

Switching in the Mortgage Market – An Update (technical note)

November 2022

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1 Summary

- 1.1 This note is a follow up to our recent update on switching in the mortgage market. It describes the approach taken to reach the findings provided in the update as well as more in-depth analysis of switching in the mortgage market. In line with the update, the analysis presented here reflects the mortgage market up to the end of 2021. This note does not contain analysis on changes in the mortgage market since that time.
- 1.2 We present an update on the findings in the Mortgage Market Study (the MMS) on the number of mortgages on reversion rates and, of those, the number of mortgages where borrowers could save money from switching. Our key findings are:
- Since the time of the market study (2016 H2) the number of mortgages on reversion rates has fallen considerably. The number of mortgages on reversion rates for longer than 6 months has fallen to 1.0m as of 2021 H2 (the MMS found around 2 million mortgages with active lenders on reversion rates throughout the second half of 2016).
 - Of these, 150,000 mortgages are near term and 70,000 mortgages are in payment shortfall and would not be able to be switched on to a new deal.
 - The number of mortgages on reversion rates where borrowers would save money by switching has also fallen, as of the remaining 780,000 mortgages, we find that 370,000 would save money by switching and that 190,000 would be unlikely to save money by switching as of 2021 H2 (see chart below). In contrast, the MMS found at least 800,000 where borrowers would save money by switching in 2016 H2.
 - We estimate that there are 370,000 mortgages where borrowers could save an average of £1,240 a year for 2 years by switching to a 2-year fixed rate with their existing lender.
 - Those who we estimate would save, would not all save equally. We estimate that around 110,000 would save less than £500 a year for 2 years, 110,000 would save between £500- £1,000 and 150,000 would save over £1,000 a year for 2 years.
 - There are 220,000 mortgages where we do not have complete information to enable us to determine whether borrowers would benefit from switching. This is significantly lower than the MMS found, as the MMS identified 450,000 mortgages from the assessment where we did not have enough data to assess whether borrowers would save money by switching or there was no internal switching option.

Figure 1: Mortgages on reversion rates for longer than 6 months



1.3 Our analytical approach uses PSD001 and PSD007 reporting data, combined with publicly available information from Moneyfacts on mortgage rates and the UK House Price Index. We use a similar approach to the MMS, but the approach has been slightly simplified. This approach can be easily replicated over time and enables us to monitor trends in the number of borrowers on reversion rates and, of those, the number of mortgages where borrowers could save money from switching to a new introductory rate.

1.4 This note is structured as follows:

- **Introduction** – In this section we provide some background on the mortgage market, set out the findings of the MMS on switching from reversion rates, describe our high-level findings and then compare these findings with those from the MMS.
- **Identifying mortgages on reversion rates** – In this section we describe our approach to identifying mortgages on reversion rates and whether they have been on a reversion rate for longer than 6 months. We also present the number of these mortgages. We then identify mortgages that would not be able to move on to a new deal with their existing lender as they are in payment shortfall or near the end of their mortgage.
- **Assessing whether a borrower would save money by switching** - In this section we set out our approach to assessing whether a mortgage borrower on a reversion rate would save money by switching. We then describe our results when we apply this approach to mortgages on reversion rates for longer than 6 months in 2021 H2.
- **Differences with the market study findings** - In this section we provide more details on the difference between the approach taken here and the approach used in the MMS. We also compare our findings with those of the MMS.

2 Introduction

- 2.1 In this section we provide some background on the mortgage market, set out the findings of the MMS on switching from reversion rates, describe out high-level findings in this research and then compare these findings with what the MMS found.
- 2.2 Currently, most mortgage products sold in the UK comprise a short-term introductory deal (often at a fixed interest rate) after which the rate changes to another (reversion) rate, such as a Standard Variable Rate (SVR) or a rate linked to a benchmark such as the Bank of England Base rate. Moving to a reversion rate can mean an increase in interest rate and mortgage payments. At this point it may be in a borrower's interest to switch to a new product either with their existing or a new lender.
- 2.3 The Mortgage Market Study (the MMS) found that, of the 8 million mortgages in the UK, there were around 2 million mortgages with active lenders on reversion rates throughout the second half of 2016. It estimated that borrowers of around 800,000 of these mortgages would have benefitted from switching to a new deal because they would save money by doing so. It also found for these 800,000 mortgages, that borrowers would have saved, on average, £1,000 per year in the first 2 years (on a new 2-year fixed rate introductory deal) and around £100 per year for the rest of the term of their mortgage. This calculation compared the repayment on existing reversion rates with repayments on a new introductory rate deal. The saving after the introductory rate expires arises because the balance is lower at the end of the introductory rate (and hence subsequent payments are lower) or because the new reversion rate is lower. In addition, the MMS also found that there were 790,000 borrowers on reversion rates throughout the second half of 2016 who appeared able to switch but would not have benefitted (saved money) from doing so.
- 2.4 The MMS also identified 50,000 mortgages within active firms that would not qualify for an internal switch and were not able to switch to a mortgage available in the open-market. Since then active lenders (covering 97% of the market) will offer a new deal to qualifying existing customers, such as those who are up to date with payments, as part of a voluntary industry agreement. We expect the agreement have reduced this group of consumers and therefore the number of mortgages with active lenders unable to switch will be very small. We have therefore not attempted to identify this group in our updated analysis. In addition, there are closed book mortgages with inactive firms. While these mortgages are included in our analysis, we do not specifically call them out. For more information on these mortgages see our Mortgage Prisoner Review.
- 2.5 In addition to 8 million mortgages with active lenders, the MMS identified 260,000 mortgages owned by firms that were not authorised for lending. These borrowers could not switch to a new mortgage with their lender.
- 2.6 We now have more complete data than at the time of the MMS. This is because we now have data on all residential mortgage books. At the time of the MMS, we did not collect data on closed books owned by firms that are not authorised for lending with PSD007 (our regular reporting data on existing mortgages). This meant that these mortgages were identified separately in the MMS. These mortgages are now included within PSD007 and within our updated analysis. However, as these mortgages have

no internal switching option they are included in our classification of missing data as they have no alternative to switch with their existing lender.

- 2.7 Here and throughout this paper switching means 'switching internally', that is, borrowers move to a new introductory rate with their existing lender rather than switch externally by moving to another lender. This is the approach that the market study used to identify whether a borrower would save money on their mortgage by switching. This is because the market study found that the average APR obtained by those who switched internally was only a few basis points higher than that obtained by borrowers who switched externally after accounting for switching costs (see page 52 of the [interim report](#)).
- 2.8 In this note we seek to identify how the results of the MMS analysis have changed since 2016. We have updated the analysis to identify the number of mortgages on reversion rates, and the number of borrowers whose mortgages have been on a reversion rate for at least six months would save money by switching, and how much they would save. Our approach is consistent with the market study methodology and our results are broadly comparable.
- 2.9 We find that since 2016 the number of borrowers on reversion rates has fallen considerably. We also find that the number of mortgages on reversion rates for longer than 6 months has fallen to 1.0m in 2021 H2, down from around 2.0m. Of these, 150,000 are near term and 70,000 are in payment shortfall and hence are not eligible to switch to a new deal. Of the remaining 780,000 mortgages, we find that 370,000 would save money by switching and that 190,000 would not save money by switching because the combination of interest rates and fees would cost more overall than remaining on their reversion rate.
- 2.10 We estimate that around 370,000 mortgages could save an average of £1,240 a year for 2 years by switching to a 2-year fixed rate with their existing lender. Many borrowers who would save money by switching save less than the average because the distribution of savings is highly skewed. We estimate that around 110,000 would save less than £500 a year for 2 years, 110,000 would save between £500- £1,000 and 150,000 would save over £1,000 a year for 2 years.
- 2.11 In addition, there were 220,000 mortgages where we do not have all the information to determine whether a borrower would save money by switching (for example, we do not have information about the value of the property) or where there is no switching option to compare with.
- 2.12 There has been a significant reduction in the number of mortgages on reversion rates longer than 6 months. The MMS identified 2.0 million mortgages with active lenders on reversion rates throughout the second half of 2016. However, there were an additional 260,000 mortgages in closed books owned by firms that were not authorised for lending where the MMS had more limited data. We would expect many mortgages in these books were on reversion rates and likely to have been on a reversion rate for more than 6 months. Consequently, there could have been up to 2.3 mortgages in total on reversion rates for longer than 6 months in 2016 H2. We find the number of mortgages on reversion rate fell to around 1million in 2021 H2.
- 2.13 In the MMS, we identified 800,000 mortgages held by consumers who can switch and would benefit from doing so. We can now only identify 370,000 such mortgages. This is a reduction of more than 50%. However, in both sets of analysis we observe mortgages that were unable to switch internally, or we do not have complete data to

assess whether a mortgage could be switched. There were around 450,000 such mortgages in 2016 H2 if we included mortgages with missing data (160,000), mortgages who did not qualify for internal switches with active firms (50,000), and up to date mortgages in closed books owned by firms that are not authorised for lending (240,000). In contrast, in this analysis we can only identify 220,000 such mortgages in 2021 H2. Consequently, regardless of how we account for mortgage where we cannot assess the benefit from switching, the number who do not switch and who would save money by switching has fallen significantly.

3 Identifying mortgages on reversion rates

- 3.1 In this section we describe our approach to identifying mortgages on reversion rates and whether they have been on a reversion rate for longer than 6 months. We also present the numbers of these mortgages. We then identify mortgages that would not be able to switch to a new deal with their existing lender as they are in payment shortfall or near the end of their mortgage.

The data

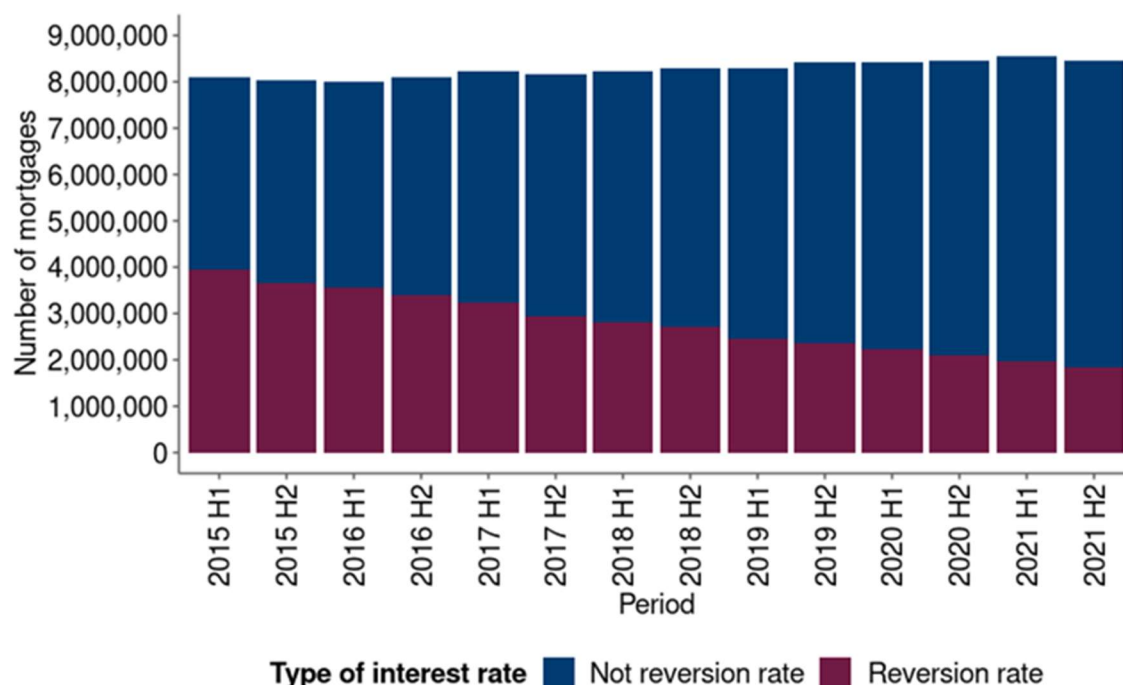
- 3.2 We use 4 data sources for our analysis. These are:
- PSD007 (mortgage performance data) - these data provide a snapshot of all regulated mortgages every 6 months and were first collected in 2015. This data included data from closed books owned by firms that are not authorised for lending from 2021 H1
 - PSD001 (mortgage sales data) - these data record all new mortgage sales from April 2005.
 - Moneyfacts data - these data provide the reversion rates for new mortgage contracts by lender.
 - UK House Price Index - these data capture changes in the value of residential properties using sales data collected on residential housing transactions at the local authority level.

The number of mortgages on reversion rates

- 3.3 There is no data field in PSD007 that specifically identifies those mortgages on reversion rates. To identify reversion rate mortgages in our data, we use two different variables:
- mortgages on Standard Variable Rates (SVRs); and
 - mortgages that have finished their introductory rate period (they have an incentivised rate end date that is before the date at which we observe the mortgage in PSD007).
- 3.4 The following chart shows the number of mortgages over time, split by whether mortgages are on reversion rates. We see that the number of mortgages on reversion rates has declined considerably since 2015. Our analysis shows that when PSD007 was first collected there were 2.5m mortgages on reversion rates and in the last available period in 2021 H2 there were 1.1m. This was at a time where the number of mortgages had increased from 8.1m in 2015 H1 to 8.5m in 2021 H2. Some of this increase will be from including mortgages in closed books owned by firms that are not authorised for lending being included in the data. From 2021 H1 we began collecting data on mortgages held by firms not authorised to lend. This will have the effect of increasing the numbers of mortgages from that date onwards.
- 3.5 The numbers on reversion rates are slightly below the numbers reported in the market study for 2016. The MMS identified an additional number of mortgages on other reversion rates by comparing the stock of products observed in the performance data (PSD007) to the observed origination products (both in PSD001

and Moneyfacts) and using ad-hoc information collected from lenders, as part of the MMS, on the number and nature of their accounts on a reversion rate. We have not replicated these additional checks and therefore the data does not align perfectly. Given the small changes in numbers, we do not think this materially affects our findings.

Figure 2: Residential mortgages, by whether on reversion rates, 2015-2021



Mortgages that have been on reversion rates for longer than 6 months

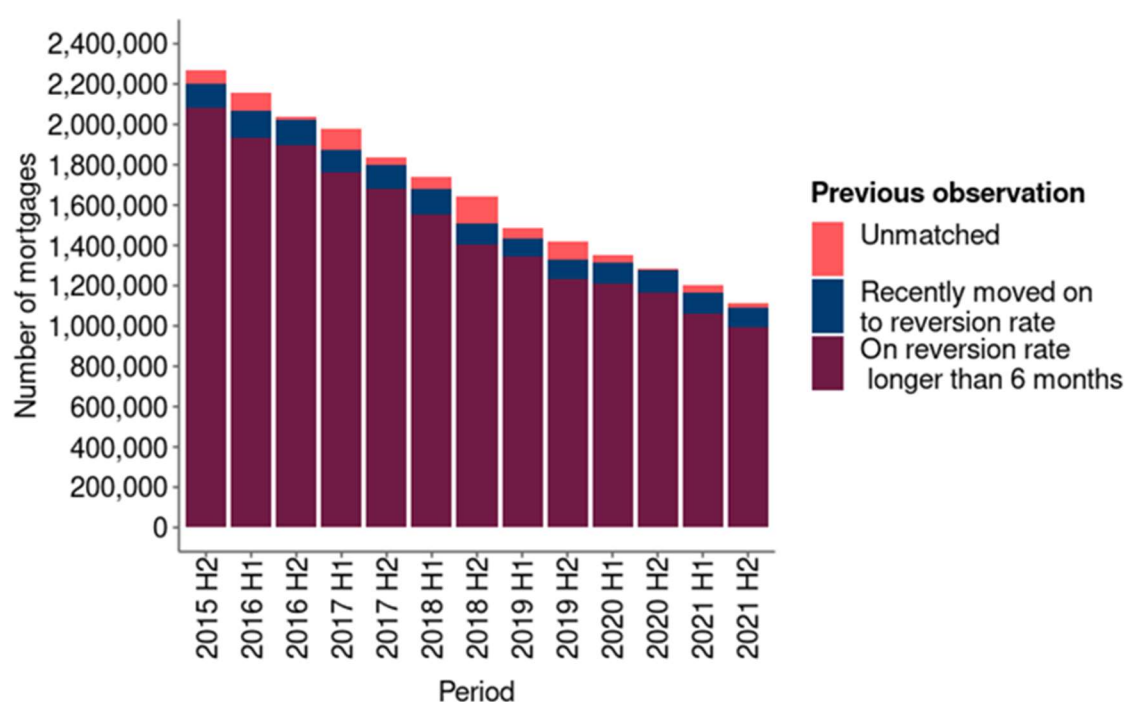
- 3.6 We only observe a snapshot of mortgages every 6 months in our PSD007 data. Some borrowers may move on to a reversion rate, but then quickly move on to another rate. Those borrowers who move off quickly may not be much affected by the higher temporary rates.
- 3.7 We focus on mortgages that have been on a reversion rate for at least 6 months. The MMS used this cut-off as it found that over three quarters of consumers switched to a new mortgage deal either with their existing or another lender (or redeemed their mortgage) within 6 months of the expiry of an introductory deal. To see whether a borrower has been on a reversion rate mortgage for longer than 6 months we need to match mortgages reported at consecutive PSD007 reporting periods. We match the mortgages on the date the account was opened, the lenders' Firm Reference Number (FRN), property postcode and the date of the birth of the first borrower. From this matching we can observe that a mortgage in two consecutive periods has been on a reversion rate for longer than 6 months.
- 3.8 The following chart (Figure 3) shows the population of mortgages on reversion rates over time, categorised according to whether a mortgage was on a reversion rate in the previous period. The chart shows that most of these mortgages were on a

reversion rates 6 months previously. There is a continual downward trend in the number of mortgages on reversion rates and the number of mortgages on reversion rates longer than 6 months.

3.9 The chart shows the number of mortgages on reversion rates, split into three categories:

- those on a reversion rate longer than 6 months,
- those who have moved on to a reversion rate in the previous 6 months, and
- those who we have not matched to the previous PSD007 period (and so we can't determine whether they have recently moved on a reversion rate).

Figure 2: Residential mortgages on reversion rates, by whether they were observed on reversion rates 6 months before, 2015-2021



3.10 The chart shows a decline in the number of mortgages on reversion rates for longer than 6 months. It also shows that relatively few mortgages have moved on to a reversion rate for the first time in each period. This is consistent with evidence that most borrowers move on to a new deal at the end of their introductory rate. Occasional paper 54 found that 20% of two-year fixed rate mortgages taken out for property acquisition between July 2013 and June 2014 were on a reversion rate in Dec 2016. However, once borrowers move on to a reversion rate, and stay on it for six months, they appear quite sticky. We can see that the stock of those on reversion rates is large relative to the number of borrowers moving on to reversion rates in each period.

3.11 The chart shows that there were 1.9m mortgages on reversion rates for at least 6 months in 2016 H2. This is slightly lower than the market study, which found around 2 million mortgages (see our previous explanation describing the differences between this analysis and the MMS). In 2021 H2, the number of mortgages on reversion rates for at least 6 months had fallen to 1.0m (those on a reversion rate

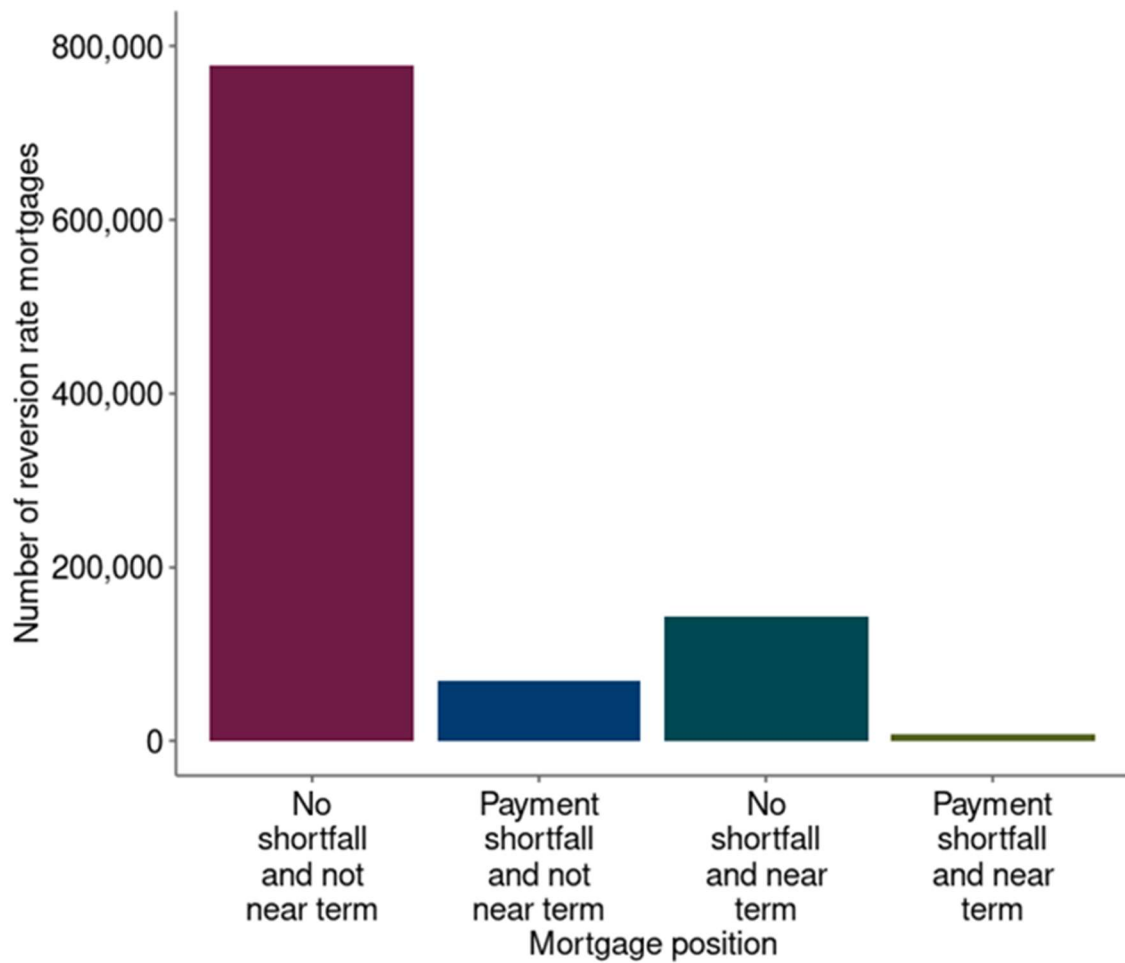
longer than 6 months). This includes mortgages held by firms not authorised to lend and therefore not included in our data prior to 2021 H1.

- 3.12 Only a small proportion of mortgages were not on a reversion rate in the previous 6 months. There are around 90,000 mortgage that were not on a reversion rate in the previous period (recently moved on to reversion rate) in 2021 H2.
- 3.13 There are also around 20,000 mortgages in the period that did not match to the previous period. This is because we cannot match a mortgage on all the variables with the previous period. For example, a mortgage may have been transferred between lenders or there may have been a change in the details of the mortgage. We therefore do not have any data to match mortgages in 2015 H1 to as we have no data from 2014 H2.

Mortgages that are unable to switch

- 3.14 Some borrowers on a reversion rate will not be eligible to switch to a new deal. Borrowers with an active lender are unlikely to be able to switch to a new deal with their existing lender if:
- they are in payment shortfall (payments have become due but remain unpaid); or
 - they are near to the end of their mortgage term (they have less than 24 months remaining on the mortgage or a current balance of less than £10,000).
- 3.15 The following chart shows the number of mortgages that have been on a reversion rate for at least 6 months where the mortgage is in either payment shortfall or near term.
- 3.16 There are 150,000 mortgages where the borrower is near the end of their mortgage contract (low balance or less than 24 months remaining). Lenders usually apply a minimum loan size and/or minimum repayment term which can prevent consumers that are approaching the end of their mortgage term, or have a low outstanding balance, from switching their mortgage. A change in the interest rate also has limited impact on the monthly payments for small value loans with short repayment terms and is unlikely to outweigh the monetary and non-monetary costs of switching to a new product. We therefore consider this population as unlikely to be experiencing significant harm from not being able to switch.
- 3.17 In addition, we observe that 70,000 borrowers are in payment shortfall. Also, within the 150,000 mortgages near term, there are around 10,000 borrowers are both in payment shortfall and near term. In total, there are 220,000 mortgages on reversion rates in payment shortfall or near term who would generally not be eligible to switch.

Figure 3: The position of mortgages that have been on a reversion rate for longer than 6 months



- 3.18 Removing these 220,000 mortgages leaves 780,000 mortgages that have been on a reversion rate for a least 6 months that may be able to switch to a new deal with their existing lender.

4 Assessing whether a borrower would save money by switching

- 4.1 In this section we set out our approach to assessing whether a mortgage borrower on a reversion rate would save money by switching and the assumptions we have made. We then describe our results when we apply this approach to mortgages on a reversion rate for longer than 6 months in 2021 H2.

Alternative mortgages

- 4.2 To assess whether a borrower would save money by switching we need to identify the alternative interest rate that a borrower would pay if they switched to another introductory rate with their existing lender. For this alternative mortgage, we need to identify the initial interest rate in the incentivised period, the reversion rate the mortgage would switch to at the end of the incentivised rate period and any fees that would be payable for the new mortgage product.

LTV

- 4.3 To identify an alternative rate, we need to estimate the current loan-to-value ratio (LTV) of the mortgage. This is because the extent of any equity in the property is a key factor determining the risk to the lender and therefore the interest rate a borrower would be able to obtain.
- 4.4 To estimate the current LTV, we need both the current outstanding balance and an estimate of the current value of the property. Current outstanding balance is reported in PSD007. Current property value and LTV are not reported in PSD007. Property value is however available at the origination of the mortgage in PSD001. To get the property values of mortgages on reversion in rates in PSD007, we match PSD007 to PSD001 using a unique key, which is created by combining full postcode, date of birth of the main borrower (ie first borrower) and origination date in both datasets. Each set is 'deduplicated' before the match to ensure that each mortgage is represented only once in the final dataset by keeping on only one observation for each unique key. This gives us the property value at origination date.
- 4.5 To get an estimate of the current property value for each mortgage at each PSD007 reporting period, we use the UK House Price Index to inflate the value of the property by the observed house price inflation over the period of time between account opening and the date we observe the mortgage in PSD007. We use the observed price inflation at the local authority level. We do this by matching the property postcode to the local authority area using a database from the ONS ([ONS postcode directory](#)). We then match the UK House Price Index for each local authority area to each mortgage for the date the mortgage account was opened and the current date the mortgage is observed in PSD007.
- 4.6 By estimating the current property value, we are then able to estimate the current LTV of each mortgage. From this we are able to identify the likely mortgages they could access from their lender.

Alternative mortgage rates

- 4.7 There are usually a number of different alternative mortgage products that a consumer might consider when switching away from a reversion rate.

Assumption 1: alternative lender

- 4.8 Consistent with the MMS analysis, we assume that consumers switch to an alternative product offered by their current lender. That is, that they switch internally rather than on the open market. We do this for two reasons.
- First, evidence suggests that most borrowers get a product from their existing lender when they switch from a reversion rate. Occasional paper 54 found that most borrowers switching to a new mortgage from a reversion rate moved to a new rate with their existing lender (internal switching accounted for around 50% of all new mortgages, and around 70% of mortgages transfers, in 2021 H2). This is likely for various reasons, including that it is simpler to switch to a new mortgage with an existing lender than moving to another lender.
 - Second, we are not able to easily identify whether a borrower would be eligible for mortgages with a different lender without collecting additional information, such as credit reference agency data.
- 4.9 This assumption is a limitation of our analysis because there may be better offers available to borrowers if they switched to other lenders. We do not think this assumption has a significant impact because the MMS found that the average APR obtained by those who switched internally is only a few basis points higher than that obtained by borrowers who switched externally after accounting for switching costs. In addition, any additional savings that might be made might be outweighed by the hassle costs of switching to a new lender.

Assumption 2: number of switches

- 4.10 Also consistent with the MMS, we assume that the borrower only switches once. That is, we assume that they remain on a reversion rate for the remainder of their mortgage after they have switched. This simplifying assumption is required to make the calculation tractable, but we note that some borrowers may make further savings if they continued to switch. The MMS tested the effect of borrowers switching twice. Under this scenario, the MMS found that for some borrowers, while one switch would not be beneficial, two consecutive switches would be.

Assumption 3: the alternative product

- 4.11 We assume that mortgages, on a reversion rate longer than 6 months, move on to 2-year fixed rate mortgages. This is consistent with the MMS methodology. The most common types of mortgages have recently been fixed rate mortgages, typically of 2 or 5 years. The MMS found that almost 95 % of new sales were of fixed rate mortgages, the majority of which were 2-year fixed rate mortgages. The rates on 2-year fixed mortgages have generally been lower than 5-year fixed rates, but recently the difference has narrowed. Choosing a 2-year fixed rate product as the alternative mortgage, rather than a 5-year fixed rate will have the effect of increasing the number of mortgages where borrowers would save money by switching (as rates on

2-year fixed were generally below 5-year fixed rate mortgage for period we are considering).

- 4.12 We do not use 2-year fixed rate mortgages because we think it is the right product for all borrowers. It is simply a proxy for indicating how many borrowers could possibly save by switching, because in 2021 as well as in 2016 it was typically the cheapest deal, and so using it will maximise the number of borrowers that can save, and the savings they can make. If we had assumed switching to a longer fixed rate deal then the number who would save and the amount they would save would be lower. Different rates will be more or less appropriate for different borrowers depending on their needs and circumstances, but suitability and appropriateness are not our concern here for the purposes of this analysis.

The alternative product data

- 4.13 We simulate the alternative rate that might be available to a borrower, by matching them with similar borrowers with the same lender using data from PSD001. We identify the median interest rate and lender fees for 2-year fixed rate mortgages by LTV band, lender and 2021 H2 (to fit with the reporting frequency of PSD007).
- 4.14 We use lender fees only and not other fees reported in PSD001, such as mortgage intermediary or third-party fees, as we assume that borrowers switch internally without help from an intermediary. This is because borrowers probably do not pay a fee to the intermediary if they use one for an internal switch.
- 4.15 We cannot identify 2-year fixed rates directly in PSD001. Firms only report the date at which the incentivised rate ends in their reporting. We therefore have to distinguish 2-year fixed rates from other fixed rates using the account opening date and the date when the incentivised rate ends. 2-year fixed rates are often not exactly set for 2 years, rather they sometimes end at a fixed point in time around 2-years out. We therefore assume that fixed rate mortgages that have an initial incentivised period of greater than or equal to 18 months and less than 30 months have an incentivised period of 2 years. We would expect most fixed rate mortgages of this length are 2-year fixed rate mortgages and therefore we do not think this approach would materially affect our results (compared to being able to perfectly identify 2-year fixed rate mortgages).
- 4.16 To identify the alternative rates, we band by LTV because the lower the LTV, the better the rate available for borrowers. We use the following bands:
- 0-60%
 - 60-70%
 - 70-75%
 - 75-80%
 - 80-85%
 - 85-90%
 - 90-95%
 - 95-100%
 - 100%+
- 4.17 We use narrower banding at the top end of the LTV range to reflect how lenders typically price their mortgages.

- 4.18 We use the PSD001 data to identify the incentivised rates that borrowers could switch on to.
- 4.19 We use Moneyfacts to identify the reversion rate. PSD001 did not include the contractual reversion rate field for new mortgages before 2021. We have used data from Moneyfacts to ensure consistency across the period.
- 4.20 For each firm in the Moneyfacts data, we use the median reversion rate across all mortgages provided by each firm for the last day in each half year period. This is unlikely to materially affect the results as most lenders have relatively few reversion rates for new mortgages (if not only one). Our analysis covers a relatively short period of time where the Bank of England Base Rate changed relatively little (by only 10bps). Therefore, the choice of the measure of reversion rate will not materially affect our results.
- 4.21 The combination of incentivised rates, lender fees and the reversion rate enable us to compare the cost of the current mortgage with an alternative one.

Calculating the savings from switching

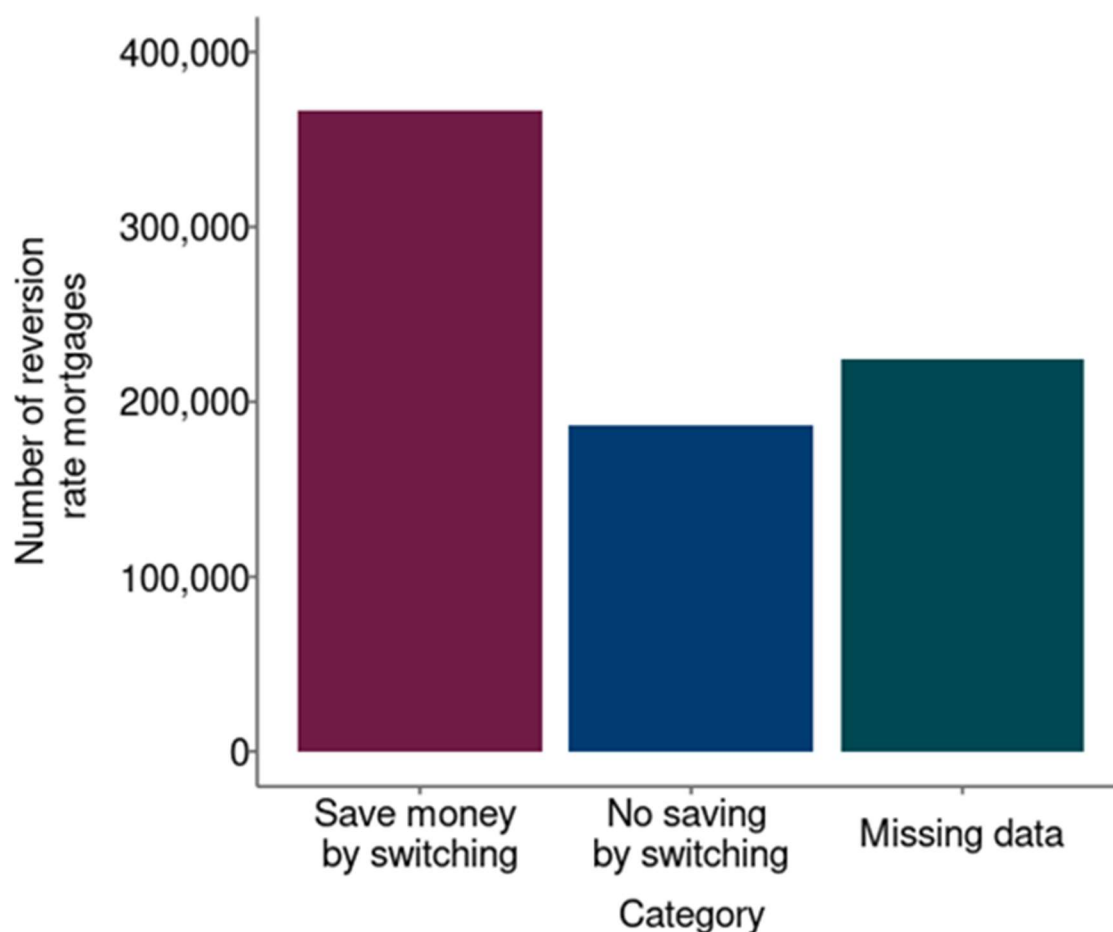
- 4.22 To calculate whether a borrower would make savings from switching, and their savings from doing so, we calculate the payments for the existing mortgage on the current reversion rate, and the payments that would be made on the alternative mortgage. For these payments, we first add the lender fees to the balance and calculate the payments that would be made for the first 2 years. We then calculate the balance on the mortgage after the incentivised period, from which we can calculate the repayments on the remainder of the mortgage on the new reversion rate.
- 4.23 To assess whether it is cheaper to switch to a new mortgage for a borrower, we cannot just compare interest rates on the existing and alternative (or counterfactual) mortgage. This is because any fees associated with the mortgage need to be taken into account. Additionally, the reversion rate borrowers are on may be a relatively low legacy reversion rate, which is lower than the reversion rates currently available by a lender on new mortgage products.
- 4.24 We therefore need to assess whether the alternative loan is cheaper overall (taking fees into account and assuming they are added to the balance) compared to the existing reversion rate mortgage. A standard approach to do this would be to calculate the internal rate of return for the two mortgages. However, as the current mortgage has one interest rate (and no fees), we can simplify the calculation but still be consistent with the MMS. We do this by calculating the present value of the alternative mortgage (i.e. the present value of all repayments to term at the reporting date of the mortgage in 2021 H2) using the interest rate of the current reversion rate mortgage. If the present value is more than 0, the internal rate of return of the new mortgage is less than the existing mortgage and therefore the borrower would make a saving by switching.

Results

- 4.25 Figure 5 sets out the number of mortgages that we estimate would have saved money by switching internally in 2021 H2. While not directly comparable with the mortgage market study data, we observe that there has been a reduction in the

number of mortgages where we expect borrowers to be able to save money by switching.

Figure 4: Reversion rate mortgages and whether borrowers would save money by switching

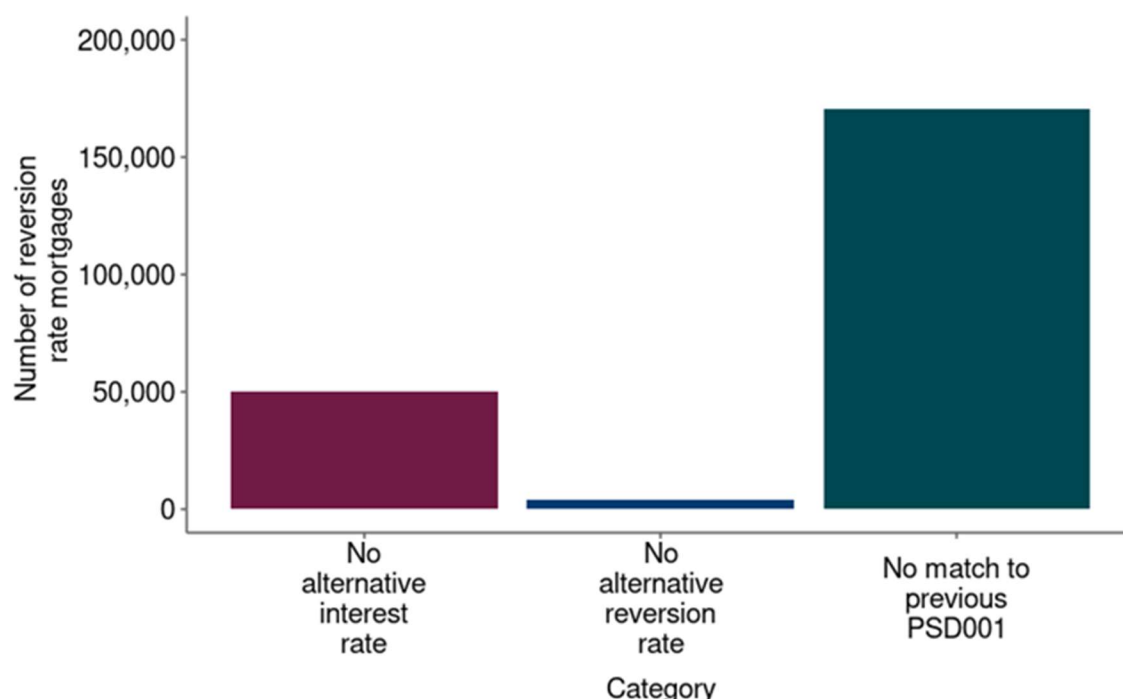


- 4.26 We estimate that of the 560,000 that we can assess as able to switch, around 370,000 would save money by switching and that 190,000 would not. The MMS found that there appeared to be 800,000 mortgages where borrowers appear able to switch and may have saved money from switching and 790,000 mortgages where borrowers would not save money from switching.
- 4.27 In addition, there are 220,000 mortgages where we do not have complete information to enable us to determine whether borrowers would save money by switching. We know that not all these borrowers can switch internally. This is because some of these borrowers are held with closed books by firms not authorised to lend. As a result, we will not be able to identify alternative interest rates for their mortgage. Some will be able to switch to a new mortgage with their lender, but we don't have information on the property value. We would expect some but by no means all of these 220,000 mortgages would also save money by switching.
- 4.28 To better understand the reasons for the missing data, Figure 6 shows the reasons why we are unable to assess whether a borrower would save money by switching internally. We are unable to assess whether they would save money by switching if

we are unable to identify details about the mortgage in PSD001 (the third column) or identify an alternative product with their lender (including their alternative introductory rate and the reversion rate they would move on to). This may be because the lender does not have an alternative rate (for example) they are a closed book, or we cannot identify an alternative interest rate for the borrower's characteristics. For example, a small borrower may not have made any new lending for a specific type of borrower.

- 4.29 The majority of the mortgages where we are unable to test whether a mortgage would save by switching is because we cannot match to a previous mortgage sale in PSD001. These are in most cases old mortgages and so we do not have product sales data. In contrast, there are relatively few mortgages where the sole reason why we cannot identify an alternative rate is because we cannot fully identify an alternative mortgage for that mortgage. We note that if we cannot match a mortgage to PSD001 we are unable to identify a mortgage's LTV and therefore cannot identify an alternative interest rate.

Figure 5: Missing switching data



Calculating the savings

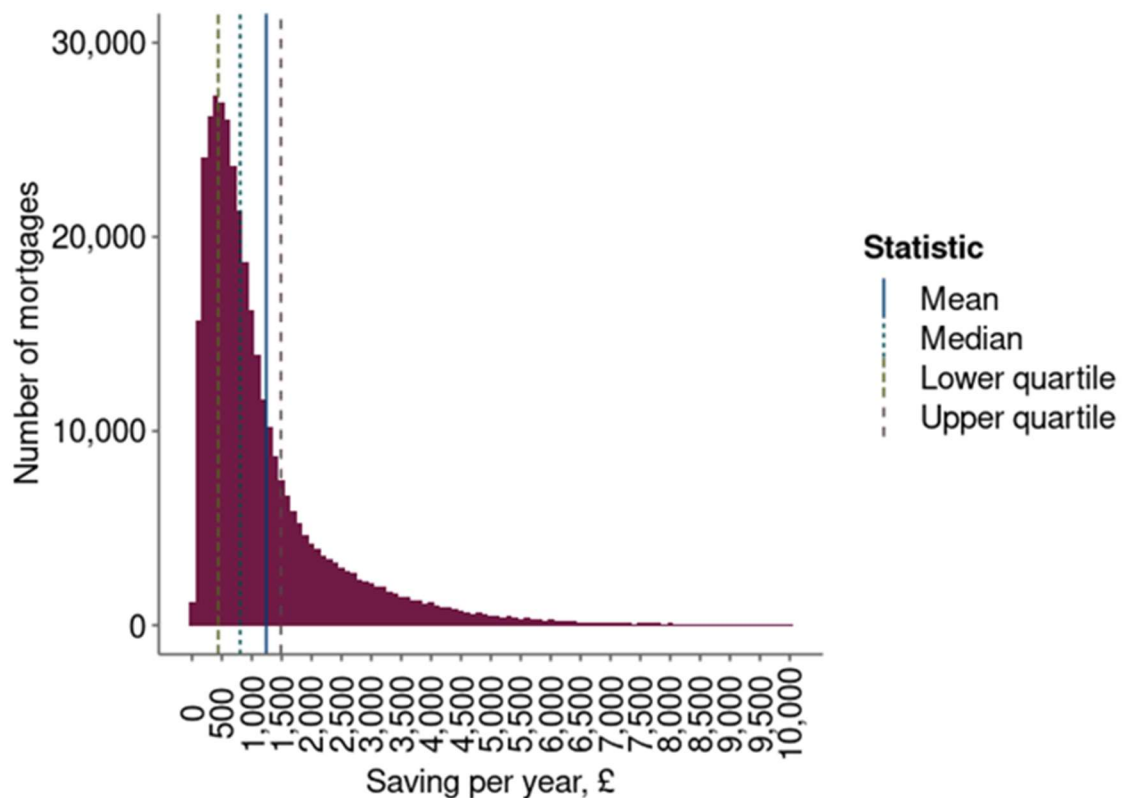
- 4.30 For the 370,000 mortgages that we are able to determine are likely to obtain a saving we provide an indication of the likely savings if they switched. We present the cash flow savings in the first two years of the mortgage.

Table 1: Savings for those that would save by switching

Average saving per year, £	Median saving per year, £	Lower quartile saving per year, £	Upper quartile saving per year, £
1,240	810	440	1,490

- 4.31 We observe that the average savings for are around £100 per month. The savings are right skewed as there is a long tail of savings above the average. Those who we estimate would save would not all save equally. We estimate that around 110,000 would save less than £500 a year for 2 years, 110,000 would save between £500 - £1,000 and 150,000 would save over £1,000 a year for 2 years. Figure 7 chart shows the distribution of savings per year.

Figure 6: The distribution of savings for those who would save by switching

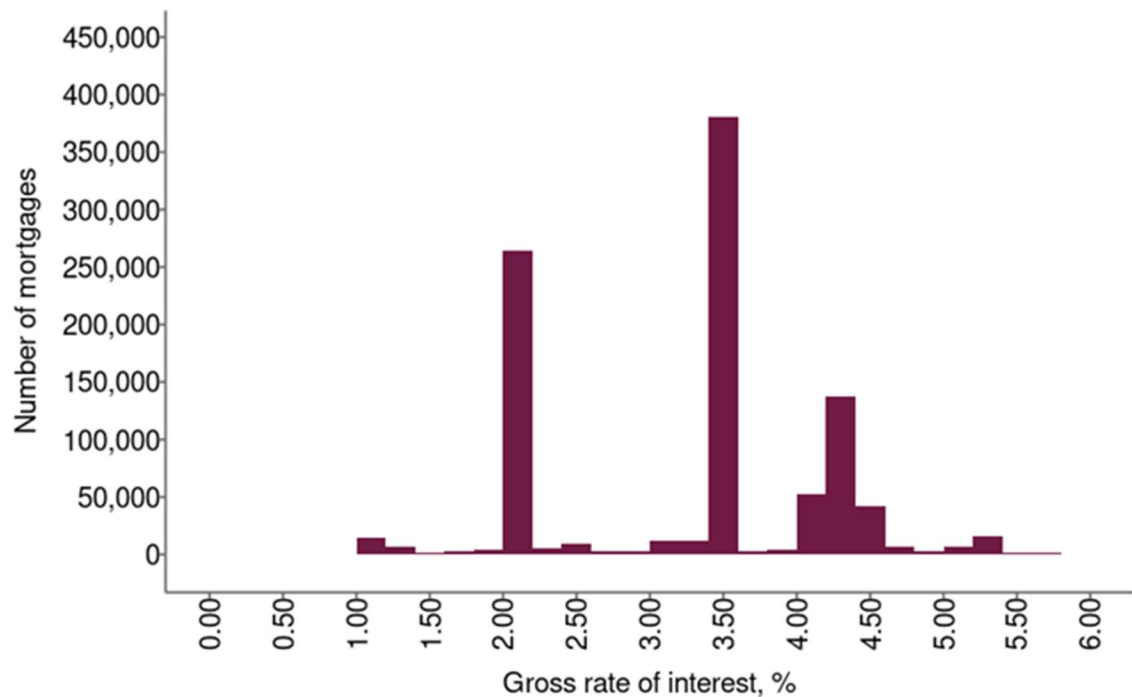


- 4.32 We also find that the savings made by borrowers are highly correlated with the size of the outstanding balance. The larger the outstanding balance the larger the saving from switching.

The interest paid by those on reversion rates

- 4.33 We also find that the savings made by borrowers are highly correlated with the size of the outstanding balance. The larger the outstanding balance the larger the saving from switching.

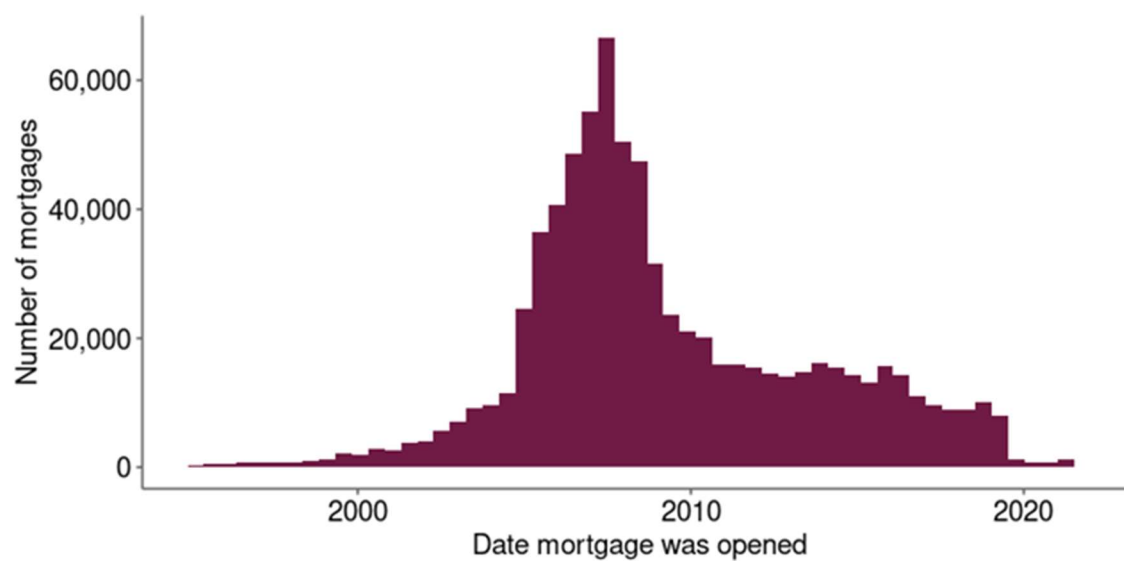
Figure 7: The distribution of interest rates for mortgages on reversion rates for longer than 6 months



The age of mortgages on reversion rates

- 4.34 Figure 9 below helps to explain why we have observed a continual fall in the number of mortgages on reversion rates. We see that a significant proportion of the mortgages on reversion rates for longer than 6 months were taken out around the time of the financial crisis in 2007. Consequently, as these mortgages are repaid these mortgages are dropping out of the stock of mortgages on reversion rates. These are not being replaced by mortgages opened since that time as mortgages moving off fixed rates more recently appear more likely to switch to another introductory rate rather than remaining on a reversion rate. Hence, we have seen a large drop in the number of mortgages on reversion rates. We note that a proportion, but by no means all, of the mortgages on reversion rates opened pre-crisis will be held within closed books held by inactive firms. Some borrowers of these mortgages will be mortgage prisoners.

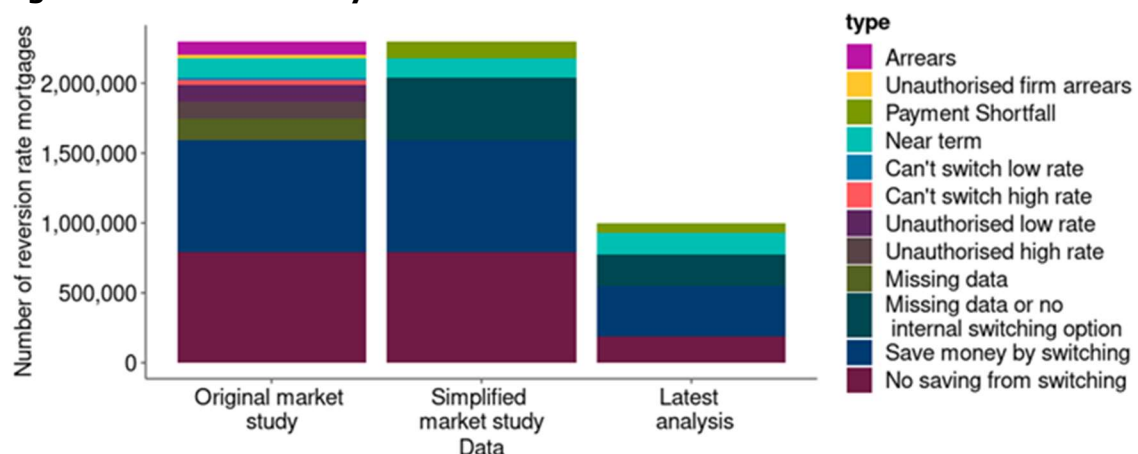
Figure 8: The account opening date for mortgages on reversion rates for longer than 6 months



5 Differences with the market study findings

- 5.1 In this section we provide more details on the difference between the approach taken here and the approach used in the MMS. We also compare and contrast our findings with those of the MMS.
- 5.2 Given the changes in the market and our data, the analysis we produce here is not directly comparable with the MMS data. However, the data shows that there has been a significant reduction in the number of mortgages on reversion rates longer than 6 months. The MMS identified around 2.3 mortgages in total (2.04 million with active firms and an additional 260,000 mortgages in closed books owned by firms that are not authorised for lending. The number has fallen to around 1million in 2021 H2.
- 5.3 In the MMS, we identified 800,000 mortgages held by consumers who appeared able to switch and may save money from doing so. We can now only identify 370,000 such mortgages. This is a greater than 50% fall. However, in both sets of analysis we observe mortgages that were unable to switching internally or we do not have complete data to identify the alternative new deal a mortgage could be switched to with their existing lender. There were around 450,000 such mortgages in 2016 H2 if we included mortgages with missing data (160,000), mortgages who did not qualify for internal switches with active firms (50,000), and mortgages in closed books owned by firms that are not authorised for lending (240,000). In contrast, in this analysis we can only identify 220,000 such mortgages in 2021 H2.
- 5.4 Figure 10 shows how we can compare the MMS findings with the findings we present here. The chart shows three bars. The first bar shows all mortgages on reversion rates for longer than 6 months (2016 H2) and mortgage held by closed books owned by firms that are not authorised for lending used in the MMS (2016/17 data). In the second bar, we have grouped these mortgages to make the groupings more comparable with our new analysis. The final bar shows mortgages on reversion rates for longer than 6 months in 2021 H2. Again, we see the number of those on reversion rates for longer than 6 months has fallen and that the number of mortgages that would save by switching has also fallen. This is true regardless of how we classify missing data.

Figure 9: How this analysis relates to the MMS



5.5 The methodology used in the market study was broadly similar to the one we have used here but there are key differences in the analysis that mean that the numbers are not directly comparable.

5.6 The key differences are:

- The Market Study used the Nationwide's regional adjusted house price index to calculate the LTVs for the identified group of potentially inactive consumers. Unique consumers in PSD007 were matched to PSD001 to retrieve the value of their property at the time of their last reported transaction (ie PSD001 date of origination). For the current analysis, we use the UK House Price Index. This index is provided at a more granular level and hence is likely to provide a better estimation of the change in the value of each mortgaged property. Using a different index affects the LTV of the property (and potentially the LTV band a mortgage was in), in turn affecting the alternative rate. The UK House Price Index has risen above the Nationwide index in recent years.¹ This would have the effect of lowering LTVs and increasing the number that we estimate would benefit from switching.
- We have used payment shortfall rather than arrears to identify whether a mortgage holder may be able to switch. We use payment shortfall as we understand that mortgages in payment shortfall are unlikely to be eligible to switch on to introductory rates. There are more mortgages in payment shortfall compared to the number of mortgages in arrears (as arrears is defined as a shortfall equivalent to two or more regular payments in the accumulated total payments).
- We used the median interest rate and the average lenders' fee from PSD001 for each lender for each LTV band. The market study used a more complex approach to identify the 'product' (defined as the combination of interest rate and fees) that was sold with the highest frequency. In case of a tie, the product with the highest fees was selected. This is to avoid the effect of any outlier rates on our analysis and ensure that the included rates reflect the rate a borrower would obtain if they switched. We do not think this assumption will materially affect our results as we expect the variance in rates for similar risk profiles at the same lender over a relatively short period of time will be relatively small.
- The Market Study used a more complex approach to match mortgages in PSD007 with their sales data in PSD001. This increases the match rate but also increases the risk of matching to the wrong mortgage. It is hard to balance the matching of more mortgages versus avoiding false matches. Our approach here is to use a simple approach that might miss matches.

¹ <https://www.gov.uk/government/publications/about-the-uk-house-price-index/comparing-house-price-indices-in-the-uk>