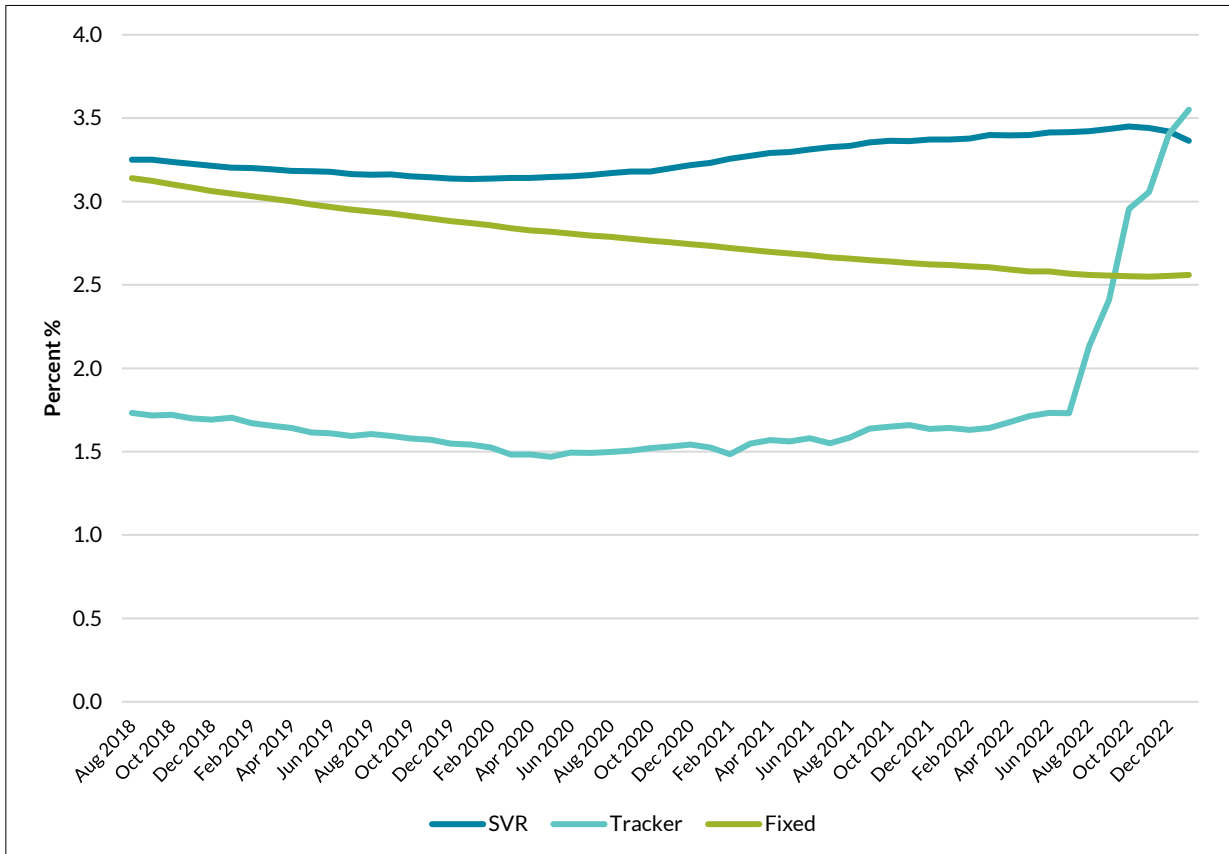
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Appendix

Figure A. 1: Average Interest Rate on Mortgage Contract Types





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