FINAL REPORT

Prepared For:

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An Empirical Investigation into the Effects of the Menu

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Date: 3rd May 2007

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EXECUTIVE SUMMARY

CRA International (CRA) was asked by the Financial Services Authority (FSA) to undertake an assessment of the benefits of the "menu" (formally the document entitled "Key facts about the cost of our services"). The menu describes the maximum amount an adviser of packaged products is paid for intermediation as well as, for comparison purposes, the average across the whole market for a range of products. Since 1st June 2005, advisers have been obliged to supply the menu to their clients in advance of any advice being given.

The aim of the project was to identify whether there have been material benefits arising from the introduction of the menu relative to the situation before its introduction and, if such benefits exist, to estimate the magnitude of these benefits. Since MiFID will impose obligations on UK residents and firms starting in November 2007, any calculation of the ongoing benefits of the menu in the future would need to be assessed against the counterfactual of MiFID requirements. Our analysis has focused on four potential benefits of the menu, described as hypotheses below. These are:

- Hypothesis 1: A reduction in commission levels (due to increased competition in the cost of advice arising from greater transparency);
- Hypothesis 2: A reduction in the dispersion of commissions (outliers converging to the mean as a result of transparency);
- Hypothesis 3: A reduction in provider bias (greater transparency causing consumers to resist placement of their business with providers who use high commissions to attract intermediaries); and
- Hypothesis 4: A shift in advisers' remuneration away from commission and towards fees (due to greater awareness of relative costs).

To test these hypotheses we have examined the commission data the FSA use to calculate the menu market averages for eleven product categories. Based on a thorough analysis of these data we have been able to establish a robust understanding of ongoing trends in the commission based market. In agreement with the FSA we have not examined commission equivalent data. We have also examined intermediary surveys that contain information on the prevalence of fee income. Since the menu has been in place for only a short period of time, there is only one year of "post-implementation" data – 2006. The tests therefore compare data collected for 2006 to the data in 2004 and 2005.

We have also considered whether changes in other regulations between 2004 and 2006 mean that our comparisons across time are not a 'fair test' of the menu. Two other important concurrent changes were the 'depolarisation' of the advice market in December 2004, and the increase in the stakeholder pension price cap from 1% to 1.5% in April 2005. After looking at the evidence regarding the impact of these events, we conclude that our before-and-after comparisons are a fair test of the effect of the introduction of the menu for most products, but care needs to be taken when looking at personal and stakeholder pensions.

We understand that, in addition to this research, the FSA has a continuing interest in mandatory disclosure as a tool for meeting its objective of consumer protection

Hypothesis 1: Reduction in commission levels

The menu could affect mean commission rates in two ways:

- The commission rate being offered by providers could fall. If so, one would observe a fall in the "simple average" of commission rates offered by different providers; or

- The share of purchases of low commission products could rise. In this case, the volume-weighted average commission would fall. However, the simple average of commission rates, meaning the average without volume weighting, might not fall.

We have examined both simple and weighted averages to see whether they fell in the period following the introduction of the menu in 2006. At the aggregate level, there is no consistent evidence that mean commission rates fell following the implementation of the menu, on either basis. In fact, of the product categories the menu covers, there were increases in mean commission rates in more categories than there were falls after the menu was implemented. The largest change to mean commission rates was an increase, for single premium personal pensions. It is generally not appropriate to examine whether these changes were statistically significant, because the data essentially cover all provider firms, and are not being used to make inferences about a larger population. However, before drawing conclusions from this result, it is important to note that there are concerns regarding the use of aggregate data. One key concern is that changes in the structure of commission could result in spurious trends at the aggregate level. To investigate this we have examined the three different commission structures. These are:

- Initial-only commission;

- Initial-plus-trail commission; and,

- Trail-only commission.

Analysing the data by structure reveals several important results:

- The average level of commission paid for a given product varies significantly by commission structure. For every product, we find that the net present value (NPV) of average Initial-only commission is lower than the NPV of average Initial-plus-trail commission.

- There are large changes in the 'market share' of these three commission structures over time for certain products. In the case of single premium personal pensions, there is a substantial increase in the 'market share' of business written on an Initial-plus-trail basis (which is the 'more expensive' structure).

- For single premium personal pensions, combining the data for all structures, the average commission rate increased substantially. To some extent, this is due to the fact that the 'market shares' of the three commission structures have changed. Thus, had the 'market shares' of the three structures remained constant, the increase in the average commission rate would have been smaller.

We repeated this analysis of how changes in the mix of commission structures used affect the overall change in the mean commission levels for all the products the menu lists. We find that changes in mean commission rates have generally been smaller at the level of different commission structures than at the level of the product category overall.

In summary, we find that, after taking into account trends in the use of different commission structures, there is no consistent evidence of changes in commission levels. The changes in average commission rates between 2004/5 and 2006 are of ambiguous sign, and the declines appear small both in economic terms and relative to the changes between 2004 and 2005. From this we conclude that the menu did not result in a consistent downward effect on commission rates.

Hypothesis 2: Reduction in dispersion of commissions

The second potential impact of the menu could be a reduction in the dispersion of commissions. This could result from:

- Providers changing the commission they offer as they can observe the market average. In particular, those paying above the market average may reduce the rate they are paying (although those paying less than the market average may increase the rate they are paying);

- Advisers choosing not to advise the products of particular providers as this would result in advisers being forced to display an unacceptably high maximum commission rate; or

- Consumers focusing on the difference between the maximum rates, and the market average. By doing so, they may seek to negotiate lower commission rates, thereby reducing the rates that are substantially above the market average.

Depending on whether average commission rates rise or fall, a reduction in price dispersion could potentially either increase or reduce consumer welfare. Since our statistical analysis of the MAC data finds no consistent evidence of a change in the dispersion of commission levels, however, there is no need to explore these welfare implications more closely

Hypothesis 3: Reduction in provider bias

Provider bias occurs when advisers recommend the product of a particular provider because of the (high) level of commission that they receive from the provider. The menu, by increasing the transparency of the remuneration of the adviser, may constrain the opportunity for provider bias.

Demonstrating that a reduction in provider bias has occurred requires evidence of:

- a statistically significant relationship between commission and new business volume prior to the introduction of the menu; and
- a reduction in this relationship following the introduction of the menu, that is, business volumes are less clearly related to commission level.

While evidence was found of a reduction in provider bias in the period following the introduction of the menu - for single premium personal pensions and for some types of investment bond - the evidence was tentative. These findings should be treated with caution given that:

- The results are highly sensitive to outliers. The analysis of single premium personal pensions is based on excluding products with initial commission levels below 3%, but without this constraint the relationship is not statistically significant. Our view, however, is that exclusion of these outliers is justified;
- Using a 5% significance level means that we would expect to find significant results in 1 in every 20 cases even if there was no true relationship. Since we have found significant results for relatively few categories this may simply be due to random variation; and
- There is no statistically significant relationship after allowing for “provider specific fixed effects” (unobservable differences between the providers).

Therefore although there are some indications that the menu has reduced commission bias, we cannot definitively conclude that there has been a material reduction in commission bias.

Hypothesis 4: Increased use of fees

The introduction of the menu could have increased awareness of the cost of commission based advice and the alternative option of paying through fees. The increased use of fees could be seen as potentially beneficial because it reduces conflicts of interest for advisers and the likelihood of commission bias.

We found no evidence that the use of fees has increased since the introduction of the menu.

Conclusions

Overall, we find little evidence that the menu has had a significant effect across the market in the four areas we have examined. Since few significant benefits have been identified, we have not sought to place a monetary value on them.

Nonetheless, we have found a small number of statistically significant results that may suggest the introduction of the menu has had a positive impact in some areas. It is noteworthy that these results have all been identified in respect of single premium products – where past and current CRA analysis has found evidence of commission bias. The tentative finding, were it judged to be reliable, is that observable commission bias in these products has been somewhat reduced.

The menu has been obligatory only since June 2005. This means that the data set we analysed was limited. Also, changes from the menu might be hard to detect in these data since it has only just come into effect, and potential behaviour changes might take time to appear. Clearer results may be observable in future.

1. INTRODUCTION

CRA International (CRA) was asked by the Financial Services Authority (FSA) to undertake an assessment of the benefits of the "menu" (formally the document entitled "Key facts about the cost of our services"). The menu describes the maximum amount an adviser of packaged products is paid for intermediation as well as the average across the whole market for a range of products. Since 1st June 2005, advisers have been obliged to supply the menu to their clients in advance of any advice being given.

The menu was intended to bring several benefits to the market including to:

- exert a pro-competitive force on commission levels and through them, charges;
- improve awareness that advice comes at a cost (paid by the consumer), and that there is choice in the advice market; and
- mitigate the risk of commission bias (including mitigating the risk of migration to high commission paying providers)[1].

The aim of the project was to identify whether there have been material benefits arising from the menu and, if such benefits exist, to estimate the magnitude of these benefits.

We have focused our efforts on:

- a statistical analysis of the commission data collected in the Market Average Commission (MAC) dataset;[2] and
- intermediary surveys that contain information on remuneration particularly related to the use of fees.

We have also undertaken a small number of industry interviews for the purpose of checking trends within the data. In addition to this research, the FSA is undertaking research into the understanding of consumers who have recently purchased packaged financial products as to the status of their adviser and how he or she was remunerated. The FSA has undertaken surveys of such consumers both before and after the introduction of the IDD and menu.

1 Reforming Polarisation: A menu for being open with consumers, Financial Services Authority, CP04/3, February 2004.

2 The commission data collected by the FSA is subject to strict confidentiality restrictions and the FSA has undertaken not to release any details that could be used to identify particular firms. All results in this report are therefore reported at the product level and only where there are sufficient observations to ensure anonymity of individual firms.

1.1. THE INTRODUCTION OF THE MENU

Rules regarding the menu provide a prescriptive format and content for the information that a firm must provide about the cost of its services. The menu describes the maximum remuneration advisers from a particular firm receive as well as the average amount paid for intermediation across the whole market for a range of products.[3] The market average rate of commission is calculated annually by the FSA and includes both commission and commission equivalent sales.[4] The menu is required to be provided to clients in advance of any advice being given.

Firms that offer financial advice could provide the menu on a voluntary basis from 1st December 2004, although they have only been required to do so since 1st June 2005. The FSA collects data in the second quarter of each year. Based on discussions with the FSA, as well as provider interviews we understand that few firms used the menu during the transitional period. Hence, we have taken the 2005 observations to represent information before the implementation of the menu. There is, therefore, only one year of "post-implementation" data – 2006.

Table 1: Published 'Market Average Commission' rates (%)

Product group	2004	2005	2006
Annuities	1.40	1.32	1.32
Collective Investment Schemes: Regular	27.13	26.49	23.81
Collective Investment Schemes: Single	3.70	3.90	3.94
Endowments	40.16	43.63	40.69
Income drawdown	5.08	5.09	5.01
Investment Bonds	4.94	5.26	4.98
Personal Pensions and Stakeholder Pensions: Regular-10 Years	23.58	18.17	21.76
Personal Pensions and Stakeholder Pensions: Regular-25 Years	31.86	29.37	33.38
Personal Pensions and Stakeholder Pensions: Single	4.54	4.77	5.29
Whole of life assurance	110.88	105.04	104.28

Source: MAC data

3 The menu originally covered 12 products. Long-term care was only included in the menu is 2004. In subsequent years, there are only 11 products covered by the menu.

4 The most recent changes to the market averages can be found on http://www.fsa.gov.uk/Pages/Doing/small_firms/advisers/disclosure/averages/index.shtml. Although the FSA has collected data on rebating behaviour, it was decided that these data were insufficiently robust for empirical analysis.

Since the introduction of the menu, there have been concerns regarding the level of compliance with the regulations that require it to be provided to clients. Research conducted for the FSA found that in only 75 of 130 (58%) face to face assessments were potential customers given both the initial disclosure document and the menu (menus were provided in 77 cases). In only 55 cases (42%) were the potential customers given both documents at the correct point in the interview.[5]

It is clear that the effectiveness of the menu will be diminished if it is not actually being given to customers.[6] In addition, the FSA only requires firms to provide a menu for customers seeking new advice rather than for customers who are making ongoing contributions on the basis of previous advice and hence the impact of the menu may take time to arise across the whole of the advised sector.

Despite apparent shortcomings in advisers' compliance with their obligation to supply a menu, the introduction of the menu could have led providers to change the rate of commission they offer. In particular, those paying above the market average may reduce the rate that they are paying because they may not have realised that they were paying above the market average (although those paying less than the market average may increase the rate they are paying). The publication of market averages could have affected providers' commission rates through this mechanism even if advisers failed to supply menus to consumers.

1.2. MARKET FAILURE

The introduction of the menu was aimed at addressing information asymmetry and principal-agent problems,

> *"Many packaged investment products are both complex and opaque. As a result many consumers cannot compare these products on an objective basis prior to purchase. Consumers may not be able to learn from experience as they do not buy these products frequently and in any event it can be difficult for them to make a self-assessment of product suitability and value after the event. (And even if they could, in the case of many products – such as a pension – it could be too late.) This means consumers are very reliant on the advice that they are given to decide on which product is suitable and good value.*
>
> *Advisers have a duty to act in the interests of the consumer. However, they or their employees are typically remunerated by commissions which are available from product providers. This can lead to a situation where an adviser has an incentive to sell a product because he or she will receive a high level of remuneration from the product provider for*

5 Depolarisation disclosure – mystery shopping results, prepared for the Financial Services Authority by TNS, Consumer Research 48, March 2006.

6 It is possible therefore that the menu could bring substantial benefits but only for customers of advisers who were complying with the FSA's requirements. As the data collected by the FSA are submitted at the provider level it is not possible to test for the impact of compliance.

doing so, and this conflicts with their duty to act in the interests of consumers, who cannot tell when advisers do not act in their interests."[7]

The menu was intended to mitigate these potential market failures by increasing awareness of the cost of advice and the potential conflicts of interest, as well as facilitating shopping around.

1.3. CHALLENGES TO IDENTIFYING BENEFITS OF THE MENU

Defining the counterfactual - what would have happened in the absence of a regulatory change - is, however, still a potential area of difficulty. In this case, the market prior to the introduction of the menu provides a reasonable counterfactual to the analysis.

However, since MiFID will become UK law in November 2007, were the FSA now to drop the menu after that date, the MiFID minimum disclosure requirements would obtain, unless the FSA were to develop another policy to replace the menu. Therefore going forward this would be the appropriate counterfactual. However, although MiFID affects intermediary disclosure, unlike the menu requirements, MiFID does not mandate a standardised form of disclosure, does not mandate that the disclosures are made at the time of the sale, and does not require that "market average" commissions be disclosed as a basis for comparison with the commissions the adviser is actually receiving. MiFID's minimum requirements are therefore somewhat similar to those that obtained before the Menu.

Other changes in regulations which occurred around the same time the menu was introduced could mean our comparison of data from 2004 and 2005 with data from 2006 is not a fair test of the effect of the menu. Two relevant regulatory changes that occurred in this period were the depolarisation of the retail advice market from December 2004 and the increase in the cap on stakeholder pension charges in April 2005.

The depolarisation of the advice market in 2004 allowed firms giving financial advice to use the multi-tied advice model. Under the multi-tied model, advisers would advise on products from a limited range of providers. Advice firms could still choose to use the pre-existing single-tied or whole-of-market models. Further, firms could use one model for one type of product (such as investment business) but another model for another type (such as mortgages).

It was anticipated that depolarisation might have two effects relevant to the present study.[8] First, through liberalising the advice market, it might lead to greater competition between advisers and thus a downward pressure on commission levels. Second, it was feared that commission bias might increase, due to a movement of business from the

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7 Reforming Polarisation: A menu for being open with consumers, Financial Services Authority, CP04/3, February 2004, Annex 1.

8 See FSA Consultation Paper 04/03 (2004), at http://www.fsa.gov.uk/Pages/Library/Policy/CP/2004/04_03.shtml

whole-of-market to the multi-tied model. It was feared that firms might choose their multi-tie providers on the basis of the commission they offered.

While the effects of depolarisation, separate from those of the menu, are not known, they are likely to have been small over this time period. This is because there is some evidence that few whole of market firms have chosen to adopt the multi-tie option. Of around 1,000 advisers who responded to the NMG IFA Census for 2006, only 4% reported that any part of their business used the multi-tied model.[9] This sense that firms made little move from whole-of-market to multi-tied business is consistent with survey evidence from before depolarisation, which found that few IFAs had a strong interest in adopting the multi-tied model.[10]

Second, the increase in the price cap on stakeholder pensions also occurred around the same time the menu was introduced. There is not clear evidence on whether the increase in the permitted maximum product charge in stakeholder pensions from 1% to 1.5% in April 2005 led to higher product charges on stakeholder pensions, and then to providers offering higher commission rates to advisers for sales of stakeholder pensions. However, there is some evidence that 'industry average' product charge on personal and stakeholder pensions increased between 2004 and 2006. It is reasonable to assume that this may reflect an increase in the price of stakeholder pensions and this may have resulted in higher commissions being paid on these products.

In summary, the comparison of commission data from 2004-5 with data from 2006 is not a pure test of the effects of the menu, because other factors changed at the same time. These factors include depolarisation, and the increase in the cap on product charges for stakeholder pensions. The available evidence suggests that the effect of depolarisation on commissions, other than due to menu, would have been small. For stakeholder pensions, available evidence is consistent with product charges having risen after the increase in the regulatory cap from 1% to 1.5% after April 2005, which is likely to have affected commission rates on pensions.[11] Thus, we conclude that for products other than pensions, a comparison of 2004-5 to 2006 is likely to be a fair test of the effect of the menu in this period.

There are several other reasons why estimating the benefits of the menu remains challenging:

- The full impact may not yet be observable (there is only one year's observation post implementation) and the current impact may be related to the levels of compliance (which as noted above has been found to be low);

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9 The FSA does not record data on the amount of advice business conducted on tied, whole-of-market and independent bases. The ABI does not separate multi-tied and tied advice in its data.

10 See NERA (2002), p.xi-xii, at http://www.fsa.gov.uk/pubs/cp/166/nera.pdf .

11 The rule change in 2005 permitted firms to raise the annual charge on stakeholder pensions from 1% to 1.5% for the first 10 years of the life of the pension only, and only for new sales.

- The process of data collection to calculate the market average has evolved over time. As companies become more accustomed to the requirements of the FSA and the process becomes more automated greater standardisation of the quality of data is possible whereas the early years of data collection may suffer from lower quality information being provided by firms; and

- The menu was introduced at the same time as other regulatory changes. In particular the depolarisation regime allowed advisers to adopt different statuses, and IDD was introduced to provide transparency regarding status to the consumer. These changes may have affected the market and hence it is challenging to identify whether market changes are due to the menu, due to other regulatory changes or due to ongoing market trends.

Even if we can observe changes in the market following the introduction of the menu, it is possible that these result from on-going trends in the market rather than the menu. Based on interviews with the FSA and market participants undertaken for this project and a review of changes in new business volume and we assume trends in the market are small for most of the products under examination. However, it is clearly the case that for several products significant changes have occurred over the last three years, in particular, endowments and with-profits bonds.

1.4. THE STRUCTURE OF THE REPORT

In the next chapter we set out the methodology and approach we use to investigate any potential benefits from the menu.

In Chapter 3, we describe the data sets we have used in the analysis, focusing on the MAC dataset but also describing Matrix and NMG survey data.

In Chapter 4, we set out our results for the different statistical tests.

Finally, the adjustments and manipulations which were performed on the underlying raw data are set out in the appendix.

2. METHODOLOGY AND APPROACH

In this chapter we first review the potential benefits that could have resulted from the introduction of the menu and the implications for statistical analysis. Since no significant benefits have been identified, we do not set out our approach for quantifying benefits.

2.1. POTENTIAL SOURCES OF BENEFITS FROM THE MENU

As set out above, the objective of the menu is to increase competitive pressure on commission levels, reduce the potential for bias and raise awareness of alternative choices in the advice market. Some of the potential benefits which the menu could have brought can be summarised through four distinct hypotheses:

- Hypothesis 1: A reduction in commission levels (due to increased competition in the cost of advice arising from greater transparency);
- Hypothesis 2: A reduction in the dispersion of commissions (due to disclosure of commission much higher than market average);
- Hypothesis 3: A reduction in provider bias (due to greater transparency leading consumers to understand that different providers may offer different commissions); and
- Hypothesis 4: An increase in the use of fees (due to greater awareness of relative costs). [12]

To test these hypotheses we have examined the commission data the FSA uses for the calculation of market averages for eleven product categories. These product categories represent the groupings that have been used on the menu.

In addition we have split the Investment Bond category into two distinct groups following our initial analysis of the Investment Bonds category, discussions with the FSA and discussions with providers. This reflects the fact that it includes short term endowment products (less than 5 years) and insurance based savings products. In addition to having very different product characteristics these also have very different commission structures. We refer to short-term endowments as “Investment Bonds1” and insurance based savings products as “Investment Bonds2”. This is more fully explained in Appendix A. Information for long-term care was only collected for 2004, and therefore has been excluded from our analysis.

12 In addition to these four hypotheses, the menu could also impact the level of product bias. Product bias occurs when advisers recommend a particular product type because of the level of commission that they receive even when the product is inappropriate. Mystery shopping techniques are the only way that the impact of product bias can be robustly assessed since testing for product bias relies on understanding what would be appropriate recommendations for any particular individual.

Under the guidance of the FSA we have not examined commission equivalent data[13]. We have also examined intermediary surveys that contain information on intermediary behaviour particularly related to the use of fees.

Since the menu has been in place only a short period of time, there is only one year of "post-implementation" data – 2006. The tests therefore compare data collected for 2006 to the data in 2004 and 2005.

Hypothesis 1: Reduction in commission levels

The menu could impact mean commission rates in two ways:

- The commission rate being offered by providers could fall. This would imply that, in the MAC data, a fall in the "simple average" of commission rates offered by different providers; or

- The volume of new business at low commission rates could increase compared to the volume of new business at high commission rates such that the average commission actually paid on the products that consumers purchase would fall (although the offering of particular providers could stay the same). This would be observed by a fall in the "weighted average" commission rate.

If these declines in commission rates were associated with lower product charges, but the quality of both products and advice remained constant, then consumer welfare will have increased.

Hypothesis 2: Reduction in dispersion of commissions

Another potential impact of the menu could be a reduction in the variation in commission. This could result from:

- Providers changing the commission they offer as they can observe the market average. In particular, those paying above the market average may reduce the rate they are paying (although those paying less than the market average may increase the rate they are paying);

- Advisers choosing not to advise the products of particular providers as this would result in advisers being forced to display an unacceptably high maximum commission rate; or

- Consumers focusing on the difference between the maximum rates and the market average to negotiate lower commission rates reducing the rates that are substantially above the market average.

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13 The four hypotheses listed above are less applicable to commission equivalent data compared to commission data. For example, provider bias does not arise for tied advisers.

If providers who offer commission rates below the market average are encouraged to raise their rates, while providers who offer commission rates above the market average are encouraged to reduce their rates, then this could result in a reduction in the level of dispersion in commission rates without actually changing the overall market average. To the extent that information asymmetries could result in some consumers suffering particularly large detriment through purchasing poor value product due to high levels of commission, it is possible that this could nonetheless result in consumer benefits.

Hypothesis 3: Reduction in provider bias

Provider bias occurs when advisers recommend the product of a particular provider because of the level of commission that they receive. Ideally, the approach should test whether it is commission that determines the advice provided rather than the other characteristics of the product or provider. However, it is very unlikely that at any point in time there is only one provider’s product that is best for a particular consumer. For example, there are likely to be several providers that would satisfy “best” advice requirements based on a selection in terms of:

- Risk factors;
- Financial strength;
- Investment performance;
- Charges and expenses;
- Customer service levels; and
- Flexibility of the product.

To identify the importance of commission we need to account for these factors and determine whether the relationship between levels of commission and the volume of new business has changed since the introduction of the menu. In practice, it is very difficult to allow for all these effects, and therefore we seek to capture them collectively using a panel regression. This approach is only applicable for commission paying business and is not applicable to commission-equivalent business through tied advisers.

Hypothesis 4: Increased use of fees

The introduction of the menu could have increased awareness regarding the cost of commission based advice and the alternative option of paying through fees. The increased use of fees has been identified as potentially beneficial because this may reduce conflicts of interest for advisers and the likelihood of commission bias.[14]

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14 To the extent that consumers prefer paying for advice through commission terms, or to the extent that fees cost more than commission, an increase in fee based advice would not necessarily increase consumer welfare.

2.2. IMPLICATION FOR THE STATISTICAL ANALYSIS OF COMMISSION DATA AND THE QUANTIFICATION OF BENEFITS

Given the hypotheses stated above it is possible to develop several empirical approaches for the purpose of testing whether the menu brought tangible benefits.

Our previous analysis found that there was no evidence of widespread commission bias but that there were several product markets where there remained concern (in particular there was more concern for single premium products than regular premium products). Much of the methodology used here builds on previous work that we have undertaken.[15]

First, we test whether there have been changes in the level and dispersion of commission rates at an aggregate level. For each product reported on the menu we test whether there were changes between 2004-5 and 2006 in the simple or volume-weighted average commission rates or the variance of commission rates.

Second, we consider econometric methods to test the relationship between commission levels, structures and the volume of business. Compared to previous analysis and approaches, we have taken advantage of the additional data collected by the FSA to examine the impact of offering products with different commission structures.

There are two alternative statistical methodologies that we use:

- A cross-sectional methodology that relates the market shares of different providers at a particular point in time to the average commission they offer to advisers; and

- A panel methodology that relates changes in the market shares of different providers to changes in the level of commissions.[16]

In the cross-sectional approach, we test for each product whether firms' market shares, measured by premium volume, are related to the average rate of commission firms offer advisers and whether this relationship has changed over time. A drawback of this approach is that factors we do not measure, such as provider reputation and product terms, may affect these cross-sectional relationships and thus bias the observed relationship between commission and market share.

The cross-sectional method tries to explain the success of different providers taking into account their product terms and average commissions. Because of the diversity in product terms, and the importance of unmeasurable factors such as provider reputation and others listed in the previous section, simple cross-sectional approaches must be used

15 Previous work in this area includes: Study of intermediary remuneration, for the Association of British Insurers, CRA International, February 2005; The effect of commission based remuneration on financial advice, for the Financial Services Authority, Charles River Associates, December 2001; Polarisation and Financial Services Regulation, A review for the Financial Services Authority, London Economics, June 2000 (members of the CRA team were the authors of this report).

16 Note that these techniques are only relevant for commission data and not for commission equivalent data.

with caution. Hence we have examined how the cross sectional relationships have changed over time.

The panel based approach considers how market shares for a particular product have changed over a period of time, during which one or more providers' average levels of commission have changed. As this approach examines differences in each provider's market share over time, it would not be biased by omitted factors that stayed constant for a given provider over time. Such factors might include a provider's reputation with consumers.

Both of these approaches examine whether there are statistically significant changes in the various relationships under consideration.[17]

2.2.1. Quantifying the benefits

Overall, we have found little evidence that the menu has had a significant effect across the whole market. It has therefore not been necessary to place a monetary value upon them.

17 A result is said to be statistically significant if it is unlikely to have occurred by chance. We do not apply the concept of statistical significance to whether mean commission rates have changed, because we have data on almost the entire market. Thus, we can know almost for certain whether mean commissions rose or fell over time. By contrast, we do apply the concept of statistical significance to tests of the relationship between commission rates and market share. This is because tests for statistical significance will identify only those relationships that are not likely to appear in the data due to random variation.

3. DATA

The FSA has collected data on commission arrangements for the last three years for the purposes of calculating market averages that must be disclosed on menus. Understanding this dataset is vital in determining the appropriate statistical analysis to be used, and the way the results should be interpreted. In this chapter we describe the data and present some summary statistics.

The Market Average Commissions (MAC) dataset is a database covering both commission paying business and business sold on a commission equivalent basis.[18] Data were collected in the second quarter of 2004, 2005 and 2006. The data are collected from providers that represent the vast majority of the market, or around £13 billion in annual premium payments.

3.1. CONTENTS OF THE MAC DATA

The FSA has collected data on 10 different product categories for providers in the market. These product categories separate regular premium products from single premium products. For each product category, firms provide the following data:

- Commission or commission equivalent data depending on the distribution channel;
- Annual premiums for products of all terms as well as those specifically requested in the FSA's data request. (For the sake of comparability, data were collected for particular products based on the term of the product and for customers of a particular age. The total premiums for the whole product category have also been collected to ensure the appropriate weighting by premiums is used);
- Total initial commission paid at the start of product (whether paid on fully earned initial basis or an indemnity basis);
- Spread initial commission and the length of period over which this is earned; and
- Ongoing commission and whether this is fund based or premium based.

The data collected are based on "post-rebate" or discounted commission data only in as far as the provider knows about rebates or discounted terms.[19] In terms of calculating any benefits form the menu or any consumer detriment from commission bias, it is appropriate to use post rebate information since increases in volumes because of increased rebating could be a sign of the market working. However, information on

18 Commission paying business includes a variety of business. This will include advice paid for entirely through commission. It will also include advice that was 'agreed' on a fee basis but paid for through commission. It will also include products sold on a fee basis where trail commission continues to be paid to the adviser.

19 The FSA has no other reliable data on the degree to which advisers rebate commissions to customers.

rebating is not always known to the providers and for this reason the information collected may underestimate the amount of rebating and hence overestimate the cost of advice.

Under the guidance of the FSA we have not examined commission equivalent data and hence all of the information that follows relates only to the commission data.[20]

3.1.1. Unit of aggregation

Providers are required to report the new business volumes they sell for each of the specified products, decomposed by the different types of commission structures through which the product is sold.[21] For instance, where a provider sells a particular product through multiple commission structures in any particular year, it is required to provide separate records for each distinct commission structure.

The number of records available for each product category for commission-only business is reported in Table 2.

Table 2: Summary of the raw MAC dataset (2004-2006)

	Commission Only		
	2004	2005	2006
Annuities	46	42	56
Collective Investment Schemes: Regular	456	493	522
Collective Investment Schemes: Single	1,328	1,266	1,306
Endowments	34	22	23
Income drawdown	70	42	53
Investment Bonds1	36	37	27
Investment Bonds2	155	212	222
Personal Pensions and Stakeholder Pensions: Regular-10 Years	134	163	161
Personal Pensions and Stakeholder Pensions: Regular-25 Years	119	141	147

20 We were instructed by the FSA to focus our efforts on the commission-only dataset. There appear to be several concerns with respect to commission-equivalent data. For example, companies can change their commission equivalent data by changing the method of allocating fixed costs to the sales process for different products including through allocating costs to products that are excluded from the menu. For this reason, the commission-only data are thought to be more reliable.

21 FSA require submissions from all packaged product providers – where advice is given - who have sales of more than one hundred policies in the relevant product category relating to quarter two.

Personal Pensions and Stakeholder Pensions: Single	217	533	676
Whole of life assurance	22	23	30
Total	2,626	2,974	3,223

Source: CRA analysis of the MAC dataset

However, different firms have adopted different approaches to submitting the data in terms of the number of records that they have provided. As an illustration, for any given product category:

- Some firms have provided records aggregated to the level of the product category, whereas others have provided records to the level of distinct products within a particular product category. Furthermore, some firms have provided records to the level of their own products within a product category – for instance reporting personal pensions and stakeholder pensions separately. Other providers give only one record for a composite personal pensions stakeholder pensions category; and

- Some firms have provided records for data aggregated to the level of different commission structures, whereas others have provided records aggregated to the level of different commission levels within those structures. For example, some providers have submitted one record for all collective investment schemes (CIS) with commission paid on an initial-plus-trail basis, while others have submitted several records for CIS schemes with commission on this basis. In the latter case, providers submitted, for example, one record for business with commission rates of 3% initial and 0.5% trail and a separate record for business with commission rates of 3.5% initial and 0.5% trail.[22]

Since providers have adopted different approaches to submitting the data, using the number of records as the unit of aggregation is not appropriate and could lead to spurious results.

One option is to examine data for each product at the level of each provider. A second option is to examine the data for each product at the level of each provider and each commission structure. We have identified three different commission structures:

- Initial-only – where all the commission is paid on an Initial-only basis;

- Trail-only – where all the commission is paid on a trail or renewal basis; and

- Initial-plus-trail – where the level of commission comprises both an initial component and a trail or renewal component.

22 Note these examples are purely for illustration of the level of aggregation.

Table 3 provides details on the numbers of observations according to these two different options regarding the level of aggregation. When the data are aggregated on the basis of providers for each different product, there are a total of 683 observations. When we allow for differences in commission structures within providers the number of observations increases to 1,129.

Table 3: Unit of aggregation of the MAC dataset

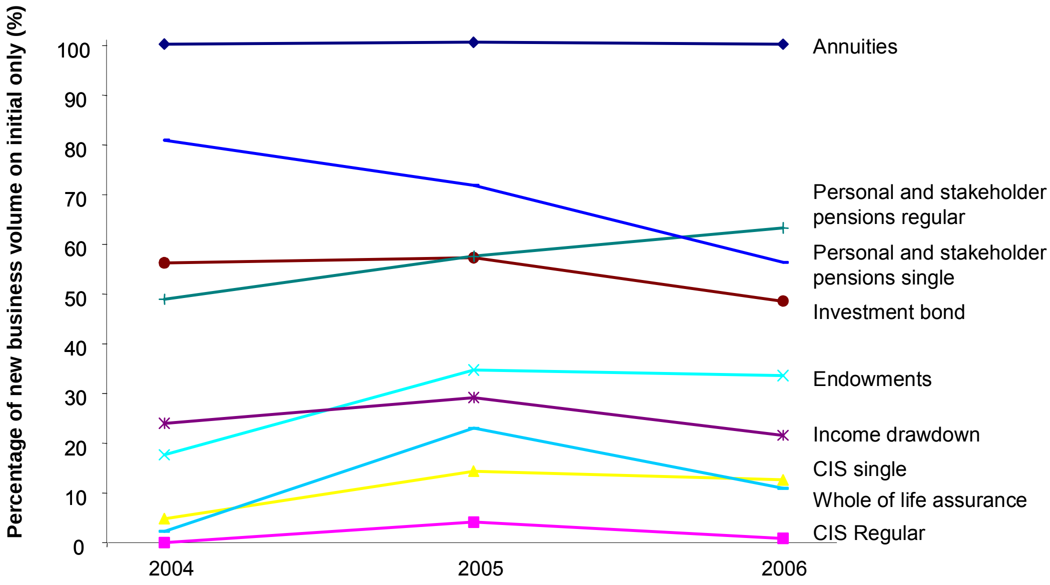
	Provider level				**Commission structure level**			
	2004	2005	2006	Total	2004	2005	2006	Total
Annuities	18	18	15	51	19	19	17	55
Collective Investment Schemes: Regular	45	39	35	119	45	45	37	127
Collective Investment Schemes: Single	56	53	46	155	109	104	88	301
Endowments	14	10	10	34	18	14	13	45
Income drawdown	15	12	10	37	29	23	19	71
Investment Bonds1	11	11	9	31	14	15	13	42
Investment Bonds2	21	21	20	62	37	36	37	110
Personal Pensions and Stakeholder Pensions: Regular-10 Years	17	19	18	54	35	36	36	107
Personal Pensions and Stakeholder Pensions: Regular-25 Years	17	18	19	54	37	33	36	106
Personal Pensions and Stakeholder Pensions: Single	19	20	21	60	41	44	46	131
Whole of life assurance	7	9	10	26	11	12	11	34
Total	240	230	213	683	395	381	353	1,129

Source: CRA analysis of the MAC dataset

We use both of these levels of aggregation in the analysis. However, understanding the structure of commission turns out to be important for understanding changes in the market average commission rate and hence analysis at the level of commission structures is of particular relevance.

Figure 1 below shows the proportion of business written on Initial-only terms for each of the product categories. It is clear from this figure that single premium personal pensions business has been characterised by a sharp fall in the proportion of new business written on Initial-only terms, while regular premium personal pensions business has been characterised by a dramatic increase in the proportion written on Initial-only terms.

Figure 1: Trends in commission structure



Source: CRA analysis of the MAC dataset

Although we can observe significant changes in commission structure, we do not associate these to the menu for several reasons. First by observation the trends occurred between 2004 and 2005 (prior to the menu) as well as between 2005 and 2006.

Given the changes in the use of different commission structures and since all submissions to the FSA should have included data at the commission structure level, this appears the most appropriate level of aggregation for the statistical analysis.

3.1.2. Measures of commission

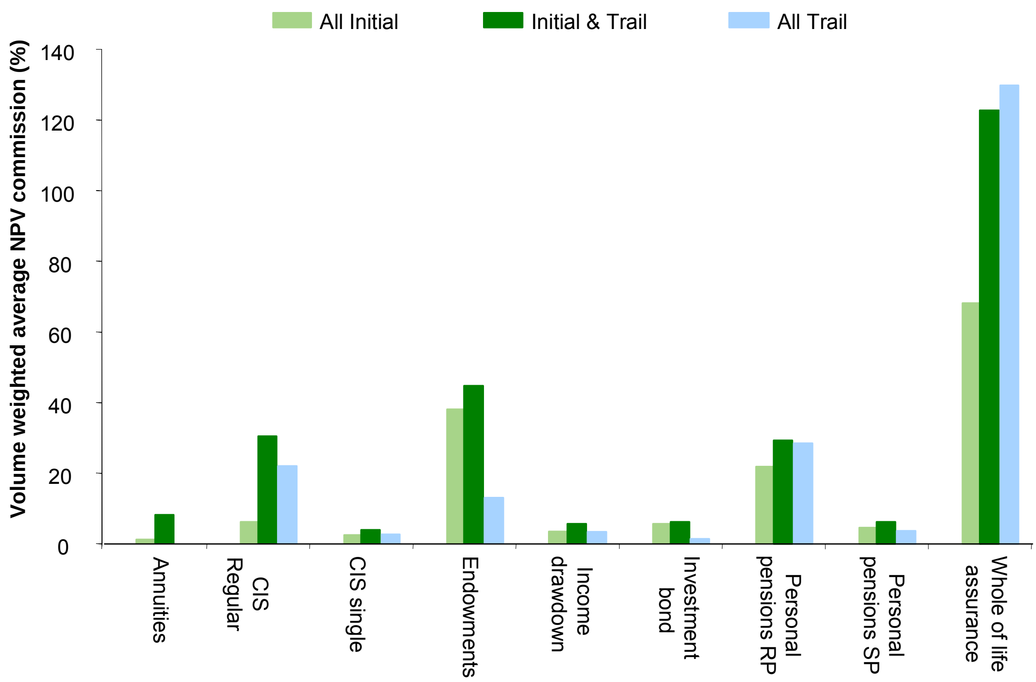
To provide consistency between records and different commission structures, the FSA calculates the Net Present Value (NPV) of the commission providers report offering in each record.[23] This NPV measure represents today's value of the total commission paid

23 The net present value for each commission (or equivalent) rate is calculated as the sum of the discounted values of each commission (or equivalent) payment that the firm may retain for that commission (or equivalent) rate. To calculate the net present value for each product group the FSA sets out assumptions with regards to the appropriate discount rate, net growth rate, lapse rate, assumed term and withdrawal rate. For any product group, the firm's maximum rate of commission (or equivalent) is the commission (or equivalent) rate in that product group with the highest net present value.
See http://fsahandbook.info/FSA/handbook/LI/2004/2004_89.pdf

over time and is expressed as a percentage of new business premiums paid in the first year.

Although an NPV approach is an appropriate method to compare across different commission structures, examining the NPV of these different structures identifies a particularly striking result. As is clear in Figure 2 below, a consistent result across all products is that the NPV of Initial-only commission is always less than the NPV of Initial-plus-trail.

Figure 2: Average commission by structure



Source: CRA analysis of the MAC dataset

The reason that NPV commission rates are higher for Initial-only business compared to Initial-plus-trail is unclear. This difference could reveal that the FSA's assumptions (in terms of persistency and discount rates) do not reflect the average market experience. For example, it could be the case that given the expectations which the intermediaries have in relation to persistency, the level of Initial-only or Initial-plus-trail would be similar. However if the FSA is assuming a higher level of persistency this will increase the value of Initial-plus-trail compared to Initial-only. Alternatively, it could reflect a willingness by providers paying higher commissions for Initial-plus-trail business to encourage advisers to use this structure of commission.

However, it is clear that this finding could introduce some counterintuitive results namely that even without any change in commission rates offered by any of the providers, a simple increase in the proportion of business sold through Initial-plus-trail commission structures, and corresponding reduction in the proportion sold through an Initial-only commission will increase the market average.

This leads to the surprising result that a movement in the proportion of new business sold through an Initial-plus-trail commission structure (that would typically be seen as beneficial for consumers since it may discourage unnecessary churning of business and could encourage the provision of ongoing advice) would lead to an increase in the market average NPV (that would typically be seen as being to the detriment of consumers). This result also provides a compelling reason to undertake analysis at the commission structure level.

Finally, while the NPV approach enables a comparison between different structures, market averages are not presented to consumers on this basis. Instead individual advisers choose their most common commission structure and present the market average data on this basis using the same value of trail commission in both the market average and their own maximum. This could encourage consumers to focus on the difference between the levels of initial commission different advisers receive If this was the case, we could see a reduction in initial commission levels or a reduced dispersion of initial commissions, even though we don't see this when commission is measured in NPVs. To capture both effects we have therefore undertaken our analysis using both the NPV measures of commission as well as the Initial-only measures of commission (for Initial-only commission and Initial-plus-trail).

3.1.3. Testing the validity of the data

A further step in the analysis was to check the validity of the MAC data. This was done in several different ways including:

- Comparing the new business volume figures to figures from the ABI to ensure that there was a high level of market coverage;
- Identifying providers who had reported only intermittently and checking that trends in market averages were robust when we only considered providers who had reported in every year; and
- Examining outliers through focusing on providers offering very high or very low levels of commission for a given product.

The result of this validation was that there were some products where the reporting of data was such that the results should be used with caution. This included income drawdown and collective investment schemes.

3.2. IMPLICATIONS FOR THE ANALYSIS OF MAC DATA

Understanding the data is vitally important for designing the appropriate statistical analysis and interpreting the results. On the basis of the analysis and testing described above it is clear that is it important to:

- Undertake the analysis using the data at the level of commission structure as well as at the product level to avoid spurious trends;

- Run tests focussing on both the NPV and the initial commission only, so as to reduce sensitivity to the assumptions used in constructing the NPV; and
- Allow for the fact that some providers only report data intermittently.

3.3. DATA ON THE USE OF FEES

The FSA's MAC data do not contain information on the use of fee based advice. As noted in section 2.1, one of the potential impacts of the menu could be to increase the awareness of the cost of commission based advice compared to fee based advice.

Hence we have also examined two different intermediary surveys:

- Matrix IFA – This database has a sample size of over 13,000 firms. Before depolarisation this database only focused on the IFA sector. Hence it is likely to under-represent the extent of multi-tied advisers since it is unlikely to capture those advisers that used to be tied advisers; it also excludes those advisers that are still tied advisers. Matrix IFA also provided us with data on the use of fees over time, although there are concerns regarding whether the time series data on the proportion of advisers that do not use any fees is representative. The data on the relative intensity of the use of fees among those who do use fees appears more robust and is consistent with other data; hence we have examined that data over time.
- NMG – This database has a sample size of around 1,600 firms. This database also contains some information on the use of fees which can be used to validate the results from the Matrix database.

4. RESULTS FROM THE STATISTICAL ANALYSIS

As noted in section 2.1, to test for any benefits from the menu we have examined four distinct hypotheses:

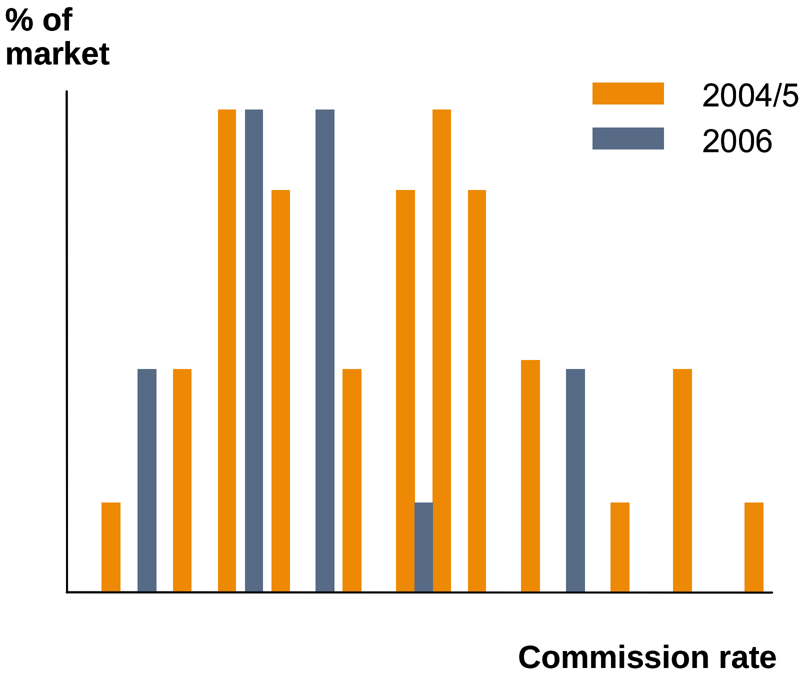
- Hypothesis 1: A reduction in commission levels (due to increased competition in the cost of advice arising from greater transparency);
- Hypothesis 2: A reduction in the dispersion of commissions (due to disclosure of commission much higher than market average);
- Hypothesis 3: A reduction in provider bias (due to greater transparency leading consumers to understand that different providers may offer different commissions); and
- Hypothesis 4: An increase in the use of fees (due to greater awareness of relative costs).

Based on the descriptive analysis for each of these tests (explained in section 2.1) we have examined relationships at the aggregate product level and for different commission structures (investigating the underlying relationships in aggregate across structures and individually within commission structures). We have also tested the level of commission as measured by the NPV and by looking at the initial commission level (which can only be applied to business written on Initial-only or Initial-plus-trail terms).

The first two hypotheses to be investigated relate to whether there has been a change in the level and in the distribution of commission since the introduction of the menu. This may come about because consumers will compare the market average commission rates to the maximum rates reported by their advisers. Where the market average is lower than that reported on an adviser’s menu, this could either encourage consumers to shop around or it could encourage a negotiation between the consumer and their adviser. Either of these approaches could result in a fall in commission levels.

This test is illustrated hypothetically in Figure 3, where we observe that the data in 2006 are to the left of the data in 2004 and 2005, and where the distribution in 2006 is narrower than that in 2004 and 2005. Such a result would offer evidence of a benefit from the introduction of the menu.

Figure 3: Illustrative change in the distribution of commission



4.1. Testing for a reduction in commission levels

The market mean net present value commission rates for commission-only business are presented in Table 4 below.

Table 4: Market average commission rates (commission-only (%)

Product group	2004	2005	2006
Annuities	1.27	1.31	1.30
Collective Investment Schemes: Regular	22.82	22.93	22.22
Collective Investment Schemes: Single	3.52	3.75	3.84
Endowments	42.70	44.34	42.34
Income drawdown	5.03	5.09	4.98
Investment Bonds	4.45	5.34	4.97
Investment Bonds1	1.02	1.05	1.12
Investment Bonds2	5.85	6.22	6.12
Personal Pensions and Stakeholder Pensions: Regular-10 Years	17.24	17.60	17.81
Personal Pensions and Stakeholder Pensions: Regular-25 Years	28.16	27.72	32.76
Personal Pensions and Stakeholder Pensions: Single	4.34	4.68	5.29

Whole of life assurance	116.79	120.74	117.87

Source: CRA analysis of MAC data

It is clear from simply looking at the numbers that there has been relatively little change in the commission levels for most product groupings. The exceptions to this are: single premium personal pensions; 25 year regular premium personal pensions; and single premium CIS. However, it is important to test whether changes of this kind reflect a change in the distribution or simply the random variation in data that would be expected to occur from year to year.

4.1.1. Aggregate results

To test whether there has been a statistically significant change in the aggregate level of commission for each product, we examine a regression equation of the average commission rate (converted into logarithms) for each provider against a dummy variable.[24] The dummy variable takes a value of one if the record is from 2006 and zero otherwise as shown in equation (1) below. We have examined both a weighted and an unweighted regression specification to investigate the impact on both the simple average commission rates and the weighted average.

$$Ln(CR_{it}^{NPV}) = \alpha + \beta_1 D_{2006} + \varepsilon_{it} \tag{1}$$

The regression results for the weighted average case, using commission rates calculated on an NPV basis are reported below in Table 5.

Table 5: Changes in mean commission rates

	Change in commission in 2006 relative to 2004/5	Measure of statistical significance (%)
Annuities	0.011	91
Collective Investment Schemes: Regular	-0.019	62
Collective Investment Schemes: Single	0.075	27
Endowments	-0.039	73
Income drawdown[25]	0.021	70

24 It is common to transform variables in to logarithms to examine percentage changes rather than changes in absolute numbers which typically makes the interpretation of results easier.

25 The results for income drawdown products appear particularly counter intuitive. As seen as above the average level of commission fell in 2006 compared to 2004 and 2005. However, we have found a positive increase in the econometric analysis. This is explained by this product having some extreme outliers and the conversion of commission rates into logarithms. This results in the average level of commission in logs rising in 2006. Given that this result is insignificant in levels and logs we do not believe this is a particular concern.

Investment Bonds1	0.140	67
Investment Bonds2	0.014	61
Personal Pensions and Stakeholder Pensions: Regular-10 Years	0.013	88
Personal Pensions and Stakeholder Pensions: Regular-25 Years	0.148	19
Personal Pensions and Stakeholder Pensions: Single	**0.158**	**1**
Whole of life assurance	-0.009	90

Source: CRA analysis of MAC data. Results that are statistically significant at the 5% level are highlighted in bold, those that are statistically significant at the 10% level are highlighted in bold italics. Where the change in commission in 2006 relative to 2004/5 captures the effect of β_1, and the measure of statistical significance is the associated p-value as reported in equation (1).

Table 5 shows that there is no consistent evidence that mean commission rates fell following the implementation of the menu. In fact, of the 11 product categories the menu covers, there were increases in mean commission rates in 8 categories. The largest change to mean commission rates was an increase, for single premium personal pensions. As we mentioned above, it is generally not appropriate to examine whether these changes were statistically significant, because the data essentially cover all provider firms, and are not being used to make inferences about a larger population. However, the measure of statistical significance Table 5 quotes reinforces the indication of the percentage changes that the increases observed in commission rates on single-premium pensions and regular-premium pensions with a 25-year term are the largest and most consistent changes over time in the data.

Some increases in commission rates on personal and stakeholder pensions are likely to have occurred because of the increase in the cap on product charges on stakeholder pensions from 1 to 1.5% in April 2005. It may also be the case that Self-Invested Personal Pensions (SIPPs) became more popular between 2004 and 2006, and that sales of SIPPs attracted more commission than of other pensions, further increasing average commissions paid on stakeholder and personal pensions.

We note further that there are some concerns regarding the use of aggregate data, as we now discuss

Caution over the interpretation given to the standard errors

The underlying rationale behind regression analysis is that a random sample of observations - where the sample is thought to be a small subset of the entire population – is used to provide an estimate of a population mean, and the associated standard errors provide an indication of how statistically meaningful the estimate is. However, in the case of the analysis undertaken above, the MAC dataset constitutes a very significant proportion of the total UK market premiums, and undertaking regression analysis on the basis of this sample to make inferences about the actual market gives rise to concerns over the interpretation given to the estimated standard errors. For instance, where this case is taken to the extreme, and the sample is extended to include the entire population, the population mean could be estimated with certainty and the estimated standard error would converge to zero. Therefore, in this particular case, where the sample is a close approximation to the actual market, this gives rise to concerns over the reliability of the estimated standard errors, and the reported p-values, and whether they can be interpreted in an economically meaningful way. In particular greater focus should perhaps be given to the actual point estimates rather than measures of significance

Extraordinary trends with aggregate statistics

Section 3.1.2 highlighted the result that the NPV of commission varied systematically between commission structures and that the use of different commission structures changed over time in some products. The impact of this is that the reported market average rate of commission could change simply due to a shift in the proportion of new business being sold through the different commission structures, without any provider offering or paying different commission rates on a particular product type.

These differences between NPVs of commissions across different structures are a particular problem for single premium personal pensions where there has been a significant increase in the proportion of business using an initial plus trial commission structure. In Table 6 we decompose the commissions paid on single premium personal pension products by structure. While the average level of commission for all structures has increased by 17.3%, when we consider each individual commission structure we find that the change in commission is less than 17.3% in *all* cases. This result arises because there has been a movement in the value of new business sold through different commission structures, from Initial-only commission (with an NPV of 4.63% in 2006) to Initial-plus-trail (with an NPV of 6.26% in 2006).

Table 6: Understanding changes in aggregate commission for single premium personal pensions

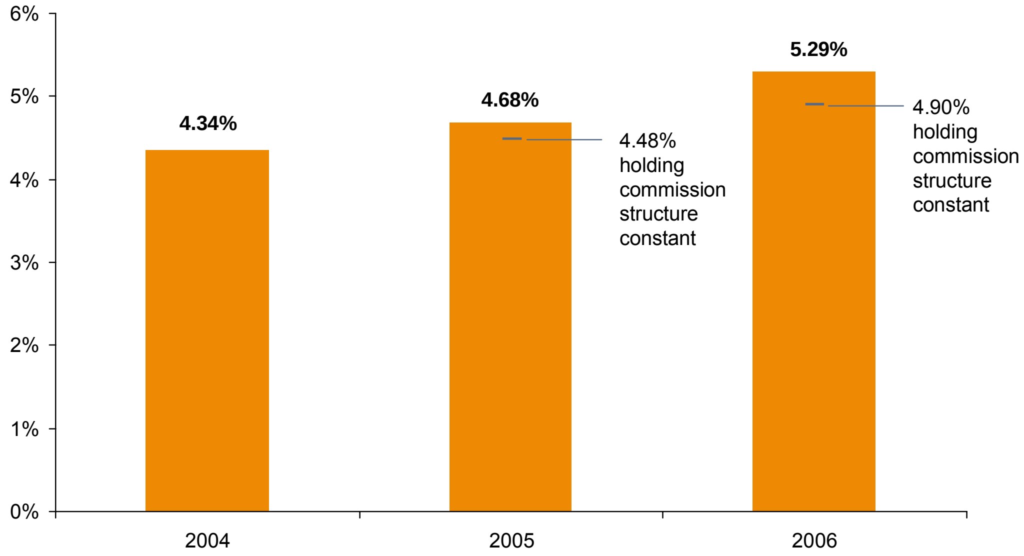
Commission structure	2004	2005	2006	% change in commission in 2006 relative to 2004/5 average
All Structures	4.34	4.68	5.29	17.3
Initial-only	3.88	4.14	4.63	15.5
Initial-plus-trail	6.53	6.13	6.26	-1.2
Trail-only	3.41	3.76	3.64	1.5

Source: CRA analysis of MAC data

Hence even without any change in commission levels by any provider in the market, this movement from initial commission to initial commission plus trail will result in a higher market average. If instead, the proportion of business on each commission structure had remained constant over time, the average commission would have increased to 4.9%

rather than 5.3% - an increase of 11% rather than 17% compared to 2004 and 2005. Figure 4 below illustrates the difference between the aggregate commission levels and the commission levels that would have occurred if the proportion of business in each commission structure remained the same as it was in 2004.

Figure 4: Average commission holding assuming the commission structure stays same as in 2004 for single premium personal pensions



Source: CRA analysis of MAC data

Sample sizes

A significant shortcoming with examining the data at the provider level is that the number of observations is reduced compared to when data are examined at the commission structure level (as shown in Table 3). For instance, in the case of Whole of Life, Investment Bond1 and Endowments, such a method of aggregation results in samples of fewer than 35 observations. We seek to address this problem in section 4.1.2 below where we examine the data at the level of the commission structure.

Statistical certainty

When it is appropriate to employ tests for statistical significance, it is necessary to choose a particular significance level. With a significance level of 10% we would expect to find a statistically significant result in 10 in every 100 cases, even in the absence of a true relationship. With a significance level of 5% we would expect to find a statistically significant result in 5 in every 100 cases, even in the absence of a true relationship. A result found for only 1 out of 11 product categories should be taken with caution.

Problems of reporting

Several substantial changes have been made to the data that have been collected. In particular for collective investment schemes it was observed that there were significant volumes of business that were written on a Trail-only basis in 2004 (believed to represent institutional business). The FSA investigated this issue and issued further guidance to providers. The impact of the revised submissions was to change the market average for CIS in 2005 and 2006. Hence, caution is required when considering changes in the CIS market average, because the 2004 data was reported on a different basis to the subsequent years. Given that this problem only affected trail-only business, to overcome this problem we examined the underlying data using commission structures which also contained an Initial-only component and were not affected by the reporting problem.

Therefore, there are several reasons to be cautious regarding the change in the aggregate commission rates. The apparent large increase in average commission rates for personal and stakeholder pensions is plausibly a result of factors such as the increase in the stakeholder pension price cap in April 2005 and an increase in the popularity of SIPPs between 2004 and 2006, rather than the menu itself. It is still possible that the menu might have restrained the increases in commission rates.

4.1.2. Results by commission structure

Given the concerns identified regarding the use of aggregate commission information, we also investigate whether there have been any change in mean rates of commission where the data are aggregated at the individual commission structure levels. To examine this hypothesis we looked at several different specifications including:

- Using commission rates measured both on an NPV-basis and an Initial-only basis – including only the components of commission which are paid upfront and excluding all other components.

- Looking at results by commission structures (i.e. whether the average level of commission has changed for business written on Initial-only terms) or jointly testing whether there has been a reduction in the initial commission levels for both Initial-only and Initial-plus-trail (after allowing for the difference in the levels).

Below we report the results for the analysis undertaken using only an Initial-only measure of commission. As we are interested in changes in commission rates following the introduction of the menu, when we combine all of the information into the same specification we have to allow for the systematic differences in the average level of initial commission – i.e. initial-only and initial-with-trail - between structures. To do this we augment our regression equation with a dummy variable, $D_{Initial}$, which assumes a value of 1 if the recorded commission structure is all-upfront and zero otherwise.

Equation (2) represents the specification of the regression equation used for this test.

$$Ln(CR_{it}^{Initial-Only}) = \alpha + \beta_1 D_{2006} + \beta_2 D_{Initial} + \varepsilon_{it} \qquad (2)$$

The results of this regression are reported below in Table 7. Overall there is little evidence of a consistent fall in mean commission rates following the introduction of the menu. The sign of the change is positive for six products and negative for five, and even though some of the changes are large, there are large changes of both signs. Although the concept of statistical significance is generally not appropriate when studying the entire population of interest, to show the consistency of the changes in commission rates across providers Table 7 also reports the statistical significance of the coefficients on the 2006 dummy. Only one coefficient – CIS single - is significant at the 10% level.

Table 7: Changes in mean rates by commission structures

	Change in commission in 2006 relative to 2004/5	Measure of statistical significance (%)
Annuities	-0.044	59
Collective Investment Schemes: Regular *	-0.109	43
Collective Investment Schemes: Single	***-0.167***	***7***
Endowments	-0.062	69
Income drawdown	0.003	97
Investment Bonds1 *	0.210	17
Investment Bonds2	0.010	76
Personal Pensions and Stakeholder Pensions: Regular-10 Years	0.016	88
Personal Pensions and Stakeholder Pensions: Regular-25 Years	0.185	12
Personal Pensions and Stakeholder Pensions: Single	0.050	61
Whole of life assurance	-0.059	53

Source: CRA analysis of MAC data. Results that are statistically significant at the 5% level are highlighted in bold, those that are statistically significant at the 10% level are highlighted in bold italics. Where the change in commission in 2006 relative to 2004/5 is captured by the effect of β_1, and the measure of statistical significance is the associated p-value as reported in equation 2. Where * denotes products that are primarily Trail-only commission structure. For these products the number of observations with initial commission is small and these results should be treated with caution.

4.2. TESTING FOR A REDUCTION IN THE DISPERSION OF COMMISSION

The second potential impact of the menu is that it could have narrowed the distribution of commission due to the behaviour of consumers, advisers or providers. This could take place even if there is no impact on the mean level of commission. To investigate this hypothesis we have:

- Compared the standard deviation of commission in 2006 to the average of the standard deviations reported in 2004 and 2005 respectively;
- Tested the extent to which this is due to a reduction in outliers resulting in the maximum or minimum commission changing; and
- Examined whether the data are more clustered around several commission points than was previously the case.

Because the MAC data describe almost the entire population of interest, we are more interested in the size and sign of the change in commission rates than the statistical significance of any changes. We report the significance of the measured changes, however, to show the consistency of the results in our data. We also note that the high degree of aggregation in the data means that the MAC data are unlikely to capture all the variation in commission rates that exists in the market. Thus, it is more problematic to test for changes in the variance of commissions rather than in the mean.

Table 8: Variation in commission (standard deviation %)

	2004/5	2006	Measure of statistical significance (%)
Annuities	0.8	0.9	59.6
Collective Investment Schemes: Regular	5.9	6.9	67.4
Collective Investment Schemes: Single	1.0	1.2	45.3
Endowments	14.0	10.5	27.0
Income drawdown	2.3	1.4	31.3
Investment Bonds1	0.7	0.8	79.2
Investment Bonds2	0.9	1.1	62.0
Personal Pensions and Stakeholder Pensions: Regular-10 Years	7.1	9.4	14.3
Personal Pensions and Stakeholder Pensions: Regular-25 Years	9.4	13.6	18.5
Personal Pensions and Stakeholder Pensions: Single	1.3	1.3	76.8
Whole of life assurance	***42.2***	***27.1***	***6.5***

Source: CRA analysis of MAC data. Results that are statistically significant at the 5% level are highlighted in bold, those that are statistically significant at the 10% level are highlighted in bold italics. The measure of statistical significance is the associated p-value

As can be seen in Table 8 there is little evidence to support the hypothesis that levels of dispersion have fallen. In only three of the product groupings (endowments, income drawdown and whole of life) is there evidence of a fall in the variation in 2006 relative to levels of variation in 2004 and 2005. One product, whole of life, shows tentative evidence of a fall in the variation of commission (statistically significant at the 10% level).

However, when we examine the maximum rates of commission we find that these results are highly sensitive to extreme outliers. In particular, in all three products we find that a significant outlier increased the measure of dispersion in 2004 and 2005. In each case one provider had a commission rate almost double the market average. In 2006, we do not find such significant outliers.

We did not find any evidence that the level of clustering (as measured by the percentage of the distribution concentrated around a small number of commission values) has risen following the introduction of the menu.

Overall, although there has not been a statistically significant reduction in the level of dispersion, it is worth noting that categories with the most extreme outliers are the categories where we have seen a reduction.

4.3. TESTING FOR A REDUCTION IN PROVIDER BIAS

The third potential impact is that the menu may have reduced the extent of provider bias. To test this we examine whether the relationship between commission levels and provider market shares on a product by product basis has changed since the introduction of the menu. A hypothetical illustration of this test is shown in Figure 5.

Figure 5: Testing for commission bias

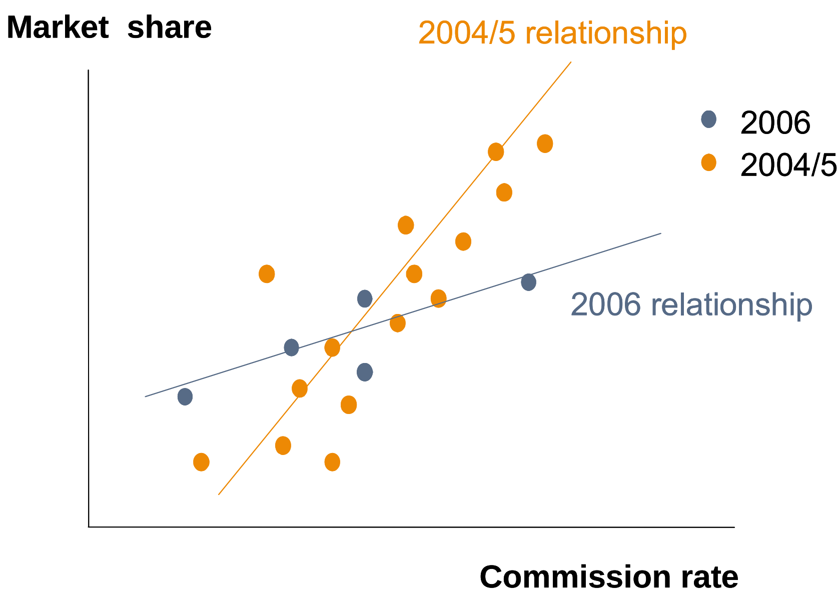


Figure 5 hypothetically illustrates that in 2004/5 there is a strong positive relationship between the commission rate offered by a provider and the provider's market share (which could be interpreted as evidence of provider bias). By contrast, the slope illustrating this relationship in 2006 is less steep than that for 2004/5.

A statistically significant decline in provider bias requires:

- A statistically significant positive relationship between commission and market share in 2004/5;[26] and

- A statistically significant decline in the relationship between commission and market share in 2006 compared to that in 2004/5.

We note that it is appropriate to use the concept of statistical significance when testing for relationships in data, even when these data describe the entire population of interest. This is because there is a risk of arriving at false conclusions regarding relationships from small samples, even though there is no risk of comparing means within the sample incorrectly.

4.3.1. Aggregate results

To test whether there has been a decline in provider bias we estimate equation (3). This involves regressing the log of new business volumes against the weighted commission rate measured on an NPV basis, and annual shift dummy variables for 2005 (and 2006) which assume a value of 1 if the year is 2005 (or 2006) and zero otherwise, and an "interactive 2006" dummy which assumes the value of the reported commission rate in 2006 and zero otherwise.

$$\log(Vol_{it}) = \alpha + \beta_1 CR_{it}^{NPV} + \beta_2 D_{2005} + \beta_3 D_{2006} + \beta_4 D_{2006} \times CR_{it}^{NPV} + \varepsilon_{it} \qquad (3)$$

The results of this test are reported in Table 9, and for evidence of a fall in provider bias we are looking for a statistically significant positive coefficient in the case of β_1, and a statistically negative coefficient in the case of β_4.

Table 9: Test of commission bias (the percentage change in volume that would be implied by a one-percentage-point change in commission rates)[27]

Product	Relationship between commission and volume	Measure of statistical significance (%)	Impact post Menu	Measure of statistical significance (%)
Annuities	-188.18	0	-83.43	49
Collective Investment Schemes: Regular	4.12	37	5.84	44

26 In principle, the unobservable differences between companies mean that there could be commission bias but a negative relationship between commission rates offered by providers and market share. For example, it could be the case that a company has a reputation such that it can pay below the market average but get a high market share. This is the reason for favouring the panel based approach.

27 As has been found in previous analysis, the responsiveness of volume to changes in commission appears implausibly high given the changes in volume observed in the market place. This is possible from a theoretical perspective, as this reflect the change in volume that a provider would observe if they raised their commission by one percentage point and all of their competitors did not change commission. In reality we would expect a change in commission of this magnitude to result in a competitive response.

Collective Investment Schemes: Single	24.19	22	-70.07	7
Endowments	1.36	69	-13.38	9
Income drawdown	1.54	88	-109.83	5
Investment Bonds1	-178.13	0	-17.32	85
Investment Bonds2	**93.61**	**1**	**-142.83**	**1**
Personal Pensions and Stakeholder Pensions: Regular-10 Years	-8.85	9	8.44	30
Personal Pensions and Stakeholder Pensions: Regular-25 Years	-5.99	8	2.88	57
Personal Pensions and Stakeholder Pensions: Single	-2.59	93	-65.23	23
Whole of life assurance	1.64	27	0.86	75

Source: CRA analysis of MAC data Where the relationship between commission and volume is captured by β_1, and the impact in the post menu period is captured by β_4 in equation 3. Results that are statistically significant at the 5% level are highlighted in bold, those that are statistically significant at the 10% level are highlighted in bold italics and the measure of statistical significance is the associated p-value as reported in equation 3.

Only in the case of Investment Bonds2 is there evidence of an improvement in commission bias in the period post the introduction of the menu.

4.3.2. Results by commission structure

As we have demonstrated above, changes in aggregate commission may reflect changes in structure. This could also be the case for a given provider. Therefore to avoid spurious relationships the commission bias hypothesis is also investigated for each product by considering only the most common commission structure. Again we have undertaken this analysis using commission measured in terms of NPV and looking at the initial component of the commission structure.[28] The regression equation estimated is equation (4).

$$\log(Vol_{it}) = \alpha + \beta_1 CR_i^{Initial} + \beta_2 D_{2005} + \beta_3 D_{2006} + \beta_3 D_{2006} \times CR_i^{Initial} + \varepsilon_{it} \qquad (4)$$

The results of this test are reported in Table 10. As was previously the case, we can see that there is evidence at the 5% significance level that commission bias is reduced for the investment bond2 category. Is it also now the case that there is evidence of commission bias being reduced for single premium personal persons at the 5% significance level.

28 In this case we use an Initial-only measure of commission where the dominant commission structure is either all-upfront or both all-upfront and trail, and a NPV measure of commission rate where the dominant commission structure is all-trail.

Table 10: Test of commission bias - by structure (the percentage change in volume that would be implied by a one-percentage-point change in commission rates)[27]

Product	Structure	Relationship between commission and volume	Measure of statistical significance (%)	Impact post Menu	Measure of statistical significance (%)
Annuities	Initial-only	-198.7	0	-92.5	43
Collective Investment Schemes: Regular	Trail-only	4.9	32	6.6	43
Collective Investment Schemes: Single	Initial-only	15.0	67	-168.1	3
Endowments	Initial-plus-trail	4.7	24	-12.8	12
Income drawdown	Initial-plus-trail	-31.4	50	-26.5	79
Investment Bonds1	Trail-only	-477.3	3	-262.5	41
Investment Bonds2	**Initial-only**	**100.0**	**1**	**-117.4**	**3**
Personal Pensions and Stakeholder Pensions: Regular-10 Years	Initial-plus-trail	-6.3	6	1.0	84
Personal Pensions and Stakeholder Pensions: Regular-25 Years	Initial-plus-trail	0.8	75	-0.5	89
Personal Pensions and Stakeholder Pensions: Single	**Initial-only**	***183.3***	***7***	***-285.9***	***1***
Whole of life assurance	Initial-plus-trail	-0.7	61	-0.1	96

Source: CRA analysis of MAC data. Results that are statistically significant at the 5% level are highlighted in bold, those that are statistically significant at the 10% level are highlighted in bold italics. Where the relationship between commission and volume is captured by β1, and the impact in the post menu period is captured by β4 in equation 4. The measure of statistical significance is the associated p-value as reported in equation 4.

However, although these results provide tentative evidence to support a reduction in commission bias there are several reasons to be sceptical:

- The results are highly sensitive to outliers. The analysis of single premium personal pensions is based on excluding products with initial commission levels below 3%, but without this constraint the relationship is not statistically significant; and
- Using a 5% significance level means that we would expect to find significant results in 1 in every 20 cases even if there was no true relationship. Since we have found significant results for relatively few categories this may simply be due to random variation.

There is also a potential concern that we find such a big impact for Investment Bonds2 but the menus does not convey data on different type of Investment Bonds. However, this provides a potential explanation for finding a result in this category. As both types of Investment Bonds are reported as a single category, Investment Bonds2 look expensive as they are typically high-commission products that are being grouped with lower-commission products. Thus, one might expect commissions on the higher commission paying products to have fallen.

4.3.3. Panel effects

The final way we test for provider bias is to use a panel approach.[29] The panel based approach considers how market shares for a particular product provider have performed over a period of time, during which one or more providers' average levels of commission have changed. Since the panel approach allows us to control for any provider-specific variables that remain constant over time, the risk of bias due to omitted variables is reduced, though not removed entirely. However, since this method estimates separate intercepts for each provider, this reduces the number of degrees of freedom in our test, which reduces its statistical power.

The panel regression analysis is undertaken at the commission-structure level and the regression specification tested is the same as that reported in equation 3. Overall there are no significant results showing evidence of a change in provider bias in the period following the introduction of the menu. Furthermore, if we look specifically at the result for single premium personal pension and Investment Bonds2 where we found significant results in cross-sectional regressions, we find results where the coefficients have the same sign, but are no longer significant. This is reported in Table 11 below.

Table 11: Panel test of commission bias - by structure

Product	Structure	Relationship between commission and volume	Measure of statistical significance (%)	Impact post Menu	Measure of statistical significance (%)
Personal Pensions and Stakeholder Pensions: Single	Initial-only	76.9	14	-53.8	39
Investment Bonds2	Initial-only	10.7	50	-20.4	11

29 Panel regression is a statistical method used to analyse data on a sample of units, such as firms or individuals, over time. The typical advantage of using such panel data is that it can be used to estimate the effect of, say, price on market share by comparing (in this case) firms against their own experiences at different times. Using this 'fixed effects' method, the fact that each firm starts with a different market share for unobserved reasons is removed from the analysis and does not affect the results.

Source: CRA analysis of MAC data. Results that are statistically significant at the 5% level are highlighted in bold, those that are statistically significant at the 10% level are highlighted in bold italics. Where the relationship between commission and volume is captured by the effect of β_1, and the impact post menu is captured by the effect of β_4 ,, and the measure of statistical significance relates to the associated p-values.

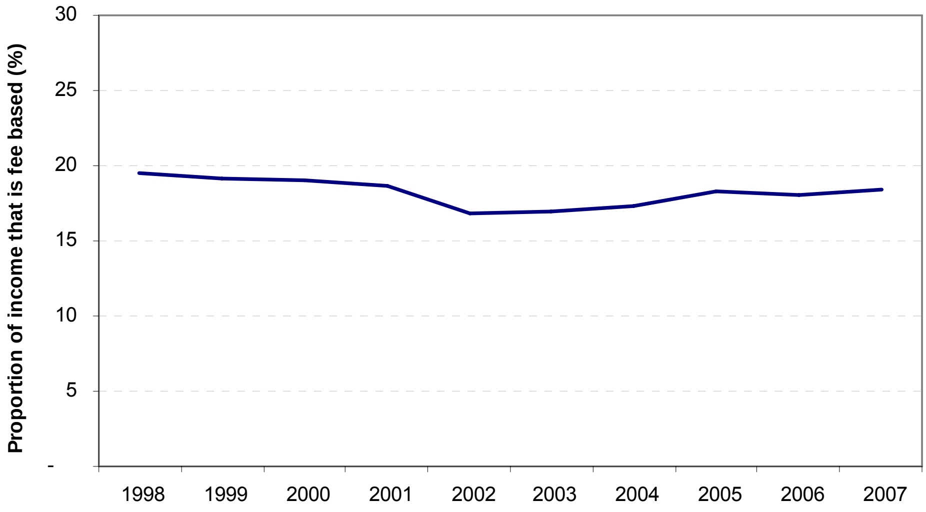
4.4. TESTING WHETHER THERE IS AN INCREASE IN FEE BASED ADVICE

The final hypothesis that we consider is whether the menu has had an impact on the use of fee based versus commission based advice. This might arise because the menu informs consumers about the cost of advice and may make consumers aware of the potential for their advisers to exhibit commission bias. It is then possible that some consumers might prefer to operate on a fee basis. Alternatively, if consumers have a reasonable understanding of the likely recommendations and the amount they have available to invest, they may compare the likely cost through commission and the likely cost through fees and then choose whichever is cheaper (which may vary in individual cases).

The first question we have therefore examined is whether or not the proportion of advice paid for on a fee basis has changed. Due to data difficulties with the Matrix IFA dataset, it is not possible to examine over time the proportion of IFAs which have at least some income from fees.[30] However, this dataset does enable an examination over time of the proportion of income that is fee based for those IFAs which have at least some fee based income.

30 Data from Matrix IFA suggests a very large decline in fee based advice in the last 3 years. However, Matrix IFA confirmed that this is not an accurate picture of the market and is due to data difficulties with advisers who are reporting that they do not have any fee based income. Discussions with the FSA and with the industry confirmed that a substantial decline in fee based advice had not occurred. In addition, NMG data (which allows for some element of comparison over time) showed that there had been little, if any, change in fee based advice.

Figure 6: Average proportion of income that is fee based for those advisers who have fee based income, 1998-2007

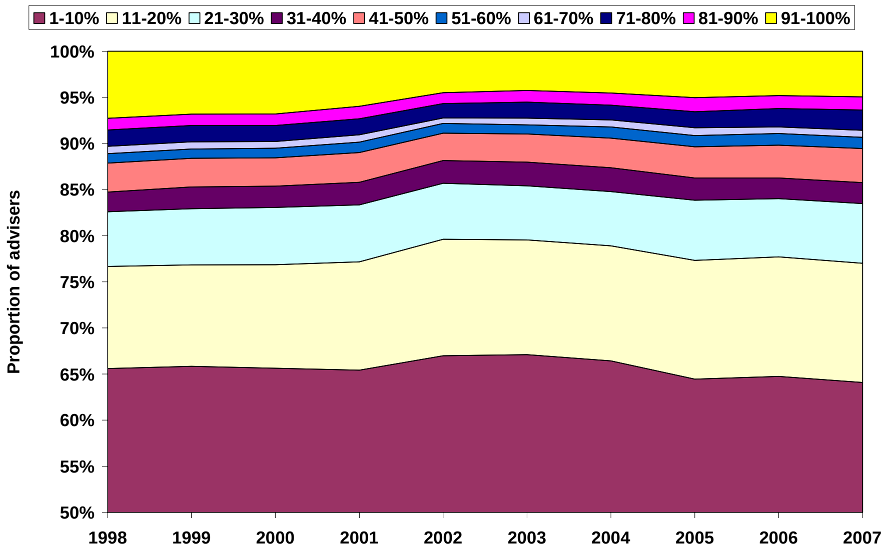


Source: CRA International based on Matrix IFA. Note that due to data availability this proportion is based on a simple average across firms rather than a turnover-weighted average.

Figure 6 shows that there has been very limited change in this series over a reasonably long period of time although there has been a very slight increase in 2005-2007 compared to 2002-2004.

Examining this information in more detail, we find that the majority of advisers who have fee based income only receive 1-10% of their income through fee based advice. It is also clear from Figure 7 that there have been no large changes in the proportions of advisers operating with different levels of fee based advice.

Figure 7: Proportions of advisers with different proportions of fee based advice, 1998-2007



Source: CRA International based on Matrix IFA. Note that due to data availability the proportions are based on a simple average across firms rather than a turnover-weighted average. The figure only includes those advisers that have some fee based advice. The figure shows that in 1998, 66% of advisers who have fee based income received between 1-10% of their income from fees, a further 11% of advisers who have fee based income received 11-20% of their income from fees etc.

Therefore we find no evidence that the use of fees has increased since the introduction of the menu.

4.5. Summary of the empirical results

In terms of the four hypotheses examined, we find very little evidence that the menu has had a consistent or significant effect across the whole market. There is no compelling evidence that it has brought significant benefits through a reduction in the average level of commission, the dispersion of commissions, provider bias or a change in the use of fees. Since no significant benefits have been identified, we have not sought to place a monetary value on them.

However, we have found a small number of statistically significant results that do suggest the menu has reduced the extent of commission bias, and specifically commission bias towards specific providers, in financial advice. It is noteworthy that these results have all been identified in respect of single premium products – where previous analysis by CRA has found greater problems of commission bias.

APPENDIX A: MATCHING FIRMS AND PRODUCT GROUPINGS

A.1 FIRM NAMES

Owing to corporate reorganisation in the UK savings and investments market over the period 2004 to 2006, it was the case that some firms reported new business premiums only in the earliest years, having been subsequently acquired and subsumed within a wider group in later years. In these cases we have matched and aggregated the acquired and acquirer firm new business premiums together, and treated them as arising from a single entity throughout the whole period.

A.2 PRODUCT GROUPINGS

A second area where the underlying data was modified is in the area of the reported product groupings. An initial inspection of the entries for each product group revealed erroneous additional groupings, such as separate "Endowment" and "Endowments" categories These entries were pooled together under Endowments.

Furthermore, we have split the Investment Bond category into two distinct groups following our initial analysis of the Investment Bonds category, discussions with the FSA and discussions with providers. This reflects the fact that it includes short term endowment products (less than 5 years) and open ended bonds. In addition to having very different product characteristics these also have very different commission structures. The investment bond category was "split" on the basis of the NPV of reported commissions. For instance all records with an NPV of commission below 3.0% are categorised as Investment Bonds1, and all records with an NPV of commission above 3.0% was categorised as Investment Bonds2.

Following these changes to the MAC dataset, our analysis was undertaken for 11 different product categories, where the resulting number of providers in each of the investment category is shown as Table 12 below[31].

Table 12: Number of Providers for each product group – All Observations

Product group	2004	2005	2006
Annuities	19	21	17
CIS Regular	61	51	46
CIS single	70	64	55
Endowments	23	16	14

31 Information for Long term Care products was only reported for 2004, and is therefore subsequently removed from our analysis.

Income drawdown	16	12	12
Investment Bonds1	17	16	13
Investment Bonds2	33	31	29
Long term care	5		
Personal and Stakeholder pensions Regular-10 Years	29	25	25
Personal and Stakeholder pensions Regular-25 Years	29	28	26
Personal and Stakeholder pensions single	32	29	28
Whole of life assurance	17	13	15

Source: CRA analysis based on FSA MAC data