

General Insurance Pricing Practices Market Study Interim Report

Annex 1: Consumer Outcomes Technical Annex

October 2019

1 Introduction

- 1.1 This technical annex presents a broad set of analyses based on policy level data for home and motor non-commercial insurance policies undertaken in the context of the General Insurance Pricing Practices market study. The analyses deepen our understanding of the dynamics of competition and pricing outcomes for individual consumers. Further analysis of these datasets is planned for the final report of the Market Study.
- 1.2 The analyses discussed are based on two main datasets:
- A large dataset containing information provided by a total 24 legal entities (insurance and intermediary firms) across home and insurance markets on a sample of approximately 15% of their policies over a 5-year time horizon - from 2014 to 2018 ("transaction level dataset").
 - A smaller dataset obtained linking policy level information from the transaction level dataset to the information collected via a consumer survey described in the Consumer research report and technical report ("joint dataset").
- 1.3 Our previous diagnostic work suggested that general insurance pricing practices can lead to different consumers paying different prices for the same insurance product, even if the cost to supply the product may be the same. Our diagnostic work also found that some consumers who stay with their home insurance provider for a long time pay prices that are much higher than those paid by new consumers. The analyses described here allow us to deepen our understanding of this phenomenon by studying how outcomes vary across individual consumers controlling for other factors, for instance policy characteristics (eg whether the policy is set to automatically renew upon expiration - autorenewal), distribution channels and consumer characteristics.
- 1.4 The analyses presented in this annex support the conclusions presented in the Interim Report. They provide insights in relation to most of the areas of enquiry set out in the Market Study Terms of Reference, as indicated in Table 1.

Table 1: Questions set out in the Terms of Reference covered by this annex

<i>The differences between prices paid for insurance by different consumers compared to the cost of providing them with insurance.</i>
<i>How many consumers are affected by paying higher prices.</i>
<i>The characteristics of consumers paying higher prices, especially the extent to which these consumers may be vulnerable.</i>
<i>Why some consumers end up paying higher prices.</i>
<i>Pricing models and strategies adopted by firms and whether these lead them to take advantage of certain consumers.</i>
<i>The impact of contractual terms, such as auto-renewal.</i>
<i>Whether firms are making high profits from certain groups of consumers, especially from those who are vulnerable.</i>
<i>Whether the current nature of competition leads to higher or lower costs for consumers in purchasing and firms in supplying insurance products.</i>

General insurance Pricing Practices Market Study Terms of Reference

1.5 In the following, we describe our approach, the findings and how the analyses are linked to other parts of the Market Study. The structure is as follows:

- A description of the data and our methodological approach (Section: Our approach)
- Findings on customer margin levels and dispersion (Section: The level and dispersion of customer margin)
- Evidence on who is buying policies characterised by high margins (Section: Who pays high margins?)
- Findings from regression analysis of transaction dataset (Section: Regression analysis on transaction level dataset)
- Findings from the joint dataset (Section: Analysis of joint dataset)
- Analysis of price walking (Section: Changes in margin for individual policies)

2 Our approach

Data: an overview

- 2.1 Our assessment of competition dynamics and consumer outcomes is based on data and information from different sources. The main source is a transaction level dataset. We collected policy level data over a 5-year time horizon - from 2014 to 2018 - from a total of 24 legal entities – price-setting insurance and intermediary firms - identified by their firm reference number (FRN). For home, we have 17 insurer firms in our sample; for motor, 18 insurer firms.
- 2.2 The market share of the insurers based on Gross Written Premium (GWP) in our sample is 76% and 91% for home and motor respectively.
- 2.3 For our sample, we only selected intermediaries who set prices. The market share of the intermediaries in our sample in terms of Gross Written Premium is 38% for home and 20% for motor insurance markets.
- 2.4 Our sample includes both large and small firms. Firms in the sample adopt different pricing models, as discussed in the [Interim Report](#) and in the [Business Models and Financial Analysis Technical Annex](#). This allows us to study in detail a variety of market behaviours and outcomes.
- 2.5 We instructed firms to sample from their books of business and provide us data on approximately 3% of customers and all of their policies across a five-year time period, from 2014 to 2018. Therefore, we have multiple observations for a single policy across time. In our dataset, each row represents a policy - uniquely identified by its ID - in a specific year. Paragraph 2.14 and following ones provide more details on the sampling methodology.

Table 2: Total records and unique, trackable policy identifiers in our transaction level dataset over the 2014-2018 period.

Data unit	Total records (rows, millions)	Number of unique policy IDs (millions)
Home	6.77	2.24
Motor	10.07	3.78

Source: FCA analysis of policy data provided by firms. Numbers reported refer to observations whose quality meets the standard for subsequent analysis. The notion of "trackable policy identifier" is explained in the Data challenges section.

- 2.6 We asked firms to provide:
 - General information on each insurance policy (eg inception and expiration date, acquisition and distribution channel). This category includes characteristics specific to home (eg type of home insured, whether property was the main residence) or to motor insurance (eg type of vehicle, number of drivers).
 - Price and cost information, for both the core policy and add-ons. For the core policy, we asked for information on the final price (premium)¹, net price² and

¹ Definition: Gross written premium to be paid by the consumer for the core policy over the duration of the current contract. This price excludes the price of any insurance "add-ons", Insurance Premium Tax, finance APR, and any fees such as renewal fees etc.

² Definition: For an underwriter or a MGA and the policy was sold through an intermediary, this is the net rate supplied to the intermediary. For an intermediary and the policy was purchased from a third party, this is the net rate supplied at which the policy was supplied.

expected claims costs.³ For add-ons, we asked for the final price and expected cost of claim, where available and distinct from the core policy.

- Information on ancillary fees applied and discounts.
- Information on policyholder (eg date of birth, marital status, previous claims)

2.7 For the analyses presented in this annex we also refer to:

- Financial data information, as described in the [Business Models and Financial Analysis Technical Annex](#).
- Qualitative information, for instance business strategies or firms' roles along the value chain, submitted by firms in reply to the request for information that informed this market study.
- Data from public sources, in particular: [English indices of deprivation 2015](#) and [ONS Pen Portraits data](#).
- Consumer survey research, as described in the [Consumer research report and technical report](#).

Methodology

2.8 The analyses discussed in this Annex focus on the margins on individual policies. Insurance policies are differentiated products, therefore studying the margin as opposed to the final price allows us to control for the cost of supply.

2.9 The margin adopted in our analysis is the *customer margin on core policy net of expenses (customer margin)*. The customer margin for each policy is the difference between premium and expected claims costs as a proportion of the premium. This customer margin measures the contribution of an individual policy to non-claims costs, expenses and profit. Therefore, it is important to emphasize the following points.

- Customer margin represents an expected margin as opposed to a realised margin: it does not account for whether a claim was liquidated during the duration of the policy.
- Customer margin differs from the profit margin accrued by insurance and intermediary firms insofar it only accounts for risk costs (the expected costs of claims), without considering other costs underwriter firms and intermediary firms normally face to cater final consumers (such as distribution costs, marketing costs).
- Customer margin only refers to the core policy, and does not account for add-ons bought by consumers in combination with the core policy but priced separately nor for premium financing.
- Compared to alternative approaches of measuring the margin, customer margin can be considered a relatively homogenous measure across different firms. However, firms can use different approaches to compute expected claims costs.

2.10 The transaction level dataset allows us to look both at most recent data (2018) and to how market dynamics and outcomes have evolved over time (from 2014 to 2018).

2.11 We analyse the motor insurance and the home insurance markets separately, and for home, we separately consider "building-only" policies, "contents-only" policies, and "combined building and contents" policies. This approach is rooted in the different characteristics of the three home insurance products and is confirmed by the data. In

³ Definition from the RFI: Expected claims cost of the core policy (excluding any insurance "add-ons"). If you are an intermediary who purchased the policy from a third party, please indicate NK if not known.

particular, we observe different average premiums and average customer margins for the three products.

- 2.12 We have analysed the data at both the market and firm level. However, to preserve firm confidentiality, we only report market level results.

Transaction level data

- 2.13 The transaction level dataset contains a sample of policies. This section described the sampling methodology and how we derived sub-samples for specific analyses.

Sampling methodology

- 2.14 As described earlier, we asked a selection of insurance companies and price-setting intermediaries to provide data at the individual consumer level for a representative sample of approximately 15% of all home and 15% of all motor insurance customers holding a non-commercial policy during the period from 2014 to 2018. In practice, we obtained our dataset asking firms to sample:

- 3% of customers who had a policy on the 1st July 2014;
- 3% of customers who had a policy on the 1st July 2015;
- 3% of customers who had a policy on the 1st July 2016;
- 3% of customers who had a policy on the 1st July 2017;
- 3% of customers who had a policy on the 1st July 2018.

- 2.15 For each sampled customer, we asked firms to provide the information for each year in which the customer held the insurance policy. In case any customer has been randomly drawn on more than one occasion, another customer had to be redrawn.

- 2.16 We requested firms to sample from each “book of business” separately, to ensure adequate coverage of different business strategies and possible consumer outcomes. Firms organise their books based on business considerations, therefore we individually liaised with each firm to minimize the risk of inconsistencies.

- 2.17 We gave instructions to exclude some books from the sample frame on the following grounds: (i) out of scope (including commercial); (ii) buy to let; (iii) commenced after 1st July 2018; (iv) no influence over pricing; (v) impossibility to retrieve available data; (vi) non-conventional risk underwriting process (eg bordereau); (vi) very short-term policies. We also set a ‘de minimis’ threshold, removing from the sample frame books of business smaller than 1,000 policies.

- 2.18 We classified books in scope into either Small (if the number of policies in the book is between 1,000 and 100,000) or Large (if the number of policies in the book is greater than 100,000). We asked firms to sample policies from all large books according to the process described earlier. For smaller books, we randomly selected 50% of them but asked firms to provide twice the sample size (6% instead of 3%). We adopted this approach to reduce the burden on firms while preserving representativeness.

Sample adjustment

- 2.19 The sample obtained as per the approach above leads to over-representation of insurance policies with longer tenure⁴ in our sample due to survival bias. This is because customers holding their policy for a shorter time drop out of the sample more quickly, whereas customers holding their policies for a longer time accumulate in the

⁴ Tenure is defined as the number of full years a customer has held the same policy.

dataset. For some of the analyses we created subsamples of the dataset with a representative distribution of tenure in each year. These sub-samples – one for each year from 2014 to 2018 – are adjusted to reflect the true distribution of policies in any given year. In the following, we refer to those as adjusted subsamples.

2.20 To achieve this, we performed the following procedure.

- Derive the real tenure distribution (target tenure distribution), by firm and market for each year from 2014 to 2018. In practice, we select multiple random samples of one single observation among the ones available over the years for each policy and use these subsets to recompute the tenure distribution. We addressed the risk of selecting a skewed draft by averaging over multiple samples.
- For each firm, we randomly drop observations from each tenure bucket (new business, tenure 1, tenure 2, ..., tenure 10 and tenure above 10) to achieve the target distribution.

Data challenges solutions adopted

2.21 Gathering the data presented many challenges that we addressed in close cooperation with the firms selected for our request for information.

2.22 Some of the main challenges were:

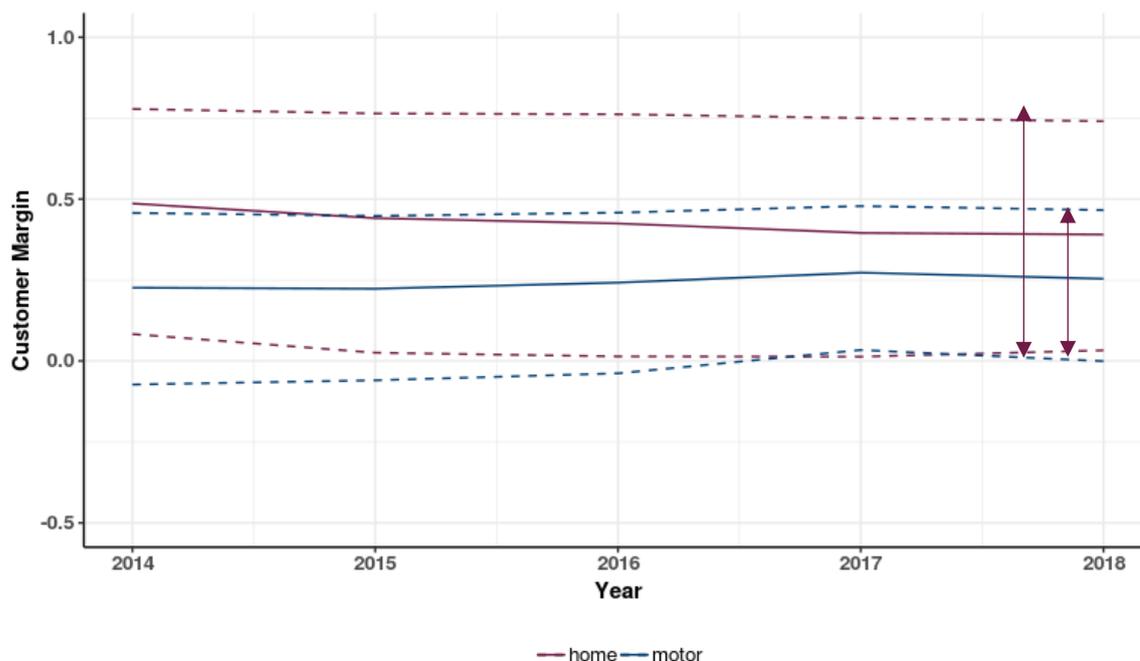
- Tracking policies over time. Firms do not adopt consistent means for identifying policies. While, for instance, each credit card or bank account is unequivocally identified by a unique number across the entire industry, no similar number exists for insurance policies. Each firm can have a different approach when tracking its customers and policies sold, and when defining whether a policy is a continuation of a previous contract. Furthermore, many intermediary firms have panels of underwriters, and insurance policies can be re-brokered. We extensively liaised with firms to ensure we could reliably identify and keep track of each individual insurance policy to study the evolution of margins over time.
- Expected costs of claims. We asked firms to provide the *expected claims cost* at the time the policy was struck. Not all underwriters keep historical records of this information, and pure intermediaries generally don't have access to it. When information was missing, we asked underwriters to re-compute the expected costs of claim by re-applying historical models to historical data, or use other suitable approximations. We asked intermediaries to provide the net premium instead.
- Data consistency and completeness. Some firms were unable to provide some of the variables for some or all policies. As a result, some of the analyses presented in this Annex are based on data from a subset of firms, depending on data availability.

3 The level and dispersion of customer margin

Customer margin is higher for home than for motor

- 3.1 Our data show us margins for home and motor over a five-year period from 2014 – 2018. The average customer margin is higher for home than for motor and, over time, slightly decreases for home insurance while it slightly increases for motor insurance.
- 3.2 In 2014, the average (median) margin in our adjusted sample was 43% (49%) for home against 19% (23%) for motor. In 2018, the average (median) is 38% (39%) for home vs. 24% (25%) for motor. Customer margin dispersion (measured by standard deviation) remains higher in home compared to motor (0.35 vs 0.24 in 2018 from 0.39 vs 0.30 in 2014).
- 3.3 Figure 1 illustrates the median customer margin and the range between the 10th margin percentile 90th margin percentile for home policies and motor policies over the period 2014 to 2018. We observe small changes in the level of margin dispersion at the aggregate market level, mostly in motor over the last 2 years. Over the entire period, the average and median margin measured for home remain consistently higher than the one observed for motor.

Figure 1: Evolution of median customer margin and customer margin dispersion over time in home and motor insurance



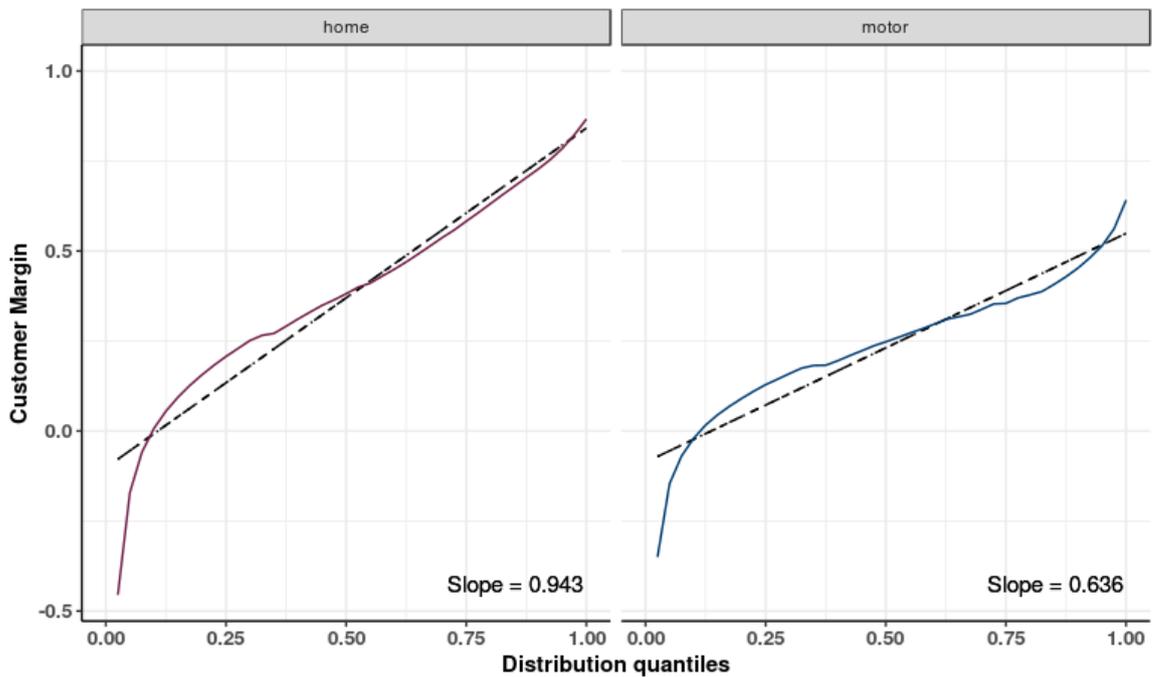
Source: FCA elaborations on transaction level dataset. Home insurance includes buildings-only, contents-only and combined buildings and contents policies

- 3.4 Market level figures are the result of very different firm level outcomes. In home, the firm level average customer margin varies widely, from slightly negative (-8%) to very positive (71%). In motor, the gap between the lowest average customer margin individually computed for each firm and the highest is smaller (from 6% to 47%).
- 3.5 In home, the four biggest players by number of active policies are characterised by a higher customer margin than most other firms. This may suggest a higher level of incumbency advantage than in motor, where we don't observe the same correlation between high market share and high margin. Indeed, for the four biggest motor players we observe a customer margin lower than most other firms.

Customer margins vary considerably and dispersion is higher for home than for motor policies

- 3.6 Customer margin dispersion can provide an indication of the extent of price discrimination in the market. To illustrate margin dispersion, we created distribution curves that put policies into 40 equally-sized groups based on ranking of customer margin from lowest to highest. We then plotted (see Figure 2) one point for each bucket (the median values). The consumer margin represents the proportion of premium that is left after covering the risk cost. That is, the consumer margin is, by definition, 0, when the entire premium is used to cover the expected claims cost, and makes no contribution to expenses or profits. The maximum value it can take is 1.
- 3.7 This type of chart shows how the customer margin (on the vertical axis) varies across the 40 equally sized groups. It allows us to see the difference in customer margin between the lowest and highest groups, as well as how margins behave between the two extremes. If all customers were paying the same margin, we would observe flat horizontal lines. If large groups of consumers were paying the same margins, we would observe distribution curves characterised by some flatter horizontal portions. Conversely, a steeper distribution curve is the result of high margin dispersion. Throughout this annex, we present multiple graphs based on the same approach to explore margin dispersion for specific subgroups (eg new customers vis-à-vis renewal customers).
- 3.8 Our data show a higher level of margin dispersion (steeper slope) in home than in motor. Margin dispersion in motor has remained broadly stable over time, whereas it appears to have slightly increased in home. We also observe negative margins. These may be new business customers who are getting a substantial new business discount. Alternatively, they may be customers who have had a substantial increase in their expected claims cost but their premium has not yet been adjusted. In the latter case, some insurers highlighted that they could spread a price adjustment following an increase in expected claims costs over more than one year.
- 3.9 An important note here is that since the customer margin measurement does not account for firms' expenses, any difference in margin levels between home and motor could be explained by the difference in expenses (eg distribution cost). However, our margin dispersion analysis focuses on the slope (steepness) of each distribution curve, which illustrates the difference in margins between groups that are characterised by broadly similar expenses. Therefore, our findings above are not sensitive to variations in expenses over time and across markets.

Figure 2: Customer margin dispersion in home and in motor insurance, 2018.

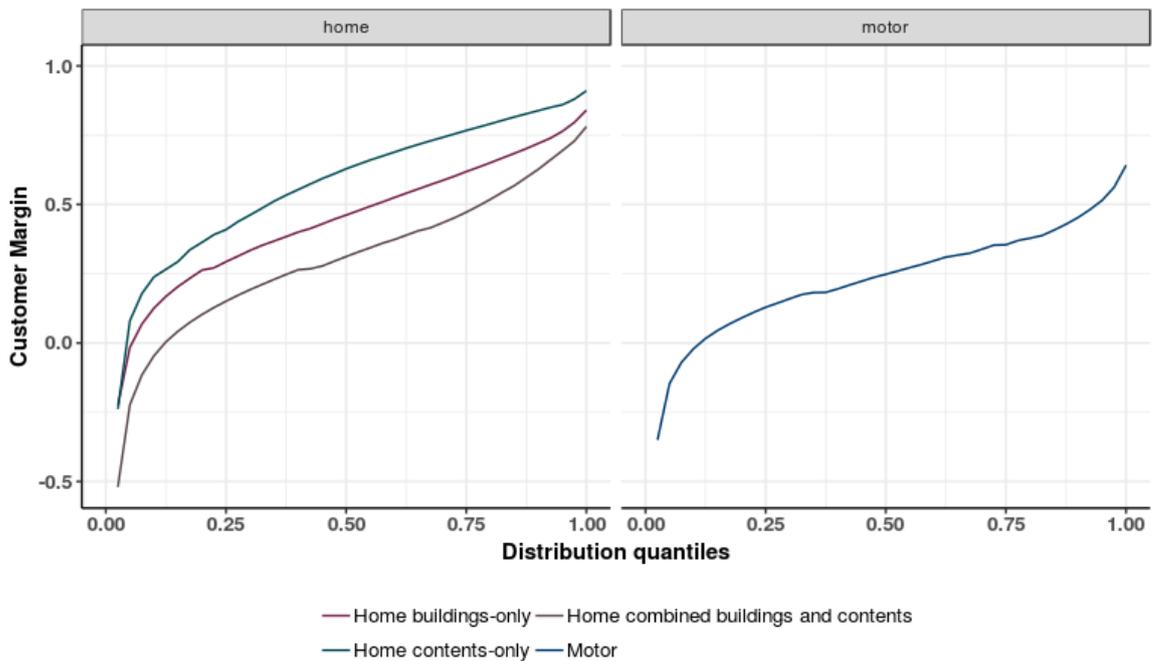


Source: FCA analysis of policy data provided by firms, 2018 adjusted subsample. Home insurance includes buildings-only, contents-only and combined buildings and contents policies. Slope is the coefficient of a linear interpolation of the data points for 2018 and is presented for illustrative purpose, to help interpret the graphs.

Contents-only policies have the highest customer margin in home market and the lowest average premium

- 3.10 In our 2018 sample for home, we measure the highest average margin for contents-only policies (57%), whereas combined building and contents policies have the lowest (30%). Buildings-only policies fall in between (44%). Margin dispersion (measured - as before - as the slope of a linear interpolation) remains similar across the three types of home policies.

Figure 3: Customer margin dispersion by type of home insurance and for motor insurance, 2018



Source: FCA analysis of policy data provided by firms, 2018 adjusted subsample

3.11 Contents-only insurance policies are characterised by the lowest average premium (£107), followed by buildings-only policies (£219) and combined building and contents (£246). For motor, the average premium in our 2018 sample is £306 (and a 25% customer margin). Margins tend to increase with premium for all types of insurance policies and, to a lesser extent, for motor policies.

3.12 To understand the source of margin dispersion, we compare:

- new policies against policies that have been renewed with the same provider (renewal policies)
- policies held for a different number of years (different tenure)
- policies distributed via different channels (directly, via price comparison websites and via other intermediated channels).

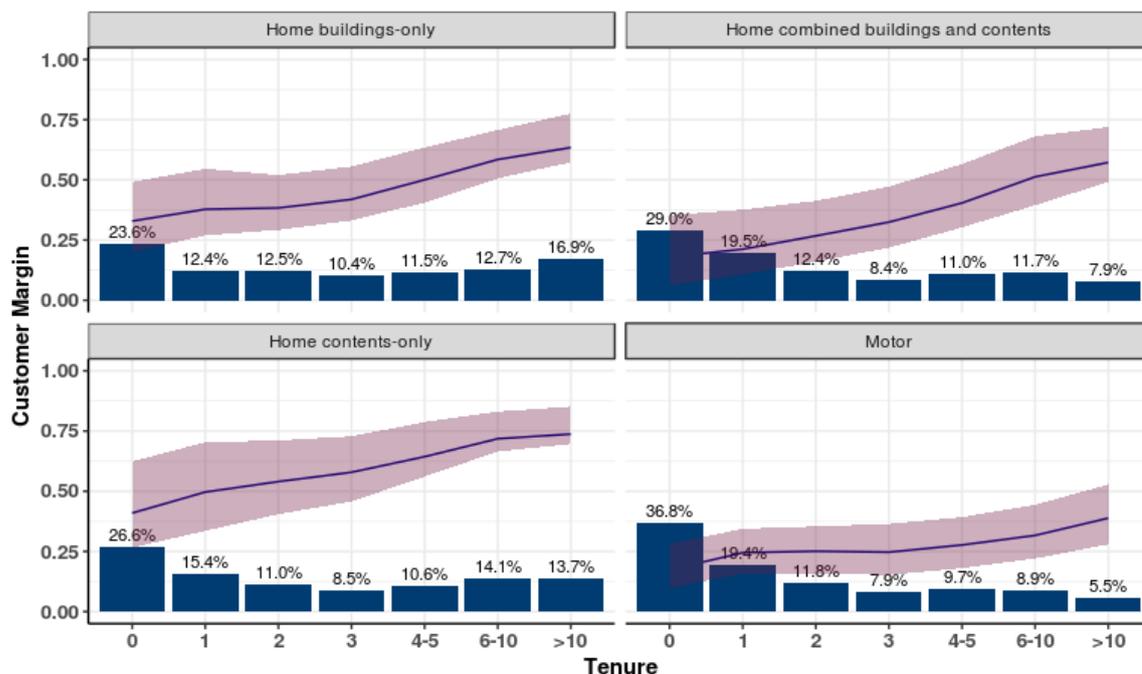
We find the average customer margin increases with tenure, but there is high margin dispersion for all tenures

3.13 To explore the evolution of customer margin and its dispersion for policies of different tenures we adopt a different graphical approach. In Figure 4 below, we group policies by their tenure and plot the average customer margin for each tenure bucket (blue line). The interquartile range in these diagrams (shaded area) shows the boundaries of the central 50 per cent of the distribution of margins for that tenure. The bars (in blue) represent what percentage of the total number of policies in our 2018 adjusted sample falls in each tenure bucket.

3.14 Figure 4 is conceptually similar to Figure 1 presented in the [Terms of Reference](#), with some key differences.

- It presents the customer margin as opposed to the profit margin. Furthermore, the customer margin is computed from policy level data, while the profit margin was computed starting from aggregated data.
- It shows additional information on the margin dispersion within each tenure bucket (the shaded area).

Figure 4: Customer margins by tenure, 2018



Source: FCA analysis of policy data provided by firms. Note that two different datasets are used in the plot above: the line representing the average margins and the shaded area representing margin dispersion (the interquartile range) are computed using 2018 data from the full transaction dataset. The bars, instead, are derived from the tenure-adjusted subsample for 2018.

- 3.15 In our 2018 adjusted sample, we observe the highest proportion of new business policies (37%) in motor. Conversely, home buildings-only policies have the largest proportion of policies that have been held for more than 10 years (17%).
- 3.16 On average, margins on policies for longstanding customers are higher, particularly for home. In motor, the slope is relatively flatter for the shortest tenures (Figure 4 above). The difference in average customer margin between a front book customer (tenure 0) and a longstanding customer (tenure >10) is 31 percentage points for buildings-only policies, 39 percentage points for combined building and contents policies, 33 percentage points for contents-only policies and 21 percentage points for motor policies.
- 3.17 The figure above also shows that consumers of the same tenure may be paying for policies characterised by the very different margins. Wide margin dispersion persists across all tenures. Therefore, while tenure is an important factor influencing the margin, the wide dispersion of margins is not explained solely by tenure. Chapter 4 of the [Interim report](#) discusses how firms set prices for their customers, including margin optimisation.

4 Who pays high margins?

Which customers are making the greatest contribution to expenses and profits

- 4.1 Wide customer margin dispersion suggests that some consumers may be paying significantly more (or less) than the market average. However, the distribution of contributions to expenses and profits across customers depends on the form of pricing a firm adopts and the consumer's position in the life time of the policy cycle. A customer paying a high margin in one year may have received an initial discount or reduced margin in previous year(s). Over the lifetime of the policy a customer may pay overall an average contribution to margin, so it is important to consider this lifecycle and not just look at the margin at a snapshot in time. However, the higher the margin and the longer the tenure of the customer the more likely that the customer is making a proportionately very high contribution to expenses and profits.
- 4.2 To consider these aspects, we adopt two complementary approaches.
- We look at snapshots in time, focusing on policies characterised by margins above a specific threshold, set to a level that would allow firms to recoup over time the typical initial business discount.
 - We study the evolution of the margin for individual customers (cohort analysis). This analysis is presented in Chapter 6 of the [Interim report](#).

High margins reflect premiums that are significantly higher than the market average premium for the risk

- 4.3 For our initial set of analyses, we set thresholds to identify policies characterised by "high" and "very high" customer margins. These thresholds are indicative to allow analysis of the dispersion of margins.
- 4.4 We compute the market average margin for firms in our sample for each product. If the market average margin were uniformly applied to all customer policies across the market it would cover the current market level of costs, expenses and profit. We then set thresholds that were at a premium 50% above this (we term this a 'high' margin) and double the market average premium for the risk (a 'very high' margin). These are only indicative thresholds and need to be considered in the context of any initial discount for the consumer. The typical difference between the new business margin and renewal that we observe is 19% for home and 11% for motor. Longstanding customers may have been paying high margins for several years.
- 4.5 In practice – considering that $Customer\ margin = \frac{premium - expected\ claims\ costs}{premium}$ – if an average premium was £100 and average expected claims cost was £76 the associated customer margin would be 24%. If we consider a premium of £100 a competitive premium, and define a 'high premium' at £150 (50% above the competitive premium) and a 'very high premium' at £200 (twice the premium) the associated critical thresholds would be:
- $high\ premium\ threshold = \frac{150 - 76}{150} = 0.49$
 - $very\ high\ premium\ threshold = \frac{200 - 76}{200} = 0.62$

Table 3: Market average customer margins and threshold values

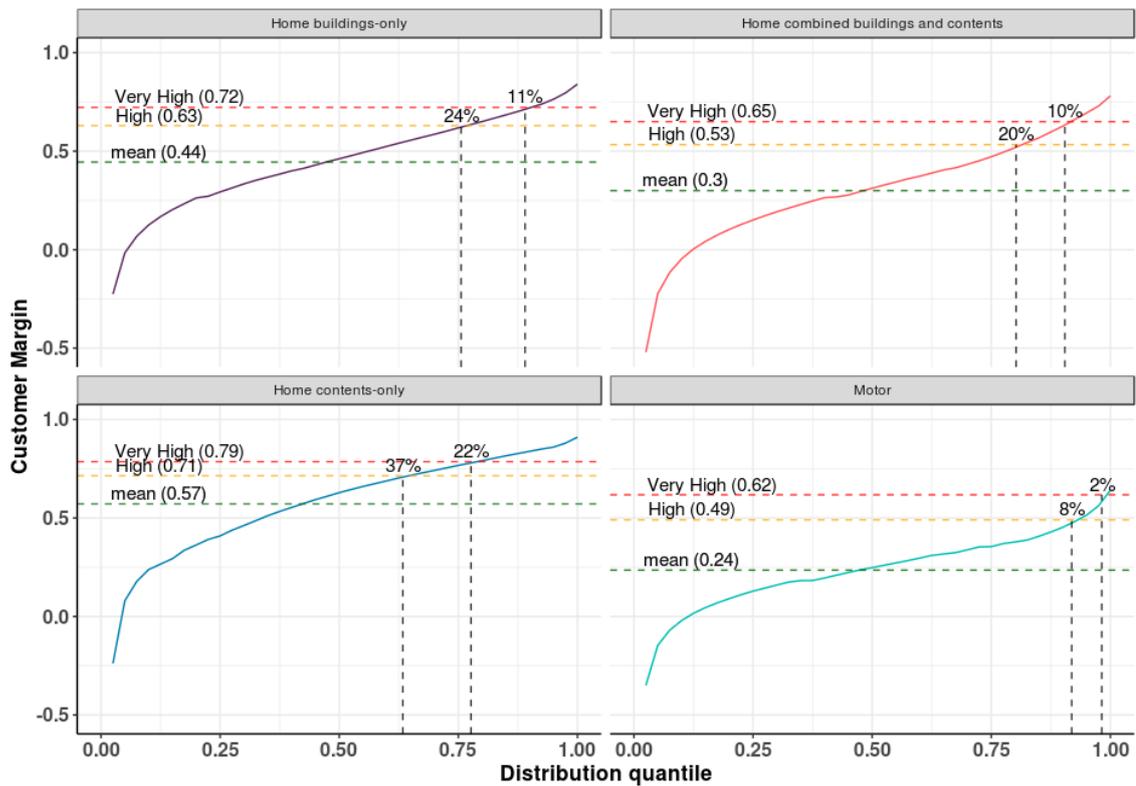
Data unit	Average margin	High margin	Very high margin
Home – buildings-only	44%	63%	72%
Home – combined building and contents	30%	53%	65%
Home – contents-only	57%	71%	79%
Motor	24%	49%	62%

Source: FCA analysis of policy data provided by firms.

A higher proportion of customers pays high and very high margins in home than in motor

- 4.6 Based on the thresholds, we compute the proportion of customers who pay high or very high margins for motor and for each of the home products and show them in Figure 5 below. The proportion of policies characterised by high and very high margins is higher for home than for motor: 37% for contents-only policies, 24% for buildings-only policies and 20% for combined building and contents policies. For motor, it is 8%.
- 4.7 Using the proportions above, we estimate that approximately 4.2 million home insurance policies were characterised by high or very high margins in 2018 (0.5 buildings-only, 2.3 combined buildings and contents, 1.4 contents-only). For motor, we estimate that 1.9 million policies were characterised by high or very high margins in 2018.
- 4.8 In detail, Figure 5 illustrates: (i) the distribution of customer margin in 2018 for each product; (ii) horizontal lines corresponding to – from the bottom up – the market average margin, the high margin threshold and the very high margin threshold in 2018. The intersection between the distribution of customer margin and three horizontal lines allows to identify the proportion of customers paying for policies characterised by margins at or above the threshold.

Figure 5: Proportion of policies characterised by high and very high customer margins, 2018



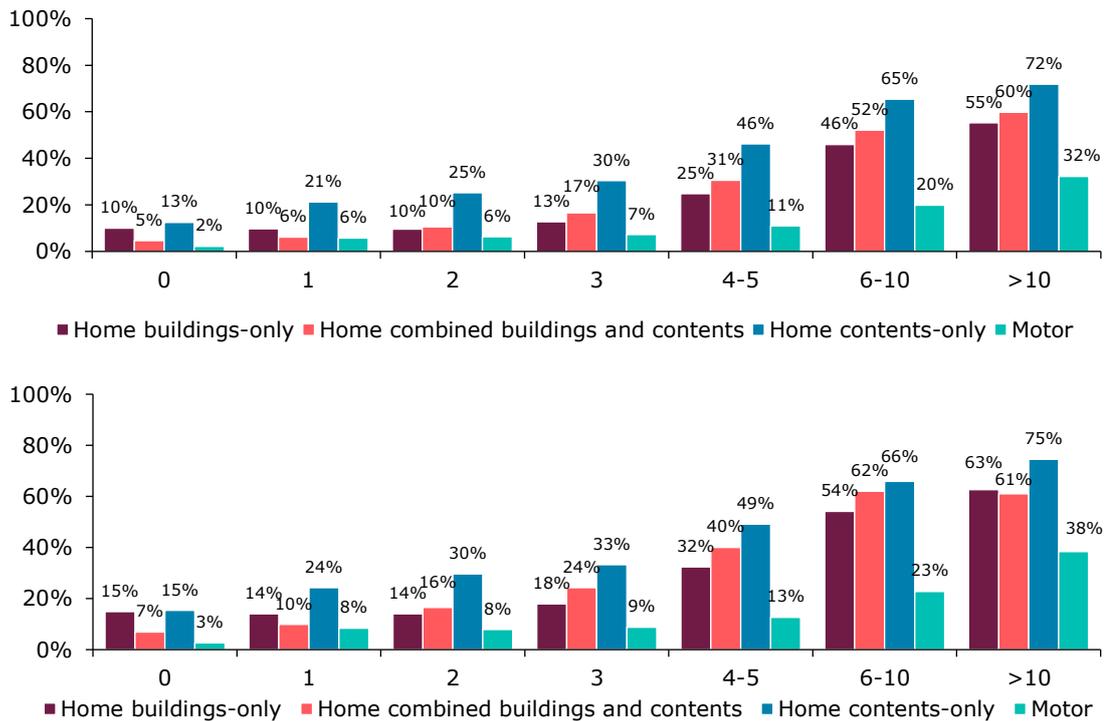
Source: FCA analysis of policy data provided by firms

- 4.9 To understand what factors correlate with a high or very high margin, we compare:
- policies held for a different number of years (different tenure)
 - policies distributed via different channels (directly, via price comparison websites and via other intermediated channels)
 - consumer characteristics

The proportion of customers buying high and very high margin policies increases with tenure, but we find high margin policies in the front book too

- 4.10 Consistent with the steady increase in average premium by tenure (see Figure 4), we find that the policies held for a longer number of years are more likely to be characterised by high customer margins. However, we also find some high margin policies in the front book (tenure 0) and, more generally, for short tenures. This is illustrated in Figure 6 below, which shows the proportion of consumers paying “high” and “very high” margins within each tenure (top panel) and the proportion of total premiums paid for those policies (bottom panel).

Figure 6: Proportion of policies (top) and total premiums (bottom) in high and very high margin policies at each tenure, 2018.

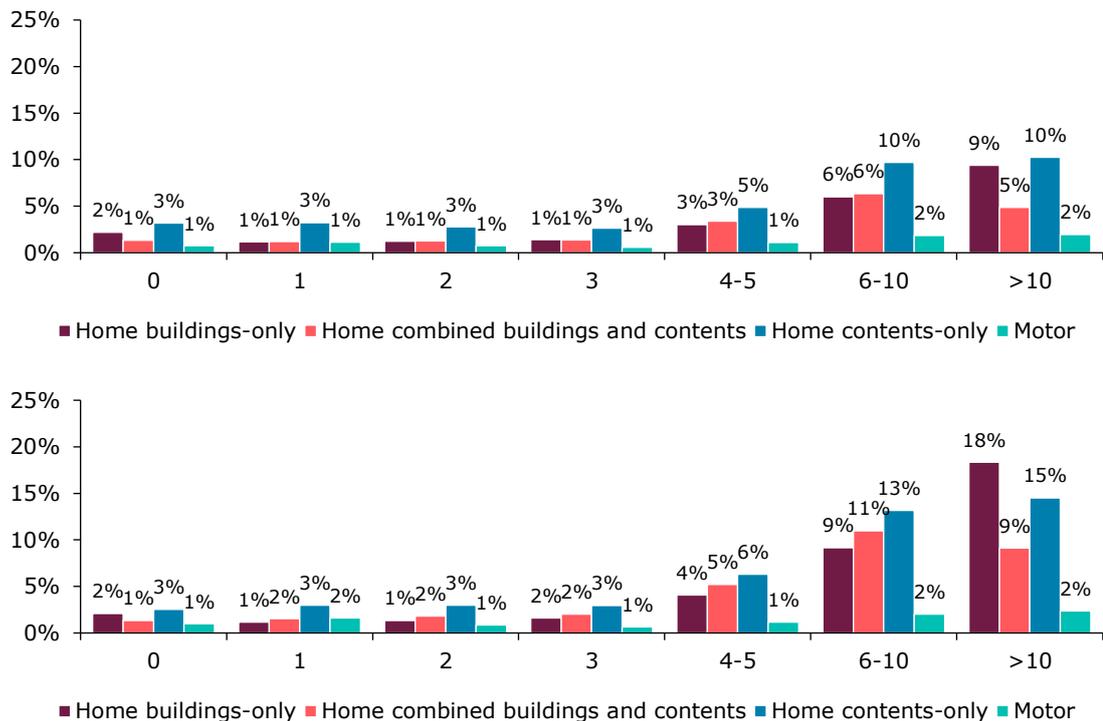


Source: FCA analysis of policy data provided by firms. The chart uses the adjusted dataset and shows, for each insurance product, the proportion of high and very high policies (count or sum of gross written premiums) within each tenure bucket. Note that, for presentation purposes, we rounded figure labels to the closest integer. Calculations presented in the text, instead, are based on maximum available precision.

Some customers paying high and very-high margin policies have held their policy for 3 years or less

4.11 While the proportion of high and very high margin policies among new business customers is lower, at least 1 in 5 policies is new business (see Figure 4). To understand the distribution of high and very high margin policies between front book customers and longstanding customers we computed the proportions of customers and total premiums in high and very high margin policies across all tenure durations. For instance, we divided the number of high and very high margin policies in tenure 0 by the total number of policies across all tenure durations instead of using the total number of tenure 0 policies as per for Figure 6 above. The resulting figures – which refer to our sample of underwriters – are shown below (Figure 7).

Figure 7: Proportion of policies (top) and total premiums (bottom) in high and very high margin policies as a percentage of the total across all tenure durations, 2018



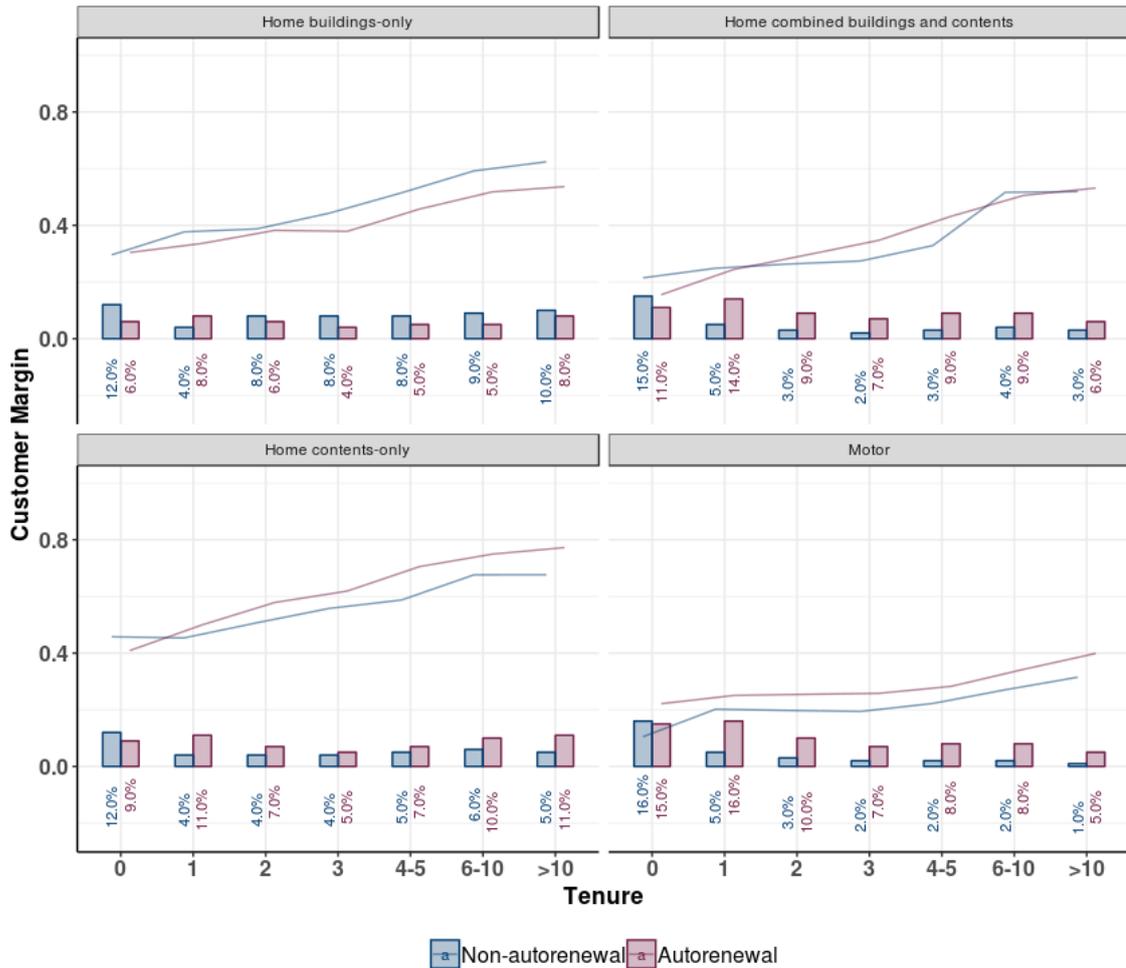
Source: FCA analysis of policy data provided by firms. The chart is based on the adjusted dataset and shows, for each insurance product, the proportion of high and very high policies (count or gross written premiums) over the total across all tenures. Note that, for presentation purposes, we rounded figure labels to the closest integer. Calculations presented in the text, instead, are based on maximum available precision.

- 4.12 We find that, for home building-only policies, 24% of the policies in our 2018 sample are characterised by high or very high margins: 6 percentage points (pp) are customers who have held their policy for 3 years or less, 18 pp% are customers who have held their policy for 4 or more years. For combined building and contents policies, the total of high and very high margin policies is 20%, 5 pp characterised by tenure up to 4 years, 15 pp by tenure 4 years or more. For contents-only policies, the total is 37%, 12 pp with tenure up to 4 years, 25 pp with longer tenure. In motor, high or very high margin policies amount to 8% of the total, 3 pp are customers who have held their policy for 3 years or less, 5 pp are customers who have held their policy for 4 or more years.
- 4.13 For home building-only policies, the premiums paid for high and very high margin policies is 38% of the total premiums in our 2018 sample. Of that, 6 percentage points (pp) are spent on policies held for 3 years or less. Similarly, for combined building and contents policies the total is 32%, 7 percentage points for policies held for 3 years or less. For contents-only policies, the corresponding figures are 45% and 11 percentage points. For motor, the premiums paid for high and very high margin policies is 10% of the total. Of that, 4 percentage points are spent on policies held for 3 years or less.

The average margin increases with tenure both for customers who have policies set to automatically renew and for those who don't

4.14 We investigate the relationship between higher consumer margins, automatic policy renewal and tenure. Figure 8 shows how the average margin varies across different tenures depending on whether a policy is set to renew automatically. The red line represents customers whose policy is set to renew automatically, the blue line the others. The bars, instead, represent the proportion of autorenewal and – separately – non autorenewal policies for the specific tenure out of the total number of policies across all tenures.

Figure 8: Margin dispersion by tenure bucket and autorenewal, 2018



Source: FCA analysis of policy data provided by firms. Note that two different datasets are used in the plot above: the line representing the average margins are computed using 2018 data from the full transaction dataset. The bars, instead, are derived from the tenure-adjusted subsample for 2018.

4.15 We observe a steady increase of the customer margin with tenure for both autorenewal and non-autorenewal policies. We also notice that, among new business customers (tenure 0) there is generally a higher proportion of policies that are not set to auto-renew. For longer term policies, instead, autorenewal is more frequent. For most firms, autorenewal is the default option, and the customer would need to opt out.

4.16 To understand whether customers are stickier when they are on autorenewal policies, we study attrition rates, ie the proportion of customers who don't renew their policy and drop out of our dataset.⁵ The Interim Report presents our findings by tenure and

⁵ Attrition in our dataset could be the result of customer switch to a new contract, to a different provider or stopping buying insurance.

by tenure and autorenewal (see figures 19, 20 and 21 of the [Interim report](#)). Figures refer to 2017 data, ie the last year in our sample where we can check if each individual policy was renewed the following year.

- 4.17 We find that the attrition rate is the same for home and motor policies at tenure 0, but drops faster for home policies, remaining higher for motor. Overall, however, it steadily declines for both home and motor policies. We also statistically test the difference in attrition at each tenure between those who have a policy set to renew automatically and those who don't. We don't find a difference in drop-out rates for motor. For home, instead, we find that autorenewal customers are stickier than non-autorenewal.⁶

Graphical analysis leads to mixed evidence on the relationship between margins and distribution channels, age and proxies for vulnerability

- 4.18 We graphically studied the distribution of the consumer margin for policies sold via intermediaries, price comparison websites, or by underwriters via a direct channel. At this stage, we haven't found consistent evidence of differences. However, this is likely due to data quality and we are considering further analysis on this topic.
- 4.19 Our dataset shows a higher proportion of elderly people paying high or very high margins (see figure 23 of the [Interim report](#)), but the effect is likely to be driven by tenure, as older customers are more likely to be long-standing customers in both home and motor.
- 4.20 We study the relationship between the probability of paying a high margin and proxies for vulnerability that we have adopted in previous studies: [English indices of deprivation 2015](#) and [ONS Pen Portraits data](#).⁷ Figure 24 of the [Interim report](#) shows that, particularly for home, the proportion living in hard-pressed communities is higher among high and very high margin policies. Given the importance of understanding whether vulnerable consumers are disproportionately affected, in the next section we present results from:
- multivariate regression analysis on the full transaction level dataset aimed at testing the impact of customer characteristics and vulnerability on margins;
 - further analysis based on a richer, but smaller dataset, which links firms' margin data to consumer characteristics obtained via the consumer survey research (joint dataset).

⁶ We use a z-test for differences in proportions and test the null hypothesis that drop out in autorenewal are equal or lower than drop out in non-autorenewal. For home insurance, we reject the null hypothesis for all tenures. For motor insurance, instead, we can never reject the null hypothesis.

⁷ Both definitions are postcode-based proxies and differ from the FCA definition of vulnerability. The latter is based on four areas of individual characteristics: health, life events, resilience and financial capability (as discussed in para 6.26). We use postcode-based proxies when analysing the transaction dataset because we only have information on individuals characteristics from the consumer survey.

5 Regression analysis on transaction level dataset

- 5.1 To deepen our understanding of how different factors – jointly considered – relate to customer margins, we develop a simple multivariate regression model. The model employed, described by the equation below, is a pooled panel regression at the policy-year (it) level with firm and year fixed effects and cluster-robust standard errors at firm level.

$$Margin_{it} = \alpha_i + \beta Characteristics_i + \delta Tenure_{it} + Year\ dummy + Firm\ dummy + \varepsilon_{it}$$

- 5.2 We use the following variables

Table 4: Definition

Variable	Description
Customer margin	Customer margin on core policy net of expenses (as defined earlier). As discussed, this information is only available for underwriters, not for pure intermediaries.
Tenure	Takes values from 0 (new policy, used as a reference value) to 10 and ">10". Based on the evidence discussed, we consider this a main variable of interest.
Autorenewal	Takes value "1" (true) when the policy is set to automatically renew the subsequent year. Based on the evidence discussed, we consider this a main variable of interest.
Policy type	Included for home insurance regressions only. ⁸ It takes three values: buildings-only (used as a reference), contents-only, combined building and contents. ⁹
Age	We define three age groups: <35 year old (reference group), between 35 and 64, 65 and over
Vulnerability flag	We test two alternative definitions, one based on <u>total Index of Multiple Deprivation (IMD)</u> , the other on <u>ONS pen portrait data</u> . - Our ONS based indicator takes value "1" (vulnerable customer) if the postcode we have for the customer (risk or billing postcode) belongs to an area described as "hard-pressed community" - Our IMD vulnerability flag takes value 1 (vulnerable customer) if the "total IMD score" corresponding to the postcode we have for the customer (risk or billing postcode) is greater than the 80 th percentile of the "total IMD score" in the whole population. Both definitions represent proxies as they are based on postcode level information. The FCA definition of vulnerability, instead, is based on individual characteristics across four areas: health, life events, resilience and financial capability, as discussed at paragraph 6.26.
ECC quartile	We grouped all policies in 4 bins based on the level of expected claims costs. This is to account for the possibility that firms could be targeting an absolute margin instead of a percentage margin.

⁸ While we have information on policy type for motor insurance too (split into comprehensive, third party fire & theft, and other), 99% of the policies in the sample for the baseline model are "comprehensive".

⁹ For the baseline sample, 12% of policies are of type "building", 63% of type "building and contents" and 25% of type "contents".

Variable	Description
	<i>This variable is introduced based on the observation that customer margin (defined as a percentage) decreases with increases in expected claims cost</i>
Discounted	<i>Indicates whether a discount was applied to the policy. In many cases the information is missing. When the information is available, we don't distinguish whether the discount was applied upon the customer request or by insurers' own initiative.</i>
Sale channel	<i>Indicates whether a policy was sold directly (reference group) or via an intermediated channel (a broker or a price comparison websites)</i>

5.3 We use firm and year fixed effect to control for other firm-specific and time-specific factors.

5.4 We perform the following steps.

- Separately estimate a baseline model for home and for motor. The baseline model only includes Tenure, Autorenewal, Policy type (for home regressions), Age group and a flag for vulnerability.
- As tenure appears to have the larger effect size, we check that the additional variables in the baseline model actually provide additional information by estimating a simplified model: customer margin as a function of tenure only.
- Extend the baseline model adding, in turn, three further explanatory variables: expected claims costs (ECC) quartile, Discount, Sale channel. The introduction of Discount and Sales channel, however, considerably reduces our sample size and alters its composition by firm. Therefore, as a robustness check, we also estimate the baseline model on the reduced sample.
- Extend the baseline model adding interaction terms between Tenure and Autorenewal. This specification helps investigate whether the relationship between customer margin and tenure length differs between autorenewal and non-autorenewal policies when controlling for other factors.
- Rerun the baseline model for each home policy type (building, contents, combined building and contents) separately.
- Test for multicollinearity using Variance Inflation Factor.

5.5 Table 5 below reports regression results for home.

Table 5: Regression results – home insurance

Home Insurance					
customer margin	Baseline	Baseline2	ECC	Discount	Channel
(Intercept)	0.15*	0.15*	0.31***	0.21***	0.26***
	(0.07)	(0.06)	(0.05)	(0.05)	(0.04)
Tenure					
tenure 1	0.04*	0.04*	0.05**	0.04**	0.04**
	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)
tenure 2	0.11***	0.11***	0.12***	0.11***	0.09***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
tenure 3	0.16***	0.17***	0.18***	0.16***	0.12***
	(0.02)	(0.02)	(0.03)	(0.03)	(0.02)
tenure 4	0.2***	0.21***	0.22***	0.2***	0.15***
	(0.02)	(0.03)	(0.03)	(0.04)	(0.02)
tenure 5	0.23***	0.24***	0.24***	0.23***	0.17***
	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)
tenure 6	0.26***	0.27***	0.27***	0.26***	0.19***
	(0.02)	(0.03)	(0.02)	(0.04)	(0.03)

Home Insurance					
tenure 7	0.26*** (0.02)	0.27*** (0.02)	0.27*** (0.02)	0.28*** (0.05)	0.2*** (0.03)
tenure 8	0.26*** (0.02)	0.27*** (0.02)	0.28*** (0.02)	0.29*** (0.05)	0.21*** (0.03)
tenure 9	0.28*** (0.02)	0.29*** (0.02)	0.29*** (0.02)	0.3*** (0.05)	0.22*** (0.04)
tenure 10	0.29*** (0.02)	0.3*** (0.02)	0.31*** (0.02)	0.31*** (0.05)	0.24*** (0.04)
tenure >10	0.32*** (0.02)	0.33*** (0.02)	0.34*** (0.02)	0.33*** (0.03)	0.27*** (0.05)
Policy type					
Content	0.13** (0.04)	0.12** (0.04)	-0.01 (0.06)	0.18*** (0.04)	0.13** (0.04)
building&content	-0.05*** (0.01)	-0.06*** (0.01)	0.02* (0.01)	-0.04* (0.02)	-0.05** (0.02)
Autorenewal					
autorenewal	0.11** (0.04)	0.11** (0.04)	0.12*** (0.03)	0.04* (0.02)	0.04 (0.02)
Age group					
age 35-64	-0.01 (0.02)	-0.01 (0.02)	0 (0.02)	-0.01 (0.01)	-0.01 (0.01)
age 65+	0.05 (0.03)	0.05 (0.03)	0 (0.02)	0.03*** (0.01)	0.03* (0.01)
Vulnerability flag					
hard-pressed	0.03*** (0.01)		0.01 (0.00)	0.03** (0.01)	0.02 (0.01)
imd >80%		0.03*** (0.01)			
ECC quartile					
ecc q2			-0.18*** (0.03)		
ecc q3			-0.24*** (0.04)		
ecc q4			-0.37*** (0.06)		
Discount					
discounted				-0.06 (0.03)	
Sales channel					
intermediated					-0.06 (0.05)
Fixed effects					
Firm FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Model stats.					
AIC	3199432.44	2384673.75	2802242.4	-215250.02	-131077.72
BIC	3199927.1	2385161.67	2802777.16	-214814.9	-130629.38
No. of Obs.	4,728,591	3,941,397	4,728,591	2,670,127	1,893,372
adj. R-squared	0.22	0.24	0.29	0.36	0.26

a Cluster-robust standard errors on firms are shown in brackets.

b Firm and year fixed effects are included.

c *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

5.6 Table 6 presents regression estimates for motor.

Table 6: Regression results – motor insurance

Motor Insurance					
customer margin	Baseline	Baseline2	ECC	Discount	Channel
(Intercept)	0.16*** (0.03)	0.16*** (0.03)	0.31*** (0.04)	0.17*** (0.03)	0.16*** (0.03)
Tenure					
tenure 1	0.06*** (0.02)	0.06*** (0.02)	0.05** (0.02)	0.07*** (0.02)	0.06*** (0.02)
tenure 2	0.09*** (0.02)	0.09*** (0.02)	0.08*** (0.02)	0.1*** (0.02)	0.09*** (0.02)
tenure 3	0.12*** (0.02)	0.11*** (0.02)	0.1*** (0.02)	0.13*** (0.02)	0.12*** (0.02)
tenure 4	0.15***	0.14***	0.12***	0.16***	0.15***

Motor Insurance					
	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)
tenure 5	0.17***	0.17***	0.14***	0.18***	0.17***
	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)
tenure 6	0.19***	0.19***	0.16***	0.2***	0.19***
	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)
tenure 7	0.2***	0.2***	0.17***	0.21***	0.2***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
tenure 8	0.21***	0.21***	0.18***	0.22***	0.21***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
tenure 9	0.21***	0.21***	0.18***	0.22***	0.21***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
tenure 10	0.22***	0.22***	0.19***	0.23***	0.22***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
tenure >10	0.24***	0.25***	0.22***	0.26***	0.24***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Autorenewal					
autorenewal	0.02	0.02	0.03*	0.02	0.02
	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)
Age group					
age 35-64	0.02	0.02	-0.04*	0.02	0.02
	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)
age 65+	0.01	0.01	-0.05**	0.01	0.01
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Vulnerability flag					
hard-pressed	0.01		0.02**	0.01	0.01
	(0.01)		(0.01)	(0.01)	(0.01)
imd >80%		0.01			
		(0.01)			
ECC quartile					
ecc q2			-0.09***		
			(0.02)		
ecc q3			-0.14***		
			(0.03)		
ecc q4			-0.2***		
			(0.05)		
Discount					
discounted				-0.05**	
				(0.02)	
intermediated					0.07
					(0.04)
add-on					
Fixed effects					
Firm FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Model stats					
AIC	475073.86	398697.69	-121494.02	-324161.77	499797.02
BIC	475542.71	399146.88	-120983.79	-323693.57	500279.35
No. of Obs.	7,202,288	6,027,081	7,202,288	7,065,226	7,136,902
adj. R-squared	0.12	0.12	0.19	0.14	0.12

a Cluster-robust standard errors on firms are shown in brackets.

b Firm and year fixed effects are included.

c *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

5.7 In the following, we focus on findings from the baseline specification, unless indicated otherwise. When interpreting results, it is important to remind that Discount and Channel specifications are characterised by a markedly different – and smaller – sample, and that we believe the quality of information, particularly for discount, could be improved.

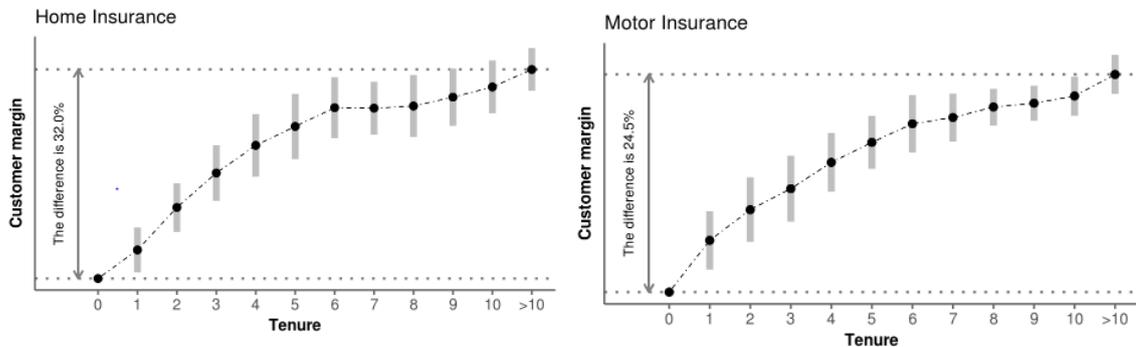
Regression analysis confirms tenure is an important driver of customer margin

5.8 For both home policies and motor policies, the tenure has the strongest impact on customer margin. Longer tenure is associated with higher customer margin than the ones observed for new customers (tenure 0, our base category). The difference in

margin (compared to tenure 0 base category) also increases with tenure length, albeit at a decreasing rate.¹⁰

- 5.9 The effect of tenure is stronger for home policies than for motor policies, but the overall trend looks similar. Figure 9 below plots the point estimates and confidence intervals for the Tenure variables from the Baseline model.

Figure 9: Estimated coefficients and confidence intervals for tenure, baseline model



Source: FCA elaborations on transaction level dataset

Customer margin for autorenewal policies in home appears higher than for non-autorenewal policies. The same does not hold for motor.

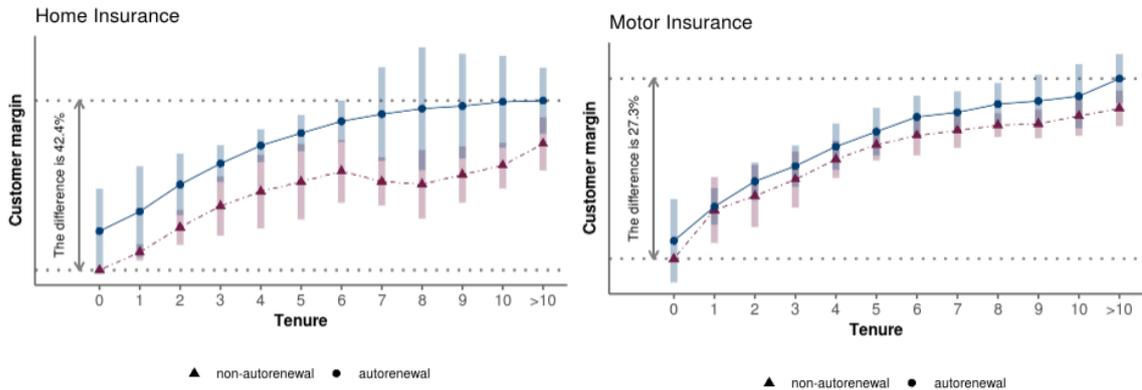
- 5.10 The baseline model indicates that the customer margin for home policies characterised by autorenewal is 11 pp higher than non-autorenewal policies. The estimate is significant at 1% level. In motor, instead, we don't find a statistically significant coefficient for autorenewal. Results for home are robust to the inclusion of the ECC variable. For motor, the autorenewal coefficient becomes significant, but remains much small in size (3 pp).
- 5.11 If we look separately at each home type (separate regressions), we find a higher estimated coefficient for autorenewal in the case of contents-only policies (16 pp) compared to buildings-only and combined building and contents policies (8 pp each). Estimates are significant at 1% level.

In motor, we don't find evidence that the relationship between customer margin and tenure length differs between policies set to automatically renew and those who are not.

- 5.12 Figure 10 below compares point estimates and confidence intervals from the Baseline specification for the Tenure variable for autorenewal policies and non-autorenewal policies. For home, the difference in point estimates is larger, with autorenewal policies characterised by higher customer margin. For motor, the difference is much smaller, and the estimates for autorenewal and non-autorenewal policies are within the 5% confidence interval of each other, suggesting the difference is not statistically significant.

¹⁰ As we discuss in Section 7, this result is supported by different analyses and does not appear to be an artefact of the fact that customer margin, by construction, is upper bounded (maximum value of 1).

Figure 10: Estimated coefficients for interaction between tenure and autorenewal and confidence intervals, baseline model



Source: FCA elaborations on transaction level dataset

Limited evidence of a relationship between margins and vulnerability

- 5.13 For home, the main regression specifications suggest that consumers flagged as vulnerable based on their postcode (either according to the ONS pen portraits based definition, or the IMD definition) buy policies characterised by a margin 3 pp higher. The inclusion of ECC as an explanatory variable, however, changes the results. For motor, the situation is reversed: we only find a statistically significant coefficient of 2 pp for the ECC specification. However, it is important to remember that, for this analysis, potentially vulnerable consumers are identified using proxies based on postcode level data. Therefore, we explore the relationship between margins and indicators of vulnerability using information from consumer survey research (the joint dataset).

6 Analysis of joint dataset

- 6.1 The data available in the transaction level dataset include information consumers provide firms when purchasing an insurance policy. To complement this information with additional data on consumers' characteristics (including socio-demographics, vulnerability, engagement and understanding of insurance markets, preferences and attitudes to fairness) a sample of the customers included in the transaction level dataset were surveyed in our consumer research (see [Consumer research report](#) and [technical report](#)).
- 6.2 The consumer research surveyed 4,214 home customers and 7,493 motor customers. However, not all survey respondents could be matched to policy data in the transaction level dataset. Successfully matching survey respondents to their associated policy data in the transaction level dataset, resulted in a matched survey sample of 3,408 home and 7,021 motor customers.
- 6.3 Relative to the transaction level dataset, the matched survey provides a small (in terms of the number of customers), but wide (in terms of the number of customer characteristics) dataset. In particular, relative to the transaction level dataset, when assessing the characteristics of high margin customers, the survey dataset increases the number of available characteristics. However, to assess high margin customers, the customer's margin must be calculable. The inputs necessary to estimate customer margins (premium and expected claims cost) were not available for all matched policies. Margins could be estimated for 2,371 home and 5,108 motor customers.¹¹
- 6.4 The survey dataset provides detailed information on consumers' policies and characteristics, but only for a small proportion of all the policies covered by the transaction level dataset. As a result, the distribution of customer margins in the survey dataset might be different to the distribution of customer margins in the transaction level dataset. For example, respondents to the survey may not have been representative of the distribution of margins across all customers.
- 6.5 Comparing the distribution of margins across the two datasets suggests this was not the case. The distribution of margins in the survey dataset is broadly representative of the distribution of margins in the transaction level dataset. Although the proportion of home customers with the very highest margins is lower in the survey dataset.
- 6.6 To ensure we defined 'high' margin customers consistently across the survey and transaction level datasets, margin thresholds from the transaction level dataset were adopted in the survey dataset (rather than defining thresholds based on sample data only). So high margin customers in the survey dataset would also be defined as high margin customers in the transaction level dataset.¹²
- 6.7 The analysis of the survey dataset defined 'high' margin customers in two ways:
- High or Very High (critical threshold): as defined above.
 - Margin decile 10: customers whose margins are within the highest 10% of all 2018 margins in the transaction level dataset (disaggregated by home, motor and policy type).

¹¹ Including restricting the sample to policies that were active on 1st July 2018.

¹² Thresholds were applied separately to home buildings, contents and combined policy types before being re-aggregated into a combined home dataset.

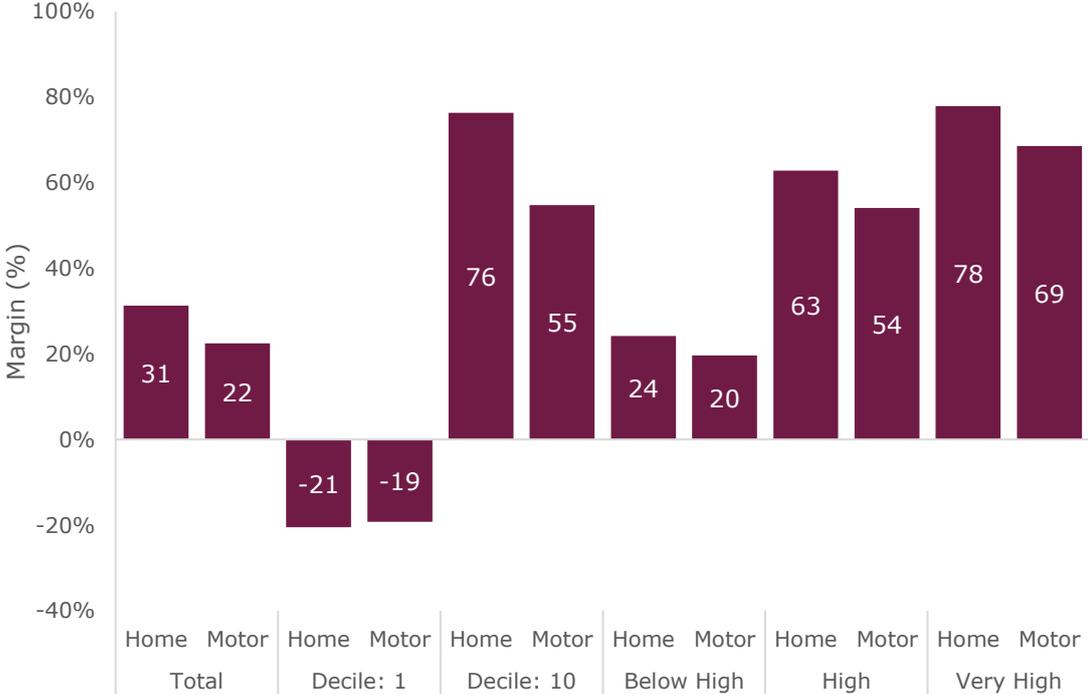
6.8 The survey dataset analysis considers an additional definition of 'high' margin customers, relative to the transaction level dataset analysis, due to the survey data smaller sample size. Exploring two definitions of high margin customers allows us to identify consistent characteristics across the two definitions.

6.9 Under the decile definition 103 home customers (4% of survey respondents with margin data) and 476 motor customers (9% of respondents) are defined as high margin. Under the critical threshold definition 373 home customers (16% of respondents) and 376 motor customers (7% of respondents) are defined as high margin. Our survey dataset analysis assesses whether these high margin customers exhibit different characteristics to customers who do not pay high margins.

High margin survey customer characteristics

6.10 Figure 11 summarises margins for high margin customers within the sample dataset. Average margins for home 'high' margin customers are 2-3 times larger than average margins for all home customers. Average premiums tend to be higher for high margin customers, but on average expected claims costs (ECC) are lower. The same results are generally true for high margin motor customers, although average margins are lower.

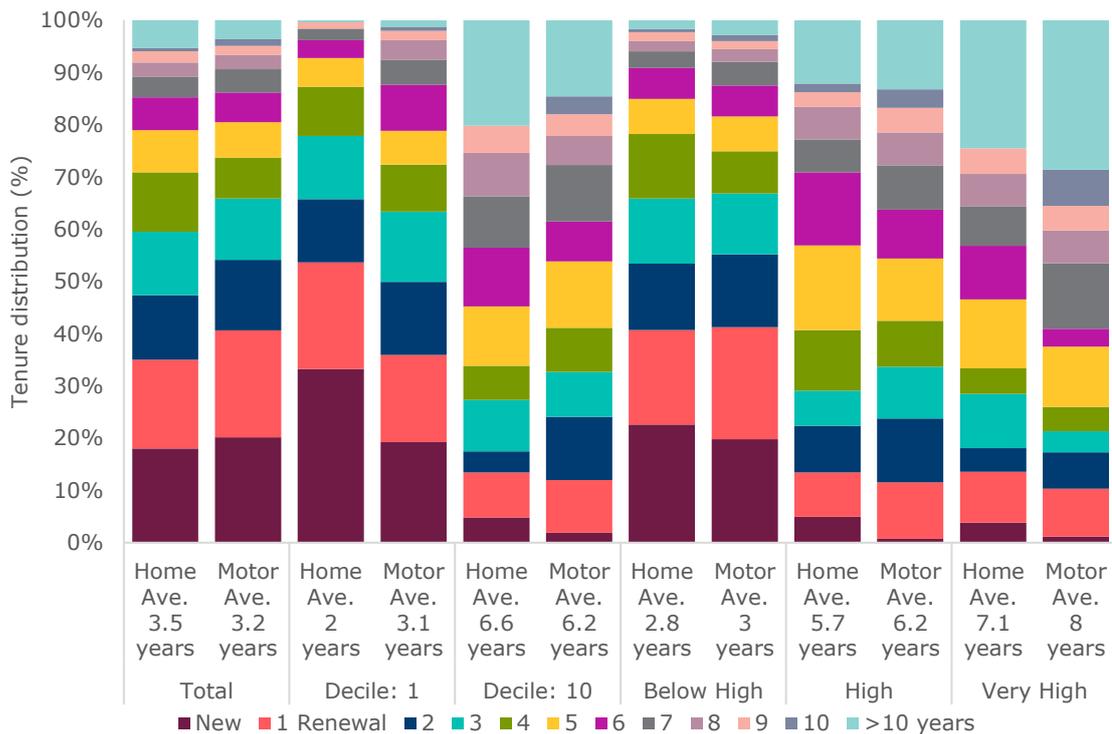
Figure 11: Survey dataset margins by group



Source: FCA analysis of joint dataset. Notes: All values weighted mean. Total is all observations for which margin is calculable.

6.11 Figure 12 summarises tenure for high margin customers within the sample dataset. High margin customers have longer average tenure and a higher proportion of customers renewing their policy with their existing provider. These results are consistent with those observed in the transaction level dataset.

Figure 12: Survey dataset tenure distribution by group



Source: FCA analysis of joint dataset. Notes: All values weighted. Total is all observations.

6.12 The consumer research helps identify several additional customer characteristics not available in the transaction database. In particular, the survey dataset includes customer characteristics associated with the following key areas covered by the quantitative survey (see the [Consumer research report](#) and [technical report](#) for further details):

- The customer journey including actions when taking out their policy;
- Consumers’ understanding of current insurance market pricing practices;
- Consumers’ attitudes to the way the insurance market currently works;
- Valuation of search and switching effort, and maximum willingness to pay for insurance; and
- Socio-demographic and vulnerability indicators.

6.13 We have assessed responses to each survey question to see if high margin customers responded differently to the average respondent, or reference group.¹³

6.14 Given the total number of customers defined as ‘high’ margin can be relatively small, and the number of options within a survey question can be large, some differences in the responses to survey questions will reflect the small sample sizes we are comparing. As such, we have restricted identification of differences to answers based on a reasonable sample size. We have also attempted to focus on characteristics which are

¹³ Under the decile definition of high margin, we compare the difference between decile 10 proportions and the average proportion across all respondents (ie the reference group is the average across all respondents). Under the critical threshold definition we compare high and very high proportions to the average proportion for customers with margins less than the high threshold (ie the reference group is the average of everyone not flagged as high or very high).

consistently different across the alternative definitions of high margin, and home and motor.

- 6.15 The consumer research identified several characteristics that are consistently found in high margin customers. Figures 19 and 20 (in Appendix at the end of this document) present the key characteristics for high margin home and motor customers across decile and critical threshold definitions. These are discussed in the following, separately for home and motor.¹⁴
- 6.16 A lower proportion of high margin home customers had switched from another provider (between 23-32%, compared to an average of 35%), while a higher proportion had allowed their policy to automatically renew without doing any research (up to 20%, compared to an average of around 10%). A lower proportion of high margin home customers are defined as active (around 55%, compared to an average of 73%), and are motivated to search for price related reasons (between 71-78%, compared to an average of 87%).^{15,16} In contrast, a higher proportion of high margin customers are motivated to stay with their existing provider for non-price reasons (around 60%, compared to an average of 47%).¹⁷
- 6.17 High margin home customers are generally less comfortable buying financial products online (as low as around 45% are very comfortable, compared to an average of 66%) and a higher proportion identify themselves as having low insurance knowledge (around 30%, compared to an average of 21%). A higher proportion of high margin home customers may also be unaware of the competitiveness of the product they own, given current pricing practices (up to 69%, compared to an average of 55%).¹⁸
- 6.18 A higher proportion of high margin home customers prefer a brand they know and trust (more than 60%, compared to an average of 46%) to changing insurance firms regularly to get the best deal (between 32-39%, compared to an average of 54%). When considering how good their current deal is, a lower proportion of high margin home customers believe their policy is amongst the lowest priced on the market (between 9-17%, compared to an average of 28%), while a higher proportion believe they could get a better deal, but the savings are not worth the hassle of shopping around (around 20%, compared to an average of 12%). A higher proportion of high margin home customers also do not know how good their deal is, as they have not checked for some time (up to 25%, compared to an average of 12%).
- 6.19 A lower proportion of high margin home customers strongly agree that there are big savings to be made by shopping around for the best insurance deal (around 20%, compared to an average of 31%), while a higher proportion agree that they don't have enough information to make decisions on the quality of different policies (up to 43%, compared to an average of 28%). A lower proportion also strongly agree that they feel

¹⁴ Average values from FCA analysis of data provided by firms and consumer survey responses and therefore may not match average values reported in [Consumer research report](#).

¹⁵ Consumers were defined as 'active' if they responded to q5 suggesting they had undertaken any of the following: used one or more price comparison websites to compare prices; used a price comparison website to compare the level of insurance cover offered and quality of service reviews; looked at insurance firms' websites; examined on-line reviews (including social media), blogs etc; contacted my insurance firm and sought to negotiate a lower price; used a broker or intermediary (other than a price comparison website); visited cash back websites.

¹⁶ Consumers were defined as a price motivated searcher if they responded to q15 suggesting they were prompted to search due to any of the following: They increased the price; I was made aware by family/friends/colleagues/something I read that better deals may be available elsewhere; I could not afford insurance at previous price; I shop around every year or I wanted to see if I could get a cheaper price.

¹⁷ Consumers were defined as a price motivated renewal if they responded to q16 suggesting they remained with their existing provider due to any of the following: They were able to reduce the price; I thought I was getting a good deal; or I was unable to get a lower price elsewhere.

¹⁸ Awareness of pricing practices was defined using responses to statements presented in question 12. We define three categories (the analysis presented in Chapter 5 presents two). 'Unaware': respondents gave 2 or more answers to the survey that indicates they lack awareness about how pricing works in the particular market. 'Potentially unaware': respondents gave 1 answer to the survey that indicates they lack awareness about how pricing works in the particular market. 'Aware': respondents gave no answers to the survey that indicates they lack awareness about how pricing works in the particular market.

good when finding a lower priced insurance deal (around 15%, compared to an average of 22%). While higher proportions agree that a lower priced provider is more likely to offer a lower quality product (up to 42%, compared to an average of 23%) and that they don't have the time or energy to shop around (up to 35%, compared to an average of 17%).

- 6.20 For motor, a higher proportion of high margin customers identify themselves as having low insurance knowledge (around 20%, compared to an average of 16%), although the difference is smaller than that observed for high margin home customers. High margin customers may also be unaware of the competitiveness of the product they own, given current pricing practices (up to 65%, compared to an average of 57%).
- 6.21 A higher proportion of high margin motor customers prefer a brand they know and trust (around 50%, compared to an average of 41%) to changing insurance firms regularly to get the best deal (around 50%, compared to an average of 59%). When considering how good their current deal is, a lower proportion of high margin motor customers believe their policy is amongst the lowest priced on the market (between 20-30%, compared to an average of 36%), while a higher proportion do not know how good their deal is, as they have not checked for some time (between 14-22%, compared to an average of 8%).
- 6.22 A lower proportion of high margin motor customers strongly agree that there are big savings to be made by shopping around for the best insurance deal (around 30%, compared to an average of 36%)¹⁹, and that they feel good when finding a lower priced insurance deal (between 16-25%, compared to an average of 28%). A higher proportion agree that they don't have the time or energy to shop around (up to 24%, compared to an average of 15%).
- 6.23 We found no clear relationship between search and switching costs and the margins consumers pay.

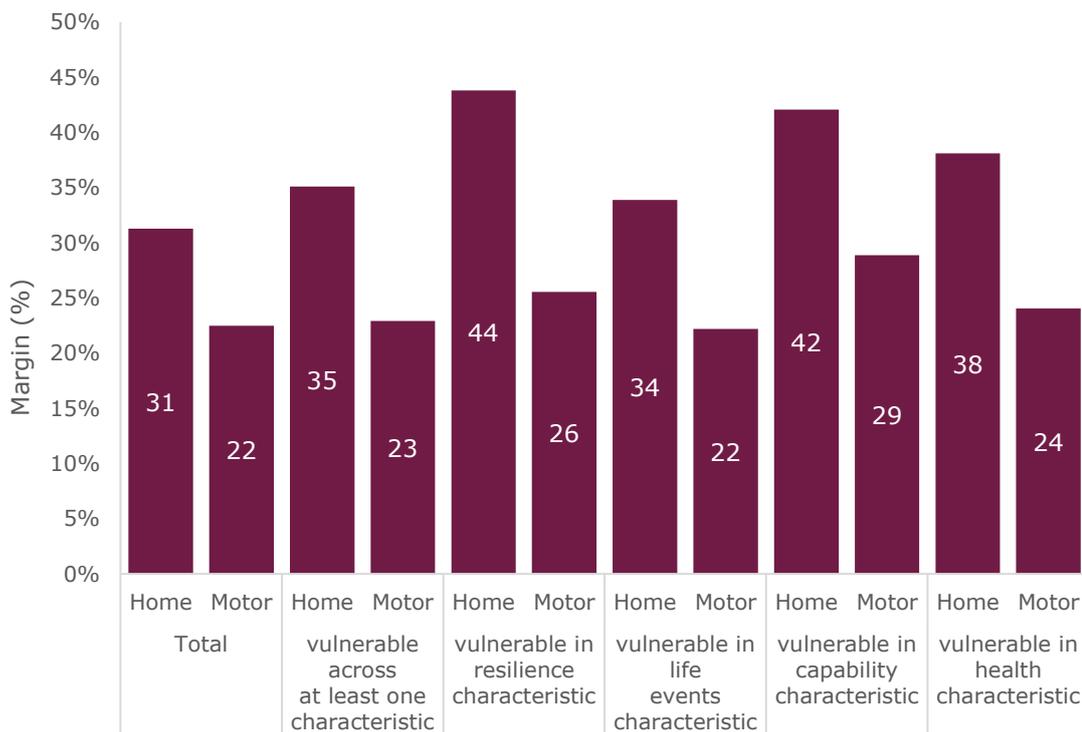
Vulnerable customers

- 6.24 The consumer survey explored the potential vulnerability of respondents. We have followed the FCA's recent Guidance for firms, defining a vulnerable consumer as 'someone who, due to their personal circumstances, is especially susceptible to detriment'. We have considered alternative vulnerability definitions across the range of characteristics we identify in the survey dataset.
- 6.25 Survey responses covering customers' knowledge about insurance products, comfort buying financial products online and socio-demographic characteristics were considered within our definition of vulnerability. We also asked targeted vulnerability questions in the survey, aligned with four drivers of actual or potential vulnerability, as set out in the FCA's recent consultation Guidance for firms on the fair treatment of vulnerable customers:
- *health* – health conditions or illnesses that affect the ability to carry out day to day tasks
 - *life events* – major life events such as bereavement or relationship breakdown
 - *resilience* – low ability to withstand financial or emotional shocks
 - *capability* – low knowledge of financial matters or low confidence in managing money

¹⁹ Although under the critical threshold 'very high' definition a higher than average proportion strongly agree (39%).

- 6.26 Across these four vulnerability drivers, 1 in 3 consumers in our consumer research who paid high prices showed at least one characteristic of vulnerability, such as having low financial capability.²⁰
- 6.27 When assessing high margin customer characteristics, a series of alternative vulnerability indicators were assessed. The four vulnerability drivers defined above were considered individually, and in combination with broader socio-demographic characteristics, such as age and household income. None of the four drivers of vulnerability, identified through targeted questions, were found to be consistently more common among high margin customers.
- 6.28 Although vulnerable customers are not over represented amongst high margin customers, they do pay higher margins on average (see Figure 13). However, this simple average does not control for other consumer characteristics that may explain why these customers have higher average margins.
- 6.29 Considering a broader definition of vulnerability, the analysis suggests high margin home customers are less comfortable buying financial products online. Both home and motor high margin customers report lower levels of insurance knowledge in some cases. If low margin policies were only accessible to customers who were comfortable buying financial products online, or had relatively high self-reported knowledge about insurance products, vulnerable customers without these characteristics could be excluded from accessing low margin offers.

Figure 13: Survey dataset margins by vulnerability classification



Source: FCA analysis of joint dataset. Notes: All values weighted mean. Total is all observations for which margin is calculable.

²⁰ As discussed in Annex 3 of the [Consumer research report](#), for some vulnerability characteristics, the number of questions used to identify potentially vulnerable customers in our survey was smaller than the number used in the Financial Lives Survey.

Low margin customers exhibit opposite characteristics to high margin customers

- 6.30 A similar analysis was also undertaken to assess the characteristics of 'low' margin customers. 'Low' margin customers were defined as those whose margins are within the lowest 10% of all 2018 margins in the transaction level dataset (disaggregated by home, motor and policy type). This includes 295 (12%) home customers and 754 (15%) motor customers.
- 6.31 Low margin home customers generally exhibit the opposite characteristics to high margin home customers. For example, they have lower average tenure and a higher proportion are new customers. They also exhibit characteristics associated with being more active ie a greater belief there are deals to be found and they have the time and energy to seek them out. They may also have better awareness of the competitiveness of the product they own, have higher self-reported insurance knowledge and are generally more comfortable buying insurance products online. A higher proportion of low margin home customers prefer to change firm regularly for the best deal rather than preferring the comfort of being with a brand they know and trust.
- 6.32 Low margin motor customers also exhibit some of the opposite characteristics to high margin motor customers. A higher proportion of low margin motor customers have high insurance knowledge and may also have better awareness of the competitiveness of the product they own.

Regression analysis has not identified additional characteristics

- 6.33 The analysis presented in the previous section provides a simple comparison between the average characteristics of high (and low) margin customers and a relevant reference group. We identified key characteristics which are more common in high margin customers. However, the analysis described above cannot identify whether these key characteristics are still important in determining a customer's margin after controlling for other characteristics high margin customers might possess.
- 6.34 For example, the analysis above found that a higher proportion of high margin customers prefer the comfort of a brand they know and trust, rather than changing regularly to get the best deal. However, this does not identify whether customers who prefer a brand they trust pay higher margins because of this characteristic, or because customers who prefer a brand they trust renew more regularly, and pay higher margins as a result of their longer tenure.
- 6.35 To determine whether customer characteristics influence margins, independently of other factors, we have analysed the sample dataset in a series of econometric models.
- 6.36 We have undertaken two sets of analysis. The first is a simple cross-sectional analysis, regressing customer margins against the characteristics available in the consumer research. This is a complement to the econometric analysis of the transaction level dataset, restricted to a single year of policy data (rather than panel data as described above). Although the survey sample is significantly smaller than transaction database, it does expand the number of customer characteristics we can assess.
- 6.37 The second econometric model we assessed was a logit model of high margin customers. This approach attempts to identify the characteristics which increase the likelihood of a customer paying high margins, after controlling for other factors.

6.38 A baseline model was defined using the regression analysis of the full transaction dataset. Comparing the model outputs showed some consistent impacts. In particular, the impact of tenure was similar across the two models. Customer characteristics from the consumer research were added to this baseline model, individually and in combination, to assess their significance. Broadly the results support the key characteristics of high margin customers we identified above. We aim to conduct further analysis for the final report.

7 Changes in margin for individual policies

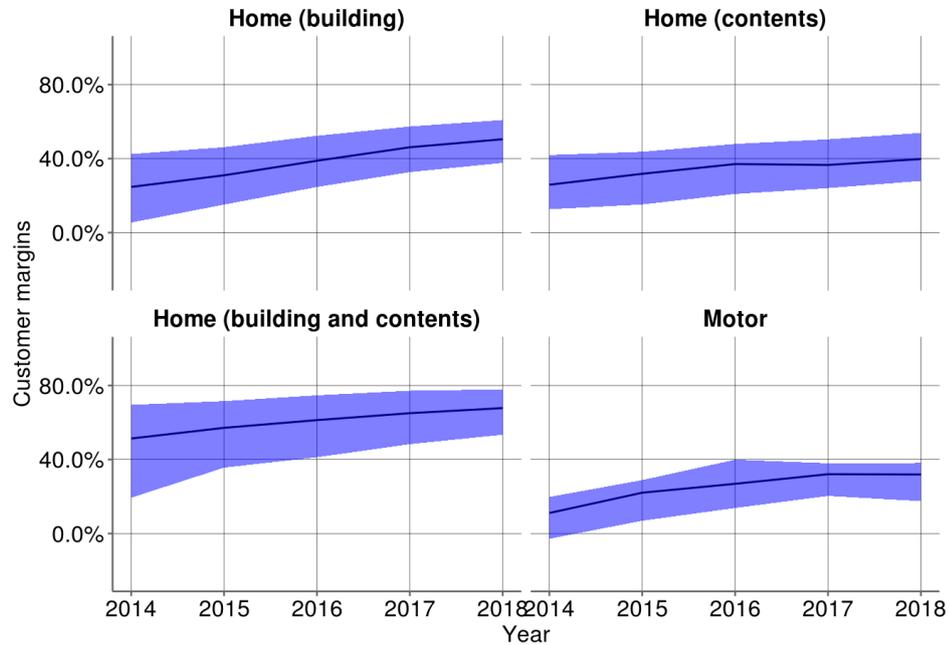
- 7.1 In the previous sections of this Annex we reported our findings on margins level and dispersion for different groups of policies. In addition to that, our data allow us to study the evolution of customer margin over time for each individual policy. That is the focus of this section.
- 7.2 The set of analyses presented offers new insights on ‘price walking’, the practice of increasing prices over time for existing customers described in Chapter 4 of the [Interim Report](#). Understanding ‘price walking’ is particularly relevant because, as discussed in Chapter 6 of the [Interim Report](#), what different consumers contribute to expenses and profits depends on the form of pricing a firm adopts and how long each customer has held their product.
- 7.3 In the [Interim Report](#), we present the year-on-year difference in customer margin at policy level for policies of different tenures over the entire 2014 to 2018 period (see Figure 17 of the [Interim Report](#)). To construct that graph, we sample one observation per policy among the ones available over the 5-year period covered by our dataset, and consider the tenure and the variation in margin measured for that policy in that year. Therefore, Figure 17 of the [Interim Report](#) mixes observations relative to different years, thus providing a better representation of long-term phenomena, as opposed to focusing on changes in 2018 alone. By exploring the change in percentage points between two subsequent observations of the consumer margin for each policy, we found higher increases up to year 5 and subsequent levelling out.
- 7.4 To cross-check the results above, we perform three additional sets of analyses.
- We explore evolution of customer margin for policies for which we have observations over the entire 2014 to 2018 period. We do this separately for different cohorts, so to compare what happens to shorter and longer tenure policies.
 - We compare the evolution of customer margin separately for policies which are renewed and policies which are not renewed at the end of each year. This allows us to study if the increase in average margin by tenure is the result of customers with lower margin policies dropping out, rather than the result of a generalised increase in margin for individual customers.
 - We take policies that were live in 2018, group them by their start date and compare the evolution of their margin. This allows to identify whether our finding of increasing margins applies to both more recent years and older years.

Customer margin increases over time for all insurance products examined

- 7.5 Figure 17 of the [Interim Report](#) suggests a higher increase in margin in the first 5 years of a policy. This is confirmed when we explore margins for the subset of policies which started in 2014 and are still active in 2018.
- 7.6 We find that almost all firms increase customer margins (ie prices after controlling for expected claims costs) in the first years of a policy, with the increase becoming weaker after a few years.

7.7 Figure 14 shows, at aggregate market level, the margin for two subsequent observations for the same policy. The lines represent the median margin, while the shaded areas the interquartile range. The graphs show that margin increase is material for each type of product in the first 5 years.

Figure 14: Margins for customers who joined in 2014 and stayed through to 2018

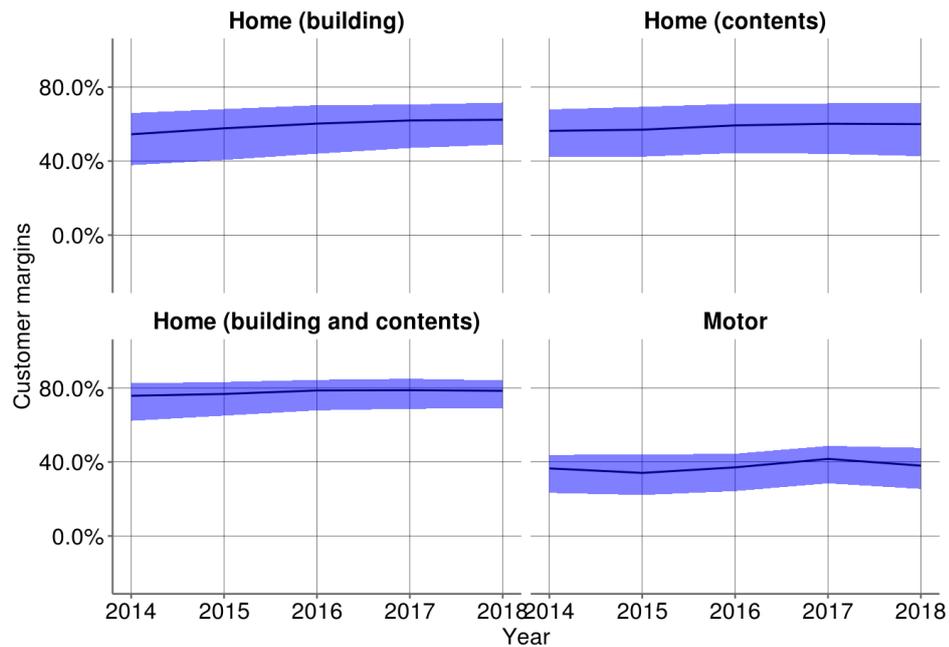


Source: FCA elaborations on transaction level dataset.

Margin increases more slowly for older policies

7.8 We explore how margins evolve for older cohorts by tracking customers who joined in 2009 and stayed in our sample between 2014 and 2018. Figure 15 shows less steep curves, confirming that margin increases more slowly after the customer has held the policy for a few years.

Figure 15: Margins for customers who joined in 2009 and staying until 2018

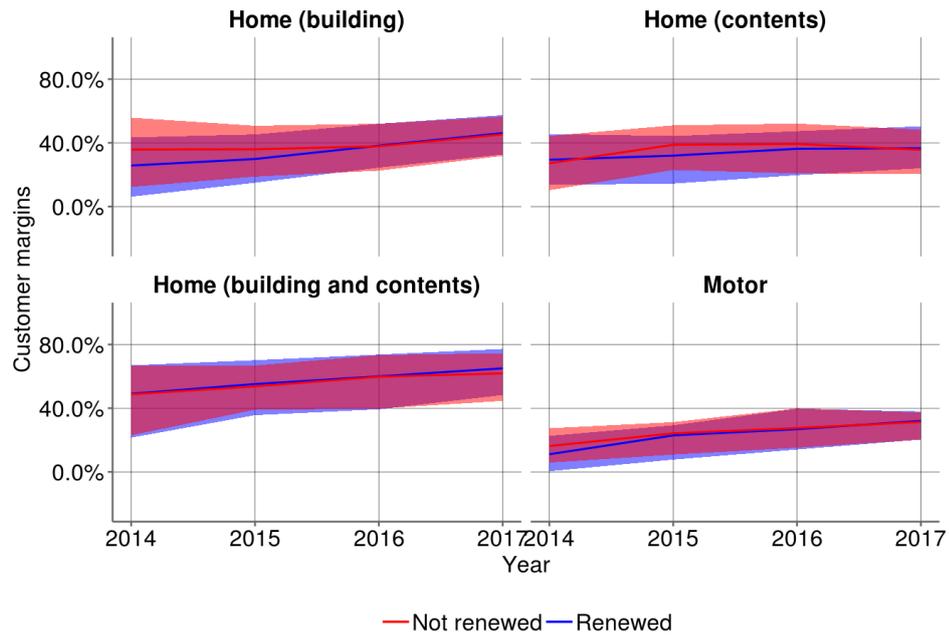


Source: FCA elaborations on transaction level dataset.

The observed average margin increase does not appear to be just the result of low margin customers dropping out of the sample

- 7.9 Longer tenure customers could show higher average margins if customers who buy policies characterised by lower margins were more likely to drop out. When we track when customers who joined in 2014 dropped out, we don't find strong evidence for this phenomenon.
- 7.10 Figure 16 shows the margins for customers who renewed their policy and those who did not. In more detail, the blue shaded area indicates the interquartile range for customers who renewed that year, and the red shaded area indicates the interquartile range for those who did not. We do not have data for 2018, as we do not have data on whether the customer renewed their policy in 2019.
- 7.11 If customers who paid lower prices were more likely to drop out, we would expect to see the blue area systemically higher than the red area. We do not see this, therefore we do not think that the reason we observe high margins for longer tenure customers is that lower margin customers dropped out.

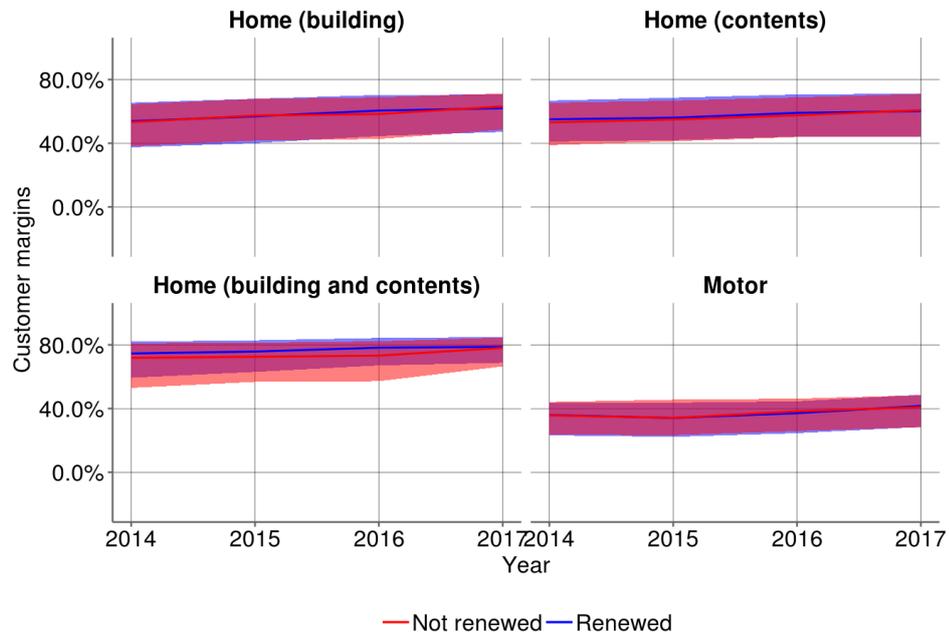
Figure 16: Margins for customers who joined in 2014, by whether they renewed that year or not



Source: FCA elaborations on transaction level dataset.

7.12 We repeat the analysis for customers who joined in 2009 to see whether lower margin customers are more likely to drop out over longer periods, but don't find strong evidence of this. Figure 17 illustrates the level of margins.

Figure 17: Margins and changes in margins for customers who joined in 2009, by whether they renewed that year or not

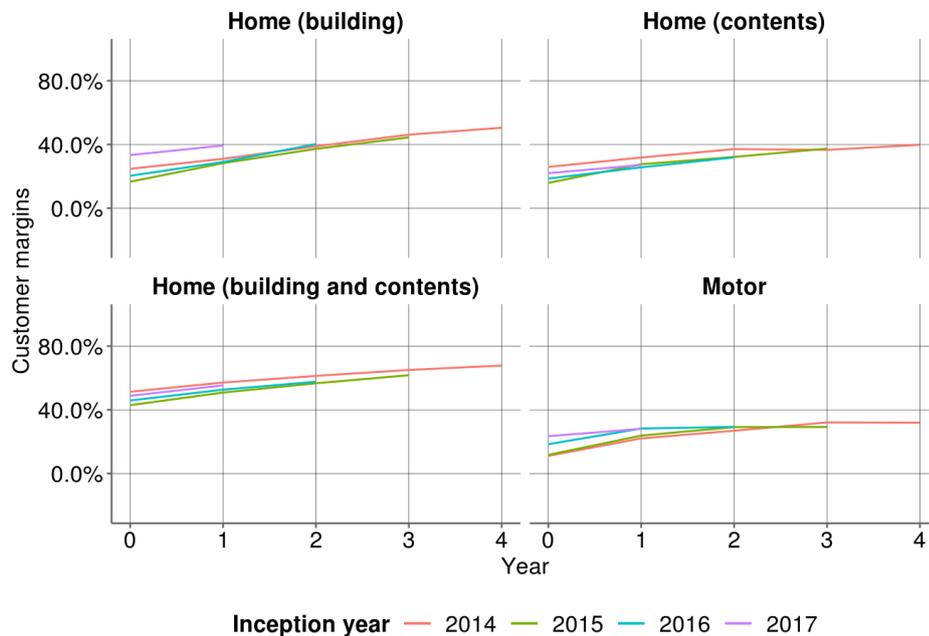


Source: FCA elaborations on transaction level dataset.

The observed increase in margin appears to be persisting over the years, with no sign of reduction

- 7.13 We looked for evidence to test whether, on aggregate, the extent of price walking has decreased in recent years. To this aim, in Figure 18, we focus on customers who, in 2018, hold a policy that was struck at any time between 2014 and 2017. We group those customers by inception date of their policy. We then separately plot, for each group, the level of consumer margin at inception (indicated with 0 on the horizontal axis) and at subsequent renewals (year 1, 2, 3, and 4).
- 7.14 If, for instance, price walking was eliminated for customers who joined in 2016, then those customers would exhibit a flat line for their margins. If price walking practices had changed significantly over the last years, we would observe diverging lines for the different groups. We do not see this. While there is variation between firms, at aggregate level, price walking is still observed for the most recent cohort of customers.

Figure 18: Margin evolution from 2014 to 2018, customers grouped by policy inception date



FCA elaborations on transaction level dataset.

Appendix: Survey dataset output tables

A.1 Figures 19 and 20 present the key characteristics for high margin home and motor customers across decile and critical threshold definitions. Cells coloured 'blue' represent a proportion lower than the reference group. Cells coloured 'red' represent a proportion higher than the reference group. The darker the colour the greater the difference from the reference group. Therefore, very dark cells indicate where high margin customers differ most from the reference group, and very light cells indicate where high margin customers differ least from the reference group. Note this approach does not directly take account of sample sizes or whether differences are statistically significant.

Figure 19: Summary home customer characteristics by margin group

		Total	Margin Decile										Critical Threshold		
			1	2	3	4	5	6	7	8	9	10	Below High	High	Very High
Customer journey	Switched from another provider	35	46	40	38	38	33	37	24	30	23	32	36	23	30
	I renewed my policy with my existing provider	54	44	48	55	53	52	55	64	61	64	50	54	65	51
	I allowed it to automatically renew, without doing any research	10	4	5	4	6	8	10	14	17	18	14	8	20	16
Active consumer	Active	73	87	83	80	79	81	74	68	60	58	54	78	57	53
	Not active	27	13	17	20	21	19	26	32	40	42	46	22	43	47
Price motivated search	Yes	87	93	89	91	91	89	87	87	82	77	74	89	78	71
	No	13	7	11	9	9	11	13	13	18	23	26	11	22	29
Price motivated renewal	Yes	53	61	58	66	66	55	50	49	47	45	38	55	44	40
	No	47	39	42	34	34	45	50	51	53	55	62	45	56	60
How comfortable are you buying financial products on-line?	Very comfortable	66	79	71	73	67	71	63	63	58	58	46	69	60	46
	Very comfortable, but prefer face to face or over the telephone	22	14	24	20	21	19	28	24	20	28	33	21	26	33
	On-line access, but not particularly comfortable using it	10	6	5	7	11	9	9	11	11	14	17	8	13	19
	I do not have on-line access	2	1	<0.5	<0.5	1	1	<0.5	1	3	<0.5	3	1	1	2
Self-reported insurance knowledge	Low	21	14	12	16	18	19	26	28	24	28	30	17	28	30
	High	79	86	88	84	82	81	78	80	76	72	70	83	72	70
Awareness of competitiveness of current product	Aware	18	23	21	28	28	22	22	17	16	14	9	20	14	11
	Potentially unaware	26	29	29	27	25	23	22	25	25	25	22	26	23	23
	Unaware	55	47	49	54	57	57	60	59	58	59	69	55	61	66
Which most closely reflects your preferences?	Prefer a brand I know and trust	46	33	39	44	42	41	49	50	61	62	64	44	61	68
	Happy to change regularly to get the best deal	54	67	61	56	58	59	51	50	39	36	36	56	39	32
How good would you say your current deal is?	Amongst the lowest priced on the market for the same level of cover and excess	28	39	33	32	30	26	26	20	19	17	10	29	17	9
	Perhaps not the lowest, but a fair price	35	33	37	37	37	33	38	38	41	38	36	37	38	37
	As good as anyone else from this supplier	10	12	11	12	8	14	8	10	9	7	8	11	7	8
	I am aware that I could get a better deal, but the savings are not worth the hassle of shopping around	12	8	8	10	8	10	15	14	16	20	21	11	21	19
	Difficult to know as I have not checked for some time	12	6	9	6	6	13	8	14	15	15	22	10	14	25
	Don't know	3	2	2	1	5	2	1	5	5	5	3	3	4	3
There are big savings to be made by shopping around for the best insurance deal	strongly agree	31	38	38	32	26	29	26	23	24	23	20	30	24	21
	agree	48	45	40	51	53	53	50	50	50	53	49	49	54	48
	neither agree nor disagree	17	13	13	13	14	13	22	21	18	27	16	16	18	25
	disagree	4	3	6	4	3	4	5	5	5	5	4	4	4	5
	strongly disagree	1	1	1	1	1	1	1	1	1	1	1	1	<0.5	1
There is not enough information for me to make decisions on the quality of different insurance policies	strongly agree	7	5	5	5	7	8	8	8	11	7	4	8	7	4
	agree	28	22	32	25	29	26	25	31	32	31	43	28	31	41
	neither agree nor disagree	30	29	25	33	27	32	34	32	23	23	29	30	28	26
	disagree	29	34	34	31	31	30	27	24	30	26	18	29	26	22
	strongly disagree	6	10	7	4	4	4	5	4	4	7	6	6	6	
I feel good when I find a lower price insurance deal	strongly agree	22	28	25	21	19	26	23	21	19	16	14	23	17	13
	agree	50	55	53	57	60	49	46	40	45	45	55	51	48	54
	neither agree nor disagree	23	15	17	19	19	22	24	33	31	29	31	22	29	30
	disagree	4	2	3	3	2	3	5	6	5	4	1	3	5	2
	strongly disagree	1	1	1	1	1	1	1	1	1	1	1	1	<0.5	
A lower priced insurance provider is more likely to offer a lower quality product or a poorer quality service	strongly agree	4	2	2	2	3	3	3	3	6	5	9	3	4	9
	agree	23	19	19	24	18	21	24	29	28	29	42	23	29	38
	neither agree nor disagree	43	40	41	45	47	44	43	46	40	41	28	43	41	32
	disagree	26	34	33	24	27	29	24	17	21	22	20	27	21	20
	strongly disagree	4	5	4	5	4	5	5	5	5	5	4	4	1	
I don't have the time or energy to shop around for the best deal	strongly agree	6	4	5	4	4	4	4	4	9	10	10	5	9	8
	agree	17	12	11	15	12	13	18	17	22	22	35	15	22	33
	neither agree nor disagree	20	15	21	17	17	18	21	24	24	25	23	20	24	23
	disagree	39	44	38	42	43	45	37	38	36	32	25	41	34	26
	strongly disagree	18	26	24	21	20	20	20	14	9	11	12	20	11	9

Source: FCA analysis of joint dataset. Notes: All values weighted proportions. Total is all observations in filtered sample dataset and therefore may not match full survey results as reported in the Consumer research report.

Figure 20: Summary motor customer characteristics by margin group

		Total	Margin Decile										Critical Threshold		
			1	2	3	4	5	6	7	8	9	10	Below High	High	Very High
Customer journey	Switched from another provider	33	29	37	36	40	34	30	31	24	31	24	32	23	28
	I renewed my policy with my existing provider	56	60	55	55	46	57	61	54	64	60	63	57	64	64
I allowed it to automatically renew, without doing any research		8	6	5	5	5	7	8	6	10	11	14	8	13	16
Active consumer	Active	80	82	83	81	87	83	78	83	79	75	69	81	71	60
	Not active	20	18	17	19	13	17	22	17	21	25	31	19	29	40
Price motivated search	Yes	91	91	93	92	96	94	88		90	88	83	91	87	69
	No	9	9	7	8	4	6	12		10	12	17	9	13	31
Price motivated renewal	Yes	61	65	65	58	63	61	58	64	66	58	51	62	53	43
	No	39	35	35	42	37	39	42	36	34	42	49	38	47	57
Self-reported insurance knowledge	Low	16	11	13	14		15	18	18	18	22	18	16	21	19
	High	84	89	87	86		85	82	82	84	78	82	84	79	81
Awareness of competitiveness of current product	Aware	18	22	20	19	16	19	14		19	17	14	18	17	14
	Potentially unaware	25	25		24	25	27	24	30	26	25	21	26	21	22
	Unaware	57	54	55		59	55	62	52	55	58	65	56	62	64
Which most closely reflects your preferences?	Prefer a brand I know and trust	41	44	39	38	33	33	38	34	45	49	49	39	49	51
	Happy to change regularly to get the best deal	59	56	61	62	67	67	62	66	55	51	51	61	51	49
How good would you say your current deal is?	Amongst the lowest priced on the market for the same level of cover and excess	36	37	40	40	41	41	37	39	33	33	28	38	30	20
	Perhaps not the lowest, but a fair price	30	31	29	31	28	29	28	28	29	32	33	30	33	24
	As good as anyone else from this supplier	11	13	13	9	12	13	9	12	8	10	10	11	9	14
	I am aware that i could get a better deal, but the savings are not worth the hassle of shopping around	12	10	11	11	10	9	15	13	15	13	14	12		18
Difficult to know as i have not checked for some time		8	6	6	7	6	6	9	6	12	9	14	8	14	22
Don't know		3	3	2	3	2	1	2			4	2	3		
There are big savings to be made by shopping around for the best insurance deal	strongly agree	36	30	38		47	37	39	38	33	31	30	36	28	39
	agree	43	45	43	41	40	42	42	42	46	42	46	43	48	45
	neither agree nor disagree	16	19	15		10	17	15	16	17	22	17	16	18	14
	disagree	4	5	3	5	3	3	3	3	3	4	6	4	5	5
	strongly disagree	1			2		1		1		1	1	1	<0.5	<0.5
I feel good when I find a lower price insurance deal	strongly agree	28	26	28	27	35	29	32	30	32	25	22	29	25	16
	agree	49		46	50	45	51	47	46	48	48	50	48		56
	neither agree nor disagree	20	22		25	16	16	19	21	17	24	23	20	23	23
	disagree	2	3	3	3	2	3	2	2	2		3	2		5
	strongly disagree	1	<0.5	1	1	2	<0.5		1		1	1	1		<0.5
I don't have the time or energy to shop around for the best deal	strongly agree	5	3	3	3	4	4	6	5	5	6	9	5	8	9
	agree	15	14	12	12	12	13	12	14		18	23	14	24	22
	neither agree nor disagree	21		19	19	18	19	23		25	24	22	21	23	33
	disagree	40	39	42	43	42	41				37	32	40	32	26
	strongly disagree	20	23	23	22	23	21	21	21	15	15	13	20	14	10

Source: FCA analysis of joint dataset. Notes: All values weighted proportions. Total is all observations in filtered sample dataset and therefore may not match full survey results as reported in the [Consumer research report](#).