



INVESTMENT COSTS: AN UNKNOWN QUANTITY

A literature review and state of play analysis

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A report for the Financial Services Consumer Panel



FiNexus

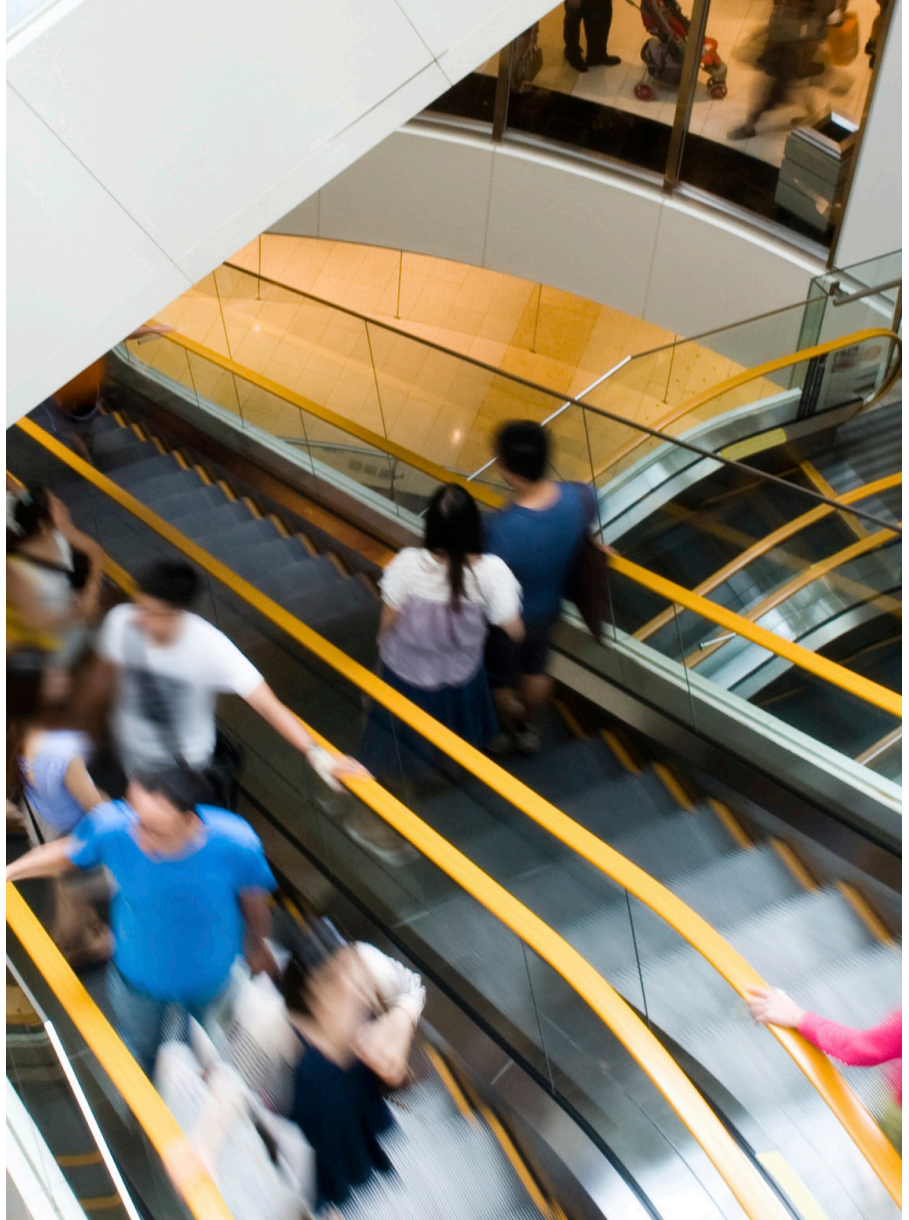


RATIONALE

The Financial Services Consumer Panel (FSCP) represents the interests of consumers in the development of policy for the regulation of financial services. One of the significant issues the panel is focusing on in 2014 is investment charges, specifically retail, but also institutional fund costs.

The Panel aims to influence the debate around transparency of charges, disclosure, conflicts of interest and a client's understanding and expectations of return (or the lack thereof). The matter is particularly relevant given the implementation of auto-enrolled pensions, which will lead to an increased number of people subscribing for private pensions and thus dependent on value for money from the fund management industry.

For this reason they asked the authors to review the current published literature regarding investment charges in Britain, and around the world, to comment on its reliability and accuracy. The aim was to understand what is and what is not known about investment costs, and to summarise how that information might help the FSCP understand how consumers might be better served in understanding and accessing the best value for their investments. For example, whether costs might be more fully transparent and disclosed, or whether investment fiduciaries might be better aligned with investors' best interests.



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GLOSSARY

Accumulation: In DC pension schemes this refers to the period of pension contributions and investment, after which the fund is used to provide the lifetime income in retirement (known as decumulation).

Active investment: The selection of investments by the asset manager who aims to outperform an investment benchmark. See passive investment and smart beta.

Active member: A member of a DC scheme who is working for the sponsoring employer.

Active member discount (AMD): A lower annual management charge that applies to active members of a scheme, which is increased when they leave employment.

Annual Management Charge (AMC): A charge levied annually by a pension provider on a member's pension fund to cover the costs associated with providing that pension scheme. The charge is usually levied as a percentage of the total fund value. See Ongoing charges figure and Total expense ratio.

Basis point: One basis point is a unit equivalent to 1/100th of 1%, and is commonly used to show changes in interest rates and bond yields. A rise in a bond yield from 5.00% to 5.60%, for example would usually be said to be an increase of 60 basis points.

Bid: The price a purchaser must pay for a security.

Bid-offer spread: The difference between the buying and selling price of a security. The price quoted in newspapers and shown on valuations is the mid-point between these, the mid-price.

Custodian: A third party company, usually a bank, that is responsible for keeping clients' assets safe, settling trades and dealing with corporate actions such as rights issues.

Decumulation: The process whereby the DC pension fund built up during the accumulation stage is converted into a lifetime income in retirement. Typically this involves the purchase of a lifetime annuity, but the member might also draw directly from the fund (income drawdown) – a practice that is expected to become much more popular under the government's proposed changes for April 2015.

Defined ambition (DA): A DWP initiative that aims to encourage employers to provide DC schemes that offer more predictable outcomes, for example via some form of return guarantee or risk-sharing mechanism between different cohorts of members.

Defined benefit (DB): In DB pension schemes, members' pensions are linked to salary (e.g. also known as final salary schemes whereby pension earnings are averaged over the period of membership). The sponsoring employer is ultimately responsible for meeting the liability if the scheme is underfunded.

Defined contribution (DC): In DC pension schemes, the member's pension is based mainly on the level of contributions invested, the charges deducted and investment returns. The fund is used at retirement to generate a lifetime income, usually in the form of an annuity (but, from April 2015, increasingly in the form of drawdown – see Decumulation). Therefore the investment and longevity risks, among others, fall solely on the individual members.

Default Fund: A default fund is the default pension fund that an employee's contributions go into if they don't choose a specific fund.

Department for Work and Pensions (DWP): The UK Government Department that is responsible for welfare, pensions and child maintenance policy.

Financial Conduct Authority (FCA): The FCA and the Prudential Regulation Authority (PRA) are the bodies that regulate the financial services industry in the UK. The FCA is primarily responsible for the conduct of financial markets. These organisations superseded the Financial Services Authority on 1st April 2013.

Fiduciary manager/management: With reference to DC pension schemes, this is where an asset manager or consultant offers a full asset management service for the default fund, drawing on third-party asset manager funds (and sometimes their own funds) for each asset class.

Fund manager: A person or organisation appointed to make and implement day-to-day investment decisions for some or all of a pension scheme's assets.

Group personal pension scheme (GPPS): A contract-based workplace pension scheme. In effect a grouping of individual personal pension plans but with pricing to reflect the group nature of the arrangement.

Index fund: An investment fund that aims to replicate the movement of a specific financial market. Typically such funds have lower charges in comparison to funds which follow a philosophy of active management. See also Passive Investment.

Ongoing Charges Figure (OCF): The OCF is calculated as the ratio of the total ongoing charges (applied to the fund) to the average net asset value (of the fund) calculated over a 12 month period and presented as a percentage. It includes all payments made to the Fund Manager, the Investment Manager, the Depositary or Trustee and the Custodian. It also includes other charges such as administration, audit and legal fees. However, it does not include all costs. Some of the costs excluded include performance fees, transaction costs (the cost of buying and selling securities) and fees paid directly by investors, such as entry/exit fees. See the discussion in Section 2 of the report. See also Annual Management Charge and Total Expense Ratio.

Passive Investment: A style of fund management whereby the asset manager buys stocks for a portfolio to mirror a market index, thereby replicating the returns of that market index.

Pension fund: The assets and liabilities that form a pension scheme.

Performance fees: A performance fee is the fee paid to the fund manager of an investment vehicle that is based on the outperformance of a pre-agreed benchmark.

Prudential Regulation Authority (PRA): The PRA and the FCA are the bodies that regulate the financial services industry in the UK. The PRA is primarily responsible for monitoring the capital levels and liquidity of financial institutions. These organisations superseded the Financial Services Authority on 1st April 2013.

Smart beta: A style of fund management that represents something of a middle ground between active and passive fund management.

Stakeholder pension scheme: Introduced in 2001, stakeholder schemes are like group personal pension schemes, but must meet certain requirements in relation to accessibility and fair terms and conditions.

Stamp duty: Stamp Duty Reserve Tax (SDRT) is a tax paid in the UK on purchases of investments, such as property and equities.

Stock lending: The act of loaning a stock or other security to another investor or firm to cover a short position. Securities lending requires the borrower to put up collateral.

Total Expense Ratio (TER): The TER is a more comprehensive measure of the member's total annual cost than the annual management charge (AMC), but is still not complete. It includes the AMC and fees for a range of services including legal, administration, audit, marketing, directors, and regulatory costs. There is growing pressure on schemes to reveal all fund costs, including transaction costs and the cost of sub-funds. See Annual Management Charge and Ongoing Charges Figure.

Transaction costs: Costs that are incurred by investors and funds as a consequence of dealing in financial assets. These include bid-offer spreads, transaction costs of underlying (sub) funds, profits from stock lending retained by fund managers, interest on cash balances retained by fund managers, and foreign exchange spreads on currency hedging, among others.

Trust-based DC: Schemes set up under trust law where the trustees are the legal owners of the assets on behalf of members and have a fiduciary duty to act in members' best interests. These schemes are regulated by The Pensions Regulator (TPR).

UCITS (Undertakings for Collective Investment in Transferable Securities): These are a type of collective investment fund, aimed at allowing investment in transferable securities and other liquid financial instruments.

Unit trust: An open-ended pooled investment vehicle created under trust law. Investors buy and sell units in the fund, based on the bid and offer prices set by the investment management firm.

EXECUTIVE SUMMARY

INVESTMENT COSTS: AN UNKNOWN QUANTITY

Millions of British people depend on the investment management industry, whether it be to manage their pensions, their life insurance, their ISA or other savings. Many millions more will join workplace pension schemes through auto-enrolment over the coming years. In the field of private pensions alone, we set aside 6.5% of our GDP each year. Therefore the costs paid for those services are of great importance to consumers, and to the efficiency of the economy as a whole.

Many would contend that, in choosing a pension or an investment product, one of the most important features for customers to consider is the cost that they will be incurring. This is true particularly for long-term savings, such as pensions, where the compounding of small annual charges add up. The RSA, for example, calculated that over the life of a pension fund, with 40 years of saving and 20 years of drawdown, a 1.5% per annum charge will reduce the possible pension-in-payment by 38%¹. (RSA 2009) The OFT notes that, during the 40 year period of saving for a pension, a 1% per annum charge will reduce the ultimate sum available to purchase a pension by 21% (OFT 2013). Further costs will be incurred during the period of the pension itself.

One might therefore expect that charges would be well understood by consumers, and would indeed be a critical factor in choosing which investment product to purchase. Therefore, the Financial Services Consumer Panel has commissioned a study to review the literature, to help understand what is and is not known about investment charges, and to make suggestions about how this critical area of consumer welfare can be understood by purchasers and policy makers.

We are able to conclude from the literature,

our desk research, and from our interviews with participants, that:

1. Costs make a very significant difference to investment outcomes, as illustrated above (OFT 2013, RSA 2009²).
2. It is not possible from the literature to know with any accuracy, the costs borne by the saver (See discussion in Section 3).
3. This is because many costs are not declared to the saver; implicitly and explicitly they are deducted from the savings account without the customer's knowledge. Indeed, implicit costs (such as trading spreads) may not even be known by the fund manager (Frontier Investment Management 2007, Lane Clark Peacock 2013).
4. Even where costs are declared, they are ill understood (DWP 2012, 2014, OFT 2013).
5. Costs of at least some products, or ranges of products seem very high (Khorana et al., 2007).
6. There do appear to be good products on the market, but that the price of similar products varies very significantly, perhaps by as much as four or five fold, for near identical services. (ABI 2012). Such price differentials are incompatible with the operation of efficient markets where such anomalies would rapidly be competed away.

Any solution as to how consumers might be better served in accessing effective low cost savings and pension products, must begin with an understanding of the difficulties in discovering costs. We discuss these in detail in Section 3. First amongst them is that many charges are simply not declared, and may not even be collected. So, while a saver is told the 'Annual Management Charge' the 'Total Expense Ratio' or the 'Ongoing Charges Figure', these do not

include many of the costs of managing the saver's investment; for example they do not include the costs of trading shares or other securities. Indeed, fund managers themselves may not be aware of the cost of share trading and other activities which they commission on behalf of their clients. (Lane Clark Peacock 2013).

Second, customers of investment products are often unaware of charges (DWP 2012, 2014, OFT 2014) or of their significance to outcomes, particularly of the significance of the compounding of annual charges. (RSA 2009)³.

Third, for many investment products, for good reason, it may not be the saver who negotiates the contract with the service provider. For example, workplace pensions are purchased by the employer.

This created a conflict of interest and a practice developed of offering 'active member discounts'; with those who have left the firm's employment but still held pension rights would be given a higher charge on their pension fund, despite the fact that the cost of managing their investment would not rise. This practice will be banned from April 2016, and many suppliers have abandoned them, however, they illustrate how conflicts can arise between the saver and their agents.

In addition, there are methodological difficulties associated with the bundling of services. So, for example, the management of a pension may bundle investment management and other administrative tasks.

In general, the market for investment products and services is characterised by a high degree of 'asymmetric information'. That is, that the customer may find it difficult to judge, (even after the service has been delivered), whether or not the work was done well, and value was achieved for the money spent. One might compare it to the situation with someone buying complex medical care. It is also characterised by

^{1/2/3}. Two of the authors of this report worked on this RSA study

a very complex 'value chain', where each participant has a different way of seeking payment. It is to this situation that the opacity of fund charges is introduced, making it difficult to ensure that savers get value for money.

Nevertheless, despite the fact that we cannot give a definitive view on the cost of investment, there are some important conclusions which the authors of this report would suggest can be drawn. These include:-

1. That costs should be understood and reported:
 - a. Since costs are important to investment outcomes, they must surely be managed, and so need to be known by those commissioning them. The literature (for example Lane Clark Peacock 2013), and our own experience both as fund managers, and in managing the information systems of fund management houses, suggests that many investment managers are themselves unaware of the costs, (particularly the implicit or hidden costs) to which they are committing client money. It can surely be argued that this failure is not compatible with the duty owed to clients. Thus, as a precursor to any further reform investment managers might be required to calculate and collate the costs which they are commissioning on others' behalf, particularly all cash costs.
 - b. Our literature search has not been successful in discovering the true cost of investment. Yet those costs are critical for outcomes and studies suggest that actual costs could easily be double the stated Annual Management Charge, or similar figure of which consumers are made most aware. (Edelman et al., 2013, Bogle 2014, Frontier Investment Management 2007). If the financial services industry is to give best outcomes, we would suggest that all those who can help manage these costs, should know what they are, and hence be able to judge their value.
 - c. In particular this should involve ensuring that customers receive comprehensive information and estimates of the total costs that will be incurred both before, and during the period over which funds are managed. That information should be presented in a form which is readily understood, particularly as regards its effects on investment outcomes. (RSA 2012, Turner et al., 2008).
2. That customers be informed, and even guided toward best buy alternatives:
 - a. The literature suggests that, if customers were to purchase at lowest cost, this could dramatically improve long term outcomes. However, we should not exaggerate the ease with which customers will be able to distinguish between good and bad products. One way in which this might be better achieved, would be to create simple categories of product, which assist consumer choice.
 - b. It might also be worth considering whether as in medicine, certain low cost, well-regulated products could be sold over the counter, whereas more complex or expensive products, or ones where the consumer was particularly vulnerable would require the advisor to accept liability for their appropriateness. So, for example, default workplace pensions are to have fees capped, but this will not apply where the saver makes a specific choice. (See arguments made in Pensions Institute/Harrison et al., 2012).
3. That governance rules be strengthened:
 - a. Two other approaches which directly address the problem of asymmetric information are worth noting: The first approach is to place the supplier under a fiduciary duty (accountable under law and regulation) to act in the interest of the customer⁵.
 - b. The second approach is to ensure that, where transactions take place from a seller with deep knowledge, that an intermediary is found who will act in the interest of the actual investor. It is this logic that lies behind the use of Independent Financial Advisers (IFA's) in the UK. However, no fiduciary can be allowed to profit at the expense of those they are there to serve.
4. That appropriate institutional arrangements be encouraged:
 - a. The countries that appear to have the best quality investment and saving products have institutions which are likely to create such outcomes; they are likely to be of scale, and low cost. They are likely to have fiduciary management. The influence of Vanguard, the low cost mutual savings vehicle in the US, or the structure of the collective pension system in Holland would be cases in point. Scale economies also help reduce costs (Bikker 2013). Policy makers might reflect on how the features that underpin such institutions can be nurtured in the UK.
5. Ultimately fee capping of the full costs (TER plus other implicit and explicit costs) may be an option, and indeed given the lack of consumer knowledge may be necessary, particularly for situations where the consumer has little control or understanding of the purchase decision.

⁴ Two of the authors of this report worked on this RSA study

⁵ See for example Share Action, A Manifesto for Responsible Investment, July 2014



TABLE OF CONTENTS

1. Methodology	10
2. Nature of investment costs and what consumers know about them	11
3. Our findings – The Literature	13
4. International comparisons	18
5. The role of costs in fund management industry competition	19
6. Current disclosure measures, possible alternatives	20
7. Improving the market	21
8. Bibliography	22
9. Appendix One - Search terms/engines	23
10. Appendix Two - Costs and charges within the value chain, as identified by the DWP (2014)	24
11. Appendix Three - Significant Papers on investment costs with reviewed comments	25
12. Appendix Four - Findings of literature review on investment costs	30
13. Appendix Five - Pension Fund Value Chain	34

1

METHODOLOGY

We would begin by stressing that there are many publications which touch upon the costs of investment, and we may not have discovered all of them. We have however, searched multiple sources and search terms which are detailed in Appendix One. From these we identified a number of relevant publications.

This database was then sent to a number of experts in the field to ask for their input, and to suggest gaps. Their names are also listed in Appendix One. Face-to-face interviews with the Investment Management Association and the Association of British Insurers have also been made to ensure that they can find no gaps in our analysis. The broad conclusions of our work have been shared with them.

Given this extensive review, we think it unlikely that a definitive study exists which has been overlooked. In particular, any such study would need to be constructed in a way which would overcome the methodological problems described in Section 3.

We identified a total of **171** separate and significant papers, articles and notes and believe that this represents a substantial part of the available information on costs, charges, transparency and related topics of relevance. We would note that there may be other studies available, but we believe we have identified the key papers, which offer empirical insight. We also note the rate at

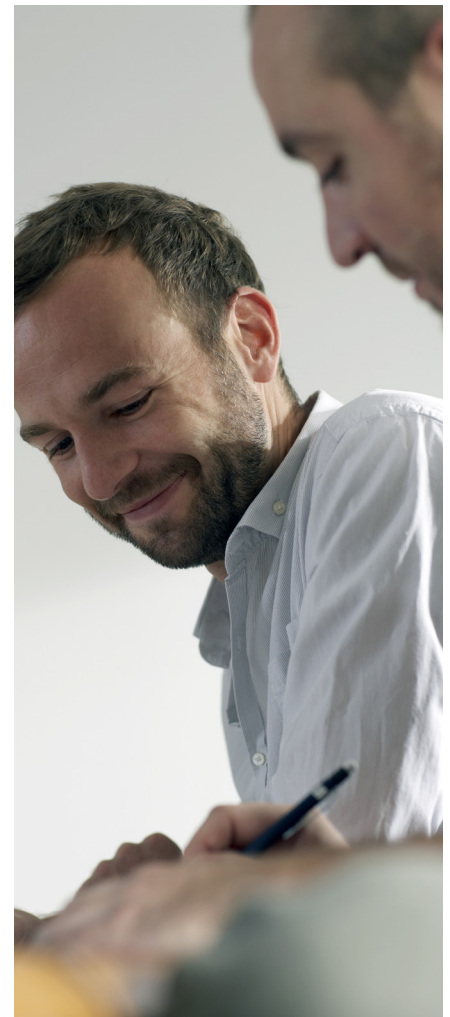
which papers are being written, or other information produced on the subject, has increased markedly over the past three years.

Rather than describing all of these papers, we prioritised the long-list of 171 papers to **23** papers using the following criteria:

- Significance of source or author
- Difference of approach (the more significant of two similar sources was prioritised)
- Difference of data (prioritisation as above)
- The empirical nature or otherwise of the approach
- Age of paper and applicability to current regulatory and business regime.

The top 23 papers together with a short summary of their conclusions can be found in Appendix Three. We believe that this gives the most accessible 'reading list' of relevant studies, illustrating different methodologies used, the problems each methodology encounters, and the main conclusions which might usefully be drawn. We have referred to these papers, where relevant, throughout the report.

We have also added a paragraph on where and how these studies have been used by regulators and why this may be problematic.



NATURE OF INVESTMENT COSTS AND WHAT CONSUMERS KNOW ABOUT THEM

2

The return earned by an investor is broadly determined by two factors: the return on the underlying assets and the cost of investing in these assets. As regards asset returns, these may vary from asset class to asset class. So certain investments might do well for one period, and then give a poor relative performance in the next. By buying and selling securities, asset managers may be able to 'outperform' one another. However academic research, such as that of Nobel Prize winner, William Sharpe (Sharpe 2013), suggests that it is very difficult indeed to choose asset managers who will consistently outperform. (As every investment document says, past performance is no guarantee of future performance).

Therefore although relative performance may be significant at the end of the investment period, before the investment is made, one of the most important criteria is the cost which will be involved in management.

However, costs are not easy to understand or to compare. Firstly because different investment products are managed in different ways, so the 'annual management charge' on a pension may cover different activities to that charged on a unit trust. Secondly because the categories under which charges are computed are not precisely defined. As the Association of Investment Companies notes in its guidance to the calculation of 'On-going Charges', given the diverse range of expenses which are incurred by investment

companies, it is not possible to provide a definitive list of which expense items should be included or excluded from the scope of 'on-going charges'⁶.

Further, surveys suggest that those purchasing investment products are not aware of what charges are included (DWP 2012, 2014, OFT 2013) or the significance of an annual charge on the ultimate outcome. (RSA 2009)⁷.

But by far the greatest difficulty in calculating charges is that many of them are not declared. To illustrate the issue, we have listed below some of the key costs which might be incurred to the savers account.

ONE-OFF CHARGES

1. **One-off:** The cost of entry or exit from a fund.
2. **Commissions:** The cost of commissions payable to a sales agent.

These, one-off charges are declared to the saver.

RECURRING CHARGES

3. **Fund Manager Direct Costs:** Annual charge made to cover the fund manager's expenses.
4. **Performance Fees:** Further charges made by the fund manager for achieving agreed performance targets.

5. **Other Ongoing Charges:** Further charges commissioned by the fund manager necessary for the ongoing management of the account, such as audit and custodial fees.

6. **Sub-fund fees:** Fees chargeable by another fund manager who has been commissioned to manage part of the saver's fund.

7. **Direct Trading Costs:** Direct charges such as commissions payable as the result of trading shares or other transactions undertaken on the saver's behalf.

8. **Implicit Cash Costs:** Indirect charges, such as the 'spread' between the cost of buying and selling a security, made on the saver's behalf.

9. **Stock Lending and other Activities:** Cost (and income) derived from using the saver's account to facilitate stock lending, or similar activities.

10. **Non-cash costs:** Such as the movement in the price of securities which is caused by trading them (market impact).

⁶ AIC Ongoing Charges Calculation. www.theaic.co.uk/sites/default/hidden-files/AICOngoingChargesCalculationMay12.pdf

⁷ Two of the authors of this report worked on the RSA study

2

NATURE OF INVESTMENT COSTS AND WHAT CONSUMERS KNOW ABOUT THEM

Cost Category	Charges included
Annual Management Charge (AMC)	Fund Manager Direct Costs
Total Expense Ratio (TER)	Fund Manager Direct Costs Performance Fees Other Ongoing Charges Sub-Fund Fees if the individual fund represents a significant part of the portfolio
Ongoing Charges Figure (OCF)	Fund manager Direct Costs Other Ongoing Charges Sub-Fund Fees if the individual fund represents a significant part of the portfolio

FIGURE 1: TYPES OF COSTS

The saver will learn about some of these recurring charges which will be bundled together under certain headings. The most generally cited are the 'Annual Management Charge' (AMC), 'Total Expense Ratio' (TER) or 'Ongoing Charges Figure' (OCF). The table above shows what is included under each of these definitions. In Appendix Two, we have included, for illustration, a longer list of the costs which the DWP proposed might or might not be the subject of charge capping.

Thus savers will not know the full cost of investing, such as dealing costs and stamp duty. These might be called the 'explicit investment costs'.

Neither they, nor in many cases their fund manager (Lane Clark Peacock 2013), will know the inherent cost of trading, such as the bid-offer spread. Under some investment strategies these may be modest, but under others quite significant. (Frontier Investment

Management 2007). Some costs and benefits of activities such as stock lending may or may not be known. Non-cash costs are not known.

In an attempt to regularise the situation, the FCA has recommended that, following European guidance on UCITS, funds should all declare the OCF⁸. The IMA is supportive of this change, and certainly will help in establishing a degree of comparability amongst funds. However, as noted above, the OCF does not include all costs.

These 'hidden costs' can be significant. But their significance will vary by market (Frontier Investment Management 2007, True and Fair Campaign 2013, Bogle 2014). The potential scale of the hidden costs problem is perhaps best illustrated by a recent comment from the CEO of one of Britain's largest pension funds, Chris Hitchen of Railpen Investments which manages

£20 billion. He claims that 'what we are getting billed for is far less than what is being siphoned off underneath'. Railpen pays £70 million a year in upfront disclosed fees, but that additional costs are 'multiples of that number, 300-400 per cent of that'⁹.

⁸ www.fca.org.uk/static/documents/thematic-reviews/tr1407.pdf

⁹ FTFM, 25th August 2014, Investors' headline fees 'only a fifth' of total. (p2)

OUR FINDINGS – THE LITERATURE

We have discovered a number of approaches taken by researchers to understand the costs of fund management, and fund management products. We have described these methodologies under five headings. Different methodologies are more or less appropriate for different investment products. We find few papers which offer results which can be regarded as reliable, and none which can definitively answer the questions about charges the FSCP has raised. Nevertheless, there are lessons which can be learned from the literature. Therefore for each methodology, we have listed its pitfalls, but also the lessons which can nonetheless be gleaned from the key studies reviewed.

METHODOLOGY 1: CONSULT THE PRICE LIST

One, and perhaps the simplest methodology for discovering the cost of investing, is to **consult the price list**. This of course is only possible in those situations where there is a price list available. For many investment products, particularly for occupational pensions, prices are negotiated, and often not made public.

We would also note that, as explained in the paragraphs above, many charges are not declared in the price list offered to investors. These can be substantial, particularly in active funds. Therefore one key pitfall of this methodology is that it does not include all investment costs.

However, studies have been done looking at the price of retail investment funds. For example, one definitive study, (Khorana, et al., 2007) took a sample of 46,580 investment fund share classes from funds around the world, using data from

Morningstar, Lipper and other agencies. These include 2440 UK funds. Using price data, and estimating a five year investment period, over which initial entry and exit charges were amortised, the researchers estimate in the UK that the annual average cost was 2.21% per annum, of which 1.29% is the Total Expense Ratio, and the rest distribution costs and other one-off payments. For long term saving, this seems a high charge, and we would note that if someone saved for a pension using such funds and switching in the way modelled by the researchers, more than 40% of their pension saving would be absorbed in fees. Further, this calculation is made before trading costs and other expenses. (Note that retail databases are not comprehensive, and so many funds may have been missed from the survey. It is difficult to know whether they would have skewed the costs positively or negatively).

Our own research has shown that there are investment funds, such as those offered by

Vanguard which offers much lower costs, as little as 0.2%. We would note that, in the pensions arena, some providers, such as NEST, NOW pensions and B&CE's People's Pension do declare their costs in a public price list. These are equivalent to around 0.5% TER. However for most pension products, price is negotiated separately for each client and not made public, so it is not possible to 'consult the price list'. Therefore, other methodologies are necessary for products where price lists are not published.

Nevertheless there are lessons to be learned:

- That the average cost of retail investment seems high, even when hidden charges are excluded
- That switching funds adds substantially to the cost
- That there are investment products and occupational pension funds which offer services which, at first review, seem of good value.

3

OUR FINDINGS – THE LITERATURE

**METHODOLOGY 2:
ASK THE BUYER**

A second approach has been to **ask the buyer**. This for example is the approach taken by the DWP in trying to understand the cost of DC pension funds. The methodology has considerable difficulties.

To begin with the only charge which a buyer is ever likely to know is the AMC or the TER.

But many customers are unaware even of those charges. In a recent survey, (Wood et al., 2012), when scheme sponsors were asked, "Have the scheme members themselves paid any charges relating to the pension scheme in the past 12 months?" 68% of respondents believed no charges had been paid. Even in schemes of more than 1000 members, only 60% knew that charges had been levied on scheme members.

Of those who know there had been a charge, only two thirds recognised that the charge was made as a percentage of the fund.

As noted therefore, this methodology of quizzing customers cannot be relied upon to give accurate data. The researchers who

undertook the study, eliminated respondents who had self-evidently misunderstood how charges worked, and assumed those who gave answers which were credible, had given ones which were accurate for the total population. This involved the elimination of around 80% of those questioned. It concluded that the AMC for trust-based schemes was 0.71%, and 0.95% for contract schemes. We would be concerned about the reliability of these conclusions.

In 2013, this study was repeated (Wood et al., 2014). In order to address the problem that respondents were unaware of charges, if they replied that there were no charges, they were prompted, that this was 'quite unusual'. 25% of trust and 13% of contract based schemes respondents nevertheless insisted 'members definitely pay no charges', those who were still unable to reply had their interview 'suspended'¹⁰. This survey came up with similar results to the earlier one. However, we would be concerned whether this work is much more accurate.

Nevertheless the 2012 study has subsequently been widely quoted, including

by the DWP in its consultation on charge capping. We would caution that this data is of questionable reliability either in assessing full costs or even in assessing AMCs/TERs. Unless they are most carefully constructed, with full documentation available, we would suggest that these difficulties will surround any study based on interviews with all but the most sophisticated customers.

Although the results of these studies may not be reliable, we note that they clearly demonstrate that for workplace pensions:

- There is a widespread lack of knowledge of charges, their significance, and their effect on outcomes
- That there are instances where policy makers may be using data where its reliability is in question.

These conclusions are echoed in other studies. In particular the RSA 2009 in its research amongst end customers and in its later study (RSA 2012), which further demonstrated that suppliers withheld, and indeed misled in supplying data on charges, even when challenged¹¹.

¹⁰. It is difficult to know how many dropped out in this fashion; our calculations suggest a further 11% for trust and 13% for contract based schemes.

¹¹. Two of the authors of this report worked on the RSA study

METHODOLOGY 3: ASK THE SUPPLIER

A third approach is to **ask the supplier** who might be expected to have rather better knowledge of costs. The danger, of course of such a request is that the supplier often has an interest in declaring costs to be low. Further, suppliers themselves may not know what the total cost of management is, since many of the services they commission are charged directly to the clients' account. (Lane Clark Peacock, 2013)

Nevertheless, there are a number of studies worth noting. (Bauer et al., 2010) report from the CEM database, (which is used amongst pension funds to compare their costs) that the median cost level for US DB funds investing in US equity is 27bps, and 51 bps for DC funds, and note that this is much lower than equivalent mutual fund costs, which they cite from other studies at 150 bps. Larger schemes give lower costs.

CEM (CEM Benchmarking 2014) itself has analysed a subset of UK Local Government Pension Scheme funds and compares them with very large (£25-45bn) funds in North America and Europe. These large funds cost 58.4 bps and the LGPS 63.5 bps. In general CEM suggests costs of around 60 bps, but notes the additional cost of active management and private equity. None of their figures include trading and other hidden costs.

Similar 'ask the supplier' studies have been undertaken by investment consultants Lane, Clark and Peacock (LCP 2013) looking at the cost of UK pension fund mandates. They note a variation between the cost of different fund mandates, and a failure to declare transaction costs, which some managers suggested was 'not readily available'. LCP conclude that 'the real cost of investing in a fund remains unclear'.

We would note that there are a number of databases, such as CEM, which may be able to shed light on investment costs. However, only a limited sample of that data, which has been made available to researchers, is publically available.

One study which has been quoted a number of times is by the ABI (ABI 2012) on contract based DC schemes. They surveyed 95% of default pensions and found an average weighted charge of 77bps. They also noted that in new auto-enrolled schemes the charge was lower at 52 bps (these are AMC charges).

One notable finding of the ABI study is that, although all the schemes are default schemes, and presumably have very similar asset allocations, charges range from below 0.3% to 2.11%, a sevenfold difference despite the similarity in service offering. This is not explained by size since some of the least costly schemes have less than 50 members (in discussions with the ABI they noted that

there were other characteristics which might influence charges, however they did not challenge the point that very different prices were set for near identical products).

This study is similar to the information which the pension providers gave to the Office for Fair Trading (OFT 2013) when they conducted a similar study the following year. They asked contract pension providers to give information on contract and trust-based schemes. They discovered a median charge of 0.71%, with a range of less than 0.1% to over 2%. The OFT noted that different suppliers had different definitions for the AMC. None included transaction costs. Some did not include the costs of pension administration. Payments to advisors were often not included.

In summary, research based on asking the supplier is likely to create conflict of interest. The key studies which we have found relate only to AMC (ABI 2012, OFT 2013). Different suppliers have different definitions for what is included within that charge. None include transaction and other costs. No study has gone back to check the comprehensiveness or reliability of the data suppliers have provided.

Nevertheless the studies ABI study and our own desk research demonstrate:

- There are very different charges made for what appear to be very similar products and services.

3

OUR FINDINGS – THE LITERATURE

**METHODOLOGY 4:
REVERSE ENGINEER**

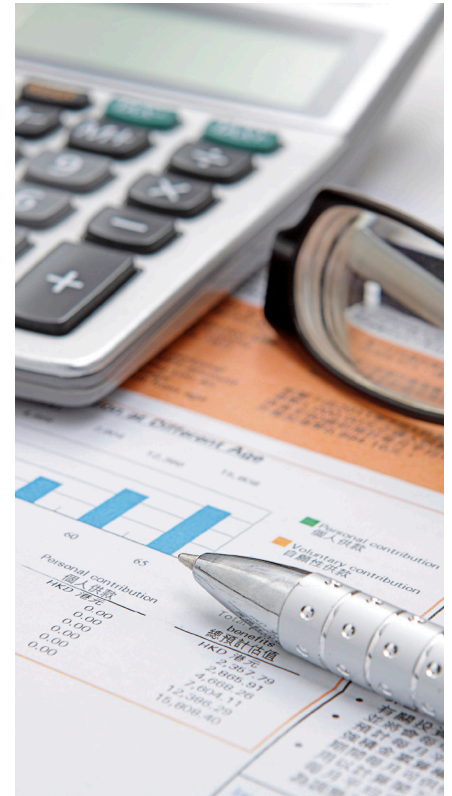
One way around the problem of calculating undisclosed costs is to **reverse engineer** trading and other hidden costs. We would note that trading is only one of the missing costs in AMC and TER, nevertheless for active funds it is likely to be the most significant (Edelen et al., 2013) surveyed US domestic equity funds, of over \$20 million, listed by Morningstar. They concluded trading costs were comparable in magnitude to the expense ratio (1.44% versus 1.19%). (Bogle 2014), makes an estimate of extra costs, including (controversially) behavioural bias by investors suggesting this adds 2.8% to the expense ratio. Frontier Investment Management (Frontier Investment Management 2007) notes that in some markets and some strategies, transaction cost may be modest, in others very large indeed. So in large cap US index funds they could be as low as 0.05%, in small cap active emerging markets 7%.

One study where reverse engineering may be more helpful is in calculating the cost

of annuities. The Government Actuaries Department undertakes a regular study comparing the income received from an annuity to the costs of the bonds necessary to meet the annuity promise. It shows, over time, reducing value-for-money in annuities, perhaps because it is those with longer life expectancy who are increasingly the main customers, perhaps because of the increased cost of reserving, or other factors. Overall it shows that, today, for inflation protected annuities an 'average' buyer would receive less than 80% of the cash flow which would be generated from the bonds which were purchased to underpin the annuity promise. Nominal annuities offer rather better value of between 80% and 90%. (Cannon and Tonks 2009).

Although the reverse engineering studies cannot provide a definitive answer to the cost of investing, they do show:

- That undeclared costs can be very significant
- That annuities which are protected against inflation are costly relative to general expectations of longevity.



METHODOLOGY 5: CALCULATE DIFFERENTIAL RETURNS

One final and intriguing methodology for calculating costs is to look at performance relative to an index, and **calculate the difference in return** between the funds' performance and the performance of the relevant index which the funds are investing in.

For this methodology to work it means that the sample needs to avoid survivorship¹² or other bias, the index must be a relevant comparator for the investment funds' strategy, and the period must be over a long enough period of years for short term 'noise' not to bias the results.

If these conditions hold, then the difference between the performance of the index and the performance of the weighted average of fund performance can be assumed to arise from the total cost of fund management, including trading and other 'hidden' costs. (James 2000) uses a methodology similar to this in calculating the true costs of unit trusts and mutual funds in the UK. His sample, from the 1990's, calculated the cost of actively managed funds to be 3.16%, and passive funds 1.2%. Life funds had even higher costs.

His study was however criticised by observers as having failed to note the lower risk profile of the sampled funds, and the unreliability of his data.

The IMA (Bryant & Taylor 2012) also used this method in looking at the "realised annual shortfall" on active and passive funds in the UK. They chose only the 15 largest funds in December 2011, and calculated their ten year return. They noted that although the declared TERs were 0.69% for index funds and 1.95% for active ones, the realised shortfall was 0.79% and 0.63% respectively. They therefore concluded that the trading activity had justified itself. We would note however, that the largest funds (ex post) introduce a bias into the sample, since better performing funds will have attracted investment. In discussions with the IMA, they acknowledged this, and agreed that the study should be used for illustration. We would note the weight of academic evidence, from Sharpe onwards which would suggest that active trading of shares, in aggregate, does not help fund managers outperform.

SUMMARY OF METHODOLOGICAL ISSUES AND IMPLICATIONS

In summary, we found significant methodological problems with all the approaches taken. The first three methodologies described fail to take into account 'hidden' costs such as those of trading. Further the surveys of customers are marred by lack of knowledge, and of suppliers by possible bias.

The other methodologies (which we have dubbed 'reverse engineer' and 'calculate differential returns') might overcome this. However sampling problems mean these methods have not come up with reliable estimates.

It may therefore be of some concern that these studies have been used by policy makers and regulators in estimating the cost of pensions and other investments. The DWP in its consultation on charging¹³ cites the 'Ask the Customer' study by Wood et al. Other studies, for example the Pensions Commission Chaired by Lord Turner, take what industry data is available, (typically for AMC), and make estimates of other costs¹⁴. This may or may not bias policy; that will depend on the issue under consideration. However, there must be some unease that reliable data is not available.

¹² Survivorship bias requires that, in calculating performance the researcher includes all the funds in existence at the beginning of the period, not just those trading at the end of the period who would tend to be ones which had had better performance. This is a perennial problem in measuring the success of investment funds.

¹³ DWP, Better Workplace Pensions: a consultation on charging, October 2013

¹⁴ Pensions Commission: Final Report, pp72 and pp110

4

INTERNATIONAL COMPARISONS

Several studies have attempted to look at international comparisons with the aim being to determine which investment and pensions systems provide better value and returns.

As regards pensions, there are some studies looking at pension system characteristics and costs such as that done by (Oxera 2013). The study found that information availability restricted the analytical frameworks to assess important data on costs. Therefore the study concluded that for charges and costs, data was either unavailable or had not been available to a level that allowed consistency to make international comparisons.

The International Organisation of Pension Supervisors (IOPS 2008) study also looks at fee charging methods for pension systems. It argues that it is difficult to compare fees and charges internationally due to the diversity of systems and fee charging methods. The authors argue that even though there is a standard international comparator known as the charge ratio, results and comparisons should be treated with caution. The trends this study found included the following:

- Voluntary systems tended to have higher charge ratios, this was attributed to costs related to marketing etc.
- Some systems where there were there were a small number of providers showed relatively lower charge ratios
- Charge ratios declined over time, therefore older pensions systems were less expensive
- Regulation helped to reduce pension costs in systems where limits were placed
- Regulations that imposed minimum guarantees led to higher charges
- A correlation existed between higher contribution and wage rates, which delivered higher final balances and therefore lower charge ratios.

Other studies show similar, intra-national advantages to scale in pension fund management.

As regards investment, Khorana et al., 2007, (cited earlier), looked at the fees charged to

mutual funds around the world. The authors studied 46,580 mutual fund classes offered for sale in 18 countries. They examined management fees, total expense ratios, and total shareholder costs (including load charges). The study found that fees varied substantially across funds and from country to country. The country differences were explained by the authors through a variety of factors, the most important of which was that fund fees were lower in countries with stronger investor protection. However, they give little granularity as to what investment protections are responsible for better outcomes.

In relation to disclosure and transparency, the (RSA 2012) provides some discussions on international systems¹⁵. It advocates the adoption of the Danish system which expresses charges in monetary rather than percentage terms. However, as with costs, most research in this area is hindered by the variation in pensions systems that make it hard to compare systems like for like.

¹⁵ Two of the authors of this report worked on this RSA study

THE ROLE OF COSTS IN FUND MANAGEMENT INDUSTRY COMPETITION

5

As noted above, investment management costs are of great importance in investment outcomes. Indeed, together with asset allocation, they may be the most important factor, if assessment is being made at the point of sale (that is before the event).

Therefore, although expert opinion might suggest that costs are a more important consideration than historic performance, the literature suggests that it is the latter consideration that is more important in customer choice. There is also a natural inclination for the industry to downplay the effect of charges (ABI 2012), and even to be 'economical with the truth' in advising customers (RSA 2012), since it is through charges that their income is earned¹⁶.

Since charges are quoted on an annual basis, many consumers may not understand their cumulative effect. When the RSA conducted 'citizen juries' to judge the performance of the fund management industry, many involved were shocked at the cumulative effect of annual charges; for example that an annual charge of 1.5% over the sixty year life of a regular pension would result in a 37% 'tax' on the final pension income (RSA 2009)¹⁷.

And as noted above many charges are not declared.

But whatever the reasons, competition is not proving effective in the investment management industry. We base this conclusion on the fact that, within the industry near identical products are being successfully offered at very different prices. So a retail investor can find an index fund offered at 25 bps, and a similar one at 100 bps, which is four times the cost, or as the ABI research on default funds suggests, these similar funds are sold at very different prices (ABI 2012). To use an analogy, if one were to go to a shopping centre and find a store offering televisions on sale, each of which had identical performance, but one priced at four times more, one would conclude that competition was not working since the shop offering the lower price product would have forced a reduction in price by other suppliers, or driven them out of business¹⁸.

It may be that, over time, the new suppliers, which have entered the British market recently, such as NEST for pensions, and Vanguard for investment management, will change the competitive landscape. However, at present, the level and importance of costs is not declared or understood by customers. There is a temptation therefore, throughout the value chain to take advantage of this situation, particularly where customers are unsophisticated. There is little incentive,

even amongst the most cost competitive funds to declare charges if others are not doing so.

These issues are particularly poignant in the market for pensions. For this discussion we can divide pensions into three types. First there are those which offer a guaranteed payment, or defined benefit, underwritten by the employer. In this case it is the employer rather than the saver who is responsible for costs. Second there are private pensions, individually contracted by the saver. Finally, there are workplace pensions, which are not guaranteed, but where the employer contracts, on behalf of the saver, with the pension provider. It is this last group which is seeing rapid growth with the introduction of auto-enrolment.

We would note that this creates a triple jeopardy. First because savers are not told the full cost they are incurring, second because the purchase decision is made by their current or past employer, and finally because savers are often unaware of the significance of costs on investment outcomes. The government is seeking to address the latter two of these issues, by placing a cap on certain (but not all) charges to auto-enrolled workplace pensions for the future, applying only to default funds.

¹⁶ Two of the authors of this report worked on this RSA study

¹⁷ Two of the authors of this report worked on this RSA study

¹⁸ We note that there is an active academic discussion about whether price competition is effective, based on data from the US retail industry. A review of the literature can be found in Khorana and Servaes (Review of Finance October 2011). The evidence is mixed. Khorana and Servaes conclude that while price does have some effect on the funds which people choose, there are many caveats and anomalies to this conclusion. For example that customers do not respond to higher entry and exit costs, which may be more opaque. In any case the studies cover the US retail market only, where as we have noted, there are significant low cost fund managers offering a range of products. The study does not include hidden costs in its assessment.

6

CURRENT DISCLOSURE MEASURES,
POSSIBLE ALTERNATIVES

As noted above the literature demonstrates that:

- Many costs are not declared to buyers
- Where costs are disclosed, buyers may not know them. Even when they are declared buyers may not be aware of their significance
- In certain circumstances where customers inquire about costs they have met obfuscation (RSA 2012)¹⁹
- Many pension products are bought by the saver's employer, not by the saver themselves.

In an incentivised market system, it would be surprising if suppliers did not take advantage of such opacity, and indeed in a 2010 study

in India (Anagol et al., 2010), such actions did indeed take place, where products were introduced to avoid declaring costs.

There have been many calls for a fuller declaration of charges. Pensions Institute/Blake (2014), for example gives a good taxonomy of different charges. The authors of this review would be amongst those advocating change (RSA 2012)²⁰. So are organisations such as the 'True and Fair' campaign. We would also note the well intentioned statements of many within the industry to improve the situation. The current head of the IMA has been vocal in his call for full transparency, though some note (Blake 2014) that current practice falls short of this. However, there is little competitive advantage to be gained for most suppliers

in unilaterally offering greater transparency. There will be effort and complexity involved in establishing a new, more transparent regime for all funds, which will positively affect better customer outcomes.

Further, as in many complex industries, the 'value chain' in investment management has a number of conflicting interests. In Appendix Five we touch upon some players in the pension fund value chain, and where some conflicts may arise. This is far from a comprehensive review. But it clearly illustrates the possibility of agents receiving revenue from their ultimate customers, without the customer being aware that this is happening.



¹⁹. Two of the authors of this report worked on this RSA study

²⁰. Two of the authors of this report worked on this RSA study

IMPROVING THE MARKET

7

This study, reviewing most of the available public literature, has not been able to discover the level of investment costs for UK consumers. We find that many of the studies undertaken to date, and quoted by policy makers and industry groups alike, do not give a reliable picture of investment costs. This is despite the profound significance of costs to investment outcomes, the huge amount of money set aside each year for pension and other savings, and the importance of that activity to the UK economy.

Throughout this study we have noted that competitive forces within the investment management industry appear not to be working in the consumer interest. This is demonstrated in the very large price differences apparent between identical products. In economic terms this can perhaps be best explained by 'asymmetric information' between supplier and customer.

Nevertheless, despite the fact that we cannot give a definitive view on the cost of investment, there are some important conclusions which the authors of this report would suggest can be drawn. These include:

1. THAT COSTS SHOULD BE UNDERSTOOD AND REPORTED

- a. Since costs are important to investment outcomes, they must surely be managed, and so need to be known by those commissioning them. The literature (for example Lane Clark Peacock 2013), and our own experience both as fund managers, and in managing the information systems of fund management houses, suggests that many investment managers are themselves unaware of the costs, (particularly the implicit or hidden costs) to which they are committing client money. It can surely be argued that this failure is not compatible with the duty owed to clients. Thus, as a precursor to any further reform, investment managers might be required to calculate and collate the costs which they are commissioning on others' behalf, particularly all cash costs.

- b. Our literature search has not been successful in discovering the true cost of investment. Yet those costs are critical for outcomes and studies suggest that actual costs could easily be double the stated Annual Management Charge, or similar figure of which consumers are made most aware (Edelman et al., 2013, Bogle 2014, Frontier Investment Management 2007). If the financial services industry is to give best outcomes, we would suggest that all those who can help manage these costs, should know what they are, and hence be able to judge their value.

- c. In particular this should involve ensuring that customers receive comprehensive information and estimates of the total costs that will be incurred both before, and during the period over which funds are managed. That information should be presented in a form which is readily understood, particularly as regards its effects on investment outcomes. (RSA 2012, Turner et al., 2008).

2. THAT CUSTOMERS BE INFORMED, AND EVEN GUIDED TOWARD BEST BUY ALTERNATIVES

- a. The literature suggests that, if customers were to purchase at lowest cost this could dramatically improve long term outcomes. However, we should not exaggerate the ease with which customers will be able to distinguish between good and bad products. One way in which this might be better achieved, would be to create simple categories of product, which assist consumer choice.
- b. It might also be worth considering whether as in medicine, certain low cost, well-regulated products could be sold over the counter, whereas more complex or expensive products, or ones where the consumer was particularly vulnerable would require the advisor to accept liability for their appropriateness. So, for example, default workplace pensions are to have fees capped, but this will

not apply where the saver makes a specific choice. (See arguments made in Pensions Institute/Harrison et al., 2012).

- c. Ultimately fee capping of the full costs (TER plus other implicit and explicit costs) may be an option, and indeed given the lack of consumer knowledge may be necessary, particularly for situations where the consumer has little control or understanding of the purchase decision.

3. THAT GOVERNANCE RULES BE STRENGTHENED

- a. Two other approaches which directly address the problem of asymmetric information are worth noting: The first approach is to place the supplier under a fiduciary duty (accountable under law and regulation) to act in the interest of the customer²².
- b. The second approach is to ensure that, where transactions take place from a seller with deep knowledge, that an intermediary is found who will act in the interest of the actual investor. It is this logic that lies behind the use of Independent Financial Advisers (IFA's) in the UK. However, no fiduciary can be allowed to profit at the expense of those they are there to serve.

4. THAT APPROPRIATE INSTITUTIONAL ARRANGEMENTS BE ENCOURAGED

- a. The countries that appear to have the best quality investment and saving products have institutions which are likely to create such outcomes; they are likely to be of scale, and low cost. They are likely to have fiduciary management. The influence of Vanguard, the low cost mutual savings vehicle in the US, or the structure of the collective pension system in Holland would be cases in point. Scale economies also help reduce costs (Bikker 2013). Policy makers might reflect on how the features that underpin such institutions can be nurtured in the UK.

²¹ Two of the authors of this report worked on this RSA study

²² See for example Share Action, A Manifesto for Responsible Investment, July 2014

8

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APPENDIX ONE – SEARCH TERMS / ENGINES

9

Our research involved a comprehensive literature search and review, using multiple sources, search terms, and strategies:

1. Using key search terms including:
 - a. Pension fund
 - a. Custodian
 - b. Broker
 - c. Asset Manager
 - d. Fund Manager
 - e. Custody
 - f. Pension fund consultant
 - g. Corporate advisor
 - h. Cost(s)
 - i. Fee(s)
 - j. Charge(s)
 - k. Investment(s)
 - l. Disclosure
 - m. Transparency
 - n. Fee cap
 - o. ATP
 - p. Conflict of interest
 - q. Disclosure
 - r. Stock lending.
2. These terms were used individually or in search strings.
3. Using an iterative process of searching for other papers published by authors of papers we identified as important during the search process.
4. These terms were used with the following search engines/sites:
 - a. ABI Website
 - b. AON Hewitt
 - c. Association of Consulting Actuaries
 - d. Bing
 - e. CEM Benchmarking website
 - f. DWP website (publications)
 - g. FE Trustnet
 - h. Google
 - i. Hymans Robertson
 - j. International Centre for Pension Management (Rotman Business School/ Ambachsheer)
 - k. Mercer
 - l. NAPF website
 - m. Netspar
 - n. Office for National Statistics
 - o. Pensions Policy Institute
 - p. Scholar (google)
 - q. The Pension Quality Mark
 - r. The Pension Regulator
 - s. True and Fair campaign website
 - t. US Department of Labour.
5. In addition, we have written and/or spoken to the following organisations to validate the literature search. We specifically asked in each case if we had missed any key or otherwise relevant papers of research, and that our prioritisation and analysis of the key papers was correct.
 - a. Association of British Insurers (ABI) - Meeting held with Yvonne Braun 28th May 14.
 - b. Investment Management Association (IMA) Meeting held with Daniel Godfrey, Jonathan Lipkin (Director of Public Policy) and Mark Sherwin (Senior Advisor) 22nd May 14:
 - c. National Association of Pension Funds (NAPF)
 - d. Confederation of British Industry (CBI) - List of papers reviewed by Marte Borhaug 16th May 14
 - e. Chris Curry, PPI
 - f. Professor David Blake
 - g. Centre for Financial Analysis and Policy (CFAP)
 - h. The True and Fair Campaign
 - i. Con Keating, Brighton Rock
 - j. Alwin Oerlemans, APG
 - k. Ole Beier Sorensen, ATP
 - l. Professor Tim Jenkinson (Oxford)
 - m. David Norman, Morning Star
 - n. Andy Cheseline, Lane Clark and Peacock - Meeting 1st July 14
 - o. Keith Ambachtsheer, International Centre for Pension Management
 - p. CEM Benchmarking
 - q. Colin Meech, Unison
 - r. Michael Johnson, Centre for Policy Studies
 - s. Competition and Markets Authority
 - t. Andrew Vaughan, Association of Consulting Actuaries
 - u. Law Society
 - v. Derek Cribb, Institute and Faculty of Actuaries
 - w. Pensions Regulator
 - x. Office for National Statistics
 - y. Steve Webb, DWP.

10

APPENDIX TWO – COSTS AND CHARGES WITHIN THE VALUE CHAIN, AS IDENTIFIED BY THE DWP (2014)

At the most basic level Consumers are usually presented with Annual Management Charge (AMC). AMC is the overt fee levied by the Investment Managers. Consumers may also be told a larger figure, the Total Expense Ratio (TER), which is the AMC plus some additional explicit operational costs. However the TER is not 'total'. Here is a list of fees identified by the DWP for a recent consultation (DWP 2014 - No CM 8840 Better Workplace Pensions). The DWP pointed out that this list was not exhaustive. We have italicised those fees that usually do not form part of the Administration fee, the AMC or the TER.

1. Set-up fees:
 - a. Scheme-level entry fees; both on entry into, or on transferring a pre-existing pot into, scheme
 - b. Scheme-level exit charges
 - c. Fees for non-member-initiated switching of funds.
2. Fees paid to governance bodies, e.g. trustees, IGCs and others.
3. Governance charges and expenses, e.g. trustee insurance.
4. Fund or investment management fee, payments to investment consultants and administrators, including underlying and separate in-house fund managers, performance fees, etc.
5. On-going charges for underlying funds in investment portfolio, e.g. fee for holding units in a UCITS fund.
6. On-going costs for running of scheme, e.g. IT, office and staffing costs, data management and record keeping.
7. Registration and regulatory costs and fees.
8. Payments to providers of professional services and other third parties or fees for related services, e.g. administrators, advisers, actuaries, lawyers, auditors, audit and legal fees for investment, accounting fees, valuation services.
9. Depository fees and fees to the custody bank.
10. Banking fees.
11. Costs of member communication services, e.g. statement costs, website, printing/ posting accounts.
12. Costs of capital requirements:
 - a. Unrecoverable VAT
 - b. Payments to shareholder service providers
 - c. Platform fees
 - d. Sales commission (pending ban from April 2016)
 - e. Brokerage commission and fees
 - f. Soft commission services included in brokerage fees, e.g. research costs
 - g. Transaction taxes, e.g. stamp duty and non-reclaimable withholding taxes on dividends
 - h. Spreads, e.g. bid-offer on bonds, FX (and associated costs such as commission)
 - i. Other charges embedded in the transaction price, e.g. payments incurred through financial derivative instruments
 - j. Entry fees, other initial charges and exit fees for investment in underlying funds
 - k. Deductions of expenses or fees from profits such that they are not shared equally with members, e.g. in relation to activities such as stock lending, interest income, foreign currency exchange.



APPENDIX THREE – SIGNIFICANT PAPERS ON INVESTMENT COSTS

11

Authors	Year	Name	Observations
ABI	2012	Time to Act: Tackling our Savings Problem and Building our Future	<p>A study of costs undertaken by asking the suppliers.</p> <p>The key findings are as follows: Average AMC for newly created auto-enrolled plan is 0.52%, (though the sample was small). Average AMC for pre-existing Group Pension Plans is 0.91%.</p> <p>Over half of companies offered active member discount (typically 0.2-0.5%), though a limited number of schemes adopted them. Article mentions FSA rulebook does not specify which costs should be disclosed, nor does EU regulations - referred to as dealing costs. FSA also states dealing costs should not be part of projections.</p> <p>The research also shows us most people do not think that charges play a particularly large role in the value of their pension savings.</p>
Anagol, Santosh and Hoikwang Kim (Wharton)	2010	The Impact of Shrouded Fees Evidence from a Natural Experiment in the Indian Mutual Funds Market	<p>A study to understand whether transparency on fees changed the behavior of institutions selling investment products.</p> <p>Observed that a specific type of investment, which was allowed to charge an arguably shrouded (opaque) fee, had been created in relatively large numbers by the industry in the time it was allowed, compared with the time before or after the regulatory changes. 44 products launched (closed-end funds) in the main period, compared to 2 before and none after.</p> <p>Main observation here is about the way firms react to disclosure regulation. Thus the authors estimate consumers paid an excess of \$500M in fees over the period for no superior results.</p>
Anagol, Santosh and Hoikwang Kim (Wharton)	2010	The Impact of Shrouded Fees Evidence from a Natural Experiment in the Indian Mutual Funds Market	<p>An 'ask the supplier' study of costs of large pension funds.</p> <p>The authors find that pension fund cost levels are substantially lower than mutual fund fees.</p> <p>While larger scale brings costs advantages, liquidity limitations seem to allow only smaller funds, and especially small cap mandates, to outperform their benchmarks.</p> <p>Found that pension fund cost levels for their domestic equity investments with a median annual cost of 27 basis points for defined benefit funds and 51 basis points for defined contribution funds.</p> <p>CEM database collected all costs that occur when managing equity investments. This includes salaries and fees for external managers (fixed and performance-related), custody fees, and the costs for managing the fund (salaries of internal fund representatives). The investment cost estimates do not contain trading expenses or any other measures of transaction costs.</p>
Bikker, Jacob	2013	Is There an Optimal Pension Fund Size? A Scale-Economy Analysis of Administrative and Investment Costs	<p>A study of the effect of scale on pension costs.</p> <p>This paper looked at the economies of scale and the optimal scale of pension funds. The study focused solely on Dutch pension funds. Finding that consolidation between smaller and medium sized funds would increase cost efficiency.</p>
Bogle, John C.	2014	The Arithmetic of 'All In' Investment Expenses	<p>A review of 'hidden costs'.</p> <p>Bogle, a founder of Vanguard Investments, notes that the issue of all-in fund costs has rarely, if ever, been subject to careful examination, likely because data on these costs are difficult, if not impossible, to quantify with precision. The kind of quantitative precision that the academic community properly demands in most cases is simply not possible with respect to these four costs (transaction costs, sales charges, cash drag and taxes) that fund investors incur over and above the expense ratio.</p>

11

APPENDIX THREE – SIGNIFICANT PAPERS ON INVESTMENT COSTS

Cannon Edmund and Ian Tonks	2009	Money's Worth of Pension Annuities	<p>A 'reverse engineering' study of the cost of annuities.</p> <p>The report examines a time series of open market option (OMO) pension annuity rates in the UK for the period 1994 to 2007, comparing the cost of annuities to the cost of the bonds which need to be purchased to defray them. There is evidence that money's worth has fallen since 2002. They discuss a number of factors that could have affected the fall in money's worth, including: changes in insurance regulation; changes in industrial concentration; an insurance cycle; pricing of mortality uncertainty and the growth in the impaired lives market.</p>
Carhart, Mark M.	1997	On persistence in Mutual Fund Performance	<p>A study showing past performance is not predictive of future performance.</p> <p>Looking at persistence in mutual fund performance, this paper finds that individual funds do not earn higher returns from following the momentum of strategy in stocks. The study is one of many which replicate Sharp's results.</p>
Department of Work and Pensions	2014	Defined benefit (DB) scheme running cost research	<p>A study of administration costs of DB schemes.</p> <p>Quantitative study to better understand the costs of administering defined benefit (DB) pension schemes. A total of 316 private sector schemes, completed the survey. The research was undertaken between 12th September 2013 and 1st November 2013 and used an online self-completion questionnaire to collect cost information on the following seven cost areas. The study only measured costs in monetary terms making comparison impossible.</p>
Department of Work and Pensions Andrew Croll, Ed Vargeson and Alex Lewis	2010	DWP Research Report No 630 - Charging levels and structures in money-purchase pension schemes: Report of a quantitative survey.	<p>An 'ask the customer', (and 'ask the supplier') study of DC pension fund costs.</p> <p>This study surveyed companies operating trust-based DC pension schemes, and suppliers of contract-based pension schemes. It discovered that for those trust-based schemes that believed they had an annual management charge, the charge was 1.23%. But there was significant confusion about how charges are levied. Almost a quarter of respondents believed that charges were levied on contributions; some believed there was no charge, while others believed the charge to be as high as 5%. Insofar as the respondents understood the questions they were asked it would be for AMC, not the full cost of pension and investment.</p> <p>In surveying suppliers, only eight out of 22 responded. No average charge was calculated.</p>
Department of Work and Pensions Andrew Wood, Dominika Wintersgill and Niall Baker	2012	DWP Research Report No. 804 Pension landscape and charging: Quantitative and qualitative research with employers and pension providers - Research report	<p>An 'ask the customer' study of DC pension costs.</p> <p>A similar study to report 630 quizzing sponsors (employers) of DC schemes. As discussed in section 3, more than two thirds of sponsors were unaware that there was any charge paid. The authors went on to assume that those who were able to give credible answers also gave accurate ones. Less than a quarter of those surveyed gave credible answers. The study demonstrated clearly the lack of understanding of charges even at the level of the AMC.</p> <p>The results of the study were that charges for trust-based plans were 0.71% and for contract 0.95%. The former figure seems inconsistent with the study by Croll et al., made two years earlier of a similar sample of funds.</p>

<p>Department of Work and Pensions</p> <p>Andrew Wood, Louise Amantani, Duncan McDougall, Niall Baker</p>	2014	Landscape and charges survey: Charges and quality in defined contribution pension schemes	<p>An 'ask the customer' study of DC pension costs.</p> <p>This study sought to avoid the difficulties associated with the lack of knowledge and experience in Wood et al 2012, by prompting those who claimed there were no charges. However, it is difficult to believe that without checking the true charge figure, this method was likely to prove effective. The charges appear only to be AMC. And other methodological difficulties were apparent in the study.</p> <p>We would be concerned about the reliability of the conclusions of this study, but for completeness they were that the average AMC for trust-based schemes was 0.75% with members of the largest schemes paying far less (0.42%). Members paying the highest charges (>1%) were those on low salaries and with low employer contributions; as well as those whose employers used a commission-based adviser.</p> <p>The average AMC for contract-based schemes was 0.84%, again with members of the largest schemes paying far less (0.51%). Older contract-based schemes, such as those sold before 1991, were most likely to face charges of >1%; as were Stakeholder Pensions, smaller schemes and schemes with lower employer contributions.</p>
<p>Frontier Investment Management LLP</p>	2007	When is a TER not a TER	<p>A 'reverse engineering' study of some hidden costs.</p> <p>The study looks at why costs are important, looking at the impact of TER in return. This is a short paper describing the nature of the impact of compounded investment costs on a fund.</p>
<p>Heale, Mike (CEM)</p>	2014	CEM Benchmarking Investment Performance & Costs	<p>A cross-fund comparison of the characteristics which affect costs.</p> <p>Characteristics associated with better performance.</p> <p>Larger funds did better than smaller funds.</p> <p>More internal management was better.</p> <p>Most funds under-estimate, under-report, and under-manage costs, especially big-ticket external costs.</p>
<p>Investment Management Association</p> <p>Chris Bryant and Graham Taylor</p>	2012	Fund management charges, investment costs and performance	<p>A 'calculate the difference' study, done by the industry body.</p> <p>The authors use the 'calculate the difference approach'. For passive funds they find the TER to be close to calculated difference. For active funds they find the TER to be 1.95% but the performance of the funds had significantly added-value, so the calculated difference was smaller.</p> <p>The approach is methodologically suspect since it used only data for the largest funds, (ex post), whose performance is likely to have been good, (that is why they became the largest funds).</p>
<p>Ionescu, Liviu and Edgar A. Robles</p>	2014	Update of IOPS work on fees and charges	<p>An attempt to make cross-country comparisons of pension charges.</p> <p>One key lesson that emerges from the country experience surveyed in this paper is that the more complex the fee structure in a retirement system is, the harder it is for members to compare across pension funds. They find it difficult to get a clear image of the way these fees can reduce their future retirement benefit. In some countries in Latin America, allowing only one type of fee has had a positive impact on fee levels.</p>
<p>James, Kevin</p>	2000	The price of retail investing in the UK, occasional paper series 6	<p>A 'calculate the difference' study of charges.</p> <p>James uses the 'calculate the difference' approach to discovering the cost of investment. He estimates the cost of UK active funds to be 3.16%, and passive funds to be 1.2%.</p>

11

APPENDIX THREE – SIGNIFICANT PAPERS ON INVESTMENT COSTS

Khorana Ajay Henri Servaes, Peter Tufano	2007	Mutual fund fees around the world	<p>A comparison of prices of retail funds in selected countries.</p> <p>The report examined management fees, total expense ratios, and total shareholder costs (which include load charges but not trading costs). Fees vary substantially across funds and from country to country. The most robust explanation is that fund fees are lower in countries where investor protection is stronger. See full discussion in Section 3.</p>
Investment Management Association	2000	Response to FSA James paper on cost of retail investing	<p>Response to James' study.</p> <p>Critique of James' sampling, and other aspects of his approach.</p>
LCP	2013	Investment Management Fees Survey	<p>An 'ask the supplier' study of charges for different standard mandates.</p> <p>A survey of providers of investment management to pension funds. It asks for their estimates of management costs for different asset classes and different scales of investment.</p> <p>It notes that transaction costs are not provided by the vast majority of respondents. The structure of flat fee arrangements means that the focus for managers is more on retaining clients than delivering additional performance.</p> <p>The survey found that performance-related fees are generally not attractively structured for investors. For example, for the global equity universe, if a manager delivers its target return of 2% per annum above.</p>
Pensions Policy Institute Mel Duffield	2014	Single-Tier Series Paper 6: The long-term cost and spending implications of the single-tier pension	<p>Looks at the implications of changes to the pension system on the implication of single tier pensions. The report focuses on savings from contracting out. Heavily focused on government spending and the single tier pension.</p>
Phillips, Don	2013	Mutual Fund Urban Myths	<p>A response to critiques such as those by Bogle.</p> <p>A defense of mutual fund charges. Concludes that although mutual funds omit the cost of trading securities from their expense ratios, that that cost is low. Reports of the charge being as high as 2% are exaggerated. For large cap US equity funds it claims a charge of less than 7 bps. (Small caps have somewhat higher brokerage costs).</p> <p>Trading friction (i.e. spreads) is the real cost but the notion that it totals 140-200 bps is 'preposterous'.</p>
Thrumble, Karen	2012	In house management A comparative Success	<p>A study of the costs of internal and external management.</p> <p>Finds better results from internally managed funds, which attributes to them being:</p> <ul style="list-style-type: none"> • Genuinely long-term investors • Invested on a diversified, low risk basis • Investment team and sponsors interests being aligned • Low cost.
Turner, John A. Hazel A. Witte	2008	Fee Disclosure to Pension Participants: Establishing Minimum Requirements	<p>A review of fee disclosures.</p> <p>Looks at the empirical research related to fee disclosure, and how fees affect final balances. The analysis of fee disclosure takes into account insights from behavioral economics in assessing the usefulness of different approaches. Standardising types of fees and formats in which they are presented helps to facilitate comparisons across different investment options. The report proposes a model fee disclosure. It creates a score card assessing the fee disclosure in six countries: Australia, Canada, Chile, Sweden, the United Kingdom and the United States.</p>



12

APPENDIX FOUR – FINDINGS OF LITERATURE REVIEW ON INVESTMENT COSTS: OTHER PAPERS

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12

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13

APPENDIX 5 – PENSION FUND VALUE CHAIN AND POTENTIAL CONFLICTS OF INTEREST

In the paper we mentioned the pension 'value chain' and the conflicts of interest inherent within it. In this Appendix we have tried to flesh out this chain in a little more detail and suggest just some of the areas where that conflict may express itself in a way contrary to the consumer interest.

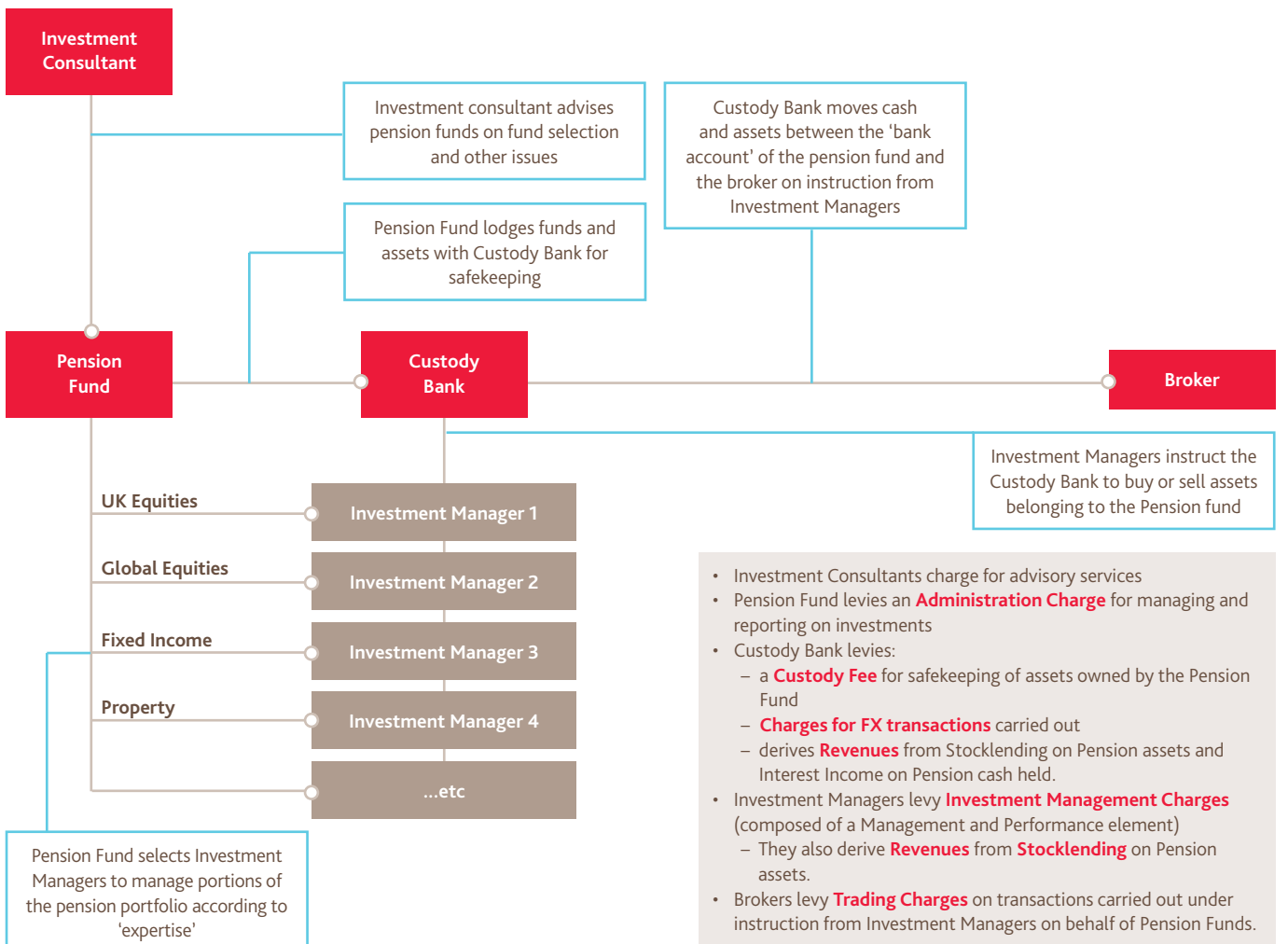
Figure 1 outlines the key players in a generalised pension fund value chain, to illustrate where conflicts of interest might occur. It is not meant to be of any one type of pension fund (DB, DC etc) but purely

to show how the key players interact. In summary:

- 1. The Investment Consultant** provides a range of services to the Pension Fund including asset/liability modelling, strategic asset allocation, benchmark selection, fund manager selection, and performance monitoring (Jenkinson et al., 2013).
- 2. The Pension Fund** manages the assets on behalf of beneficiaries.


- 3. The Custody Bank** provides a range of services to the Pension Fund and acts like a bank manager for the Pension Fund. Services include global custody, 'captive' FX, stock lending, reconciliations, asset valuations, collateral management and corporate actions.
- 4. Investment Managers** manage money under mandate from the Pension Fund.
- 5. Brokers** buy and sell assets held by Investment Managers (under mandate from the Pension Fund) and provide other execution and structuring capability, sometimes directly to the Pension Fund.

FIGURE 1: SUMMARY GENERALISED PENSION FUND VALUE CHAIN



Within this value chain a number of conflicts of interest can arise.

1. **Investment Consultants** can provide services both to Pension Funds and Investment Managers (SEC 2005). The SEC (2005) report also stated *"...consultants may steer clients to hire certain money managers and other vendors based on the pension consultant's (or an affiliate's) other business relationships and receipt of fees from these firms, rather than because the money manager is best-suited to the clients' needs..."* and went on to state that such conflicts may not be disclosed to Pension Fund clients. These conflicts of interest were reiterated by Youngdahl (2013), who also raised the topic of 'pay to play' activity. Jenkinson (et al., 2013) emphasised the secrecy around the role of the Investment Consultant by pointing out how little research had been done in this area largely as a result of unwillingness by Consultants to share data.
2. **Custody Banks.** The principle conflicts here rise either from paucity of comparable data, or vertical integration throughout the value chain:
 - a. There is almost no comparative information on captive FX spreads and commissions although several lawsuits in the US in 2011 cited whistle blower evidence that one custody bank had applied unfair rates to captive FX transactions carried out on behalf of Pension Fund clients. Another was also accused by a range of Pension Funds of similar practices. However, information is still scarce as cases were largely settled out of court.
 - b. Stock lending is a process largely facilitated by Custody Banks in association with Investment Managers by lending Pension Fund client assets. Some Pension Fund track such activity closely in recognition of the revenue opportunities and the risk, others do not. Regardless, the collaborative and mutually beneficial activity carried out by Custodians and Asset Managers with the assets of common clients introduces a worrying conflict.
 - c. Global Custodians have slowly been developing new services over the past decade and building operational capabilities that are sold in outsourced models to Investment Managers. The trouble arises when the Global Custodian is providing such services to Investment Managers that are managing money for clients common with the Global Custodian. It is possible that the result is cross subsidy of Investment Manager P&L by artificial moving of costs from manager to Pension Fund.
3. Softing, the process of Investment Managers directing large volumes of Pension Fund trading activity to Brokers in exchange for discounted or free goods and services, was tackled by Lord Myners (2001), ultimately resulting in the IMA disclosure tables for equity trading and commission that are made available to Pension Funds by Investment Managers. These table show volume of turnover for a given Investment Manager segmented by Broker. Once equity brokerage commission was made explicit, reported commission fell from just less than 15bps to closer to 10bps over a 2-3 year period (Jenkinson et al., 2012). However, over the same time period, trading volumes rose. The net result is an increase in the absolute cost of trading. So Jenkinson's paper is well named: 'Does transparency overcome conflicts of interest'. What is clear is that getting to the exact figure of impact of turnover on fund costs is impossible without a second order calculation involving aligning turnover to volume of assets held. These values are held separately. Moreover, it is clear that obtaining information here is difficult from a research perspective.
4. Specific fund types may have challenges. Private Equity, for example, may lodge their own staff as interim managers in acquired companies and take Board roles, both of which are roles for which they routinely derive a fee.



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