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# Who Switches and Why? A Diagnostic Survey of Retail Financial Services in Ireland 

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#### Abstract

Failure to switch service provider is viewed as leaving money on the table. While psychological hassle and switching costs are often invoked to explain the observed inertia, there is little empirical research that directly measures barriers to switching in retail finance markets. This study uses a large diagnostic survey ( $\mathrm{n}=2,903$ ) to model predictors of switching for four retail financial products: bank current accounts, mortgages, loans, and credit cards. The survey gathers detailed individual histories of experience with original purchase and comparison decisions in each market, as well as search and switching activity for each product. In addition to standard socio-demographic factors, we measure psychological factors such as estimated savings from switching and perceived price dispersion in the market. We also record measures of financial literacy. Comparing offers when originally choosing a product emerges as a powerful predictor of later switching behaviour. This variable has considerably more explanatory power than financial literacy or socio-demographic background characteristics. Estimated savings is also a positive predictor of switching. Estimates of price dispersion are not reliably associated with switching outcomes. These findings, taken in aggregate, suggest that confidence in engaging with financial providers and products, and developing the habit of doing so from an early point, may be more important than comprehension of financial concepts, which is the typical policy route to consumer empowerment.


Keywords: barriers to switching, online survey, consumer preferences, switching costs JEL: C91

## 1 Introduction

The assumption that firms compete on price and quality is predicated on the belief that consumers can (i) spot better deals and (ii) readily switch to them (Farrell and Klemperer, 2007). This process does not require every consumer to be constantly on the look out for better deals - as long as a sufficient number are scouring the market for value, firms should be forced to offer better deals to everyone. This is the theory. In practice, switching rates for financial products are consistently low (Bajo and Barbi, 2018; Johnson et al., 2019). This evidence raises the question of what kind of interventions could boost switching rates. Addressing this problem requires understanding the experiential and psychological traits of those who do switch, and then determining whether policy interventions can induce these traits in non-switchers, or how best to trim the policy sails to the existing traits of non-switchers. The purpose of this paper is to document predictors of switching in retail finance markets from a large, nationally representative diagnostic survey and draw out implications for policy.

Switching is the outcome of a multi-stage process. At the most simple level, this involves identifying an alternative product, conducting some comparison to ensure this alternative is better value, weighing this gain against the cost of switching (which itself may need to be investigated), and finally deciding whether to proceed. This is (at least) a four-stage process. Some consumers may start the switching process without following through, others might contemplate it without engaging in any action and others might not even be aware that they can switch (Byrne et al., 2020; Keys et al., 2016; Marandola et al., 2020). To understand what curtails switching, it is necessary to measure the spectrum of switching experiences. In this study, for each of the four retail financial products - bank current account, credit card, personal loan, and mortgage - we categorised people's switching experience into one of six categories: (i) did not know switching was an option; (ii) never considered switching; (iii) considered but never acted; (iv) looked into switching but never took formal steps; (v) started switching process but did not complete it; and (vi) switched. Subsequent survey stages were tailored to the selected category. This allowed us to gather a more accurate and richer picture of people's experiences with switching. The survey proper measured how the product was originally chosen, and if relevant, experiences with switching and barriers experienced. To the best of our knowledge, the relative prevalence of these groups and their varying experiences have not yet been investigated.

A second contribution is measuring the perceived financial gain from switching. We measured estimated savings from switching and perceptions of price dispersion in the market, which should inform expectations of potential gains. At present, the modal assumption in the literature is that gains are perceived correctly, conditional on being attended to, with the latter varying according to household traits. But it is possible
that even conditional on attention being switched 'on', a distribution of expected gains could drive switching behaviour in the same way a distribution of expected returns partly drives stock market investment. To the best of our knowledge, this is the first paper to directly measure perceived price dispersion in the context of switching.

We also develop and test two new scales of financial understanding. Traditional financial literacy scales frame concepts neutrally, which necessitates a greater degree of abstraction. Research shows that reasoning and understanding can shift dramatically when concepts are abstracted, usually for the worse. For this reason, the six question financial-literacy scale we test uses real-life scenarios. The second scale tests an important aspect of financial understanding that is difficult to include within context-free scales, namely how the provider profits from a financial transaction. To measure this, we introduce a four question scale which we call the Provider-Profit Quiz. For example, we test whether it is understood that a bank profits from selling mortgages by lending money at a higher interest rate than they borrow.

Our results reproduce some established findings in the literature - switching rates are generally low, having a university degree is a weakly positive predictor of switching (especially for mortgages, which is the most complex procedure). The likelihood of switching is increasing with age, which suggests experience is important. The most striking novel finding that emerges is that comparing offers when originally choosing a product is a strong and consistent predictor of later switching. On one level this may seem counter-intuitive; those who compare offers the first time arguably have less to gain from switching in the future than those who randomly choose. Nevertheless, this factor is a much stronger predictor of switching than financial literacy or educational attainment. There is also a monotonic relationship between product comparison in original choice and extent of switching experience within each product. In terms of psychological traits, switchers report saving more per year from switching than non-switchers estimate they would save if they switched. The current results cannot disentangle whether the cause is over-optimism on the part of switchers, pessimism on the part of non-switchers, or a combination of both. There was no difference in perceived price dispersion overall. At the product level, switchers perceived significantly more price dispersion between bank accounts than non-switchers, and the opposite was the case for mortgages, though the effect was marginal.

The rest of the paper is structured as follows. Section 2 covers related literature. Section 3 describes the method in brief, with a detailed explanation in Papadopoulos et al. (2023). Section 4 displays descriptive results. Section 5 displays the main regression results. Finally, 6 discusses the findings and concludes.

## 2 Related Literature

This section briefly reviews related literature on switching to motivate the design of the current study. We review general barriers to switching, expectations about potential gains and determinants of search behaviour, and also note evidence that general attitudes can underlie switching activity across markets. We indicate how this existing research informed which measures were collected in the present study as potential predictors of switching.

A salient point to make at the outset is that switching rates in retail finance are not just low, they are stubbornly low: a systematic review of interventions to increase consumer search and switching in retail financial markets found that nudges boost switching by 2-3 percentage points (Vasas, 2022). Reducing administrative burden, or changing the decision making environment - together classified as 'structural' nudges - were found to be more effective than simple informational nudges (e.g. disclosures, reminders and simplifications). The majority of interventions Vasas (2022) reviewed targeted mortgages or bank accounts and were conducted in conjunction with or solely by a financial regulator. A second main finding was that nudges were relatively more effective at promoting search between alternatives than actual switching. This is the context in which this current study investigates determinants of switching with a view to provide evidence for policy makers on improving the competitiveness of the market. For instance, it is possible there are 'structural' aspects of the switchers' environment that can be transposed to that of non-switchers. For instance, we ask about the process of originally choosing the product, as well as search and switching activity, as early experiences often shape the nature of and expectations for future market interactions.

The majority of switching research in general focuses on homogeneous products like electricity and gas, and also telecommunications (e.g. Ndebele et al., 2019; Farrell and Klemperer, 2007). Typical barriers to switching in these commonly studied markets are network effects (Maicas et al., 2009) - for instance when it is convenient for a consumer to be with the same mobile phone network as family and close friends to avail of same-network reduced rates - product complexity, and brand loyalty (Deller et al., 2021). Network effects should not arise for retail financial products, however the latter two factors are pertinent. Complexity is particularly an issue for mortgages, where the potential gains from switching are greatest. As a general rule, mortgage holders stay put - a trend that is international (Miles, 2004; Campbell, 2006; Bajo and Barbi, 2018; Andersen et al., 2018; Byrne et al., 2020). A lack of trust in counterparties' motives is one reason why mortgage holders do not switch (Johnson et al., 2019). Those who buck the trend tend to be younger and more educated (Andersen et al., 2018; Keys et al., 2016). It is likely this group have the educational and environmental resources to grapple with the complexity of comparing mortgages. Within this highly
educated group, those with the most to gain due to larger principals and longer repayment terms are most likely to switch ((Bajo and Barbi, 2018)). However being highly educated is correlated with numerous omitted factors that could underlie the higher propensity to switch. For instance, Byrne and Martin (2021) find that high-income households are significantly more likely to engage in product search than the lowest-income households.

Across products, likely gains from switching is a driver of search and switching activity. One reason switching can be lower than expected is insensitivity to differences in price. In an experimental study, Timmons et al. (2019a) showed that low sensitivity to differences in interest rates depresses switching rates. In that experimental study, an information intervention increased sensitivity to a given difference and enhanced stated willingness to switch. In the present study, we record perceptions of price dispersion, which should be compressed if people underweight how interest rate differences map to price differences.

Interestingly, Timmons et al. (2019a) also reported that those who could list the greatest number of steps required to switch mortgage (e.g. acquire up-to-date house valuation, contact solicitor, etc.) were most likely to switch. One interpretation of this finding is that uncertainty over the steps involved is the primary source of aversion. Uncertainty can be ameliorated by advice from trusted peers. In the survey, we ask how people who began the search process for alternatives were first prompted to do so, and include the option that it was on the basis of advice from family or friends.

There is relatively less direct evidence on switching propensity for other retail finance products under the microscope in this study, namely bank current accounts, loans and credit cards. For each of these, research has tended to focus instead on how people understand the product, but these findings are directly informative for understanding likely barriers to switching. Taking each in turn, research on bank accounts has mostly focused on deposit savings accounts, where consumers forego gains by not switching to the product which offers the best return (Adams et al., 2021). The most relevant studies show that consumers are inattentive to changes to the level of charges on their bank account (Branzoli, 2016). FCA surveys (Savanta:ComRes, 2020) in the UK report similar levels of inattention. It is an obvious but important fact that financial gains from switching cannot come into play, at least in the initial decision to look into switching, if people do not know how much they currently pay. For the purposes of this study, low knowledge of bank account charges implies that non-price motives, such as customer service and convenience, may be more important drivers of switching relative to other products.

The nature of credit cards means that under optimal use the product can cost the customer close to zero (apart from non-avoidable taxes, such as government stamp duty). A stylized fact of the credit card market
is that profits made from the subset who roll over their balance cross-subsidise the sophisticated customers. However, people tend to learn from (harsh) experience as late charges are overwhelmingly incurred in the first three years of owning a credit card (Agarwal and Mazumder, 2013). Many credit card customers never pay fees thereafter because they pay off the entire balance at the end of each month. However, the proportion who cannot or simply do not do this can gain by switching. One reason this does not occur is an apparent lack of understanding of how interest rate differences map to cost differences (Stango and Zinman, 2009). This may also explain why Ponce et al. (2017) in Mexico and Gathergood et al. (2019) in the UK found substantial evidence that repayments by consumers holding multiple credit cards were determined by relative balances, a 'balance-matching heuristic', rather than by a desire to pay down the card with the highest interest rate first.

Research on loans has focused on the decision process at the point of initial purchase (see Lunn et al. (2018) for a review of evidence) rather than switching decisions. A practical reason for the dearth of research on loan refinancing is that early-repayment fees could outweigh any gain from switching to a lower interest rate and/or shorter repayment term. However, EU legislation capping early repayment fees ${ }^{1}$ means that refinancing is more likely to be a financially prudent action in a wider variety of circumstances. Nevertheless, the research on initial loan choice is highly relevant to the question of how to boost loan switching rates. Evidence shows whichever co-determined attribute is made salient is given greater weight (Lunn et al., 2016). This means that contradictory points-of-indifference (overlapping indifference curves) can be generated from simple changes in emphasis. Furthermore, as for mortgages and credit cards, loan consumers are not sensitive to the interest rate as the primary determinant of value, unless prompted by an information intervention (Bertrand and Morse, 2011). Other studies find that demand for loans is altered by superficial presentational aspects (Wonder et al., 2008; Estelami, 2001; Bertrand et al., 2010).

Another reason loan switching is low is that consumers do not realise the interest payment savings from repayment over a shorter term. In an experiment, Timmons et al. (2019b) asked participants to choose a loan provider and repayment term for a hypothetical loan of $€ 10,000$. The comparison tool default repayment term was varied across conditions to be one year or five years. Results showed that $12-16 \%$ more participants in the five year condition chose a repayment term greater than three years. The authors estimated that this choice of a longer term translated to a minimum cost of $€ 470$ on a $€ 10,000$ loan, given the interest rates used in the study ( $8-13 \%$ ). The finding suggests that consumers do not have strong preferences for repayment terms, otherwise they would not be so influenced by the default on average. One can infer from this that

[^0]poor understanding of the relationship between repayment term and financial cost may contribute to low switching rates for loans. To test this, in the financial literacy section of the present study we include a question to test understanding of this relationship.

The wider literature on switching beyond retail finance is also instructive for identifying plausible drivers of switching behaviour. Sitzia et al. (2015) find that a major barrier to switching is customer inattention and the complexity of comparing and switching between retailer offers. To measure these factors, the present survey recorded whether participants ever considered switching and, for those who at least engaged in searching for alternatives, whether they found product comparison difficult. Wilson and Price (2010) showed that between $17 \%$ and $32 \%$ of consumers switched to a more expensive electricity provider, leaving them worse off. Concern about making a mistake was recorded as a salient factor by Daglish (2016). We therefore included an indicator in the present study for whether fear of making a mistake was a factor in the decision process of participants who considered switching.

Switching can also become a behavioural norm that carries across markets. Harold et al. (2020) found that simply having switched in the past in one market was predictive of switching in a different market. A similar finding was made by Waddams Price and Zhu (2016) Within markets, switching can also become a habit. Longitudinal telecommunications data from Spain found that past switchers of mobile phone provider were likely to switch again (García-Mariñoso and Suárez, 2019). Low satisfaction was predictive of switching, and those with bundled packages were less likely to switch, plausibly due to the higher complexity inherent in bundled products. The evidence that suggests switching might be a kind of habit is consistent with the evidence on consumer attitude types Flores and Price (2018), which indicates that the likelihood of having searched for alternative offers and having switched one's electricity provider in the past 3 years is significantly associated with consumers' attitudes to markets. Specifically, those who generally reported sticking to a good product once they have found it, as well as those who reported that they do not have time to hunt for small savings were less likely to search and switch. On the other hand those who indicated feeling that life is too short to worry about better deals were less likely to search, but not less likely to switch. Based on these attitudes, the authors categorised consumers as 'Shoppers', 'Timepoor' and 'Loyal', who exhibited different search and switching behaviours. The paper also highlighted the strong relationship between anticipated gains and searching and switching. In this study we collect a measure of estimated savings, which is a hypothetical question for non-switchers and an empirical one for switchers. We also ask a neutral question about price dispersion in each market, the responses to which can be used as a proxy for the potential for gains.

## 3 Method

Many analyses of the determinants of switching use mass transaction data which can only distinguish switchers from non-switchers. One advantage of the current method is that switching activity was considered as a spectrum of decisions and actions, ranging from not knowing one could switch to having switched successfully. This approach allowed participants to be branched in the online survey to answer tailored questions based on their individual switching activity. This permitted more granular analyses to be performed. Details of how this branching was conducted are described in Papadopoulos et al. (2023), and also in the Appendix. This method section provides a high level overview, with details on main variables of interest in the analysis.

### 3.1 Participants

Three-thousand participants were recruited from two separate large online panels held by two leading market research and polling companies ${ }^{2}$. Data were collected between the 10 th and 29 th of June 2022. Sociodemographic characteristics of the sample are summarised in Table 7.1 in the Appendix. Participants only completed the questionnaire if they were involved in the financial decision making of their household. This was defined as experience with at least one of the following: choosing their individual bank account or mortgage, deciding how much to pay in rent, whether to get a loan, choosing and paying for a credit card, making investments, or switching between different providers for financial products. In addition to being involved in the financial decisions of their household, participants were required to own at least one of the financial products of interest in this study, namely bank accounts, credit cards, loans and mortgages. This resulted in a sample of 2,903 who completed the switching questionnaire. While the sample was focused on financial decision-makers, the sample approximates latest CSO figures well (see Table 7.1), although the $60+$ age category is comprised primarily of those aged 60 to 70 years. Participants were paid between $€ 4$ and $€ 4.50$, depending on the recruiter, for undertaking the study, which took about 20 minutes to complete on average.

[^1]
### 3.2 Materials and Design

The study was programmed in JavaScript using the Gorilla Experiment Builder (Anwyl-Irvine et al., 2020). Participants completed the study on their desktop, tablet or phone.

The survey flow was as follows: First, participants indicated which products they held, the name of their provider(s), and their level of satisfaction with each product. Next they chose a switching history category for each product owned and completed an in-depth survey of their experience with switching each product. Participants who had switched in the last five years were considered "switchers" in the context of this study. ${ }^{3}$. Participants were branched into a version of the switching experiences survey according to their response. The full list of questions is included in Papadopoulos et al. (2023). Within each stage, the phrasing of questions was tailored to the stated experience of the participant regarding switching. ${ }^{4}$ The survey proper was split into four parts: (i) original choice, (ii) switching steps taken (thoughts and actions), (iii) switching costs experienced, (iv) estimates of savings from switching and perceptions of price dispersion in the given market.

Following the switching-experience survey, participants completed two financial literacy tests. We also measured psychological factors theoretically related to switching financial products, including perceived financial knowledge (for themselves and the general population) and financial confidence. The survey concluded by collecting socio-demographic data.

### 3.3 Procedure

Participants read an information sheet outlining the format and general aims of the study and signed a consent form to participate. They completed the survey as outlined in the design section above. A detailed description of the entire procedure is contained in Papadopoulos et al. (2023). Here we focus on the parts which measured behavioural and psychological predictors of switching, which are the focus of this paper. These sections are Original Choice of Product, Perceptions of Savings and Price Dispersion, Financial Literacy, and perceived knowledge and confidence.

[^2]
## Original Choice

When choosing their financial product originally (i.e. first bank account/credit card/loan/mortgage), participants were asked if they compared offers from different providers. Those who answered 'No' were asked how they made their choice. The options given were product-specific (for example the option "I don't remember choosing it or someone else set it up for me" was only included for bank accounts). Those who answered 'Yes' were asked for the number of options they compared, with the options being ' 2 ', ' 3 ' or ' 4 or more'.

## Perceptions of Savings and Price Dispersion

Those who had not switched were asked how much they thought they could save per year by switching, taking into account the costs of switching. Switchers were were asked how much they think they had saved per year by switching, again after subtracting the costs involved in the process.

The price dispersion question provided a short scenario which benchmarked the cheapest provider in the market as costing €100 per year. Participants were asked what they thought the most expensive provider would charge. An answer of $€ 200$ would imply price dispersion of $100 \%$. All groups answered this question.

## Financial Literacy Scales

The first financial literacy quiz consisted of six scenarios with a multiple choice question about the scenario. These questions probed understanding of the following topics: inflation, investment fees, the relationship between repayment term and total amount of interest paid, compound interest, diversification, and interest rates. The order of questions was randomised across participants. Correct answers were not incentivised.

The second scale tested a more context-specific aspect of financial understanding, namely how the provider profits (or hopes to profit) from a financial transaction. A four question scale which we call the ProviderProfit Quiz was used to measure this. For example, one question tested understanding that a bank profits from selling mortgages primarily by lending money at a higher interest rate than at which it borrows. Each question had multiple correct and incorrect answers. Participants were told to select all the correct answers.

The questions to both scales are provided in Section 7.1 of the Appendix.

## Financial Knowledge and Confidence

While the scales above measure objective financial literacy, we also recorded subjective feelings of confidence and knowledge (Savanta:ComRes, 2020). We measured financial confidence with the question Generally speaking, how do you feel about managing your money and financial matters? with end points on the 1-7 scale marked 'Not Confident at All' and 'Highly Confident'. Similarly, Financial Knowledge was measured using scale response to the question How knowledgeable do you think you are about general financial matters?. Perceptions of the average level of other people's financial knowledge was also recorded.

## 4 Descriptive Results



Figure 1: Switching History by Product: The bars from left to right represent the proportion who didn't know switching was an option, never considered switching (light blue), considered switching but never acted (grey), looked into switching(black), began the process but did not complete it (teal) and switched (purple)

This descriptive results section follows the chronology of the switching survey. First, we show the breakdown of switching behaviour across products. In Section 4.1 we show how original comparison behaviour differed across groups. In Section 4.2 we present descriptive results on estimated savings and price dispersion by product. Next the results of the two financial knowledge quizzes are shown in 4.3, along with subjective
confidence and knowledge results. In Section 4.4 we summarise descriptive statistics for observable differences between switchers and non-switchers on the behavioural and psychological variables of interest. This sets up the presentation of the regression analysis - which simultaneously controls for all these factors to determine the strongest predictors of switching - in Section 5.

The breakdown of switching experience for each product is shown in Figure 1 above. The proportion of switchers in our sample for each product was $17.1 \%$ for bank accounts, $12.5 \%$ for credit cards, $6.4 \%$ for mortgages and $6.1 \%$ for loans. For all products, the largest proportion of non-switchers fall into the "never considered it" category, which ranges from $45 \%$ for bank accounts to $69 \%$ for loans. The relatively high rate of switching for bank accounts is plausibly due to the timing of the survey, when two major providers, Ulster Bank and KBC, were in the process of leaving the market. The potential spillover effects of the marketing of these closures are discussed in Section 4.1 of Papadopoulos et al. (2023).

Notably, for all products apart from loans, a considerable proportion either considered switching but took no action or informally investigated the process, i.e. "looked into switching". Together, this group constitutes $34 \%$ of bank account holders and $35 \%$ of mortgage holders. The proportion who reported beginning the process but not completing it is negligible for all products except mortgages, where $3.4 \%$ report this behaviour, which in relative terms is just over half the size of the switcher category ( $6.4 \%$ of respondents).

### 4.1 Differences in Original Comparison by Switching Group

A large and consistent difference between switchers and non-switchers across products was the proportion who compared options in their original choice process. The most popular method of choosing for those that did not compare offers was simply to pick a product from an existing provider, for instance getting a mortgage with a company with whom you had a bank account. Figure 2 above shows the proportion in each switching category for each product who compared offers originally for that product. A consistent pattern emerges across the levels of switching experience. For bank accounts, leaving aside the group who didn't know they could switch, the proportion within each group who compared originally increases monotonically from "never considered switching" (group 1) to "switched" (group 5). The pattern for mortgages is also monotonic. For loans and credit cards the same general pattern emerges. This finding suggests that there may be something fundamental about initial comparison which instils a capability to investigate switching. While the relationship may not be causal, the regression analysis which follows rules out this association as being driven by socio-demographic or financial literacy factors. We defer further discussion of how to interpret this variable until the discussion.


Figure 2: Comparison in Original Choice by Switcher Category: The six bars from left to right in each quadrant represent the proportion who didn't know switching was an option (0), never considered switching (1), considered switching but never acted (2), looked into switching (3), began the process but did not complete it (4) and switched (5).

### 4.2 Perceptions of Market Price Dispersion and Estimated Savings

Figure 3 above shows the price dispersion estimates for non-switchers and switchers. The coloured dots are staggered to create a cumulative distribution. Note that for bank accounts, the median price dispersion for switchers is above the 75 th percentile of the non-switchers distribution. For mortgages, the distribution is much more compressed (and accurate) for switchers. This may indicate a lack of understanding of the concept of price dispersion for mortgages by non-switchers. The price dispersion distributions are similar for loans and credit cards. Although the absolute level of price dispersion seems inaccurate for the purposes of this study what matters is relative perceptions of dispersion, which is an indicator of potential gains in the market. In the regression analysis that follows, we include a categorical variable of price dispersion quartile for each product. This solves the issue of extreme responses skewing the results while retaining the full sample. For bank accounts the second, third and fourth quartiles start at €120, €151 and €201 respectively. For mortgages these higher quartiles begin at $€ 112$, €161 and $€ 301$. For loans the figures are $€ 110$, Є145 and $€ 201$. Lastly, the credit card numbers are $€ 110$, Є150 and $€ 201$. At first glance, the estimated price dispersion in mortgages is highest. As the top-right quadrant of Figure 3 shows, this difference is driven by non-switchers.


Figure 3: Price Dispersion by Product: In each quadrant the left distribution shows the price disperison estimates of non-switchers, and the right shows switchers' estimates. The light blue boxes indicate medians and interquartile ranges. The sample has been trimmed to remove answers below €100, which doesn't make sense given this was the base price for the cheapest option in the market, and the top $1 \%$ of observations were also deleted as outliers.

Figure 4 above shows the distributions of realised annual savings from switching and potential savings from switching. For all four products, switchers estimated they saved more per year than prospective switchers thought they would save if they were to switch. Both groups were asked to take into account the costs of switching and to write in a negative number if they thought these costs would outweigh the savings. This variable is not included in the regression analysis because the two groups are essentially asked to assess different things. Any selection effect in switching, which the literature shows exists for mortgages at least (Bajo and Barbi, 2018), would introduce bias into this coefficient. It is instructive however to note the descriptive difference as evidence that the realised gains may be larger than a perhaps cursory surveyal of the market would indicate.


Figure 4: Estimated Savings by Product: In each quadrant the left distribution shows the potential savings estimates of non-switchers, and the right shows switchers' estimates of realised savings. The light blue boxes indicate medians and interquartile ranges. The sample has been trimmed to remove answers below €100, which don't make sense given this was the base price for the cheapest option in the market, and the top $5 \%$ of observations were also deleted as extreme values (e.g. typing in an extra zero)

### 4.3 Actual and Perceived Financial Understanding

The mean score in the financial literacy quiz was 2.88 out of $6(\mathrm{SD}=1.53)$. The distribution is shown in the left panel of Figure 5 below. The results of the Producer-Profit test are shown in the right panel (where a one mark deduction has been applied for every incorrect option selected). The mean score was 3.83 (SD $=2.19$ ). The correlation of scores between financial literacy quiz and the Producer-Profit test is 0.335 . The correlation coefficients for each pair of questions within each measure are presented in Tables 7.2 and 7.3 in the Appendix, where we also comment on the internal validity of the scales and make comparison to other scales in the literature.

The question with the lowest proportion correct in the Financial Literacy Quiz concerned how the cost of credit would change following a one year reduction in the repayment term. The question probing understanding of inflation was answered the best ( $77 \%$ correct). Figure 6 in the Appendix shows the proportion correct on each of the six questions.


Figure 5: Distribution of Scores for Financial Literacy Quiz (left) and Producer Profit Quiz (right)

### 4.3.1 Perceived Capability

At the end of the survey, participants rated their level of confidence in making financial decisions on a 1-7 response scale. For financial confidence, the mean score was $4.71(\mathrm{SD}=1.47)$. They also rated their level of financial knowledge and the average level of others' knowledge on a 1-7 scales. For self-knowledge the mean score was $4.24(\mathrm{SD}=1.40)$ and the mean for others' knowledge was $3.63(\mathrm{SD}=1.22)$. The within-person self-other knowledge gap averaged $0.6(\mathrm{SD}=1.4)$. Sixteen percent thought others had higher knowledge than them, $35 \%$ thought their level of knowledge was the same as the population average, and $49 \%$ thought their knowledge was better than average. The accuracy of these beliefs can be estimated using the level of performance on the financial understanding scales. We created a composite score which gave equal weighting to performance on the financial literacy scale and the producer-profit quiz, and categorised participants into ten equal-sized categories of performance (i.e. deciles).

The left panel of Figure 6 below shows that a better-than-average effect arose across the distribution of objective performance. The lowest decile of performance rated themselves as just below 4 on the 1-7 scale of knowledge, and rated others likewise. Note that the navy and grey dots overlap beside the vertical axis. The self-other perceived knowledge gap starts from the second decile of objective performance and increases thereafter. Note that the best performers do not have increasingly low opinions of the knowledge of others, as the grey line becomes flat around 3.5. In the right panel of Figure 6, we plot the distribution of standardised financial performance for those who indicated their knowledge level was better than average ( $49 \%$ of the sample). Of this group, $32 \%$ performed worse than average. When the sample frame is expanded to include those who thought they were at least as good as average on financial knowledge, the proportion of overconfident participants rises to $42 \%$. Accuracy regarding one's place in the distribution was better


Figure 6: The Self-other perceived knowledge gap across objective performance (left panel) and distribution of standardised performance for those who indicated having better-than-average knowledge (right panel)
among those who indicated being worse than others; only $22 \%$ of this much smaller group ( $\mathrm{n}=485$ ) actually performed better than average. This pattern reproduces the classic better-than-average asymmetry (Zell et al., 2020).

The correlation matrix between the objective measures of ability and ratings of confidence and knowledge is shown in the Appendix. The correlation between the two financial knowledge scores is moderate at 0.335 . The correlation between perceived knowledge and financial confidence is high (0.678). The correlation between own-ratings of financial knowledge and the level of others is also moderately high at 0.429 .

### 4.4 Switchers vs. Non-switchers: Summary of Differences

A summary of differences between switchers and non-switchers on the main behavioural and psychological variables of interest are shown below in Table 4.1. As evident in Section 4.1, for all four products, switchers were more likely to engage in comparison during the original choice process. There was no clear pattern of higher financial literacy among switchers. It was positive for mortgage switchers and negative for loan switchers - reasons why the sample of loan switchers might be qualitatively different are discussed in the conclusion. Across all products, switchers' estimated savings were higher than the hypothetical savings nonswitchers thought they could achieve. However a direct comparison is confounded by the selection effect into switching by those with the most to gain. The size of this effect is unknown, though the evidence on inattention to the switching opportunity and complexity as a barrier means it might be small; regardless, we urge caution interpreting this difference. For estimated price dispersion and financial confidence, only
bank account switchers recorded significantly higher scores. Lastly, only loan switchers did not record higher perceived knowledge on average than their non-switcher counterparts. In Section 7.2 of the Appendix the differences between switchers and non-switchers on demographic factors such as age, gender and education are provided.

|  | Bank | Mortgage | Loans | Credit Card |
| :--- | :---: | :---: | :---: | :---: |
| Compared in Original Choice | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Financial Literacy Composite |  | $\checkmark$ | X |  |
| Estimated Savings | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Estimated Price Dispersion | $\checkmark$ |  |  |  |
| Financial Confidence | $\checkmark$ |  |  | $\checkmark$ |
| Perceived Knowledge | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |

Table 4.1: Checkmarks denote positive significant differences between switchers and non-switchers.

## 5 Regression Analysis

The regression analysis pools together the majority of the factors associated with switching described above. The models also include socio-demographic factors such as age, gender and education. The first section (5.1) presents panel data models with repeated measures at the individual level. The second section (5.2) presents product-level models which show how the strength of predictors varied across products.

### 5.1 Panel Data Models

We conducted mixed-effects logistic regressions with a random intercept to account for individual-level propensity to switch. Each observation is an individual-product pairing. The underlying assumption is that the individual level propensity to switch, which varies randomly across the sample, is constant across products for a given individual. The results are shown in Table 5.1 and expressed as average marginal effects. ${ }^{5}$ In the context of logistic regression, marginal effects are interpreted as the percentage point change in the probability of a positive outcome given a one-unit change in a covariate, holding all other covariates constant. Note there are are 7085 observations from 2903 participants, which indicates the average number of products owned is 2.4. Some participants appear four times because they own every product and others

[^3]only once.

The first column includes only whether people compared options in original choice, the composite financial literacy score ${ }^{6}$, a dummy variable for product (the reference category is bank accounts), and the quartile of price dispersion estimate in the market for that product (see Section 4.2 for more information on these quartiles.) The average marginal effects accord with the earlier descriptive results. Comparing options in original choice ${ }^{7}$ is a strong predictor of switching ( $\mathrm{p}<0.001$ ) with a 16.24 percentage point (hereafter $\mathrm{pp})$ increase in the probability of switching. Higher scores on the composite financial literacy scale is not associated with a significant increase in the probability of switching. The significant negative coefficients on the product variables show that probability of switching is significantly higher for bank accounts. Lastly, being in the top quartile for price dispersion was positively associated with switching ( $\mathrm{p}<0.05$ ).

The second column adds demographic controls. We include a three-category variable for highest level of educational attainment. The reference case is upper secondary education. The middle category comprises people with a diploma or technical certificate, and the last category is higher degree, masters and doctorate. The other demographic variables are gender, age, and age squared. Having a degree or higher is weakly associated with switching propensity ( $\mathrm{p}<0.1$ ). In addition to being marginally significant, note that the education marginal effect of 0.0176 is smaller than that of the fourth quartile of price dispersion of 0.0236 . The probability of switching in the last five years increases significantly with age ( $\mathrm{p}<0.01$ ). The negative marginal effect on age squared indicates that the relationship between age and switching is not linear; the difference between young adults and middle-aged adults is greater than that between middle-aged an older adults. Notably, the Comparison marginal effect is unchanged, which indicates that its predictive power is not mediated by socio-demographic background characteristics.

Column 3 adds the ratings of financial confidence and perceived financial knowledge. The former is not associated with switching, while perceived financial knowledge is a strong predictor of switching ( $\mathrm{p}<0.01$ ). The introduction of these variables does not otherwise change the pattern of coefficients. The Comparison dummy retains its large magnitude, and the fourth quartile of price dispersion remains a significant predictor at the five-percent level.

Finally, Column 4 restricts the sample to those who at least looked into switching for a given product. This allows us to add the variable of difficulties encountered in the switching process to the model. This variable ranges from $0-6^{8}$ and is binned into three equally sized categories: No switching costs (0), low

[^4]Table 5.1: Mixed Effects Logistic Regressions. Results Reported as Average Marginal Effects

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
| Compared Options Originally | $\begin{aligned} & \hline 0.1624^{* * *} \\ & (0.0102) \end{aligned}$ | $\begin{aligned} & \hline 0.1567^{* * *} \\ & (0.0102) \end{aligned}$ | $\begin{aligned} & 0.1507^{* * *} \\ & (0.0101) \end{aligned}$ | $\begin{aligned} & \hline 0.1674^{* * *} \\ & (0.0228) \end{aligned}$ |
| Composite Fin Lit Score | $\begin{gathered} 0.0013 \\ (0.0027) \end{gathered}$ | $\begin{gathered} 0.0010 \\ (0.0028) \end{gathered}$ | $\begin{gathered} -0.0009 \\ (0.0028) \end{gathered}$ | $\begin{gathered} -0.0106 \\ (0.0087) \end{gathered}$ |
| Credit Card | $\begin{gathered} -0.0485^{* * *} \\ (0.0103) \end{gathered}$ | $\begin{gathered} -0.0474^{* * *} \\ (0.0104) \end{gathered}$ | $\begin{gathered} -0.0497^{* * *} \\ (0.0104) \end{gathered}$ | $\begin{gathered} -0.0404 \\ (0.0276) \end{gathered}$ |
| Loan | $\begin{gathered} -0.1220^{* * *} \\ (0.0088) \end{gathered}$ | $\begin{gathered} -0.1233^{* * *} \\ (0.0089) \end{gathered}$ | $\begin{gathered} -0.1246^{* * *} \\ (0.0089) \end{gathered}$ | $\begin{gathered} -0.0596 \\ (0.0386) \end{gathered}$ |
| Mortgage | $\begin{gathered} -0.1356^{* * *} \\ (0.0085) \end{gathered}$ | $\begin{gathered} -0.1381^{* * *} \\ (0.0085) \end{gathered}$ | $\begin{aligned} & -0.1392^{* * *} \\ & (0.0085) \end{aligned}$ | $\begin{gathered} -0.2707^{* * *} \\ (0.0300) \end{gathered}$ |
| Price Disp Q2 $(\mathrm{ref}=\mathrm{Q} 1)$ | $\begin{gathered} 0.0081 \\ (0.0107) \end{gathered}$ | $\begin{gathered} 0.0103 \\ (0.0108) \end{gathered}$ | $\begin{gathered} 0.0109 \\ (0.0108) \end{gathered}$ | $\begin{gathered} -0.0541 \\ (0.0342) \end{gathered}$ |
| Price Disp Q3 | $\begin{gathered} 0.0016 \\ (0.0106) \end{gathered}$ | $\begin{gathered} 0.0007 \\ (0.0106) \end{gathered}$ | $\begin{gathered} 0.0013 \\ (0.0106) \end{gathered}$ | $\begin{gathered} -0.0526 \\ (0.0347) \end{gathered}$ |
| Price Disp Q4 | $\begin{gathered} 0.0269^{* *} \\ (0.0117) \end{gathered}$ | $\begin{gathered} 0.0236^{* *} \\ (0.0117) \end{gathered}$ | $\begin{gathered} 0.0241^{* *} \\ (0.0117) \end{gathered}$ | $\begin{gathered} -0.0293 \\ (0.0356) \end{gathered}$ |
| Diploma (ref = upper secondary and below) |  | $\begin{gathered} 0.0050 \\ (0.0107) \end{gathered}$ | $\begin{gathered} 0.0048 \\ (0.0108) \end{gathered}$ | $\begin{gathered} -0.0409 \\ (0.0347) \end{gathered}$ |
| Degree or Higher |  | $\begin{gathered} 0.0176^{*} \\ (0.0101) \end{gathered}$ | $\begin{gathered} 0.0126 \\ (0.0101) \end{gathered}$ | $\begin{gathered} -0.0246 \\ (0.0320) \end{gathered}$ |
| Female |  | $\begin{gathered} -0.0071 \\ (0.0083) \end{gathered}$ | $\begin{gathered} 0.0013 \\ (0.0085) \end{gathered}$ | $\begin{gathered} 0.0319 \\ (0.0259) \end{gathered}$ |
| Age |  | $\begin{aligned} & 0.0054^{* * *} \\ & (0.0020) \end{aligned}$ | $\begin{aligned} & 0.0054^{* * *} \\ & (0.0020) \end{aligned}$ | $\begin{gathered} -0.0061 \\ (0.0065) \end{gathered}$ |
| Age Squared |  | $\begin{gathered} -0.0001^{* * *} \\ (0.0000) \end{gathered}$ | $\begin{gathered} -0.0001^{* * *} \\ (0.0000) \end{gathered}$ | $\begin{gathered} 0.0001 \\ (0.0001) \end{gathered}$ |
| Financial Confidence |  |  | $\begin{gathered} 0.0008 \\ (0.0041) \end{gathered}$ | $\begin{gathered} 0.0064 \\ (0.0126) \end{gathered}$ |
| Perceived Fin. Knowledge |  |  | $\begin{aligned} & 0.0146^{* * *} \\ & (0.0043) \end{aligned}$ | $\begin{gathered} 0.0334^{* *} \\ (0.0136) \end{gathered}$ |
| Low Switching Costs (ref = none) |  |  |  | $\begin{gathered} -0.2652^{* * *} \\ (0.0278) \end{gathered}$ |
| High Switching Costs |  |  |  | $\begin{gathered} -0.3583^{* * *} \\ (0.0292) \end{gathered}$ |
| Observations | 7085 | 7085 | 7085 | 1628 |
| Groups | $2903$ | $2903$ | 2903 | 1162 |

switching costs (score of 1 ) and high (2 or more out of 6). Even in this restricted sample, the Comparison dummy is a strongly significant predictor of switching with a substantial marginal effect size of 0.1674 (p $<0.001$ ), indicating nearly a 17 percentage point increase in switching probability. Perceived financial knowledge remains significant, with a larger point estimate but also a larger standard error, meaning it is only significant at the five-percent level. A strong negative relationship between difficulties encountered and switching probability emerges, with the marginal effects on low and high switching cost categories strongly significant ( $\mathrm{p}<0.01$ ). When the base category is changed to low switching costs, the high switching cost category has strongly significant negative marginal effect. Finally, the Q4 Price Dispersion variable is no longer a significant positive predictor of switching, and in fact becomes negative, though non-significant. However, this is understandable in the context of restricting the sample to those who at least looked into switching. We infer from this pattern that beliefs of wider price dispersion in the market likely constitute a push factor to begin searching for better value deals. Once the non-searchers are excluded from the sample, this effect is not evident.

The most striking result from Table 5.1 is the strength and consistency of the Comparison dummy. In unreported analysis we broke this variable down further to investigate whether the effect of comparison is diminishing. Recall from the Method section that participants who said they compared offers indicated whether they compared two, three, or four or more offers. When a four-level categorical variable is included, the higher levels of comparison are associated with higher probabilities of switching. The pattern of these coefficients is shown in Figure 9 in the Appendix.

### 5.2 Product-Level Models

Logistic regression models for each product are shown in Table 5.2 below with results once again reported as average marginal effects. In these models, the scores on the two financial understanding scales are included separately, because their individual effect varies across products. Column 1 shows the results for bank accounts. Comparison is a strong predictor of switching, as in the pooled analysis. Neither financial literacy measure is a predictor. Notably, all quartiles of price dispersion are associated with increased probabilities of switching relative to the bottom quartile, for which the maximum price dispersion inferred was $20 \%$. For Q4 of price dispersion, the point estimate of 9.74 percentage points $(\mathrm{p}<0.01)$ relative to the base category is approximately three times larger than the effect of having a higher degree relative to upper secondary
fees; 2) It was difficult figuring out the final price of offers and/or comparing them; 3) Uncertainty about how long it would take to switch; 4) There weren't many alternative offers that were better value; 5) The amount of paperwork required 6) It was difficult to figure out if I was eligible for better-value deals. The proportion clicking each option is described in detail in Papadopoulos et al. (2023).
education ( $\mathrm{ME}=0.0338, \mathrm{p}<0.05$ ). Age is weakly associated with switching. Lastly, as observed in Column 3 and 4 of the pooled model, perceived financial knowledge is a highly significant predictor of switching (p $<0.01$ ).

For mortgages, Comparison is a strong positive predictor of switching. Scoring higher on the producer-profit quiz, which probed understanding of how the providers of retail finance products gain from the transaction, was a strongly significant predictor of switching mortgage ( $\mathrm{p}<0.01$ ). This may of course reflect learning-by-doing, but it is indicative that more applied measures of understanding can be helpful in discerning the differences in knowledge between switchers and non-switchers. An unlikely result, which was flagged in Section 4.2, is that the non-switchers predominated in the upper half of the distribution for estimated price dispersion for mortgages. The absolute numbers inputted may hint at a lack of understanding of the question. This might once again reflect noise in mapping interest rates to monetary prices, or simply miscomprehension of the question. As for bank accounts, age is a marginally significant predictor of switching, but the effect size is four times larger. Perceived financial knowledge is also a marginally significant predictor. It is notable that higher levels of educational attainment are not associated with mortgage switching - this null result goes again the trend in the literature, but this may be because the current analysis captures dimensions such as prior experience with product comparison, and psychological factors, which are not collected in typical surveys.

For loans and credit cards, there are fewer predictors of switching, apart from the Comparison dummy. Loan switchers scored lower on the producer-profit quiz. The educational attainment variables also have negative marginal effects for this product. This points to loan switchers being qualitatively different, a point we discuss in the next section. Female loan consumers were marginally higher probability of switching loan (p $<0.1$ ). For credit cards, no reliable predictor of switching emerged, with the weak effect on Q2 of Price Dispersion likely a result of statistical noise.

Table 5.2: Product-Specific Logistic Regressions. Results reported as Average Marginal Effects

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
| Compared Options Originally | $\begin{aligned} & \hline 0.2075^{* * *} \\ & (0.0182) \end{aligned}$ | $\begin{aligned} & \hline 0.0467^{* * *} \\ & (0.0135) \end{aligned}$ | $\begin{aligned} & \hline 0.0758^{* * *} \\ & (0.0167) \end{aligned}$ | $\begin{aligned} & \hline 0.2397^{* * *} \\ & (0.0242) \end{aligned}$ |
| Score out of Six in Fin Lit | $\begin{gathered} -0.0052 \\ (0.0050) \end{gathered}$ | $\begin{gathered} 0.0047 \\ (0.0052) \end{gathered}$ | $\begin{gathered} -0.0007 \\ (0.0047) \end{gathered}$ | $\begin{gathered} 0.0041 \\ (0.0059) \end{gathered}$ |
| Producer-Profit Net Score | $\begin{gathered} -0.0014 \\ (0.0033) \end{gathered}$ | $\begin{gathered} 0.0096^{* *} \\ (0.0037) \end{gathered}$ | $\begin{gathered} -0.0059^{* *} \\ (0.0028) \end{gathered}$ | $\begin{gathered} 0.0000 \\ (0.0039) \end{gathered}$ |
| Price Disp Q2 $(\mathrm{ref}=\mathrm{Q} 1)$ | $\begin{gathered} 0.0335^{*} \\ (0.0184) \end{gathered}$ | $\begin{gathered} -0.0316 \\ (0.0232) \end{gathered}$ | $\begin{gathered} -0.0092 \\ (0.0205) \end{gathered}$ | $\begin{gathered} 0.0411^{*} \\ (0.0239) \end{gathered}$ |
| Price Disp Q3 | $\begin{gathered} 0.0329^{*} \\ (0.0190) \end{gathered}$ | $\begin{gathered} -0.0228 \\ (0.0231) \end{gathered}$ | $\begin{gathered} -0.0265 \\ (0.0179) \end{gathered}$ | $\begin{gathered} -0.0041 \\ (0.0211) \end{gathered}$ |
| Price Disp. Q4 | $\begin{aligned} & 0.0974^{* * *} \\ & (0.0203) \end{aligned}$ | $\begin{gathered} -0.0572^{* * *} \\ (0.0221) \end{gathered}$ | $\begin{gathered} -0.0189 \\ (0.0191) \end{gathered}$ | $\begin{gathered} 0.0015 \\ (0.0230) \end{gathered}$ |
| Diploma (ref = upper secondary and below) | $\begin{gathered} 0.0285 \\ (0.0177) \end{gathered}$ | $\begin{gathered} -0.0286 \\ (0.0197) \end{gathered}$ | $\begin{gathered} -0.0359^{* *} \\ (0.0163) \end{gathered}$ | $\begin{gathered} 0.0232 \\ (0.0231) \end{gathered}$ |
| Degree or Higher | $\begin{gathered} 0.0338^{* *} \\ (0.0164) \end{gathered}$ | $\begin{gathered} 0.0085 \\ (0.0202) \end{gathered}$ | $\begin{gathered} -0.0236 \\ (0.0165) \end{gathered}$ | $\begin{gathered} -0.0116 \\ (0.0201) \end{gathered}$ |
| Female | $\begin{gathered} -0.0102 \\ (0.0141) \end{gathered}$ | $\begin{gathered} 0.0071 \\ (0.0153) \end{gathered}$ | $\begin{gathered} 0.0224^{*} \\ (0.0133) \end{gathered}$ | $\begin{gathered} -0.0006 \\ (0.0169) \end{gathered}$ |
| Age | $\begin{gathered} 0.0062^{*} \\ (0.0032) \end{gathered}$ | $\begin{gathered} 0.0113^{*} \\ (0.0060) \end{gathered}$ | $\begin{gathered} 0.0047 \\ (0.0032) \end{gathered}$ | $\begin{gathered} 0.0028 \\ (0.0038) \end{gathered}$ |
| Age Squared | $\begin{gathered} -0.0001^{* *} \\ (0.0000) \end{gathered}$ | $\begin{gathered} -0.0002^{* *} \\ (0.0001) \end{gathered}$ | $\begin{gathered} -0.0000 \\ (0.0000) \end{gathered}$ | $\begin{gathered} -0.0000 \\ (0.0000) \end{gathered}$ |
| Financial Confidence | $\begin{gathered} 0.0014 \\ (0.0066) \end{gathered}$ | $\begin{gathered} -0.0041 \\ (0.0078) \end{gathered}$ | $\begin{gathered} -0.0039 \\ (0.0061) \end{gathered}$ | $\begin{gathered} 0.0077 \\ (0.0088) \end{gathered}$ |
| Perceived Fin. Knowledge | $\begin{aligned} & 0.0202^{* * *} \\ & (0.0068) \end{aligned}$ | $\begin{gathered} 0.0151^{*} \\ (0.0086) \end{gathered}$ | $\begin{gathered} 0.0104 \\ (0.0065) \end{gathered}$ | $\begin{gathered} 0.0098 \\ (0.0092) \end{gathered}$ |
| Observations | 2853 | 1192 | 1443 | 1597 |

Lastly, in Tables 7.8 and 7.9 in the Appendix we present alternative specifications which check the sensitivity of the results to the five-year limit on being a switcher. When people who switched more than five years ago are omitted from the sample, the effect sizes become larger but the pattern of results stays the same. This indicates that people who switched over five years ago are more like switchers than people who never never switched. When this group is brought back and the dependent variable is changed to 'ever switched' (Table 7.9) the pattern of results is again similar to the preferred specification above, but the effect sizes are larger. For instance, Comparison has a marginal effect that ranges from 10-30 percentage points, instead of 4.5-24 in Table 5.2 above, and the effect of higher categories of education and perceived price dispersion are also larger. In aggregate, this suggests the effect sizes in the main specification may mark a lower bound. We reiterate that the five-year cutoff was chosen to reduce noise in recollections of the switching process; more details on the rationale are provided in Section 2.3.2 of Papadopoulos et al. (2023).

## 6 Discussion and Conclusion

This paper investigated the experiential and psychological factors associated with switching using a large, nationally representative survey of nearly 3,000 financial decision makers. The survey gathered a detailed picture of the process people went through when originally acquiring their bank account, mortgage, loan and/or credit card, and the steps they considered or took with regard to switching provider thereafter. The present paper focused on uncovering potentially novel factors that have a theoretical causal link to switching. To this end, we introduced questions to measure the intuited level of price dispersion in the market, consumers' objective financial understanding and their subjective measures of financial knowledge and confidence.

One result stands out in all of our analysis. The likelihood that an individual switches financial products is strongly and consistently associated with whether that individual originally compared options when they first purchased the product. This effect is robust to controlling for financial literacy, various socio-demographic background characteristics and perceptions of savings and price dispersion in the specific market. In other words, factors other than these must determine both whether the individual shops around when they first purchase a product and whether they subsequently switch - factors common to both behaviours. Note that any explanation for this finding must go beyond loyalty to brands or companies, since the original choice of provider is part of what must be explained.

Some indication of the mechanism(s) behind this finding might be had from the fact that while the relation-
ship is large and statistically significant in relation to all four products, it is strongest for credit cards and current accounts, with a weaker effect for mortgages. The survey asked respondents who did not compare products how they had originally chosen their provider. The most common response for current accounts was to choose based on recommendations from friends and family, followed by opting for the first provider that seemed reliable and decent value. Meanwhile, almost three-quarters of those who did not compare offers obtained their original credit card through the same bank with which they had a current account. Put another way, consumers in this group mostly relied on existing relationships to make the decision, rather than trusting themselves to explore a new relationship. While we cannot be sure based on existing data, this would seem to indicate lack of confidence in the ability to make an independent decision about the value of financial products, or perhaps lack of confidence when interacting with providers. To the best of our knowledge, there is little research linking the process of original choice to later switching behaviour. However, research on switching in general shows that switching in one market is predictive of switching in another; for instance switchers of gas supplier are more likely to also switch their mobile phone (Harold et al., 2020). Related to this, a large survey of UK consumers broke consumers into three groups based on their attitude to searching for better deals - 'Shoppers', 'Timepoor' and 'Loyal'. They recommended tailoring campaigns to boost switching to target the specific concerns of individual groups - for instance, emphasising that the switching process can be quite quick to the 'Timepoor' group (Flores and Price, 2018).

Unwillingness to form new financial relationships, or lack of confidence in doing so, need not be related to actual capability in financial decision-making. Indeed, our results suggest that the relationships between switching and two objective measures of financial understanding are relatively weak. This suggests that the prospects for increasing consumer activity through efforts to raise financial literacy are not good, unless improved financial acumen is accompanied by substantial increases in confidence when considering whether to try to apply that acumen.

A similar logic concerns the finding that the relationship between switching and perceptions of potential price dispersion in the market are also relatively weak. This implies that the oft-repeated call for greater 'awareness raising' in relation to the potential benefits of switching financial products is also unlikely to do much to encourage actual switching. In our data, very few consumers were unaware that they could switch products and non-switchers perceived similar amounts of price dispersion in each market. That said, those who did actually switch reported larger savings, on average, than non-switchers thought they could make by switching. Again, while at first glance this pattern may seem contradictory, a possible explanation for it concerns confidence. Non-switchers may view similar potential savings in general, as determined by the dispersion of prices, but differ in their expectation of being able to obtain them should they try.

In summary, in order to be successful, policies to increase consumer activity may have to do more than to raise awareness of opportunities to save money, or even to raise financial literacy, which is in itself a difficult policy goal. Our findings suggest that consumers need not only to be aware of savings and to perceive them as substantive, but also to feel confident enough to engage with financial providers and to choose a product that actually delivers those savings.

A note on the differences between the products under scrutiny is required, particularly the difference between personal loans and the others. While bank accounts and mortgages, and to a lesser extent credit cards, are all acquired for similar purposes, there are two distinct groups who take out loans. One group use loans as a way to consumption-smooth essentially, paying a reasonable sum in interest in order to obtain a consumer durable or make an investment that would otherwise be delayed by saving. The stream of benefits from the use of the loan funds makes its purchase a sound decision. Another group take out loans in order to fund a current lifestyle that is beyond their means. This group tends to have lower financial capability. When seeking assistance from professional financial advisors, they may also be advised to consolidate their loans, or switch to a lower-interest option. This heterogeneity in the reason for acquiring personal loans, and the downstream consequences, should be kept in ind when interpreting the results, for example the finding that switchers of bank accounts, mortgages, and credit cards had higher perceived knowledge than non-switchers, but that loan switchers did not. Loan switchers also performed worse on the objective financial capability metrics.

In conclusion, this paper has explored a collection of experiential and psychological factors associated with switching retail finance survey provider. Understanding the mental models of the market of those who switch is important to inform the design of interventions to boost switching levels. However, a primary finding of this analysis is that the foundations for switching are laid down early, in how consumers originally interact with the market. One inference from this finding is that the consumer welfare implications of recruiting customers without empowering them to compare different providers may be more negative than previously thought. Research is required into this specific topic. Overall, while switching rates remain low, there is potential to increase rates by tailoring the environment of consumer-retailer interactions to help the median customer in terms of switching activity - who does not switch - to act more like current switchers and obtain better value in the market.

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## 7 Appendix

## Socio-Demographic Breakdown of Sample

|  |  | Obs. | $\%$ | Population \% |
| :--- | :--- | :---: | :---: | :---: |
| Gender | Men | 1449 | 49.9 | 48.9 |
|  | Women | 1446 | 49.8 | 51.1 |
| Age | Non-Binary/Other | 8 | 0.3 | - |
|  | 18-39 years | 983 | 33.9 | 40.4 |
| Educational Attainment | Below Degree | 1168 | 40.2 | 35.1 |
|  | $40-59$ years | 752 | 25.9 | 24.5 |
| Employment | (0+ | 1735 | 59.8 | 58.0 |
|  | Degree or above | 1168 | 40.2 | 42.0 |
|  | In Labour Force | 1998 | 68.8 | 65.2 |
|  | (Of which, Employed) | 1911 | $(95.6)$ | $(95.2)$ |
|  | (Of which, Unemployed) | 87 | $(4.4)$ | $(4.8)$ |
| Living Area | Not in Labour Force | 905 | 31.2 | 34.8 |
|  | Urban | 1858 | 64.0 | 63.3 |
|  | Rural | 1045 | 36.0 | 36.7 |

Table 7.1: Sample Characteristics. Note: Population estimates for Gender, Age, Educational Attainment and Living Area are from Census 2016 data available at data.cso.ie. Employment estimates are from the 2022 Q1 Labour Force Survey

### 7.1 Measures of Objective Financial Understanding

## Financial Literacy Test

The six questions are shown below. The correct answer is in bold. The order of questions was randomised across participants.

1. Jenny takes out a 4 -year loan to pay for a car. After 1 year, she decides that she could afford to increase her monthly repayments to pay the loan off at the end of 3 years instead of 4. Assuming the interest rate does not change, what will happen to the total cost of borrowing, i.e. how much it costs Jenny in total to borrow the money?

- The cost of borrowing will be higher if she pays the loan off in 3 years instead of 4
- The cost of borrowing will stay the same
- The cost of borrowing will be lower if she pays the loan off in 3 years instead of 4
- The cost of borrowing might be higher or lower - it depends on the type of loan
- I don't know

2. Paul puts $€ 100$ in a savings account that pays interest at $2 \%$ per year (APR). After 5 years the amount of money in Paul's account will be:

- Є102
- Between €102 and €110
- Exactly €110
- A little more than $\in 110$
- I don't know

3. Adam gets a pay rise of $3 \%$. The current annual rate of inflation is $2 \%$. Which best describes Adam's financial situation in the year following the pay rise?

- Adam can afford to buy less than he could the previous year
- Adam can afford to buy the same as the previous year
- Adam can afford to buy roughly $1 \%$ more than the previous year
- Adam can afford to buy roughly $5 \%$ more than the previous year
- I don't know

4. Stephanie has some savings and wants to invest them. She is offered the opportunity to buy shares in a successful local company that is doing well. An alternative is to purchase a mutual fund offered by her bank, which invests the money in a mixture of shares in international companies and government bonds. Which best describes the risk involved?

- Investing in the local company represents a substantially greater risk
- Investing in the mutual fund represents a substantially greater risk
- The amount of risk is the same - it depends how the economy goes
- There is little risk in either case - the worst that could happen is she gets her money back
- I don't know

5. Michelle has two credit cards. Both have outstanding balances. Card X has a higher credit limit but also a higher interest rate than Card Y. What is the most cost-effective way for Michelle to pay off her debts?

- She should pay off as much as she can on Card X and the minimum on Card Y
- She should pay off as much as she can on Card Y and the minimum on Card X
- She should pay off an amount on each card in proportion to how much she owes on each
- She should pay off an equal amount on each card
- I don't know

6. Frank is planning to make an investment of $€ 10,000$ for at least 5 years. Company A offers him the chance to invest his money in a fund that buys international shares. The management fee is $1.3 \%$ of the fund value each year. Company B offers the same product with a lower fee of $1.0 \%$, but it charges an initial set-up fee of $€ 100$. Which fund is likely to be better value for Frank?

- The fund offered by Company A
- The fund offered by Company B
- Both Companies offer the same long-term value
- It is impossible to say which fund offers better long-term value
- I don't know


Figure 7: Proportion Correct by Question

## Producer Profit Test

1. How do banks make money from people who open current accounts with them? Select all that apply

- Banks subtract maintenance fees directly from the accounts of most account holders
- Banks take a very small percentage of the customer's balance each year
- The more money people put in accounts; the more money banks have to lend to other customers
- Banks are paid small amounts by shops each time customers use their debit cards
- The more customers a bank has; the more fees it collects for services like international transfers/banker's drafts/currency exchange and so on
- Banks receive support from the government which is linked to how many account-holders they have

2. How do banks make money from people who take out mortgages with them? Select all that apply

- The total payments banks get from a customer over many years is much greater than the lump sum they initially lend the customer to buy the house
- Bank ends up owning properties of people who don't keep up with their mortgage repayments
- Banks get to increase mortgage repayments as house prices go up
- Banks benefit from selling home and life insurance to customers who take out mortgages

3. How do banks make money from giving people personal loans? Select all that apply

- Banks receive payments from car dealers when loans are used to buy cars
- Banks get customers to pay back the amount they lend plus some extra
- Banks profit from penalties charged to people who forget to make repayments
- Banks borrow at lower interest rates than the rates they charge customers; making a profit on the difference

4. How do banks make money from people who have credit cards with them? Select all that apply

- Banks charge penalty fees if customers do not make minimum monthly repayments
- Banks are paid by businesses when credit cards are used to make online purchases
- Banks charge immediate interest on cash withdrawals even if they are repaid the following month
- Banks add a small percentage to all purchases made with a credit card
- Banks add interest to any amount not repaid the following month
- Banks analyse what individual customers spend money on and sell this information to advertisers


## Correlations and Consistency of Measures

The pairwise correlation coefficients for each financial literacy test are shown below. Note that the low but positive correlations are indicative of the questions probing different domain-specific aspects of financial understanding.

|  | Inflation | Diversification | FundFees | Loan Repay | CreditCard | Compound\% |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Inflation | 1.0000 |  |  |  |  |  |
| Diversification | 0.1671 | 1.0000 |  |  |  |  |
| FundFees | 0.1672 | 0.1947 | 1.0000 |  |  |  |
| Loan Repay | 0.0960 | 0.0594 | 0.0705 | 1.0000 |  |  |
| CreditCard | 0.2198 | 0.2170 | 0.1220 | 0.0784 | 1.0000 |  |
| Compund\% | 0.1549 | 0.2415 | 0.1335 | 0.0503 | 0.1951 | 1.0000 |

Table 7.2: Pearson's correlation coefficient between Financial Literacy Questions

|  | Bank a/c | Mortgage | Loan | Credit Card |
| :--- | :---: | :---: | :---: | :---: |
| Bank a/c | 1.0000 |  |  |  |
| Mortgage | 0.1572 | 1.0000 |  |  |
| Loan | 0.1471 | 0.2552 | 1.0000 |  |
| Credit Card | 0.2277 | 0.2659 | 0.1783 | 1.0000 |

Table 7.3: Pearson's Correlation Coefficient between Question scores on the Producer Profit Quiz

The Cronbach's alpha, a measure of scale reliability or internal consistency, is 0.5 for both scales. This is similar to measures reported for other scales: Rieger (2020) record measures of 0.42 for the Lusardi and Mitchell (2011) financial literacy scale, and a range of 0.29 to 0.66 for other published financial literacy measures (e.g. Burke and Manz, 2014, Cumurović and Hyll, 2019). These figures would be considered low if the purpose was to measure an underlying psychological trait like extraversion. However, we think of financial literacy as understanding a range of domain-specific relationships. As such, reliability is not necessarily to be expected nor desirable when testing components of financial literacy. For instance it is important to understand the completely independent concepts of diversification and compound interest to be financially literate in the round.

### 7.2 Differences between Switchers and Non-Switchers by Product

This section gives a breakdown of the differences between switchers and non-switchers a the product level, and provides the details underlying the summary table in Section 4.4. of the main text. Note that in this table results from the two financial literacy scales are shown separately for full transparency.

## Bank Accounts

Table 7.4 gives a T-test table for switchers and non-switchers of bank accounts. The first two columns give the averages for each variable while the next two provide the mean and standard errors together with significance levels for the two groups.

|  | Switcher | Non-Switcher | Diff. (Switcher - Non) | S.E. | Obs. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Compared Options Originally | 0.547 | 0.212 | $0.335^{* * *}$ | $(0.024)$ | 2860 |
| Score out of Six in Fin Lit | 2.994 | 2.872 | 0.122 | $(0.076)$ | 2860 |
| Producer-Profit Net Score | 3.745 | 3.874 | -0.129 | $(0.110)$ | 2860 |
| Age | 45.516 | 48.364 | $-2.847^{* * *}$ | $(0.676)$ | 2860 |
| Female (ref = not female) | 0.451 | 0.508 | $-0.057^{* *}$ | $(0.025)$ | 2860 |
| Degree | 0.476 | 0.388 | $0.087^{* * *}$ | $(0.025)$ | 2860 |
| Estimated Savings from Switching | 0.350 | -0.069 | $0.418^{* * *}$ | $(0.057)$ | 2687 |
| Estimated Price Dispersion | 0.231 | -0.047 | $0.278^{* * *}$ | $(0.056)$ | 2754 |
|  |  |  |  |  |  |

Table 7.4: Bank account Balance Table: Differences between switchers and non-switchers.All tests are t -tests assuming unequal variance. Note: ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.10$.

Switchers were significantly more likely to compare products originally. This difference emerges across all products. In terms of demographics, bank account switchers were about three years younger on average ( p $<0.01$ ), less likely to be female $(\mathrm{p}<0.05)$ and significantly more likely to hold a higher degree $(\mathrm{p}<0.01)$. There was no difference in financial literacy or knowledge of how companies profit from providing financial services.

The estimates of savings and price dispersion shown in the table above have been standardised to ease interpretation (note that non-standardised measures are shown in Figures 3 and 4 in the main text). Also
note the smaller sample size as outliers have been removed. The average estimate of savings in the switcher group is 0.35 standard deviations above the overall mean. The gap between groups is highly significant (p $<$ 0.01). Perhaps relatedly, switchers also perceive price dispersion between bank accounts to be much greater ( $\mathrm{p}<0.01$ ).

## Mortgages

Table 7.5 displays a T-test table for switchers and non-switchers of mortgages. Switchers were significantly more likely to compare products originally ( $\mathrm{p}<0.01$ ). The difference in performance on financial literacy and producer-profit tests were highly significant, with switchers doing better on both ( $\mathrm{p}<0.01$ ). Mortgage switchers were younger than non-switchers by about five years ( $\mathrm{p}<0.01$ ) and more likely to have a degree ( $\mathrm{p}<0.01$ ). The point estimate shows that a lower proportion of switchers than non-switchers were female, and the gap is equivalent to that of bank accounts, but here the difference is not significant due to the smaller sample size. Switchers estimates of their savings from switching were substantially higher than the hypothetical savings estimates of non-switchers ( $\mathrm{p}<0.01$ ). Interestingly, the difference in perceived price dispersion across mortgages goes in the opposite direction, but it is not significant.

|  | Switcher | Non-Switcher | Diff. (Switcher - Non) | S.E. | Obs. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Compared Options Originally | 0.776 | 0.526 | $0.250^{* * *}$ | $(0.050)$ | 1192 |
| Score out of Six in Fin Lit | 3.618 | 3.030 | $0.589^{* * *}$ | $(0.204)$ | 1192 |
| Producer-Profit Net Score | 4.658 | 3.950 | $0.708^{* * *}$ | $(0.246)$ | 1192 |
| Age | 42.053 | 47.464 | $-5.412^{* * *}$ | $(1.028)$ | 1192 |
| Female (ref = not female ) | 0.395 | 0.445 | -0.051 | $(0.058)$ | 1192 |
| Degree Holder | 0.671 | 0.435 | $0.236^{* * *}$ | $(0.056)$ | 1192 |
| Estimated Savings from Switching | 0.817 | -0.047 | $0.864^{* * *}$ | $(0.171)$ | 1122 |
| Estimated Price Dispersion | -0.152 | 0.010 | -0.162 | $(0.108)$ | 1153 |
|  |  |  |  |  |  |

Table 7.5: Mortgages Balance Table: Differences between switchers and non-switchers. All tests are t-tests assuming unequal variance. Note: ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.10$.

|  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Switcher | Non-Switcher | Diff. (Switcher - Non) | S.E. | Obs. |
| Compared Options Originally | 0.580 | 0.298 | $0.281^{* * *}$ | $(0.054)$ | 1445 |
| Score out of Six in Fin Lit | 2.818 | 2.903 | -0.085 | $(0.171)$ | 1445 |
| Producer-Profit Net Score | 3.182 | 3.822 | $-0.641^{* *}$ | $(0.292)$ | 1445 |
| Age | 45.557 | 46.403 | -0.846 | $(1.408)$ | 1445 |
| Female (ref = not female) | 0.534 | 0.470 | 0.064 | $(0.055)$ | 1445 |
| Degree Holder | 0.386 | 0.374 | 0.012 | $(0.054)$ | 1445 |
| Estimated Savings from Switching | 0.930 | -0.054 | $0.984^{* * *}$ | $(0.164)$ | 1357 |
| Estimated Price Dispersion | 0.008 | -0.001 | 0.009 | $(0.118)$ | 1384 |
|  |  |  |  |  |  |

Table 7.6: Loans Balance Table: Differences between switchers and non-switchers. All tests are t-tests assuming unequal variance. Note: ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,^{*} \mathrm{p}<0.10$.

## Loans

Table 7.6 above shows the T-test results for switchers and non-switchers of loans. Switchers were significantly more likely to compare products originally ( $\mathrm{p}<0.01$ ). The performance gap in the Producer Profit quiz goes in the opposite direction to that of mortgages, with non-switchers scoring higher ( $\mathrm{p}<0.05$ ). There was no difference in terms of education, age or gender. Switchers estimates of savings were substantially higher than those of non-switchers ( $\mathrm{p}<0.01$ ). There was no difference in price dispersion estimates.

## Credit Cards

Table 7.7 gives a T-test table for switchers and non-switchers of credit cards. Switchers were more likely to compare offers originally ( $\mathrm{p}<0.01$ ), and scored marginally better on the financial literacy test ( $\mathrm{p}<0.01$ ). The only socio-demographic difference was that switchers were younger ( $\mathrm{p}<0.05$ ). Switchers estimated substantially higher annual savings from switching, with the effect size approximately one standard deviation ( $\mathrm{p}<0.01$ ).

|  | Switcher | Non-Switcher | Diff. (Switcher - Non) | S.E. | Obs. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Compared Options Originally | 0.640 | 0.201 | $0.439^{* * *}$ | $(0.036)$ | 1600 |
| Score out of Six in Fin Lit | 3.290 | 3.057 | $0.233^{*}$ | $(0.123)$ | 1600 |
| Producer-Profit Net Score | 4.115 | 4.118 | -0.003 | $(0.168)$ | 1600 |
| Age | 49.490 | 51.685 | $-2.195^{* *}$ | $(1.048)$ | 1600 |
| Female (ref = not female) | 0.395 | 0.453 | -0.058 | $(0.037)$ | 1600 |
| Degree Holder | 0.480 | 0.446 | 0.034 | $(0.038)$ | 1600 |
| Estimated Savings from Switching | 0.930 | -0.054 | $0.984^{* * *}$ | $(0.164)$ | 1357 |
| Estimated Price Dispersion | 0.008 | -0.001 | 0.009 | $(0.118)$ | 1384 |
|  |  |  |  |  |  |

Table 7.7: Credit Cards Balance Table: Differences between switchers and non-switchers.All tests are t-tests assuming unequal variance. Note: ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,^{*} \mathrm{p}<0.10$.

### 7.3 Subjective Financial Capability

## Table of Correlations between Measures

The table below shows the correlation matrix between the two objective measures of financial understanding

- the number correct out of 6 on the applied financial literacy scale and net score on the producer-profit quiz - and the three subjective measures, namely self-rated confidence, own knowledge and others' knowledge. The table also includes the knowledge gap between the latter two measures.

|  | FL total correct | PP Net Score | FinConf | SelfKnowl | OthersKnowl |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| PP Net Score | 0.3351 |  |  |  |  |
| Fin Confidence | 0.2366 | 0.1454 |  |  |  |
| SelfKnowl | 0.2877 | 0.0798 | 0.6785 |  |  |
| OthersKnowl | -0.0724 | -0.1385 | 0.2965 | 0.4293 |  |
| Knowledge Gap | 0.3470 | 0.2005 | 0.4068 | 0.6064 | -0.4579 |

Table 7.8: Table of Correlations between objective and subjective financial capability measures. Note that the diagonal on which all correlations are 1 has been excluded. This means ' FL total correct' is only shown as a column and 'Knowledge Gap' as a row.

The main text plotted financial knowledge acorss deciles of objective financial understanding. Figure 8 below shows the relationship with performance for mean financial confidence, rated on a 1-7 scale of "not confident at all" to "highly confident". The graph slopes upwards, indicating that on average confidence has a basis in reality, but note that even the lowest level of performers rate themselves above the midpoint of the scale on average, suggesting overconfidence.


Figure 8: Financial Confidence across Deciles of Performance on Financial Knowledge Scales

### 7.4 Additional Regression Analysis Results



Figure 9: Log-odds coefficients for model with four-level categorical variable for comparison in original choice

Table 7.9: Omitting Those Who Switched Over Five Years Ago

|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ |
| :--- | :---: | :---: | :---: | :---: |
| Compared Options Originally | $0.3076^{* * *}$ | $0.0563^{* * *}$ | $0.0809^{* * *}$ | $0.3140^{* * *}$ |
| Score out of Six in Fin Lit | $(0.0229)$ | $(0.0153)$ | $(0.0175)$ | $(0.0287)$ |
|  | -0.0033 | 0.0062 | -0.0011 | 0.0057 |
| Producer-Profit Net Score | $(0.0059)$ | $(0.0058)$ | $(0.0048)$ | $(0.0064)$ |
|  | -0.0004 | $0.0111^{* * *}$ | $-0.0058^{* *}$ | 0.0010 |
| Price Disp Q2 (ref = Q1) | $(0.0040)$ | $(0.0042)$ | $(0.0029)$ | $(0.0042)$ |
|  | $0.0419^{*}$ | -0.0342 | -0.0085 | $0.0466^{*}$ |
| Price Disp Q3 | $(0.0218)$ | $(0.0253)$ | $(0.0211)$ | $(0.0258)$ |
|  | $0.0496^{* *}$ | -0.0225 | -0.0271 | -0.0086 |
| Price Disp. Q4 | $(0.0230)$ | $(0.0254)$ | $(0.0184)$ | $(0.0227)$ |
|  | $0.1338^{* * *}$ | $-0.0600^{* *}$ | -0.0194 | 0.0125 |
| Diploma (ref = upper secondary and below) | $(0.0245)$ | $(0.0245)$ | $(0.0196)$ | $(0.0261)$ |
|  | $0.0448^{* *}$ | -0.0343 | $-0.0367^{* *}$ | 0.0237 |
| Degree or Higher | $(0.0213)$ | $(0.0228)$ | $(0.0167)$ | $(0.0254)$ |
|  | $0.0407^{* *}$ | 0.0051 | -0.0224 | -0.0151 |
| Female | $(0.0196)$ | $(0.0232)$ | $(0.0170)$ | $(0.0222)$ |
| Age | -0.0165 | 0.0094 | 0.0215 | -0.0052 |
|  | $(0.0168)$ | $(0.0171)$ | $(0.0136)$ | $(0.0186)$ |
| Age Squared | $0.0112^{* * *}$ | $0.0130^{* *}$ | 0.0048 | 0.0051 |
| Financial Confidence | $(0.0037)$ | $(0.0066)$ | $(0.0033)$ | $(0.0041)$ |
| Perceived Fin. Knowledge | $-0.0001^{* * *}$ | $-0.0002^{* *}$ | -0.0000 | -0.0001 |
|  | $(0.0000)$ | $(0.0001)$ | $(0.0000)$ | $(0.0000)$ |
| Observations | -0.0020 | -0.0052 | -0.0042 | 0.0051 |
| Stan | $(0.0078)$ | $(0.0087)$ | $(0.0062)$ | $(0.0097)$ |
|  | $0.0243^{* * *}$ | $0.0183^{*}$ | $0.0113^{*}$ | 0.0103 |
|  | $(0.0080)$ | $(0.0097)$ | $(0.0067)$ | $(0.0101)$ |
|  | 2249 | 1054 | 1395 | 1401 |

Standard errors in parentheses. Dependent variable: Ever Switch. ${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$

Table 7.10: Product-Specific Logistic Regression Predicting Ever Switching

|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ |
| :--- | :---: | :---: | :---: | :---: |
| Compared Options Originally | $0.3078^{* * *}$ | $0.1043^{* * *}$ | $0.1107^{* * *}$ | $0.3560^{* * *}$ |
|  | $(0.0205)$ | $(0.0219)$ | $(0.0196)$ | $(0.0270)$ |
| Score out of Six in Fin Lit | 0.0011 | $0.0208^{* *}$ | -0.0034 | $0.0124^{*}$ |
|  | $(0.0064)$ | $(0.0082)$ | $(0.0057)$ | $(0.0075)$ |
| Producer-Profit Net Score | 0.0049 | $0.0149^{* * *}$ | -0.0050 | 0.0061 |
|  | $(0.0043)$ | $(0.0057)$ | $(0.0035)$ | $(0.0051)$ |
| Price Disp Q2 (ref = Q1) | 0.0380 | -0.0396 | 0.0094 | 0.0462 |
|  | $(0.0239)$ | $(0.0315)$ | $(0.0237)$ | $(0.0289)$ |
| Price Disp Q3 | $0.0474^{*}$ | -0.0031 | -0.0180 | 0.0145 |
|  | $(0.0254)$ | $(0.0324)$ | $(0.0212)$ | $(0.0270)$ |
| Price Disp. Q4 | $0.1389^{* * *}$ | -0.0470 | -0.0130 | 0.0499 |
|  | $(0.0261)$ | $(0.0337)$ | $(0.0226)$ | $(0.0312)$ |
| Diploma (ref = upper secondary and below) | $0.0682^{* * *}$ | -0.0424 | $-0.0375^{* *}$ | 0.0222 |
|  | $(0.0222)$ | $(0.0299)$ | $(0.0189)$ | $(0.0277)$ |
| Degree or Higher | $0.0455^{* *}$ | -0.0129 | -0.0087 | -0.0162 |
|  | $(0.0211)$ | $(0.0296)$ | $(0.0197)$ | $(0.0254)$ |
| Female (ref = not) | $-0.0474^{* * *}$ | 0.0146 | 0.0176 | -0.0312 |
| Age | $(0.0181)$ | $(0.0236)$ | $(0.0161)$ | $(0.0214)$ |
| Age Squared | $0.0217^{* * *}$ | $0.0245^{* * *}$ | $0.0072^{*}$ | $0.0150^{* * *}$ |
| Financial Confidence | $(0.0040)$ | $(0.0081)$ | $(0.0039)$ | $(0.0052)$ |
| Perceived Fin. Knowledge | $-0.0002^{* * *}$ | $-0.0002^{* * *}$ | -0.0001 | $-0.0001^{* *}$ |
|  | $(0.0000)$ | $(0.0001)$ | $(0.0000)$ | $(0.0000)$ |
| Observations | -0.0043 | -0.0077 | -0.0073 | -0.0086 |
| Stan | $(0.0081)$ | $(0.0114)$ | $(0.0076)$ | $(0.0109)$ |
|  | 0.0124 | 0.0187 | $0.0166^{* *}$ | 0.0108 |
|  | $(0.0086)$ | $(0.0125)$ | $(0.0082)$ | $(0.0116)$ |

Standard errors in parentheses. Dependent variable: Ever Switch. ${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$

## 8 Complete Instrumentation

This section reproduces all the questions participants were asked.

## INFORMATION SHEET

Study Information

## Please read the following information carefully

Many thanks for participating in this research. This information page explains what to expect.

## Who is conducting the study?

We are the Behavioural Research Unit at the Economic and Social Research Institute (ESRI). We are funded by public bodies interested in helping to understand how people make decisions.

## What is the study about?

This study is about financial decisions. We are interested in your experience with financial products (e.g., bank accounts), as well as your thoughts on general financial matters. The study takes about 20 minutes to complete.

## What is expected of me?

We will first ask you to confirm that you are willing to participate. You will then answer some questions about your experience and opinions about financial products, such as mortgages or credit cards. Please complete the study on your computer or laptop, with the browser window set to full screen, or on your mobile phone on landscape mode (turn your phone sideways to make it widescreen).
(Click Next to continue)

Is there any reason I can't take part?

You must be 18 years or over.

## What do I need to do?

We would like you to read the instructions and questions carefully and then answer as best you can. Where questions ask what you would do in a given situation or ask for your opinion about something, please answer as honestly as possible. The study will only take around 20 minutes. Please complete it in one sitting. If you have difficulty loading any page, please refresh your browser - the programme will save your progress as you complete the study. (Click Next to continue)

## How will my responses be recorded?

All of your answers will remain confidential. They will not be stored with your name. Instead, we store them against a number (your 'Private ID'). So all responses are kept anonymous. The responses will initially be held on the survey company's Microsoft servers in Dublin, then transferred to secure files on computers in the ESRI. Once all responses have been made anonymous they will be put up online for other researchers to study, in line with best scientific practice. Data Protection This study is carried out in accordance with Data Protection legislation. If you have any queries in relation to this, please contact DataProtection@esri.ie
(Click Next to continue)

## CONSENT FORM

Behavioural Research Unit Participant Consent Form Please read the below information carefully.

- I have read and understand the information on the previous pages, which explains the nature of the study I am to undertake.
- I consent to taking part as a study participant.
- I confirm that I am aged 18 or over.
- I understand that the aim of the research is to understand people's opinions and behaviour in relation to financial products.
- I understand that I will be presented with a series of tasks through my browser and that my responses will initially be recorded and stored on Gorilla's Microsoft servers in Dublin. I understand that, once all data has been collected, my responses will subsequently be deleted from those servers and stored on ESRI computers only.
- I understand that the study data will be stored against a Private ID which is unique to this study and cannot be used to identify me.
- I understand that the data will be available to researchers and will only be used for research purposes. I understand that my anonymous responses may be made available in online data repositories for research purposes.
- I understand that I may withdraw participation at any point during the study by exiting the web browser, and that no data will be stored unless I complete the study in full.
- I understand that once I complete the study in full I will not be able to withdraw my data (as this data will be completely anonymised and so cannot be linked to me).

I have read and understood the above and consent to taking part as an experimental participant.

## FILTER 1: ELIGIBILITY

## F1. Are you involved in the financial decisions taken in your household? This may include any of the following:

- deciding where to have your individual bank account
- choosing your mortgage OR how much to pay in rent
- deciding whether to get a loan
- choosing and paying for a credit card
- making investments
- switching between different providers for financial products.

Please select the option that best applies to your situation:

- I am the sole financial decision-maker in my household
- I am sharing financial decision-making with another person (for example with a partner or other household member)
- I am not involved in making financial decisions
- Banks and other companies provide a range of financial products.


## FILTER 2: PICK PRODUCTS

Which of the following financial products do you currently have? (Select all that apply)
(Note: Do not select 'Personal loan' if you only have a loan from the government, for example to cover university fees)

- Bank account
- Mortgage
- Personal loan
- Credit card
- None of the above

Please tick any products you had in the past five years but don't have anymore, for whatever reason. You do not need to answer this question if it doesn't apply to you - just click the 'Next' button.

- Mortgage
- Personal Loan


## PERSUASION TO COMPLETE

The rest of this survey involves questions about your financial products and how you choose them. Your answers are important, because the ESRI is using the study to design ways to improve people's understanding of how banks and finance work, so they can make better financial decisions and save money. All your answers are completely anonymous. Please take your time. You may find some questions difficult. That's ok, just answer them as best you can. We are grateful for your help.

## COMPANY AND SATISFACTION

You said you have a bank current account. Which company (or companies) do you have a bank current account with? Please select all that apply. The mobile apps listed below are also bank accounts, even though they don't have physical branches, so click them as well if you have them.

- Bank of Ireland
- AIB
- KBC
- Ulster Bank
- Permanent TSB
- An Post
- EBS
- Local Credit Union
- Revolut
- N26
- Other

Which company or companies do you have a mortgage with? Please select all that apply

- Bank of Ireland
- AIB
- KBC
- Ulster Bank
- Permanent TSB
- EBS
- Avant Money
- Local Credit Union
- Finance Ireland
- Haven
- ICS Mortgages
- Other

Which company or companies do you have a loan with? Please select all that apply

- Bank of Ireland
- AIB
- KBC
- Ulster Bank
- Permanent TSB
- EBS
- Chill Money
- An Post
- N26
- Local Credit Union
- Avant Money
- Other

Which company or companies do you have a credit card with? Please select all that apply

- Avant Money
- AIB
- Bank of Ireland Visa
- Permanent TSB Visa
- EBS
- Local Credit Union
- Revolut
- Chill Money
- An Post
- Other

Please think about to your experience with your (provider selected) [product]. How satisfied are you with:

The quality of the customer service of your (provider selected) [product] (Very unsatisfied-Very satisfied)

The price you pay for your (provider selected) [product] (Very unsatisfied-Very satisfied)

## SWITCHING HISTORY

On the next few pages you will be asked about whether you have switched the company or bank you get your financial products from. Switching is when YOU do any of the following:

- Decide to change to a different company.
- Approach your company and get a better deal from them.
- Get a new product (e.g. a new bank account) to replace your old one, even if you do not close the old one immediately.
- Move to a new company because you heard your current one going to leave the market.

But the following situations are NOT switching:

- You are 'rolled over' on to a new contract after your old one expires.
- You are transferred to a different company because your old company stops providing the service.
- You open a new bank account because you moved country and you did not close your old bank account.


## SH1: Have you ever switched your [product] in the past?

- Yes
- No
- I didn’t know I could switch my bank account
- I don't remember

If yes to $\mathbf{S H 1}$ :

## SH2 When did you switch your [product]?

- In the past 12 months
- Between 1-3 years ago
- Between 3-5 years ago
- More than 5 years ago but less than 10 years ago
- More than 10 years ago

If No to SH1 or "More than 5 years ago" to SH2:

SH3 You said you switched your [product] more than 5 years ago. But in the *last 5 years* which of the statements below best reflect your experience of switching?

- I never considered switching my [product] in the past 5 years
- I thought about switching my [product] (again) but never did anything
- I looked into switching my [product] (again) but didn't take it very far. (For example, I checked what other companies offered or what the switching process involved, but I did not take any formal steps like filling out forms or contacting companies)
- I started the process of switching my [product] (again) but didn't complete it. (For example, I contacted my current company about leaving, an alternative company about joining them or a broker.)


## CHOICE OF ORIGINAL PRODUCT

In this stage we are going to ask you about each of the financial products you said you hold:

1. First we will ask you about your [Product with highest switching score]
2. Then about your mortgage [Product with 2 nd highest switching score, if applicable]
3. Then about your credit card [Product with 3rd highest switching score, if applicable]
4. And finally about your bank account [Product with 4th highest switching score, if applicable]

There are a lot of questions, and you might be unsure for some of them. Please try your best. Also remember that all responses you give are completely anonymous and cannot be traced to you.

OC1 Thinking back to when you first got a mortgage, did you use a broker or professional advisor to help you pick which mortgage to get?

- Yes
- No
- I don't remember

If $\mathrm{OC} 1=$ yes proceed to $\mathbf{O C 2}$, If $\mathrm{OC} 1=$ no proceed to $\mathbf{O C} \mathbf{3}$

OC2 Did you compare offers from different companies when you first got your mortgage?

- Yes - the broker picked out more than one mortgage so that I could compare
- No - the broker picked one out and I went with that mortgage
- I don't remember

If $\mathrm{OC} 3=$ yes proceed to $\mathbf{O C} 4$, If $\mathrm{OC} 3=$ no/don't remember proceed to OC 5

OC4 How many [product] offers did you compare?

- I compared 2 bank account offers
- I compared 3 bank account offers
- I compared 4 or more bank account offers

OC5 How did you choose the [product]?

FOR BANK ACCOUNTS

- I don't remember choosing it or someone else set it up for me
- I set one up with the company my family/friends were with
- I went with one advertising a deal, either in person (e.g. on a college campus) or marketing materials
- I went with the first one which seemed reliable and decent value
- I went with a company I used already (e.g. for my bank account or savings account or loan)
- I went with the [product] recommended by a [product] broker
- I went with the [product] recommended by a family member or friend
- I went with a company advertising a deal
- I went with the first company that approved me for a [product]

FOR CREDIT CARDS

- I went with a company I used already (e.g. for my bank account or savings account or mortgage etc.)
- I went with a company recommended by a family member/friend/other
- I went with a company that offered benefits that I wanted (e.g. travel benefits, insurance)
- I went with a company advertising a deal

OC6 When first choosing your [product] card, did you use any of the below to help you decide? Please select all that apply

- Price comparison website
- Online interactive calculator
- Financial advice website
- Company website
- Financial mobile app
- Other online resource
- None of the above


## SWITCHING QUESTIONS

Thank you for sharing how you first chose your [product]. Next we are now going to ask you about your experience later with [product] switching. Earlier in this survey, you selected the option: [insert switching activity level selected] The following series of questions relate to your experience in the past five years.

## S1 Thinking back to when you first considered switching your [product], what was the initial reason or prompt for this course of action? Please select one option.

FOR BANK ACCOUNTS/LOANS/CREDIT CARDS

- A family member or friend talked about it
- I wanted to reduce my spending and switching my [product] seemed a good way to do this
- I saw/heard an advertising campaign about switching
- My [product] provider had increased its prices or was about to (e.g. introduced new fees or increased the interest rate)
- I had a bad experience with my [product] provider and I wanted to switch away from them
- I received professional financial advice to switch my mortgage/loan/credit card
- I heard the company I was with was leaving the Irish market
- Other


## FOR MORTGAGES

- A family member or friend talked about it
- I wanted to reduce my spending and switching my product seemed a good way to do this
- I saw/heard an advertising campaign about switching
- My mortgage provider had increased the interest rate on my variable-rate mortgage, or was about to do so
- The fixed-rate period on my mortgage was coming to an end
- I had a bad experience with my product provider and I wanted to switch away from them
- I received professional financial advice to switch my product
- My mortgage company informed me that I could save money by changing my mortgage deal
- I heard the company I was with was leaving the Irish market
- Other

If $\mathrm{S} 1=\mathrm{A}$ family member or friend talked about it-I saw/heard an advertising campaign about proceed to $\mathbf{S 2}$, else proceed to $\mathbf{S 3}$

S2 What was your primary motivation for (thinking about/looking into/starting the process of) switching your [product]?

FOR BANK ACCOUNTS/LOANS/CREDIT CARDS

- To save money
- I was dissatisfied with the customer service of my previous company
- I was dissatisfied with the online services of my previous company
- None of the above

FOR MORTGAGES

- To save money on repayments
- To get more certainty over my future monthly repayments
- To get cashback from switching
- I was dissatisfied with the customer service or online services of the company I was with
- None of the above


## S3 You indicated earlier that you thought about switching your [product] but never looked into it properly. What was the main reason you didn't look into it? Please select one option.

- I forgot about it/other things took priority
- It seemed very complicated and time consuming
- I wasn't certain I would save any money
- Other


## S4 Please select all the statements that apply to your experience of switching [product]

 or considering to switch.- I looked up offers of other companies to check the savings I could make
- I got advice from a family member and/or friend and/or work colleague
- I informed my current provider about my intention to switch or discussed getting a better deal with them
- I checked the time and paperwork involved in switching
- I checked the financial costs involved in switching
- I consulted a professional financial advisor
- I thought about the risk of making a mistake, such as moving to a loan company that was actually more expensive, or had worse customer service.

S5 Thinking back to when you switched your bank account, do you remember using a switching code or 'switching pack' of documents which the bank you were moving to gave you?

Choose N/A if you switched to an online bank account like Revolut or N26.

- Yes I remember using a switching pack I was given
- No, I did not use a switching pack
- I don't remember
- N/A - this question does not apply to me


# S6 When (looking into switching) your [product], did you use any of the below to help you decide? Please select all that apply 

Choose N/A if you switched to an online bank account like Revolut or N26.

- Price comparison website
- Online interactive calculator
- Financial advice website
- Company website
- Financial mobile app
- Other online resource
- None of the above


## S7 What aspects of the [product] you (tried to) switch(ed) to were attractive compared to the one you left?

Please rank the following factors - Click on the option you think is most important first, then the second most important option, and so on. Only rank options that actually mattered for you, there is no need to rank them all.

When you are happy with your rankings, press the red "Confirm" button (below the options). All options below were randomised

FOR BANK ACCOUNTS

- "More reputable or trustworthy",
- "Lower account maintenance and usage fees"
- "More flexible and easier to use abroad"
- "Better online and mobile banking"
- "Better customer service"
- "Introductory offers"
- "Proximity of branch location"
- "Getting the account allowed me to get a better deal on a loan or mortgage with the same company"


## FOR MORTGAGES

- "More reputable or trustworthy",
- "Lower interest rate",
- "Cashback",
- "More certainty about future repayments",
- "Better online and mobile banking to track payments",
- "More flexibility (e.g. to make extra repayments)"
- "Better customer service",
- "Proximity of branch location"

FOR LOANS

- "More reputable or trustworthy"
- "Lower interest rate"
- "More certainty about future repayments"
- "Better online and mobile banking to track payments"
- "More flexibility (e.g. to make extra repayments)"
- "Better customer service"
- "Proximity of branch location"


## FOR CREDIT CARDS

- "More Reputable or trustworthy provider"
- "Lower interest rate"
- "0
- "Refund on interest payments"
- "Better rewards such as points towards flights"
- "Lower fees such as for late payments or cash withdrawals"
- "Better online and mobile banking to track payments"
- "Better customer service"
- "Proximity of branch location"

To undo a previous ranking, click on it again. To start over, click "Clear". When you are happy with your rankings, press the red "Confirm" button.

## S8 Do you remember what kind of mortgage you switched from?

If you switched soon after your fixed-rate period ended, so technically you had been put onto the standard variable rate by the lender, you should still count that as switching from a fixed-rate mortgage.

- I switched from a fixed-rate mortgage
- I switched from a variable-rate mortgage
- Don't know


## S9 Do you remember what kind of mortgage you switched to?

- I switched to a fixed-rate mortgage
- I switched to a variable-rate mortgage
- Don't know

S10 Did you encounter any difficulties when (you investigated/looked into) switching your [product]?
(Please select all that apply)

- High costs came up, such as solicitor fees, early repayment fees or any other fees
- It was difficult figuring out the final price of offers and/or comparing them
- Uncertainty about how long it would take to switch
- There weren't many alternative offers that were better value
- The amount of paperwork required
- It was difficult to figure out if I was eligible for better-value deals
- Other (please specify in box below)
- None of the above

S11 You indicated earlier that you thought about switching your [product] but never looked into it properly. What was the main reason you didn't look into it? Please select one option.

- I forgot about it/other things took priority
- I was worried I might make a mistake
- It seemed very complicated and time consuming
- I wasn't certain I would save any money

S12 What is the primary reason you did not complete the switching process for your [product]?

- I didn't have time/other things took priority
- The time commitment for switching seemed excessive and I decided it wasn't worth it
- The process seemed very complicated with lots of paperwork and I decided it wasn't worth it.
- The financial cost involved in switching seemed excessive and I decided it wasn't worth it
- I was wary about making a mistake, or regretting my decision, and decided not to proceed with switching.
- Other (please specify)


# S13 How satisfied are you with your decision to switch/not switch your [product]? 

Not at all satisfied 1234567 Completely satisfied

## ESTIMATED SAVINGS

Please give us your best guess of how much you think you have saved per year in euro by switching to a different [product] provider?

Please take anything you had to pay in order to switch into account.

Type a zero if you think it saved you nothing, or a negative number if you think switching ended up costing more money than it saved.

E

## PRICE DISPERSION

This question is about how much [product]s cost. The amount customers pay for a [product] from a company depends on [the usage fees and maintenance fees/interest rate and the fees] that the company charges. Suppose that Mary/Bill and Anne/David have [product]s with different companies, but [they use their accounts in exactly the same way/they have the same type of mortgage and same pattern of repayments/they have the same type of loan and repayment history/they use their cards in exactly the same way]. While Mary has a [product] with the cheapest company in the Irish market, Anne has a loan with the most expensive company [of the main providers (e.g. banks, credit unions, An post)].

For every $€ 100$ that Mary/Bill pays each year in [interest and] fees on her/his [product], how much do you think Anne/David pays for the [product] with the most expensive company? If you think they both would pay the same, please write down €100.
$\epsilon$

## FINANCIAL LITERACY

Options for the questions below were randomised (the correct response is in bold)

FL1 Jenny takes out a 4-year loan to pay for a car. After 1 year, she decides that she could afford to increase her monthly repayments to pay the loan off at the end of 3 years instead of 4. Assuming the interest rate does not change, what will happen to the total cost of borrowing, i.e. how much it costs Jenny in total to borrow the money?

- The cost of borrowing will be higher if she pays the loan off in 3 years instead of 4
- The cost of borrowing will stay the same
- The cost of borrowing will be lower if she pays the loan off in 3 years instead of 4
- The cost of borrowing might be higher or lower - it depends on the type of loan

FL2 Paul puts €100 in a savings account that pays interest at $2 \%$ per year (APR). After 5 years the amount of money in Paul's account will be:

- €102
- Between €102 and €110
- Exactly €110
- A little more than €110

FL3 Adam gets a pay rise of $3 \%$. The current annual rate of inflation is $2 \%$. Which best describes Adam's financial situation in the year following the pay rise?

- Adam can afford to buy less than he could the previous year
- Adam can afford to buy the same as the previous year
- Adam can afford to buy roughly $1 \%$ more than the previous year
- Adam can afford to buy roughly $5 \%$ more than the previous year

FL4 Stephanie has some savings and wants to invest them. She is offered the opportunity to buy shares in a successful local company that is doing well. An alternative is to purchase a mutual fund offered by her bank, which invests the money in a mixture of shares in international companies and government bonds. Which best describes the risk involved?

- Investing in the local company represents a substantially greater risk
- Investing in the mutual fund represents a substantially greater risk
- The amount of risk is the same - it depends how the economy goes
- There is little risk in either case - the worst that could happen is she gets her money back

FL5 Michelle has two credit cards. Both have outstanding balances. Card X has a higher credit limit but also a higher interest rate than Card Y. What is the most cost-effective way for Michelle to pay off her debts?

- She should pay off as much as she can on Card $\mathbf{X}$ and the minimum on Card $\mathbf{Y}$
- She should pay off as much as she can on Card Y and the minimum on Card X
- She should pay off an amount on each card in proportion to how much she owes on each
- She should pay off an equal amount on each card

FL6 Frank is planning to make an investment of $€ 10,000$ for at least 5 years. Company A offers him the chance to invest his money in a fund that buys international shares. The management fee is $1.3 \%$ of the fund value each year. Company B offers the same product with a lower fee of $1.0 \%$, but it charges an initial set-up fee of $\in 100$. Which fund is likely to be better value for Frank?

- The fund offered by Company A
- The fund offered by Company B
- Both Companies offer the same long-term value
- It is impossible to say which fund offers better long-term value


## HOW BANKS MAKE MONEY

The correct responses are in bold. All options were randomised

Current Accounts:

HBMM1 How do banks make money from people who open current accounts with them? Tick all that apply

- The fund offered by Company A
- The fund offered by Company B
- Both Companies offer the same long-term value
- It is impossible to say which fund offers better long-term value

Mortgages:

HBMM2 How do banks make money from people who take out mortgages with them?

- The total payments banks get from a customer over many years is much greater than the lump sum they initially lend the customer to buy the house
- Bank ends up owning properties of people who don't keep up with their mortgage repayments
- Banks get to increase mortgage repayments as house prices go up
- Banks benefit from selling home and life insurance to customers who take out mortgages*

Loans:

HBMM3 How do banks make money from giving people personal loans?

- Banks receive payments from car dealers when loans are used to buy cars
- Banks get customers to pay back the amount they lend plus some extra
- Banks profit from penalties charged to people who forget to make repayments
- Banks borrow at lower interest rates than the rates they charge customers, making a profit on the difference

Credit Cards:

HBMM4 How do banks make money from people who have credit cards with them? Select all that apply

- Banks charge penalty fees if customers do not make minimum monthly repayments
- Banks are paid by businesses when credit cards are used to make online purchases
- Banks charge immediate interest on cash withdrawals even if they are repaid the following month*
- Banks add a small percentage to all purchases made with a credit card
- Banks add interest to any amount not repaid the following month
- Banks analyse what individual customers spend money on and sell this information to advertisers

PERCEIVED KNOWLEDGE (Savanta:ComRes, 2020)

How knowledgeable do you think each of the following are about general financial matters?

- You (1-7 Not all knowledgeable - Highly knowledgeable)
- The general population (1-7 Not all knowledgeable - Highly knowledgeable)

FINANCIAL CONFIDENCE (Savanta:ComRes, 2020)

Generally speaking, how do you feel about managing your money and financial matters?

- 1-7 (Not at all confident - Highly confident)


## GENERAL SWITCHING

Which of the below services, if any, have you switched in the last 3 years? Please select all that apply

- Gas
- Electricity
- Broadband
- Pay TV (e.g., SKY or Virgin media)
- Car insurance
- Health insurance
- Life insurance
- Home insurance
- Income protection insurance
- Mobile phone contract
- None of the above


## SOCIO-DEMOGRAPHICS MORTGAGE TYPE

What is your gender?

- Male
- Female
- Prefer not to say
- Other (please specify)

What age are you?

What region do you live in?

- Leinster - Dublin
- Leinster - Outside of Dublin
- Munster
- Connacht/Ulster

Which of the following best describes the area you live in?

- Urban
- Rural


## Which of the following best describes your housing situation?

- Living in own accommodation
- Renting
- Living at home with parents
- Other

If you have a mortgage, what kind of mortgage is it?

- Fixed-rate
- Variable-rate
- Tracker mortgage
- I don't know
- I don't have a mortgage

What is your nationality?

- Irish
- Other (please specify)

What is your highest level of educational attainment?

- Less than Junior Cert
- Junior Cert or equivalent
- Degree
- Leaving Certificate
- Technical or Vocational Certificate
- Diploma
- Masters
- Doctorate

Please indicate to which occupational group the Chief Income Earner in your household belongs, or which group fits best. If the Chief Income Earner is retired, or is not in paid employment but has been out of work for less than 6 months, please answer for their most recent occupation.

- Higher managerial / professional / administrative (e.g. doctor/board director)
- Intermediate manager / professional / administrative (e.g. newly qualified solicitor/middle manager)
- Supervisory or clerical / junior managerial / professional / administrative (e.g. office worker or salesperson) OR Student
- Skilled manual worker (e.g. bricklayer or bus/ambulance driver or pub/bar worker etc)
- Semi or unskilled manual work (e.g. manual workers or apprentice or shop assistant)
- Casual worker - not in permanent employment OR retired OR unemployed OR full-time carer
- Farmer / agricultural worker
- Unsure


## What is your current employment status?

- Employed full-time
- Employed part-time
- Self-employed
- Homemaker/Carer
- Furloughed/Temporarily unemployed due to COVID-19
- Seeking employment/Unemployed
- Retired
- Student
- Unable to work


## Which of the following best describes your current civil status?

- Single
- Married/Civil Partner/Cohabiting
- Divorced/Separated
- Widowed
(Note: If you are living in a shared household, for example renting with others, or you are living with parents but are financially independent, do not include the income of these others in your answer.)
- Up to $€ 20000$
- €20 000 - Є29 000
- €30 000 - Є39 000
- €40 000 - €49 000
- Є50 000 - Є69 000
- €70 000 - €89 000
- €90 000 - Є109 000
- €110000-Є129000
- €130000-€149000
- €150 $000+$
- Prefer not to answer

You are now finished the study. If you have comments about any part of it, or any general comments you would like to make, please write them in the box below. Otherwise, click 'Next' to exit.

Thank you for participating!

| Q | Content | Switchers | Started process | Looked into it | Thought about it |
| :---: | :---: | :---: | :---: | :---: | :---: |
| S1 | Prompt | X | X | X | X |
| S2 | Motivation (filter for prompt that is ambiguous re motivation) | X | X | X | X |
| S3 | Why not look into switching |  |  |  | X |
| S4 | All Steps Taken | X | X | X |  |
| S5 | Switching Pack (Only for Bank Accounts) | X |  |  |  |
| S6 | Online Tools to help switching | X | X | X |  |
| S7 | Rank Pull Factors | X | X | X |  |
| S8 | Type of mortgage switched to (Only for mortgages) | X |  |  |  |
| S9 | Type of mortgage switched from (Only for mortgages) | X |  |  |  |
| S10 | Difficulties faced | X | X |  |  |
| S11 | Rank reasons not to not looking into switching |  |  |  | X |
| S12 | Rank reasons not to completing the process |  | X | X |  |
| S13 | Satisfaction from (not) switching | X | X | X | X |


[^0]:    ${ }^{1}$ Directive 2008/48/EC made it illegal for firms to charge a fee for early repayments below $€ 10,000$ in a 12-month period (Article 16).

[^1]:    ${ }^{2}$ RED-C Research \& Marketing (https://redcresearch.ie/techniques/online-research/), Behaviour Attitudes (https://banda.ie/). Panel details for Behaviour Attitudes can be found on the study's OSF page (https://osf.io/98bvw/).

[^2]:    ${ }^{3}$ One advantage of this cut-off is that we can be more confident over the accuracy of the average recollection. We perform analyses on the group that ever switched in the Appendix
    ${ }^{4}$ For instance, one question was phrased "select all the steps you took when you looked into switching your . . ." but for switchers the phrasing was "when you switched your . . ."

[^3]:    ${ }^{5}$ It is called an average marginal effect because marginal effects are calculated at every observed value of each covariate and then averaged.For shorthand we use the term marginal effect or simply effect.

[^4]:    ${ }^{6}$ The results do not change if the two scores are included separately.
    ${ }^{7}$ Hereafter this variable will be referred to as the Comparison dummy or simply Comparison as shorthand.
    ${ }^{8}$ The list of options was as follows. 1) High costs came up, such as solicitor fees, early repayment fees or any other

