THE INVESTMENT FUNDS INSTITUTE OF CANADA | L'INSTITUT DES FONDS D'INVESTISSEMENT DU CANADA

IFIC Submission

Re: CSA Consultation Paper 81-408

Consultation on the Option of Discontinuing Embedded Commissions ("Paper")

June 9, 2017

TABLE OF CONTENTS

1 IFIC SUBMISSION

Introduction 1
Response to the CSA Concerns 2
Conflicts of Interest – Fund Managers, Dealers and Representatives 2
Conflicts of Interest – Barriers to Entry 3
Investor awareness of fees and value for money 3
Unintended Consequences 4
IFIC's Alternative to a Prohibition 6
Responding to Other Issues in the Consultation Paper 7
Market Competition and the Changing Funds Industry 8
Effective Disclosure 8
Measuring Investor Outcomes 8
Passive and Active Investing 9

2 APPENDIX A - MASTER QUESTION MATRIX WITH ANSWERS

3 APPENDICES B - F

Appendix B - A Competitive and Changing Funds Industry 40
- Importance of Mutual Funds to Canadians 40
- Competition and Price 41
- Cost of Mutual Funds 43
- New Fund Company Entrants and Changing Distribution Landscape 44
- Incentives for Performance 45
- Conclusion 46

Appendix C - Effectiveness of Disclosure 47
- Early Evidence of the Impact of Enhanced Disclosure 47
- Academic Research on Disclosure and Conflict of Interest 47
- Conclusion 48

TABLE OF CONTENTS

3

Appendix D - Measuring Investor Outcomes 49

- Measuring Harm 49
- Value of Financial Advice 49
- Goals-Based Planning 51
- Banning Embedded Fees Will Cause Many Canadians to Pay More for Advice 51
- Impact on Seniors and Vulnerable Investors 53
- Conclusion 53

Appendix E - Active and Passive Management 54

- Growth and Availability of Passive Funds 54
- Comparisons of Active and Passive Investing 55
- Market Efficiency 55
- Risk 56
- Conclusion 56

Appendix F - Peer Review of Fund Fee Research 57

4

APPENDIX G - ECONOMIC IMPACT ASSESSMENT OF BANNING EMBEDDED COMMISSIONS IN THE SALE OF MUTUAL FUNDS

Executive Summary 63
Introduction 67
Scope of Review 68
Approach and Methodology 69
The Mutual Funds Market in Canada 71
Mutual Fund Distribution Channels 72
The Role of Financial Advisors in the Sale of Mutual Funds 74
Advisor Compensation 74
Profile of Investors 76
Robo-Advisors 78
Growth in ETFs 80
Regulatory Environment 81
Accountability 84
Proposed Changes to Regulation 84

TABLE OF CONTENTS

The Financial Advisory Sector 86
- Industry Structure by Financial Advisor Segment 87
- Dual Licensing 88
- Growth Trends 88
- Households by Investable Assets and Fund Ownership 89

The Value of Financial Advisors 90
- The Economic Theory 90
- Investor Attitudes to Advisors in Canada 91
- Empirical Evidence on the Value of Advisors 93
- Summary of Findings 95

Conflicts of Interest 96
- Economic Theory 96
- Mitigation of Conflict of Interest 97
- The Drivers of Conflict of Interest in the Sale of Mutual Funds 98
- The Profile of Mutual Fund Investors in Canada 99
- Longevity of Relationship between Advisor and Client in Canda 101
- Evidence on Existence of Conflict of Interest 103
- Summary of Findings 104

Embedded Commissions 105
- Economic Theory 105
- The Effects of Embedded Commissions in the Sale of Mutual Funds 106
- Variation of trailing commissions across mutual funds in Canada 108
- Relationship between fund performance and trailing commission 110
- Conflicts of Interest under Alternative Compensation Schemes 112
- Summary of Findings 113

Cost of Financial Advice in Canada 115
- The Cost of Advice 115
- Financial Advisor Compensation 116
- Summary of Findings 117

Hypotheses Regarding the Likely Impacts of a Ban on Embedded Commissions 118

Sensitivity Analysis on the Potential Impact of a Ban on Canada's Economic Footprint 120

TABLE OF CONTENTS

4

Jurisdictional Review 125
- Introduction 125
- Mapping Embedded Commissions 125
- Case Study: UK 129
- Case Study: Australia 133
- Transparency and Disclosure 133
- Countries that Contemplated and Rejected a Ban 134

Summary of Findings 137
Conclusions 138
Appendix A: Limitations 139
Appendix B: List of Sources Used 140
Appendix C: Glossary 145
Appendix D: List of Acronyms 146
Appendix E: Reviews of Cumming et al (2015) 147

SUBMISSION

Introduction	1
Response to the CSA Concerns	2
Conflicts of Interest – Fund Managers, Dealers and Representatives	2
Conflicts of Interest – Barriers to Entry	3
Investor awareness of fees and value for money	3
Unintended Consequences	4
IFIC's Alternative to a Prohibition	6
Responding to Other Issues in the Consultation Paper	7
Market Competition and the Changing Funds Industry	8
Effective Disclosure	8
Measuring Investor Outcomes	8
Passive and Active Investing	9

June 9, 2017

Delivered By Email: comments@osc.gov.on.ca; consultation-en-cours@lautorite.qc.ca

British Columbia Securities Commission
Alberta Securities Commission
Financial and Consumer Affairs Authority of Saskatchewan
Manitoba Securities Commission
Ontario Securities Commission
Autorité des marchés financiers
Financial and Consumers Services Commission, New Brunswick
Superintendent of Securities, Department of Justice and Public Safety, Prince Edward Island
Nova Scotia Securities Commission
Securities Commission of Newfoundland and Labrador
Registrar of Securities, Northwest Territories
Registrar of Securities, Yukon Territory
Superintendent of Securities, Nunavut

In care of

The Secretary
Ontario Securities Commission
20 Queen Street West
19th Floor, Box 55
Toronto, Ontario M5H 3S8

Me Anne-Marie Beaudoin
Corporate Secretary
Autorité des marchés financiers
800, square Victoria, 22e étage
C.P. 246, tour de la Bourse
Montréal, Québec H4Z 1G3

Dear Sirs/Mesdames:

RE: CSA Consultation Paper 81-408 - *Consultation on the Option of Discontinuing Embedded Commissions* ("Paper")[1]

Introduction

The Canadian Securities Administrators (the "CSA") are consulting on whether to prohibit embedded commissions[2] and to require all investors to enter into direct-pay arrangements with their dealer firms. The Investment Funds Institute of Canada ("IFIC" or "we") is proposing an alternative to the prohibition on embedded commissions which will allow Canadians to continue to choose to pay investment funds dealer fees indirectly, address the harms identified by the CSA and avoid the unintended consequences of a prohibition.

[1] CSA Consultation Paper 81-408, *Consultation on the Option of Discontinuing Embedded Commissions*, available at https://www.osc.gov.on.ca/documents/en/Securities-Category8/sn_20170110_81-408_consultation-discontinuing-embedded-commissions.pdf (the "Paper")

[2] The Paper makes it clear that the practice under review is not the payment of embedded commissions generally but only "the prevailing practice of remunerating dealers and their representatives for mutual fund sales through commissions, including sales and trailing commissions, paid by investment fund managers."

The CSA have identified the following concerns:

(1) Embedded commissions raise conflicts of interest that can reduce the investment fund manager's focus on fund performance, encourage dealers and representatives to make biased investment recommendations, encourage high fund costs and inhibit competition by creating a barrier to entry;

(2) Embedded commissions limit investors' awareness of dealer compensation costs, add complexity to fund fees that inhibits investor understanding of such costs, and restrict investors' ability to directly control those costs and their impact on investment outcomes;

(3) Embedded commissions generally do not align with the services provided to investors because investors do not receive ongoing advice commensurate with the ongoing trailing commissions and the cost of advice provided may exceed its benefit to investors.

Response to the CSA Concerns

Conflicts of Interest – Fund Managers, Dealers and Representatives

We agree that the payment by the investment fund manager to the client's dealer, which is used in part to pay the advisor (the embedded commission), is a potential conflict of interest. While the conflict of interest can be mitigated in a variety of ways, it can only be eliminated by a prohibition.

We do not agree, however, that a prohibition would be effective in eliminating other similar compensation-based conflicts of interest or that a prohibition is a proportionate response to the potential harms identified. Furthermore, a prohibition on embedded commissions will restrict the availability of investment advice for mass-market households[3] with smaller amounts to invest. This unintended consequence of the prohibition will have long-term impacts on Canadians' ability to plan and save for retirement, leaving them with substantially lower levels of assets to fund their retirements.

The potential for conflicts of interest exists in all financial advisory services payment models. This is because, in all financial advisory services compensation models, there is asymmetric information between advisors and clients (otherwise the client would not need advice) and the value of financial advice cannot be assessed at the time it is provided.[4] Transitioning all embedded commission clients to a direct-pay fee-based arrangement will simply substitute the conflicts in embedded commissions with the conflicts in the selected fee-based direct-pay method of compensation.[5]

The cost of any regulatory proposal should be proportionate to the harm it seeks to address. Risk of harm is present in any conflict of interest situation; however, there is only actual harm when the risk is crystalized. The risk of harm with embedded commissions is that the dealer's representatives may put their financial interests ahead of their clients' interests by recommending a mutual fund solely because it pays a higher commission. The risk of harm in the case of the mutual fund manager is that the manager may pay high trailer fees to ensure their funds are sold to investors on the basis of the compensation the representative will receive and not based on the cost and performance of their funds. If this happens, the risk is crystalized and harm results. This is a contravention of the current rules and discipline is warranted in appropriate cases.[6]

[3] At the end of 2012 mass-market households had investable assets of $100,000 or less, mid-market households had between $100,000 and $500,000 in investable assets, and affluent households had $500,000 or more in investable assets, The Paper, p.27
[4] PricewaterhouseCoopers LLP, *Economic Impact Assessment of Banning Embedded Commissions in the Sale of Mutual Funds*, May 2017, (the "PwC Report"), annexed as Appendix G to this letter, p.30
[5] The PwC Report, p.46-48
[6] CSA Discussion Paper and Request for Comment 81-407, *Mutual Fund Fees*, p.101

However the Paper does not provide any evidence that the risk of harm from conflicts of interest is any less, or that investor outcomes would be better under a direct-pay fee-based compensation arrangement than under an embedded commission arrangement.

Research by Cumming et al. provides evidence of the effect of embedded commissions on the mutual fund market but cannot answer the question as to whether fee-based or commission-based remuneration is better for individual investors.[7] Research by PwC agrees that the variation in the size of trailing commissions creates an incentive to recommend particular funds, but could find no credible evidence of widespread abuse by registrants of their clients by virtue of the information asymmetry and inability to validate value of financial advice at the time it is paid for.[8]

CSA, IIROC and MFDA sales practice compliance reviews, while finding some instances of non-compliance, provide no support for widespread non-compliance with registrants' duties - investment fund managers' duty to act in their funds' best interests and dealers' and advisors' duties to make suitable investment recommendations and to deal with their clients fairly, honestly and in good faith.[9]

Conflicts of Interest - Barriers to Entry

The Paper suggests that evidence supporting the argument that embedded commissions constitute a barrier to entry is found in studies published over the past 13 years that show Canadian mutual fund fees are among the highest in the world. In fact, the most recent 2015 Morningstar study does not support this claim. In its 2015 study, Morningstar acknowledged that an appropriate comparison of US and Canadian mutual fund fees must include the cost of advice and federal and provincial tax. Comparing apples to apples places Canadian MERs "in the top half of the lower fee markets" of the 25 countries surveyed. Indeed, research cited by the CSA shows asset-weighted cost of ownership in Canadian advice channels to be 2.02% of invested assets (when the impact of taxes is excluded) compared to approximately 2.0% in the US (which does not levy taxes). For modest US investors with less than $100,000 to invest, the cost increases to 2.40%.[10] In some ways this is remarkable given the advantage of scale in the US's $17T market compared to Canada's $1.4T market.

As we describe under the heading Market Competition and the Changing Funds Industry, the Canadian market for investment products and services is highly competitive and there is no evidence that embedded commissions constitute a barrier to entry.

Investor awareness of fees and value for money

We agree that embedded commission arrangements limit investors' awareness and understanding of such costs. Investors should know all the fees they pay and receive services commensurate with those fees.

The good news is that the "embedded" nature of embedded commission has been made transparent by the combined effect of CRM2 and Point of Sale Fund Facts reforms. Dealers must provide their clients, annually, with a "Report on Charges and Other Compensation" which includes disclosure of the total amount of trailing commissions in dollars and cents.[11] The Fund Facts, delivered before the client's purchase, discloses whether compensation is paid by the fund manager to the dealer and the amount expressed as a percentage of the client's investment and in dollars per $1,000 invested.

[7] Appendix F, Summary of Academic Review of Fund Fee Research; The PwC Report, p.40-41
[8] The PwC Report, p.47
[9] CSA Staff Notice 33-318 *Review of Practices Firms Use to Compensate and Provide Incentives to their Representatives* (December 15, 2016); MFDA *Review of Compensation, Incentives and Conflicts of Interest* (December 15, 2016); IIROC *Managing Conflicts in the Best Interest of the Client – Status Update* (December 15, 2016); and IIROC *Managing Conflicts in the Best Interest of the Client – Compensation-related Conflicts Review* (April 27, 2017)
[10] The Paper, p.108
[11] National Instrument 31-103, Registration Requirements, Exemptions and Ongoing Registrant Obligations, s.14.17(h)

This new information seems to be making a difference in investor understanding and awareness. In 2015, before the implementation of CRM2 and POS, 67% of mutual fund investors reported being familiar with the fees they pay their firm directly to operate and administer their account and the commissions that their firm receives from other companies. Fully 48% knew the amount of fees their firm received from other companies for the investments they hold. Early evidence subsequent to implementation of these disclosure reforms showed awareness of direct fees rose to 76% and awareness of indirect fees rose to 59%.[12]

Importantly, it is not necessary that all investors understand the fees they pay in order to curb misbehavior incented by conflicted compensation arrangements. The PwC research shows that where a market is characterized by asymmetrical information, only a subset of all consumers need to be informed in order to produce an effective deterrence that will discourage registrant abuse of less well informed investors.[13]

We believe the costs disclosure can be improved by including the fund company's management expenses in the annual cost report. We will work with the CSA to implement this change.[14]

Unintended Consequences

Finally, prohibiting embedded commissions could reduce access to advice for mass-market investors with negative consequences for long-term savings and retirement readiness.

Prohibiting embedded commissions will have a significant impact on mass-market investors' access to advice. The Paper acknowledges that mass-market households are the group most at risk of falling into the advice gap and that this group makes up the largest share of households.[15] Nevertheless, the Paper states that since the mass market has the lowest percentage ownership of mutual funds of the three investor segments (22%) and "only" 45% of investment fund owning mass-market households use advice, the CSA do "not anticipate a significant advice gap" for mass-market households.[16] If an advice gap develops, the CSA predict that deposit-taker and insurer-owned dealers will fill the gap.[17]

The CSA analysis considers the importance of mass-market investors to the total market for mutual funds and advice. It is equally appropriate to also consider the importance of mutual funds and advice to mass-market investors.

Looking at all investor segments at the end of 2015, Canadian households held $1.4T or 35% of their aggregate financial wealth in investment fund securities. Ninety percent of Canadians purchase investment funds through an advisor. Of those investors, 79% purchased mutual funds using an embedded commission arrangement. It is not clear why, in the absence of demonstrating harmful outcomes for those investors or how their outcomes would improve with the direct-pay fee-based arrangement, the CSA propose to remove the choice for mass-market, mid-market and affluent households when so many households of all segments prefer this option.

Looking only at the mass-market households that own investment funds, there are 8.9 million households serviced by MFDA members. Of those, 7.3 million households (83%) are mass-market households[18]. Assuming those mass-market households hold investment funds, (a fair

[12] British Columbia Securities Commission, *Investor Readiness for Better Investing 2016-2017 Panel Study: Part 2* (report prepared for the BCSC by INNOVATE Research Group (April 26, 2017)), p. 8.
[13] The PwC Report, p.35
[14] IFIC Media Release, *Investment Funds Industry Ready to Tackle CRM3*, April 25, 2017, https://www.ific.ca/en/news/investment-funds-industry-ready-to-tackle-crm3/
[15] The Paper, p.62-63
[16] The Paper, p.63
[17] The Paper, p.63
[18] MFDA Client Research Report: A Detailed Look into Members, Advisors and Clients ("MFDA Report"), p.5-6.

assumption since 95% of MFDA members' assets under administration are comprised of mutual funds[19]) a prohibition could impact millions of mass-market households.

Despite suggestions to the contrary, there is no global trend to prohibit embedded commissions. Only three countries have implemented a ban.[20] While the European Union (EU) proposes to prohibit independent advisors from accepting commissions, the independent advice channel is one of the smallest channels in the European funds industry, representing just 11% of assets. The vast majority of fund sales are made through banks, where the prohibition does not apply. In all, only 13% of total worldwide mutual fund assets of $39.4 trillion are covered, or slated to be covered, by a ban on embedded commissions. Many countries are addressing conflicts of interest through policy and regulatory reforms, but are not doing so through a prohibition of embedded commissions.[21] Of those, several have explicitly considered a prohibition and have decided against it out of fear of an advice gap.

Not only would the impact be significant, but it would be disproportionately felt in Canada versus other jurisdictions that have banned embedded commissions. This is because Canadians hold more investment funds as a percentage of total financial assets than any other country in the OECD. Countries that have chosen to ban embedded commissions - The Netherlands, the UK and Australia - rank 27th, 28th and 32nd respectively. This disproportionate effect will be amplified by the narrow scope of the prohibition in Canada. In The Netherlands, the UK and Australia, the prohibition applies across financial sectors – including securities, banking and insurance. The CSA proposal to ban embedded commissions will only apply to investment funds.

The value of financial advice over the long term is well documented. Academic research shows that while financial advisors (or anyone else) are not able to consistently beat relevant market benchmarks after fees on their investment choices, their advice generates significant net benefits to investors in terms of more disciplined savings behavior, overall higher asset values, more efficient tax planning and retirement confidence.[22] According to one study, a household receiving advice over 15 years accrues 3.9 times the value of investment assets of a comparable non-advised household.[23]

On the demand side, behavioral economics predicts that investors will be less likely to seek financial advice if they have to pay "up front" for credence goods whose value is not fully understood at the time of purchase. The same investor would be more likely to pay for advice using embedded dealer compensation even though the cost may be the same.[24] Mass-market investors who might otherwise seek advice could also be deterred by higher costs for advice.[25]

In addition, evidence from the US and UK where transition away from embedded commissions is largely complete shows that the costs to mass-market investors have increased, providing additional disincentives to seek advice.[26]

On the supply side, firms will have to make up for the lost commission revenue with fees based on a percentage of account assets. While there is little evidence available on the cost of fee-based advice, we know that accounts below $100K will be uneconomic in a direct-pay fee-based arrangement. We also know that 80% of Canadians have less than $100,000 in

[19] MFDA Report, p.4
[20] South Africa is in the process of banning embedded commissions.
[21] Countries that considered and rejected a ban are Sweden, Denmark, Germany, Hong Kong, India, Ireland, Japan, New Zealand, Singapore, United States, Switzerland, Israel and South Korea.
[22] The PwC Report, p.29
[23] Claude Montmarquette and Nathalie Viennot-Briot, "The Gamma Factor and the Value of Financial Advice", CIRANO Institute, August 2016, p.18-25
[24] The PwC Report, p.39-40.
[25] Appendix D, Measuring Investor Outcomes p.3-4
[26] *UK retail investing fees stay above 2.5% annually*, Financial Times. August 26, 2016. https://www.ft.com/content/ba0ae18c-6a98-11e6-a0b1-d87a9fea034f (requires subscription); and ICI Submission Letter on Proposed Rule; Reexamination of Fiduciary Rule, April 17, 2017, https://www.ici.org/pdf/17_ici_dol_fiduciary_reexamination_ltr.pdf

financial investments.[27] It seems inevitable that fewer firms will serve mass-market investors without embedded commissions.[28]

In addition, the prohibition will further concentrate the market for investment products and services by favoring scale and affiliated vertically integrated financial institutions. The end result will be a market with less choice, less investor access and less competition.[29]

Assuming a prohibition reduces access to advice and forces mass-market investors to become do-it-yourself investors, the move from advised investing to self-investing is expected to reduce the amount of savings available to those Canadians at retirement. Those who could potentially be deprived of access to financial advice following the ban on embedded commissions would accumulate, on average, $240,000 less in savings prior to retirement than those with access to advice.[30]

IFIC's Alternative to a Prohibition

We think there is another way to address the concerns raised by the CSA without the cost and disruption that a ban on embedded commissions would create and without the possible unintended consequences of reducing access to financial advice for mass-market investors.

Instead of a prohibition, IFIC proposes a number of reforms which, if implemented, would address most of the harms identified by the CSA and would continue to allow investors the choice of paying for a mutual fund investment indirectly or directly, and avoid the unintended consequences created by a prohibition.

IFIC's alternative is guided by four investor-focused principles:

- Investors should have real, fully informed choice as to how they pay for investment products and services;
- Investors should know the cost of any embedded commission they pay;
- Investors who do not want advice should not pay for it, and
- When investors pay an embedded commission they should know what they are paying for.

IFIC proposes a "made-in-Canada" approach consisting of the following reforms:

1. Mitigate the conflict of interest:
    a. Cap or standardize embedded fees – This mitigates the financial incentive for an advisor to recommend a fund based only on trailer fee. Consideration would have to be given to transparency of standard rate variability. An approach to capping in the US is described below.[31]

[27] MFDA Report, p.5
[28] The PwC Report, p.52-53
[29] The PwC Report, p.52-53
[30] The PwC Report, p.58
[31] The US industry provides examples of a cap and a standardization of embedded fees. Rule 12b-1 under the Investment Company Act of 1940 requires that, before using fund assets to pay for distribution expenses, a fund must adopt a written "rule 12b-1 plan" that describes all material aspects of the proposed financing of distribution. The rule 12b-1 plan must be approved initially by the fund's board of directors as a whole, and separately by the "independent" directors. The rule does not restrict the amounts of the fees that may be approved under the plan. However, current FINRA Rule 2341(d)(2) and (d)(3) sets the maximum front-end or deferred sales charge resulting from any transaction, and prohibits broker-dealers from selling funds that pay more than 0.25 percent per year of fund assets as "service fees," and more than 0.75 percent per year of fund assets as "asset-based sales charges," effectively setting the maximum 12b-1 fees at those amounts or less. More recently, US fund companies have developed Transaction (or "T") shares which generally have a uniform front-end load (usually 2.5%) across all fund categories, and a 12b-1 fee of 0.25%.

b. Series A units[32] to be sold only in channels where advice is permitted – This mitigates the conflict of interest when investors pay full trailer fees (which include payment for advice) to discount brokerages which cannot provide advice.[33]

c. DSC funds to be available only within established guidelines – This mitigates the unfairness of advisors locking clients into funds which are not suitable given the client's age or time horizon.

2. Improve investor awareness and control of fees

   a. Making embedded commissions more transparent by expanding personalized investment cost disclosure to include the full MER.

   b. Simplify pricing and standardize naming conventions for fund series – This reduces complexity for investors and facilitates comparisons of MERs and trailer fees across fund families.

3. Mitigate conflicts and improve investor awareness and control over fees:

   a. In a direct-pay fee-for-service arrangement, fees to the dealer may be paid, with the client's agreement, by the manager out of redeemed units – This would address the behavioral resistance of investors to pay up front for services whose value is future and uncertain (credence goods). It would also eliminate the conflict of the embedded fee being paid by the investment fund manager without the investor's approval. It would allow the investor to negotiate the fee directly with the advisor (and perhaps the services covered by the fee), but the investor would not need to have the cash on hand to pay the fee immediately. This is proposed by the CSA at p.22 of the Paper.

4. Improve investor awareness and control over fees and align fees with services:

   a. Mandate enhanced discussion about fees and services at account opening and before each purchase, or annually – This mitigates the concern that the investor is not aware of the fees paid or the advice and services that the investor receives (or is entitled to receive) for the fees paid.

5. Align fees and services:

   a. Trailer fee service level agreement at account opening – This facilitates investor evaluation of the value of the advice and services they receive for the trailing commissions.

Furthermore, IFIC believes that vigorous and coordinated compliance reviews of the current rules combined with the strategic use of enforcement action in appropriate cases has proven to be an effective deterrent to misbehavior for registrants with ongoing businesses and reputations to protect.

Responding to Other Issues in the Consultation Paper

The Paper, in addition to making the primary argument that embedded commissions should be prohibited due to conflicts and lack of transparency, makes a number of related observations

[32] Series A units are the most common fund series; they are available to all investors, and have the lowest minimum investment amounts of all fund series. Included within the MER of Series A units are the costs for advice and services provided by the dealer and advisor. Payment of these distribution costs are made to the dealer via a deferred sales charge commission and/or an ongoing trailer fee, depending on the sales charge option selected by the investor.

[33] IDA (now IIROC) Dealer Member Rule 1300.1(t) sets out the basic framework for dealers that do not provide advice to a client. They must apply for and receive approval to be exempt from the requirements in Rules 1300.1(p), 1300.1(r) and 1300.1(s) to make a determination that orders are suitable for such client. As at November 2016, 28 dealer firms are permitted to carry on business as order execution-only firms that cannot provide advice.

about the competitiveness of Canada's investment funds industry, the value of disclosure in mitigating conflicts of interest, passive and active investing and how to best measure investor outcomes. We believe the Paper's perspectives on these issues are incomplete and would benefit from additional context. What follows is a summary of four of the attached appendices that address these issues in detail.

Market Competition and the Changing Funds Industry

The CSA concludes, on the basis of the presence of embedded commissions, that the Canadian investment funds industry is uncompetitive.

By any conventional economic benchmark, the Canadian market for investment products and services is highly competitive. There is no evidence that embedded commissions represent a barrier to entry to low-cost product providers – foreign or domestic. There are plenty of both in the Canadian market now.

Fund managers compete aggressively on the basis of their funds' rates of return – this is evident in their competition for various funds awards and the fact portfolio managers are compensated on their risk-adjusted performance against benchmark.

There is significant evidence of a consistent decline in mutual fund fees over the past decade. At 1.96% at the end of 2015, the asset-weighted MER for long-term mutual funds is at its lowest level—declining 8 bps in just one year[34].

Appendix B, *A Competitive and Changing Fund Industry*, provides more information on current market trends and how they are evolving to address the CSA concerns.

Effective Disclosure

The Paper suggests, based on academic research, that disclosure alone is no longer effective to mitigate the risk of harm from conflicts of interest and that registrants provide more biased advice when a conflict of interest is disclosed. Importantly, the authors of the research relied on by the CSA acknowledged the limits of their study:

> *"Disclosure, at least in the context of the admittedly stylized experiment discussed in this paper, benefited the providers of information but not its recipients. We do not believe that this is a general result – that is, that disclosure always benefits providers and hurts recipients of advice."*[35]

Properly framed and delivered at the right time, the right disclosure can be effective in a long-term client advisor relationship that is mutually beneficial.

Appendix C*, Effectiveness of Disclosure*, provides more information on how disclosure can be made more effective.

Measuring Investor Outcomes

Investor outcomes can be measured in a variety of ways. The Paper measures investor outcomes only in terms of product cost and compensation for outperformance. While these are important, investors also need to measure progress relative to specific financial goals.

The Paper gives little weight to the value of advice in helping investors achieve their financial goals because it wrongly concludes that the influence of long tenured advice is intangible and therefore unmeasurable. A complete view of investor outcomes must include an examination

[34] Strategic Insight, *Insight* report, January 2016.
[35] Cain, Loewenstein and Moore, *Coming Clean: Perverse Effects of Disclosing Conflicts of Interest*, The Journal of Legal Studies, Vol. 34, No. 1 (January 2005), p. 20.

of the total client portfolio, associated compensation, advisor services, the value of advice, and long-term client goals.

Appendix D, *Measuring Investor Outcomes*, has more information on measuring investor outcomes.

Passive and Active Investing

The Paper demonstrates a marked preference for online advice incorporating passive investment strategies for mass-market investors.[36] Regulators should exercise caution in signaling preferred market outcomes when widespread use by mass-market investors of online advice and passive investment strategies has yet to weather a full market cycle.

Predicting markets and what is best for individual investors is difficult for both investment professionals and regulators. Both active and passive investment funds can help investors meet their financial goals. The market continues to innovate with Platform Traded Funds, ETFs and hybrids of both that offer a full range of investment strategies and prices.[37] We believe the market should decide how to best meet investor needs.

Appendix E, *Active and Passive Management*, has more information on the attributes of passive and active investing.

Answers to the questions posed by the CSA are attached as Appendix A.

Attached as Appendix F is a summary of the *Peer Review of Funds Fee Research*.

The PricewaterhouseCoopers LLP report, *Economic Impact Assessment of Banning Embedded Commissions in the Sale of Mutual Funds*, is attached as Appendix G.

* * * * *

We appreciate the opportunity to comment on the consultation. If you have any questions or comments, please contact me by email (pbourque@ific.ca) or by phone at 416-309-2300.

Yours sincerely,

THE INVESTMENT FUNDS INSTITUTE OF CANADA

By: Paul C. Bourque, Q.C.
President and CEO

[36] The Paper, p.62
[37] "PTFs a welcome game-changer", Paul Brent, National Post, June 21, 2016; "Alternatives in the rush to low fund fees", Tim Kiladze, G&M Report on Business; "Hybrid ETFs may offer the best of both worlds", Terry Cain, G&M Report on Business, May 16, 2017; "Dalbar's 12 Factors to Measure When Picking Active or Passive Funds", www.thinkadvisor.com, February 22, 2017

APPENDIX A

MASTER QUESTION MATRIX WITH ANSWERS

IFIC Responses to Questions Posed in CSA Consultation Paper 81-408
Consultation on the Option of Discontinuing Embedded Commissions

Questions	Industry Response
1. Do you agree with the issues described in this Part? Why or why not?	Although we acknowledge that the three investor protection and market efficiency issues identified in Part I of the Paper are legitimate issues for regulatory consideration, we do not agree that there is sufficient evidence of harm arising from embedded commissions[1] to warrant their prohibition. In addition, we do not agree with the Paper's contention that embedded commissions give rise in any significant way to the four sub-optimal behaviours listed on page 4 of the Paper. While substantial research has been cited in the Paper, the research does not provide evidence that the risk of harm from conflicts of interest is any less, or that investor outcomes would be better, under a direct-pay fee-based compensation arrangement than under an embedded commission arrangement. Research conducted by PricewaterhouseCoopers LLP ("PwC") concludes "there is no significant evidence that embedded commissions in Canada have been leading to conflicts of interest influencing financial advisors' behaviour."[2] **Conflicts of Interest**: We agree that embedded commissions, or any compensation model for that matter, can create conflicts of interests. However we find that the Paper takes too narrow a view of client/dealer, client/advisor and client/manager interests. For example, the Paper does not acknowledge that client/advisor interests are, in many respects, significantly aligned. Manager/dealer interest to aggregate assets and increase revenue may be different than a client's interest in getting the best service possible at the lowest cost but these different interests are not in conflict. The fact is neither can succeed in a long-term investment relationship without the success of the other. The PwC report finds that "There is no credible evidence for widespread abuse of this potential conflict of interest in Canada. In fact in the US where embedded commissions are substantially less prevalent than in Canada, there is significant evidence of advisors' interests not being aligned with their clients where in Canada there is evidence to the contrary."[3]

[1] Please see footnote 2 of IFIC's submission letter, to which this document is attached as Appendix A.
[2] PricewaterhouseCoopers LLP, *Economic Impact Assessment of Banning Embedded Commissions in the Sale of Mutual Funds*, May 2017, (the "PwC Report"), p. 72 (attached as Appendix G).
[3] The PwC Report, p. 47

Questions	Industry Response
	Investor awareness, understanding and control of dealer compensation costs: The recently implemented Client Relationship Model Phase 2 ("CRM2) Report on Charges and Compensation which discloses whether a trailer fee is paid and, if so, how much that fee is in dollars and cents, and the Point of Sale ("POS") Fund Facts which discloses the percentage and dollars per $1,000 invested of any applicable trailer fee in advance of a purchase decision, have made embedded commissions transparent. This significantly reduces the risk of lack of awareness and understanding of embedded commissions. Previous CSA statements on the importance of these reforms for enhancing investor awareness and understanding of fees support this view. For example: In March 2013, the CSA said the purpose of CRM2 *"is to ensure that clients of all registrants receive clear and complete disclosure of all charges and registrant compensation associated with the investment products and services they receive, and meaningful reporting on how their investments perform."* [4] Regarding POS, the CSA said in June 2010, *"We think that the disclosure required by the Instrument would provide investors with the opportunity to make more informed decisions by giving investors key information about a mutual fund."*[5] In August 2016, announcing the project to measure the impact of POS and CRM2, the CSA wanted to ensure *"that increased transparency about investment costs and performance and the provision of the Fund Facts documents are indeed helping investors make more informed investment decisions*".[6] The Paper provides no convincing evidence why POS and CRM2 disclosures will not significantly improve investor awareness and understanding of fees, including embedded commissions. Recent results from the BCSC's research suggest these reforms are having the anticipated impact of increasing investor awareness of fees and causing investors to consider taking action such as changing their dealer and/or advisor.[7] As noted on page 9 of our

[4] CSA Notice of Amendments to National Instrument 31-103 (Cost Disclosure, Performance Reporting and Client Statements), (2013) 36 OSCB 3173, March 28, 2013.
[5] CSA Staff Notice 81-319 - *Status Report on the Implementation of Point of Sale Disclosure for Mutual Funds*, (2010) 33 OSCB 5449, June 18, 2010.
[6] CSA News Release 2016/67 - *Canadian Securities Regulators to Measure Impact of Point of Sale Amendments and Phase 2 of the Client Relationship Model*, August 22, 2016
[7] BCSC*, Investor Readiness for Better Investing 2016-2017 Panel Study: Part 2* (April 26, 2017) page 29 (prepared for BCSC by Innovate Research Group) - BCSC study of a group of B.C. investors prior to and following receipt of CRM2 statements found that investors who received CRM2 statements are more aware of the fees, both direct and indirect, they are paying and, after receiving statements, some groups of investors were much more likely to switch advisors.

Questions	Industry Response
	submission letter, the research cited by the CSA on page 88 of the Paper in support of the CSA view that disclosure is of limited value in curbing biased advisor advice does not mention the methodological caveats expressed by its authors. Our submission reproduces the authors' caveats. Appendix C – Effectiveness of Disclosure provides a full description of the methodology for this report and more recent views about disclosure from the primary author of the research. **Embedded commissions do not align with the service provided**: We agree that when investors pay embedded commissions they should know what they are paying for. We are disappointed that the Paper does not mention that this information is currently required to be provided to investors by s.14.2 of NI 31-103[8]. The Paper provides no convincing evidence as to why enforcement or clarification of the existing rules would not achieve the desired objective or why prohibiting embedded commissions is the only solution to the issues cited in the Paper.
2. Are there other significant issues or harms related to embedded commissions? Please provide data to support your argument where possible.	No. We believe the Paper has identified the regulators' significant concerns with embedded commissions - conflicts of interest, investor awareness and alignment of fees to services received. To provide a balanced perspective, embedded commissions provide significant benefits to investors that are not described in the Paper. Please refer to our response to Question 3 below and to The PwC Report annexed as Appendix G.
3. Are there significant benefits to embedded commissions such as access to advice, efficiency and cost effectiveness of business models, and heightened competition that may outweigh	Yes there are significant benefits to embedded commissions. We find it interesting that none of the research cited in the Paper quantifies the harms of embedded commissions in terms of investor outcomes. By comparison, the benefits of financial advice and the efficiencies derived from embedded commissions are well

[8] NI 31-103, *Registrant Requirements, Exemptions and Ongoing Registrant Obligations*, Section 14.2, Relationship disclosure information:
(1) A registered firm must deliver to a client all information that a reasonable investor would consider important about the client's relationship with the registrant.

(2) Without limiting subsection (1), the information delivered under that subsection must include the following:
(a) a description of the nature or type of the client's account;
(b) a general description of the products and services the registered firm offers to the client;
…
(e) a description of the conflicts of interest that the registered firm is required to disclose to a client under securities legislation;
(f) disclosure of the operating charges the client might be required to pay related to the client's account;
(g) a general description of the types of transaction charges the client might be required to pay;
(h) a general description of any compensation paid to the registered firm by any other party in relation to the different types of products that a client may purchase through the registered firm;
…

Questions	Industry Response
the issues or harms of embedded commissions in some or all circumstances? Please provide data to support your argument where possible."	studied and documented but these did not find their way into the Paper. **Access to advice and increased financial assets** Embedded commissions increase the use of financial advisors and increase access to financial advice because they make advice affordable to mass-market investors. It is one of the reasons that Canada has a high number of advised households.[9] Access to ongoing financial advice has been demonstrated to significantly increase household financial assets over unadvised households[10]. The same research shows that dropping or losing financial advice dramatically diminishes investors' asset growth. The benefits of advice combined with public policymakers' emphasis on encouraging individuals to take on more responsibility for financing their retirements strongly indicate that regulatory policy should be focussed on ensuring that as many Canadians as possible have access to individualized financial advice at a price they can afford. Behavioural economics teaches us that consumers reduce their demand for a service when the fees for that service are salient and subject to negotiation, as opposed to being embedded in the overall price of the product, even when they have full knowledge of the embedded fee. It can be expected that this tendency, combined with the inability of consumers to benchmark the outcome of their fee negotiation with their advisor against published information, will lead some investors who currently use an advisor to stop using one and will discourage non-advised investors from seeking an advisor.[11] **Efficiency and cost effectiveness of business models** A range of essential services are paid for through the dealer portion of embedded commissions. They include account administration, account and advisor oversight, investor account statements, complaint handling and advice. Advisory fee levels in Canada for fee-based accounts range from 1.75% to 1.00% of AUM, with an average of 1.4%. This contrasts with the trailer fees for 96% of equity and balanced funds which do not exceed 1.00%. Data from Pricemetrix confirms that, in 2014, even fee-

[9] Montmarquette, C., & Viennot-Briot, N. (2016). *The Gamma Factor and the Value of Financial Advice*. CIRANO, reporting Ipsos Reid data finds that 34% of households use a financial advisor; and *National Smarter Investor Study*. Public Opinion Research. Key Highlights.' BC Securities Commission & InvestRight, 2015, which found that 30% of Canadians age 35 and older invest with an advisor.

[10] Montmarquette, C., & Viennot-Briot, N. (2016). The study shows that investors with advice accumulate 290%, or 3.9 times, more assets after 15 years than comparable non-advised households.

[11]; Appendix D, Measuring Investor Outcomes; and The PwC Report, p. 39-40.

Questions	Industry Response
	based accounts from $1 million - $2 million in assets were paying fees, on average, of 1.16%.[12,13] Many clients have very limited assets when they first begin working with an advisor. Despite the initial low balance, the embedded commissions model allows the advisor to still accept the client. Business is done because the payment model promises a continuing income stream which will grow with the asset level. The client benefits from the commitment of the advisor who will encourage him/her over the life of their relationship to continue to save. The interests of the client and the advisor are aligned – both benefit from the growth of the portfolio. By contrast, in order to achieve economies of scale, fee-based platforms in Canada require a minimum portfolio size of $100,000 (the reason is described in more detail in our response to Question 16), a threshold that is not met by most investors who are using an advisor. The Paper has identified mass-market investors as being most at risk of having reduced access to financial advice (p.62). Research by the MFDA shows that 8.9 million households are served by the MFDA channel, of which 7.3 million are mass-market households with less than $100,000 in financial assets.[14] An estimated 6.8 million households pay their fees through the embedded commissions model.[15] Accordingly a significant number of investors will be left without advice that they would like to access, or be forced to rely on online advice, in the event embedded commissions were to be prohibited.
4. For each of the following investment products, whether sold under a prospectus or in the exempt market under a prospectus exemption: • mutual fund • non-redeemable investment fund • structured note Should the product be subject to the discontinuation of embedded commissions? If not:	The prospect of reduced access to financial advice and resulting lower savings balances for Canadians constitute compelling policy rationales for not prohibiting embedded commissions. These lower levels of wealth accumulation will especially disadvantage Canadians with modest investment accounts. If embedded commissions are prohibited for the distribution of mutual funds they should also be prohibited for the distribution of like financial products and services that compete with mutual funds, regardless of whether or not these products are prospectus-qualified. If dealers and advisors cannot receive sufficient compensation to retain the viability of selling mutual fund products, it may encourage them to sell substitutable securities or insurance

[12] *Fee-based accounts: Why such an information gap on fees?* Globe & Mail. http://www.theglobeandmail.com/globe-investor/investment-ideas/fee-based-accounts-dont-advertise-prices-but-its-good-for-business/article25043240/ (Data from Pricemetrix).
[13] Strategic Insight, *Insight Report, 2016*.
[14] MFDA Client Research Report: A Detailed Look into Members, Advisors and Clients, ("MFDA Report"), p. 5-6
[15] Strategic Insight. *Insight Report, 2016*. 79% of mutual fund assets are sold with embedded commissions.

Questions	Industry Response
○ What would be the policy rationale for excluding it? ○ What would be the risk of regulatory arbitrage occurring in the exempt market if embedded commissions were discontinued for the product only when sold under prospectus?	products for which embedded commissions can continue to be earned. The risk of such arbitrage is significant and real in the MFDA channel where almost all of the advisors are dually-licensed.[16] Harmonization with insurance regulators on registrant conduct and product regulation should be a pre-condition to proceeding with this initiative. Imposing different rules for the distribution of similar financial products creates risk of harm to investors. By prohibiting embedded commissions for the distribution of a limited scope of investment fund products only, securities regulators will be creating opportunities for regulatory arbitrage. It is important to note that the Netherlands, the UK and Australia, which prohibited embedded commissions, all did so across a range of financial services (securities, insurance and banking) and not just for mutual funds. An undertaking by the CSA to monitor the work of the Canadian Council of Insurance Regulators in this area is insufficient to address the harm to investors presented by the arbitrage opportunity created by the regulators.
5. Are there specific types of mutual funds, non-redeemable investment funds or structured notes that should not be subject to the discontinuation of embedded commissions? Why?	Please refer to our response to Question 4.
6. Are there other types of investment products that should be subject to the discontinuation of embedded commissions? Why?	Please refer to our response to Question 4.
7. Do you agree with the discontinuation of all payments made by persons or companies other than the investor in connection with the purchase or continued ownership of an investment fund security or structured note? Why or why not?	No, we do not agree with the discontinuation of all payments by persons other than the investor. There is nothing objectionable to the embedded method of paying dealer compensation, provided the investor is informed. Other indirect payment methods where the investor provides instructions to pay fees to another are also not inherently troublesome as long the investor so instructs and understands the implications of paying fees in this manner.

[16] MFDA Report, p. 19.

Questions	Industry Response
	Survey data consistently shows that most investors prefer to pay through a bundled fee model.[17] For small investors, purchasing mutual funds this way is the best choice to gain access to advice and participation in the capital markets.
8. Are there other fees or payments that we should consider discontinuing in connection with the purchase or continued ownership of an investment fund security or structured note, including: a. the payment of money and the provision of non-monetary benefits by investment fund managers to dealers and representatives in connection with marketing and educational practices under Part 5 of NI 81-105; b. referral fees; and c. underwriting commissions. Why? What is the risk and magnitude of regulatory arbitrage through these types of fees and commissions?	**NI 81-105 – Sales Practices** Prohibiting the distribution of mutual funds using embedded commissions is a significant issue. The sales practices issues are referred to only tangentially in the Paper. We have ideas to improve NI 81-105 and are ready to discuss them with the regulators, but they should be addressed in a thoughtful and comprehensive dialogue dedicated to those issues. Removing the ability of fund managers to help defray the costs of educational conferences is likely to reduce advisor access to both general and product education, a result that is contrary to investor interests and regulators' expectations for enhanced product knowledge – one of the CSA's proposed targeted reforms in CP 33-404. **Referral fees** Referral fees should not be prohibited in connection with the purchase or continued ownership of an investment fund security, subject to disclosure of the fee to the client. However, enforcement should be pursued against any individuals who meet the business trigger for registration under NI 31-103 but who are not registered; for example former advisors who were disciplined for misconduct but continue to receive ongoing referral fees.
9. If payments and non-monetary benefits to dealers and representatives for marketing and educational practices under Part 5 of NI 81-105 are maintained further to the discontinuation of embedded commissions, should we change the scope of those payments and benefits in any way? If so, why?	Please refer to our response to Question 8.

[17] POLLARA. *Canadian Mutual Fund Investors' Perceptions of Mutual Funds and the Mutual Fund Industry 2016* ("Pollara 2016"), p. 28. In survey question 17, Preference for How Advisor is Compensated, 54% of investors responded that they prefer to pay their advisor through mutual fund fees that reduce their investment returns, rather than pay fees directly. This has been a consistent response rate annually since this question was first posed in 2013.

Questions	Industry Response
10. With respect to internal transfer payments: a. How effective is NI 81-105 in regulating payments within integrated financial service providers such that there is a level playing field for proprietary funds and third party funds? b. Should internal transfer payments to dealers within integrated financial service providers that are tied to an investor's purchase or continued ownership of an investment fund security or structured note be discontinued? Why or why not? To what extent do integrated financial service providers directly or indirectly provide internal transfer payments to their affiliated dealers and their representatives to incent the distribution of their products? c. Are there types of internal transfer payments that are not tied to an investor's purchase or continued ownership of an investment fund security or structured note that should be discontinued?	**Internal transfer payments** We believe that NI 81-105 has been very effective in regulating payments within integrated financial services companies, and cite the relative absence of enforcement actions in this area. We would observe generally that, if the CSA are of the view that internal transfer payments are equivalent to trailing commissions, and if the CSA decide to ban trailing commissions, then it would make sense to also ban internal transfer payments that are tied to an investor's purchase of a specific investment fund security. We will defer to the individual responses that our members may choose to submit in response to this Question.
11. If we were to discontinue embedded commissions, please comment on whether we should allow investment fund managers or structured note issuers to facilitate investors' payment of dealer compensation by collecting it from the investor's investment and remitting it to the dealer on the investor's behalf.	Yes, this payment method should be allowed, however it is unlikely to mitigate the consequences of a prohibition of embedded commissions for mass-market investors. We have included a discussion of this method of payment in our alternative proposal as a mitigation tool in the event of a prohibition because it would be one way to address the behavioral resistance of consumers to pay up front for advice where the value of that advice cannot be known at the time of purchase. However, there are operational issues to be resolved to implement this method of payment, as well as serious tax consequences that will need to be explained to all clients wishing to use such a payment method.

Questions	Industry Response
	For a more fulsome discussion of these issues, please refer to our response to Question 29.
12. Based on a consideration of the data and evidence provided in this Part, would a proposal to discontinue embedded commissions address the three key investor protection and market efficiency issues discussed in Part 2?	No. We believe that the data and evidence provided in this Part do not support prohibition of embedded commissions as the only solution to address the three key investor protection and market efficiency issues discussed. It is a disproportionate and unnecessary regulatory response. As we have cited in our response, the CSA concerns can be addressed in other ways without the negative impact of a prohibition; please refer to our alternative proposal in the submission letter. A key input supporting the CSA's proposal, the research paper by Cumming et al., *A Dissection of Mutual Fund Fees, Flows, and Performance*, was evaluated in three independent academic reviews. These reviews, similar in style to peer reviews that would be undertaken to evaluate work for publication, provide detailed evaluations of the methodology employed in the Cumming et al. work along with assessments of the strength of the research findings and conclusions. The reviews are consistent in finding serious limitations in the Cumming et al. analysis and they suggest that any conclusions should be subject to skepticism due to outstanding methodological issues. All these authors offer constructive suggestions for an improved future iteration. A summary of the academic reviews is provided in Appendix F, Peer Review of Fund Fee Research. Copies of the full academic reviews are annexed to the PwC report at Appendix G to this submission. **Conflicts of interest** As noted in our response to Question 1, PwC's research concludes that there is no significant evidence that embedded commissions in Canada have been leading to conflicts of interest influencing financial advisors' behaviour. A prohibition of embedded commissions would likely eliminate some of these influences, but would create new instances of misalignment of interests between investors and advisors via new fee schemes.[18]. Potential conflicts exist in any relationship, irrespective of the fee structures, so while the prohibition of embedded commissions might address the conflict of interest inherent in this compensation model, it would substitute for this conflict different, potentially more harmful or less manageable conflicts of interest associated with the other payment models. In general, conflicts of interest in financial advisory

[18] The PwC Report, p. 72

Questions	Industry Response
	relationships can be mitigated by increased financial literacy, increased transparency, and longevity of the relationship between advisor and investor.[19] **Awareness and Understanding of Fees** Investor understanding of fee payments is already high. Today 74% of mutual fund investors say they understand the fees they pay[20] and 73% say they know that the fees they pay are used in part to compensate their advisor[21,22]. In addition, the general level of education of mutual fund investors is relatively high, and while this may not be a perfect proxy for financial literacy, it is a good indicator that investors should be able to easily understand information, provided that it is presented in reader-friendly design and language.[23] On this basis, while the prohibition of embedded commissions would address to a degree the CSA's concerns with investor awareness and understanding of fees, we repeat that a prohibition of such commissions is a disproportionate and unnecessary regulatory response to the concerns raised. The CRM2 requirement that investors be given personalized reports on the fees they paid in the previous year, and the Fund Facts disclosure of the dollar and percentage amount of trailer fees depending on the amount invested at the time of purchase, have already effectively unbundled embedded commissions, and we expect that investor awareness, understanding and control of fees will improve as a result of these reforms. A prohibition of embedded commissions, and requiring clients to individually negotiate their own fees will, however, result in less transparency, less awareness of whether the fees they are paying are fair (no ability to compare with other firms or other investors) and may do nothing to enhance their ability to control fees. It will also make it more difficult for clients to assess their account performance since returns will no longer be expressed net of fees. The PwC research notes that one of the principles of a perfect competitive market is that information on prices should be known to all market participants. Moving away from embedded fees to individually negotiated fees will violate this principle and therefore may actually reduce competition.[24]

[19] The PwC Report, p. 38
[20] Pollara 2016, p. 25
[21] Pollara 2016, p. 27
[22] Appendix C, Effectiveness of Disclosure, on page 1 notes that the BCSC research found that, after receipt of their CRM2 statements, investors' awareness of direct fees rose from 59% to 76% and awareness of indirect fees rose from 48% to 59%.
[23] The PwC Report, p. 38
[24] The PwC Report, p. 48

Questions	Industry Response
	Embedded commissions do not align with the services provided Prohibiting the trailer fee will eliminate misalignment of the trailer fee and the service. However there is no evidence that other fee payment models that would remain available after a prohibition of embedded commissions would better align with the services provided. One example of a simpler and less disruptive approach to aligning the fees and services would be to set out in a service level agreement the services for which each investor is eligible, and the fees for those services, and to encourage the investor to take advantage of all services included for those fees.
13. Are there other ways in which the CSA could address these issues that could be introduced in conjunction with, or separate from, the discontinuation of embedded commissions?	Rather than prohibiting embedded commissions, the CSA should implement IFIC's alternative proposal described in the submission letter to which this document is annexed as Appendix A. The alternative proposal addresses the concerns raised by the CSA without the cost, disruption and unintended consequences that could result from a prohibition. In addition, the market has already moved, and continues to move, to address the concerns raised by the CSA, without regulatory intervention.[25] It is worthwhile to consider the unintended consequences of a prohibition in the two (of three) jurisdictions where a prohibition was implemented (and which were selected as case studies in The PwC Report), as well as the reasons why a prohibition was not implemented in those jurisdictions that considered, but expressly rejected, this approach. In addition, a number of European jurisdictions are domestically applying the MIFiD 2 Directive such that the ban on commissions applies only to independent distributors, which comprise only 11% of the distribution channel for mutual funds throughout Europe. [26]
14. Are there other conflicts of interest that could emerge following a transition to direct pay arrangements that would not be addressed in the current securities regulation framework?	A transition to direct-pay arrangements would not necessarily create new conflicts of interest but would highlight the existing conflicts embedded in those types of compensation models. The PwC research confirms that "Financial advisory services belong to the category of credence goods which implies that they are characterized by asymmetric information. As a consequence, potential conflicts exist in any such relationship irrespective of the fee structure."[27]

[25] See Appendix B, A Competitive and Changing Fund Industry.
[26] The PwC Report, p. 59-68, and p. 68-71.
[27] The PwC Report, p. 44

Questions	Industry Response
	The PwC report outlines, in detail, the various conflicts inherent in alternative compensation arrangements to embedded commissions.[28] Existing conflicts in current compensation arrangements have been identified by the CSA in their December 2016 report on firms' compensation practices,[29] and these are all addressed by current CSA and SRO rules. The SRO rules require the firm to put the clients' interests ahead of their own when there is a conflict of interest. There is evidence that there is widespread industry compliance as a result of these SRO rules.[30,31]
15. What effect do you think the removal of embedded commissions will have on investor experience and outcomes? In particular:	Commenting generally about the data and evidence produced by the CSA, the Paper fails to provide any evidence for the CSA's predictions that a prohibition of embedded commissions would: • reduce fund series by 65% and resulting cost reductions (page 51); • promote the emergence of smaller asset managers (page 53); • cause a decline of MERs by 25 to 50 bps for actively-managed equity funds and 10 to 25 bps for actively-managed fixed income funds (page 53); • drive a shift to lower-cost, passively-managed funds (pages 54,72); • increase index fund market share to 5% - 10% of the market in 5 years after a prohibition (page 55); • promote new market innovations that would ensure that mass-market households still have access to advice (page 57); • promote growth of on-line advice (pages 60, 62); • not deter deposit-taker and insurer-owned dealers to continue to serve mass-market households (page 63); and • have little direct impact on integrated business models (page 63).

[28] The PwC Report, p. 46-48.
[29] CSA Staff Notice 33-318, *Review of Practices Firms Use to Compensate and Provide Incentives to their Representatives*, (2016), 39 OSCB 10115.
[30] MFDA Bulletin #0705-C, publishing the results of a targeted review of Member compensation and incentive programs. The MFDA identified a small number of Members who provided incentives that favoured proprietary mutual funds or mutual funds of a particular fund family over other mutual funds. These cases were referred to Enforcement and were quickly remedied. Other compensation and incentive practices were identified that, in MFDA's view, increase the risk of mis-selling and unsuitable advice. Firms are expected to properly manage these risks and consider amendments to their compensation structure.
[31] IIROC Notice 16-0297, *Managing Conflicts in the Best Interest of the Client – Status Update*, December 15, 2016; IIROC Notice 17-0093, *Managing Conflicts in the Best Interest of the Client – Compensation-related Conflicts Review*, April 27, 2017.

Questions	Industry Response
	PwC's research, and the experience in other jurisdictions, tells us that any reduction in the availability of advice (whether through a reduction in number of advisors (however caused), or an increase in costs, or both) for all levels of investor, will negatively impact investor outcomes. Most importantly, investors with no further access to advice will have lower levels of assets in retirement than investors who have had the long-term and consistent benefit of an advice relationship throughout their investing lives.[32] The MFDA states that "Advisors may be using the embedded DSC commission paid by the fund company upon purchase to finance the cost of offering advisory services to mass-market clients. If so, a ban of embedded compensation would eliminate the DSC commission and may result in advisors having to charge clients an upfront fee to cover the cost of their services. As mass-market households are less likely to be able to afford direct-pay arrangements and are less likely to be eligible for fee-based programs, they would be the most impacted by a ban of embedded compensation."[33] The importance of effectively measuring investor outcomes and how prohibiting embedded commissions may affect outcomes is explored in greater detail in Appendix D, Measuring Investor Outcomes.
• Will investors receive advice and financial services that are more aligned with the fees they pay?	We do not need to prohibit embedded commissions to align advice and financial services received with fees paid. As noted in our response to Question 12, a simpler and less disruptive approach to align the fees and services would be to set out in a service level agreement the services to which each investor is entitled, and the fees for those services, and to encourage the investor to take advantage of all services included for those fees. This is one of the reforms in IFIC's alternative proposal.
• What effect will the proposal have on the growth of automated advice? Is this likely to be beneficial to investors?	We do not know what effect the proposal will have on automated advice, and the Paper does not provide any evidence to support the CSA's prediction that the proposal would promote new market innovations that would ensure that mass-market households will still have access to advice (p.57). Automated advice does not have a sufficient history to assess its ability to overcome investors' behavioural biases and to meet investor expectations, particularly in declining markets, for older investors in the de-cumulation stage and

[32]Montmarquette, C., & Viennot-Briot, N. (2016). The Gamma Factor and the Value of Financial Advice. CIRANO
[33] MFDA Report, p. 15.

Questions	Industry Response
	vulnerable investors. For a discussion of automated advice please refer to the PwC research[34] and to Appendix B, A Competitive and Changing Funds Industry. Effective use of technology provides the opportunity to lower costs and improve the client experience; the increased use of technology for this purpose is already occurring as a result of market competition.
• Is discretionary advice likely to increase in Canada as we have seen in the other markets that have transitioned away from embedded commissions and, if so, would this shift be positive or negative for investors?	We cannot predict whether there may be an increase in discretionary advice. Discretionary advice tends to be at the higher end of the cost spectrum. Accordingly, all things being equal, those who cannot afford this service today will still not be able to afford it after a prohibition. As such, it is not likely to become a realistic alternative to traditional investment advice for many investors.
• What effect will the proposal have on the growth of the online/discount brokerage channel and cost of fund products offered in this channel? Is this likely to be beneficial to investors?	We cannot predict whether there may be an increase in online accounts. The Paper provides no evidence for the CSA's prediction that the proposal would promote growth of on-line advice (p.60, 62). However, it is fair to suggest that more investors facing an advice gap would consider trying to invest on their own. We expect, as today, experiences will be mixed. Anecdotally we understand that many online accounts have been opened and funded, but remain un-invested due to behavioural fear of loss.
• What effect will the proposal have on the cost and scope of advice provided to specific investor segments?	Based on the PwC and MFDA research and the experience in other jurisdictions we expect that the proposal to prohibit embedded commissions will make advice less available, in particular, for the mass market.[35,36] There is a minimum cost for a dealer to administer a client's account, and that minimum is higher for fee-based accounts given the systems required by the dealer to bill and collect the fees on those accounts. Embedded commissions provide a certain assurance of an annual revenue stream that enables a dealer and advisor to receive a reasonable return on their investment in the client over time; however, as fee-based accounts do not provide that assurance, dealers using those arrangements must cover their costs as they are incurred. For this reason, many firms require a

[34] The PwC Report, p. 12 - 14.
[35] The PwC Report, p. 52-53, 55; MFDA Report, p. 15
[36] Appendix D, Measuring Investor Outcomes.

Questions	Industry Response
	minimum account size of $100,000.
16. What types of payment arrangements are likely to result if this proposal is adopted? In particular: • Would the payment arrangements offered by dealers to investors differ based on investor segment? If so, how and why?	Payment arrangements offered by dealers today already differ based on investor segment, and this will continue after a prohibition. As is currently the case, payment options will depend on how much the investor has to invest. We have identified the following possible payment arrangements that could be offered in the event of a prohibition on trailer fees: • Discount brokerage – investors can manage their own investments using an online discount broker account. Currently a large number of such accounts have been opened but remain in cash (un-invested). • There may be a return to front-end-load pricing, and possible reversion to previous higher load levels. In the exempt market, which consists mainly of one-time transactional deals rather than long-term advised relationships, front-end loads of 8 to 10% are common. • In a pre-authorized contribution arrangement, investors could have a percentage fee deducted from each installment - investors would not see this as a good deal. • Mutual fund transactions might become like stock transactions where an investor pays a fee or commission for every purchase and sale transaction. We should not forget that DSCs were created to address clients' worries about payment of up-front commissions • Hourly-rate billing for advice • Fee-based accounts, where an annual asset-based percentage fee or charge is remitted or deducted on a monthly or quarterly basis. As noted above these types of accounts are typical only offered to clients with a minimum account size of $100,000.
17. Do you think this proposal will lead to an advice gap? In particular: • Which segments of the market are likely to be affected? Please consider segmentation by wealth, geography (size and location of community e.g.	Our research suggests that prohibiting embedded commissions is likely to result in an advice gap for, at least, the mass-market investor. This has been the experience in other jurisdictions. The PwC report concludes that since the use of embedded commissions is more widespread in Canada than in the UK and Australia, the likelihood of an advice gap would be more pronounced than in those countries.[37] As noted in our submission letter, many

[37] The PwC Report, p. 71; MFDA Report, p. 19

Questions	Industry Response
remote, small, medium, large), age, technological sophistication, the level of fund ownership across households, etc.	countries are addressing conflicts of interest through policy and regulatory reforms, but are not doing so through a prohibition of embedded commissions. Of those, several have explicitly considered a prohibition and have decided against it out of fear of an advice gap. Instead these jurisdictions generally opted for more disclosure as a solution to conflict of interest issues.[38] The MFDA report suggests a slightly different impact on investors, "Given almost all licensed advisors with FA [financial advisory] firms are dually licensed to sell insurance and the CSA proposal to ban embedded compensation would not apply to insurance products (such as segregated funds), clients may not in fact experience any change in their advisory relationship. Rather, advisors may decide to recommend products or services to their clients that are not subject to the same regulatory requirements."[39]
• Do you agree with our definition of an advice gap?	The CSA's definition of advice gap on page 62 of the Paper is premised on three elements - an amount of advice, a price for that advice, and a point in time relative to today. This definition is too narrow. Given the proven value of advice to investors (and to the public policy goal of ensuring sufficient personal retirement savings) an advice gap should be seen as existing whenever personalized advice to the degree expected or needed by an investor is not obtainable by the investor from his or her preferred provider for any reason, not simply price.
• Should we differentiate between an advice gap for face-to-face advice and an advice gap generally?	No. Any reduced access to individual financial advice, resulting in lower savings available at retirement for Canadians, especially Canadians with modest investment accounts, would be a serious and harmful result. It does not matter whether the advice was provided face-to-face or over the phone. It is important that the market be allowed to continue to provide clients with choice as to how they want to access advice. As noted in the PwC research, other countries that have contemplated a prohibition on embedded commissions, but have rejected it, did so mostly for the fear of an advice gap. Instead they generally opted for more disclosure as a solution to conflict of interest issues.[40]

[38] The PwC Report, p. 71
[39] MFDA Report, p. 19.
[40] The PwC Report, p. 71

Questions	Industry Response
• What types of advice or services currently provided today would be most affected by the proposal?	We must be careful to avoid triggering any negative consequences to investors, particularly as there are other ways to address the regulators' concerns without resorting to a prohibition on trailer fees. Research confirms that, in 2016, nine out of ten mutual funds were purchased through a financial advisor, an increase over the last 5 years. It also confirms that 56% of investors would feel "not very confident" or "not confident at all" choosing mutual funds without the help of an advisor, and most investors would not be comfortable buying investment products on-line or through automated advice.[41] As noted in our response to the first bullet of this Question, the availability of advice to the mass-market would be most affected by the proposal.
• Are there any potential interactions between this proposal, existing reforms such as CRM2 and other potential reforms such as CSA CP 33-404 that may affect the size of any potential advice gap?	The reforms proposed in CP 81-408 and CP 33-404 will, in combination, significantly increase the cost of providing financial advice and accelerate and expand an already existing advice gap. Even without a regulatory best interest standard, the implementation costs of one or more of the proposed targeted reforms will increase operational costs that investors ultimately pay for.
• How could a potential advice gap, face-to-face advice gap or financial service gap be mitigated?	IFIC's alternative proposal addresses the concerns raised by the CSA without the cost, disruption and unintended consequences that could result from a prohibition.
• Do you think that online advice could mitigate an advice gap? If so, how?	Online advice may be of limited utility in mitigating an advice gap. The PwC research notes, "While robo-advice does seem to appeal to growing parts of the investor population, it is apparent that the current technology has limitations that do not enable it to effectively service all clients. While robo-advisors offer some guidance, robo-advisors in Canada currently do not offer complete financial advisory services. This may make them inadequate for investors with more complex financial planning needs, including estate planning and tax planning. Secondly, the questionnaires provided by robo-advisors to assess investors' needs may be too simplistic to provide appropriate advice. Finally, as this technology is fairly new, it is not yet clear whether robo-advisors can provide a substitute for the behavioural coaching that advisors provide."[42]

[41] Pollara 2016, pages 14,15 and 17-19
[42] The PwC Report, p. 14

Questions	Industry Response
• Do you think that the significant market share of deposit-taker owned and insurer-owned dealers in fund distribution in Canada will affect the size or likelihood of an advice gap to develop?	We defer to the individual responses that may be provided by our members in response to this portion of the Question.
18. Given some of the changes we have seen in the industry over the past few years (fee reductions, introduction of DIY series, streamlining of fund series, automatic fee reductions increasing access to fee-based options etc.), what is the likelihood that the fund industry will transition away from embedded commissions without regulatory action? In particular: • Will the industry continue to transition away from embedded commissions if the CSA does not move forward with the proposal?	As is discussed in Appendix B, A Competitive and Changing Fund Industry, for several years the fund industry has been transitioning away from embedded commissions and to direct-pay fee-based compensation for investors with higher asset levels. This transition will continue. However, because the embedded commission arrangement produces better outcomes for some clients and is preferred by many clients, embedded commissions will not disappear unless prohibited by regulators. The competitive market has driven reductions in trailer fees in addition to reductions in management fees, and this trend is also expected to continue. Canadian investors have seen a steady decline in mutual fund fees over the past decade. At 1.96% at the end of 2015, the asset-weighted MER for long-term mutual funds is at its lowest level—declining 8bps in just one year. The percentage of equity and balanced funds that pay above-average trailer fees (higher than 1%) sits at only 4%. This is less than half (from 10%) the level of just one year ago. All indications are that this trend will continue and that it will be increasingly difficult for funds and fund companies paying higher than average trailers to find shelf space in distribution channels. As shown in Appendix E, Active and Passive Management, one of the most significant market trends in recent years has been the rapid growth of passive ETFs. Sales of passive investment funds, particularly ETFs, are far higher than their relative market share. For example, while ETFs make up just 8% of investment fund assets, net sales in 2016 were 35.4% of investment fund sales. This trend is expected to continue. Currently in Canada, passive products make up 87% of the Canadian-domiciled ETF industry.
19. How accurate is Figure 8 regarding the purchase options available to fund investors by channel, account size and firm	We have no views on the accuracy of Figure 8, other than to note that, as we see it, the portfolio management channel is not a true comparator to fund distribution channels and, therefore, should not be included in the

Questions	Industry Response
type? In particular: • Do you see payment options and business models evolving at present? • How are they likely to change over time if the CSA were to choose not to move forward with the proposal?	comparison. Discretionary portfolio management is a very different service than the options for distribution of funds being considered in the table. There is already underway a significant market-driven evolution of business models. The development of new payment options and new products, and regular announcements of fee reductions and simplification of pricing are all current market trends that are expected to continue. The MFDA observes that since the implementation of CRM2, there has been a rise in fee-based platforms and accounts within MFDA membership.[43]
20. We note that the distribution of fee-based series is still relatively limited in Canada versus other markets. Are there obstacles (structural, operational, regulatory, investor demand, etc.) specific to Canada limiting the use of fee-based series by dealers?	The relative differences between jurisdictions in availability or popularity of product types, fee structures or other characteristics are not a result of obstacles but rather market evolution that is unique to each jurisdiction. The barriers to the use of fee-based series are the same everywhere – if there is no payment to the dealer, the client's account assets must be sufficiently large to support the higher costs of operating a fee-based account as opposed to an embedded fee account. For this reason there are minimum account thresholds for these arrangements, which make them practically unavailable to investors with account sizes below $100,000.
21. Please describe how discontinuing embedded commissions will affect competition and market structure and whether you agree with the analysis set out in Part 4? In particular:	We do not agree with the analysis in Part 4 suggesting the Canadian capital markets and the market for investment management and investment funds are not competitive. In fact, our research notes that the Canadian market has all the indicia of a competitive market. Please refer to Appendix B, A Competitive and Changing Fund Industry.
• Do you think the proposal will have an impact on the level of industry consolidation or integration? What about with respect to the concentration of mass-market investor assets held in investment products managed by deposit-taker owned firms?	PwC's research concludes that the proposal may accelerate industry consolidation and concentration of mass-market investor assets held in investment products managed by deposit-taker owned firms. Reduced profitability for some players may lead to consolidation of the advisory industry and the risk of increased bias towards funds produced by the same organizations that provide the advice. PwC suggests that banks are generally in the best position to serve less affluent clients who will stop using independent advisors.[44]

[43] MFDA Report, p. 13.
[44] The PwC Report, p. 53

Questions	Industry Response
• What are the likely impacts on investor outcomes and market efficiency of any potential consolidation?	Consolidation of market participants will leave investors with less access to financial advice, less choice of investment products and less competitive prices, producing inferior investor outcomes.
• What opportunities and what challenges do you think the proposal would introduce for specific industry stakeholder groups? o Independent dealers? o Independent fund manufacturers? o Integrated financial service providers? o Mutual fund dealers? o IIROC dealers? o Online/discount brokers?	PwC's research indicates that pricing and distribution pressures will increase for independent dealers and manufacturers. Advisors and dealers who rely significantly on less affluent investors may become economically non-viable or would have to shrink their businesses significantly.
• What is the likelihood and magnitude of regulatory arbitrage across similar financial products such as segregated funds and deposit-taker products?	Please refer to our response to Question 4.
• What would be the impact on dually-licensed mutual fund dealers and insurance agents?	Please refer to our response to Question 4.
• Will the proposal lead new, lower-cost entrants to the market? Why and how?	The market is already causing fund managers to be announcing, on a regular basis, fee reductions, and this trend is expected to continue with or without new entrants in the marketplace. It is difficult to predict whether the proposal will generate new entrants to the market and whether new entrants would be lower cost. To the extent an entrant sees opportunity to fill a need and can do so at a pricing level that generates profit, it is a fair assumption that such entrants would emerge. However, as noted in our response to Question 12, we do not think the Paper provides any evidence for CSA

Questions	Industry Response
	predictions that a prohibition of embedded commissions would, among other results, lead to new, lower-cost entrants to the market. There are a very small number of large low-cost passive ETF providers in Canada and the US. The ability of new entrants to compete in this space is limited, given the inability to compete with product differentiation and the importance of scale in delivering the lowest-cost offering.
• Does the interaction between this proposal and the proposals set out in CSA CP 33-404 change your responses to the questions above and, if so, how?	CP 81-408 and 33-404 will have the complementary effect of increasing costs and enhancing the advantages of scale and affiliated distribution. As we noted in our response to Q17, bullet 5, the reforms proposed in CP 81-408 and CP 33-404 will, in combination, significantly increase the cost of providing financial advice and accelerate and expand an already existing advice gap. Even without a regulatory best interest standard, the implementation costs of one or more of the proposed targeted reforms will increase operational costs that investors ultimately pay for.
• Will a transition away from embedded commissions reduce fund series and fee complexity, as we have contemplated?	A prohibition of embedded commissions will result in elimination of new sales of fund series with embedded commissions. Simplification of fund fee series is already underway in the market, and will continue regardless of regulatory reform. Fee-based models may or may not be more complex and may or may not be simpler for investors to understand. Investors in fee-based arrangements will know what they are paying, but will not have enough comparative information to know whether they are paying more or less than their neighbours.
• Do integrated financial service providers have an advantage in terms of their ability to cross-sell and cross-subsidize across business lines? If so, how?	The PwC research suggests that in the face of a regulatory prohibition on embedded commissions Canadian banks are best positioned, in terms of infrastructure and reputation, to serve mass-market investors through robo-advice and hybrid advice models that are affordable to those investors. This is especially relevant for smaller and more remote communities, where a bank or insurer might be the only alternative to a local independent advisor or firm that cannot afford to serve their clients anymore.
• What are the potential effects on competition of the rise in online advice? Are these effects likely to be large and positive?	We refer to our response to Question 17, 7th bullet, which discusses PwC's views on the limitations of robo-advice. PwC finds that notwithstanding the above limitations and any changes in regulations, it appears that the growth in the use of robo-advice will continue to accelerate, driven by

Questions	Industry Response
	evolving technology (i.e. artificial intelligence) and the increasing adoption of such technology by younger generations.[45]
22. What impact will the proposal have on back office service processes at the investment fund manager or at the fund dealer? In particular: • Is there any specific operational or technological impact that we should take into consideration?	We cannot underestimate the magnitude of the administrative and client-contact changes that will be necessary for investment fund managers, dealers and advisors to transition away from embedded commission arrangements, and the resulting burden and loss of trust experienced by investors who will not understand why the regulator is forcing a change to their compensation model. Many dealers will need to establish fee-based compensation models and, in addition will be faced with necessary task of meeting with each and every client to transition to alternative account types by the implementation deadline – an enormous task that will yield few benefits other than to bring the industry into compliance with the new rules. This is among the number of disproportionate consequences we can expect to be triggered by a prohibition on embedded commissions.
23. The payment of embedded commissions requires the dealer and the investment fund manager to implement controls and oversight (with associated compliance costs) in order to mitigate the inherent conflicts of interest today. • Would the transition to direct pay arrangements alleviate the need for some of these controls and oversight? • To what extent, if any, does the use of direct pay arrangements by representatives today (e.g. when a representative provides services under a fee-based arrangement) alleviate the need for some of these controls and oversight?	As we have noted in our response to Questions 1 and 12, prohibiting embedded commissions does not eliminate all conflicts of interest, only those inherent in the embedded commission model. Moving to alternative compensation arrangements replaces those conflicts with conflicts that are inherent in the alternative compensation arrangements. For this reason, dealers and investment fund managers will continue to need to have in place controls and oversight of conflicts, with measures to identify and manage them, regardless of the compensation arrangements that are offered to investors.

[45] The PwC Report, p. 14

Questions	Industry Response
24. Embedded commissions, especially trailing commissions, provide a steady source of revenue for dealers and their representatives. If embedded commissions were discontinued, would dealers be able to compensate for the loss of this revenue with direct pay arrangements?	Canada's is a competitive market in which we expect many dealers would be able to establish new pricing models that would enable them to continue to receive the same or similar levels of revenue from their client base, taking into account that they may have fewer clients. It is expected that any new pricing model they adopt would allow them to collect more fees from each of their fewer number of clients. However some dealers that serve the mass market would have difficulty in developing pricing models that would continue to generate sufficient operating revenues for them while allowing them to continue to serve their mass-market clientele. PwC notes that advisors and dealers who rely significantly on mass-market investors may become economically non-viable or would have to shrink their business significantly. As such "reduced profitability for some players may lead to consolidation of the advisory industry and the risk of increased bias towards funds produced by the same organizations that provide the advice".[46] This will lead to an increase in the cost of advice for investors, and a reduction in the number of advice providers, particularly those that are accessible to mass-market clients. Mass-market clients would be forced to go without advice, or choose to invest online without advice, or use a robo-advice solution.
25. Aside from commission grids and salaries, what other approaches to representative compensation might dealers use if we were to discontinue embedded commissions? How are these approaches likely to change over time?	A prohibition on embedded commissions would have no impact on how advisor performance is assessed and rewarded and, therefore, would have no impact on dealer commission grids and salaries. Dealers would still have to fairly allocate revenues between themselves (for dealership management and administration) and their advisors (compensation).
26. What impact will the proposal have on representatives in the industry? In particular, what impact will the proposal have on the: • career path; • attractiveness of the job; • typical profile of individuals attracted to the career;	A change in payment arrangements by itself is unlikely to have any impact on the attractiveness of a career for incumbent advisors. Experience has shown that advisors moving to a fee-based model earn as much or more than under the embedded model. Fee-based advisors may serve fewer, but larger investors. However, a prohibition on embedded commissions will make it more difficult for new advisors to enter the market and build their books of business, as they typically begin their careers advising new and smaller investors, for whom fee-based accounts will be uneconomical. This limitation

[46] The PwC Report, p. 53.

Questions	Industry Response
• recruitment; and • relative attractiveness of careers in competing financial service business lines?	will diminish the attractiveness of this career choice for new entrants. The increasing regulatory burden, and significantly increased litigation risk whether for errors, or perceived lack of suitable recommendations, is also adding to reduce the attractiveness of financial advisor as a career choice.
27. How practicable are the mitigation measures discussed and how effective would these measures be at assuring: • access to advice for investors, • choice of payment arrangements for all investor segments, and • a level playing field amongst competing investment products?	In 2016, approximately 79% of all mutual fund assets were purchased using embedded commissions[47]. Prohibiting this distribution channel will have transformational effects on investment fund managers, distributors and most importantly, their investors. The Paper acknowledges that the proposal to prohibit embedded commissions favours some business models over others. Greater concentration of ownership, higher costs, fewer advisors and less access to advice are predictable outcomes[48]. The Paper provides little evidence that any of the mitigation measures proposed would minimize or prevent any of these negative outcomes. These outcomes are disproportionate to the harm the CSA is seeking to mitigate, especially given alternative reforms such as those proposed by IFIC that address the harms raised by the CSA, that are focused on ensuring access to advice and choice of payment arrangements, and that avoid the unintended consequences of a prohibition.
28. What other measures should the CSA consider to mitigate the above unintended consequences?	The regulatory framework should preserve as much choice as possible, consistent with investor protection, and the market should be permitted to address regulators' concerns, as is already occurring. The CSA should consider IFIC's alternative proposal.
29. Other than the potential impacts we have identified in Part 4, what other potential unintended consequences, including operational impacts and tax consequences, may arise for fund industry stakeholders and investors further to the discontinuation of embedded commissions? In particular: a. Would there be a negative tax impact to investors associated with their payment	We will defer to the individual responses that may be provided by our members in response to the operational impacts portion of this Question. With respect to the tax issues, periodic fund redemptions in a non-registered account, including to pay dealer compensation as proposed, would result in capital gains/losses to the investor. Capital losses, in particular, could increase tax complexity to the extent that an investor has an arrangement to periodically purchase new units of a given fund. For example, a client who has a pre-arranged purchase plan to automatically buy new units of a fund every month could trigger the superficial loss rules to the extent a capital loss is realized on units of the same fund

[47] Strategic Insight, *Insight Report 2016*.
[48] The PwC Report, p. 53

Questions	Industry Response
of dealer compensation under direct pay arrangements? In particular, would the investor's payment of dealer compensation through periodic fund redemptions facilitated by the investment fund manager attract tax consequences? Please explain. b. To the extent a transition to direct pay arrangements results in the rationalization of fund series, could this rationalization attract negative tax consequences for investors? c. What, if any, measures, regulatory or otherwise, could assist in mitigating potential operational and tax impacts?	disposed of in the same month. Clients would be required to track losses and new purchases to comply with the rules for claiming losses on re-acquired property; to the extent they attempt to claim losses in contravention of the rules, they may be subject to reassessments and penalties. In the case of registered accounts, the situation is less clear, as Canada Revenue Agency is still in the process of finalizing its position on registered plan fees. To the extent such withdrawals are made from RRSPs and RRIFs they would in most cases be taxable to clients. Such withdrawals may also trigger the application of HST in cases where HST did not apply before. Whether there are negative tax consequences because of rationalization of fund series due to a transition to direct-pay arrangements will depend on the fund series. For some funds, there will be rollover treatment, while for other funds, the rationalization of fund series will result in the recognition of a gain or loss.
30. With respect to the loss of a form of cross-subsidy from high net worth investors to lower-wealth investors in a fund further to a transition to direct pay arrangements, a. to what extent (please quantify where possible) would the loss of this cross-subsidy increase the cost of providing advice and services to lower-wealth fund investors under direct pay arrangements?; b. does the existence of this form of cross-subsidy suggest that high net worth fund investors may be indirectly paying fees that are not aligned with the services they are receiving (i.e. do the fees they pay exceed the actual cost of the services and advice they receive?); and	We do not have data on the possible cross-subsidization effect of the embedded commission model; however, we note that the potential for cross-subsidization is not unique to embedded commission payment models. To the extent that cross-subsidizations might be considered to exist, they would exist across all financial services compensation models where the revenues generated by one client exceed those generated by another. Eliminating embedded commissions will not eliminate the asymmetry in client fee levels – individual high net worth clients will continue to contribute higher revenues to the dealer than will individual low asset investors. Embedded commissions do benefit smaller investors. As was noted in our response to Question 3, most investors start with small amounts to invest and actually receive advice and services worth more than their account balances would pay for. In an embedded fee relationship, even a first-time investor with $15,000 to invest is likely to receive more than the $75 in advice that his/her trailer fee would cover (assuming a 50/50 split of the trailer fee between the dealer firm and the advisor). Later, as their asset levels increase, these investors contribute higher levels of fees to the dealer's revenues. The high net worth investor is in a position to negotiate a

Questions	Industry Response
c. what measures may mitigate the potential effects on dealers, representatives and investors from the loss of the cross-subsidy?	fee arrangement – one that s/he perceives as providing value for the services received. Under an embedded commission model, high net worth investors can negotiate better loads and be eligible for reduced trailing commissions. Many choose a fee-based payment model and seek a broader suite of advisory services than those required by a low net worth investor.
31. What measures could fund industry participants proactively take to mitigate the unintended consequences that may stem from the discontinuation of embedded commissions?	As the UK and Australia experiences have shown, the bulk of remediation required to correct the unintended consequences of a prohibition on embedded commissions will fall to governments and regulators. In the UK, the Financial Conduct Authority has had to establish an Advice Unit to support businesses looking at low-cost automated advice solutions. The government is consulting on a proposal to allow individuals to withdraw up to £500 from their government pensions (potentially more than once) to pay for their pre-retirement financial advice. The embedded commission model originally evolved in order to make mutual funds and financial advice accessible to modest investors in a way that was efficient for the industry. It is the responsibility of regulators to fully analyze the potential impact on Canadian investors of a prohibition of embedded commissions and, if they decide to proceed, to have specific plans in place to ensure that investors are not disadvantaged.
32. For each transition option, please tell us how your business (investment fund manager or dealer) would have to operationally change or restructure in terms of systems and processes and the related cost implications. Where possible, please provide data on the estimated costs. • Are there unique costs or challenges to specific businesses? • What transition period would be appropriate? • Should existing redemption schedules for DSC and low-load purchase options be maintained until the redemption schedule is	As we strongly disagree that a prohibition of embedded commissions is an appropriate solution to the issues raised in the Consultation Paper, we disagree with the need to transition away from embedded commissions. However, should the CSA decide to proceed with a prohibition, the transition decisions to be taken by any particular investment fund manager or dealer in response will depend on each firm's business model and its desired strategic business direction. For this reason we defer to the individual responses that may be provided by our members in response to this Question.

Questions	Industry Response
completed, or discontinued at the Transition Date?	
33. Which transition option would you prefer? Why? Are there alternative transition options that we should consider?	Please refer to our response to Question 32.
34. As discussed in Appendix B, the CSA did not retain the option of capping embedded commissions, either as a stand-alone solution to the key issues discussed in Part 2 or as an interim step toward an eventual discontinuation of embedded commissions. Should the CSA further consider using a fee cap as a transition measure? Why?	The CSA should consider capping or standardizing embedded fees as one element of a stand-alone solution, as this will mitigate the financial incentive for an advisor to recommend a fund based only on trailer fee. Consideration would have to be given to transparency of standard rate variability. In Canada, as a practical matter, trailer fees are effectively capped already, given that 96% of all equity and balanced funds are at or below a 1% trailing commission.
35. Please explain whether you think each of the initiatives discussed above will, either alone or in combination: • address the three investor protection and market efficiency issues and their sub-issues identified in Part 2; and • address or not address any additional harms or issues that you have identified.	**POS and CRM:** We agree with the CSA's view in the Paper that the Point of Sale and CRM 1 & 2 reforms, now implemented, will improve investors' awareness and understanding of mutual fund costs and performance, and make them more informed and active consumers of investment fund products and advice services: • "increased transparency should better enable investors to compare the costs of investing which should help investors manage the impact of fund costs on returns" (p.87). • performance reports will allow investors to better assess the true costs and value of the services they receive, and, overtime time, may lead to better performing funds (p.87) The addition of IFIC's alternative measures to these disclosure reforms will further address the investor protection and market efficiency issues identified in the Paper. **Compliance reviews:** We agree that compliance reviews may assist in addressing conflict of interest (p.90). Vigorous and coordinated compliance reviews of the current rules combined with the strategic use of enforcement action in appropriate cases has proven to be an effective deterrent to misbehaviour for registrants with ongoing businesses and reputations to

Questions	Industry Response
	protect. **CP33-404 Proposals:** We acknowledge the CSA's view in CP 81-408 that some of the targeted reform proposals in CP 33-404 may: • Lead to better conflict of interest management and mitigation (p.93); and • Cause tied forms of compensation to play less of a role in product recommendations (p.93). Given the CSA's conclusion that the combination of the proposals in CP 33-404 and the POS and CRM initiatives may address the conflicts of interest in embedded commissions (p.93), we question whether a prohibition on embedded commissions needs to be pursued at this time.
36. Are there alternative options or measures, whether regulatory or market-led, that could successfully address the three investor protection and market efficiency issues and their sub-issues identified in Part 2. If so, please explain.	Please see IFIC's alternative to a prohibition which would address many of the CSA concerns but maintain investor choice. The alternative is described beginning on page 6 of IFIC's comment letter to which this document is attached as Appendix A.

APPENDICES B - F

Appendix B - A Competitive and Changing Funds Industry 40
- Importance of Mutual Funds to Canadians 40
- Competition and Price 41
- Cost of Mutual Funds 43
- New Fund Company Entrants and Changing Distribution Landscape 44
- Incentives for Performance 45
- Conclusion 46

Appendix C - Effectiveness of Disclosure 47
- Early Evidence of the Impact of Enhanced Disclosure 47
- Academic Research on Disclosure and Conflict of Interest 47
- Conclusion 48

Appendix D - Measuring Investor Outcomes 49
- Measuring Harm 49
- Value of Financial Advice 49
- Goals-Based Planning 51
- Banning Embedded Fees Will Cause Many Canadians to Pay More for Advice 51
- Impact on Seniors and Vulnerable Investors 53
- Conclusion 53

Appendix E - Active and Passive Management 54
- Growth and Availability of Passive Funds 54
- Comparisons of Active and Passive Investing 55
- Market Efficiency 55
- Risk 56
- Conclusion 56

Appendix F - Peer Review of Fund Fee Research 57

A COMPETITIVE AND CHANGING FUNDS INDUSTRY

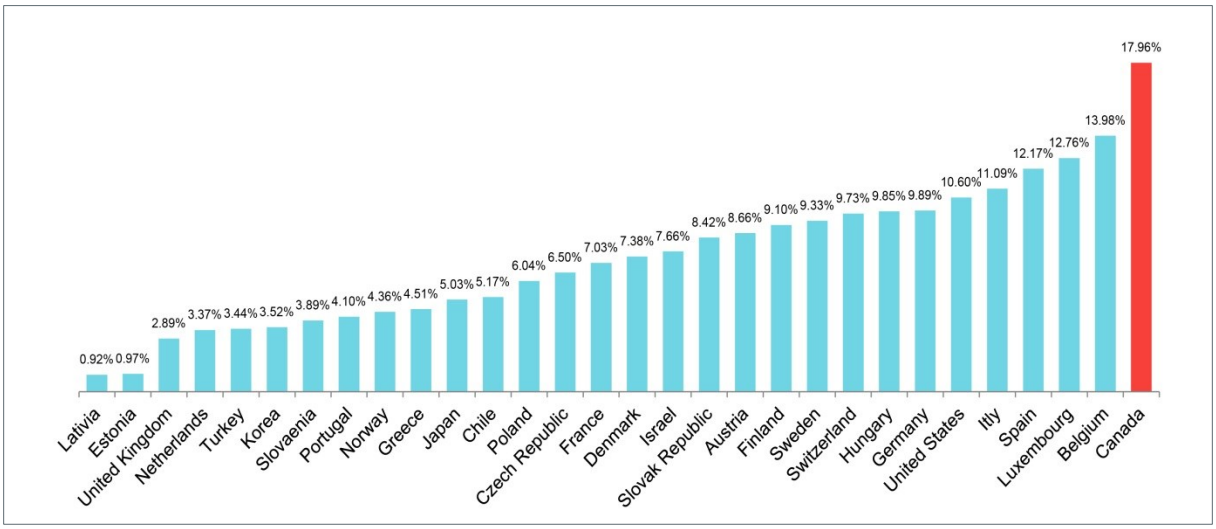
The CSA Consultation Paper 81-408 – Consultation on the Option of Discontinuing Embedded Commissions ("the Paper") makes a number of observations about the Canadian funds industry and the importance of mutual funds in helping Canadians build wealth. For example, the Paper seems to minimize the importance of mutual funds for less affluent Canadians, observing that "investment funds are less popular than traditional savings vehicles with mass-market households" and that "mass-market households make up the largest share of *those that do not* own investment funds". There are also numerous statements that investors do not receive value for money in actively-managed funds and a concern that Canadians pay "among the highest mutual fund fees in the world". The Paper also presents the view that embedded commissions encourage high fund costs, inhibit competition by creating a barrier to entry and reduce investment fund managers' focus on fund performance.

Standing in contrast to these observations, a preponderance of evidence would suggest that Canadian investors benefit from a highly competitive investment funds industry that sees a continual stream of new entrants to the market and a relentless focus on fees and fund performance.

Importance of Mutual Funds to Canadians

The share of Canadians' financial wealth that is invested in investment funds has been steadily increasing since 1990 and has now overtaken the share of financial wealth in deposits. At the end of 2016, with over $1.3 trillion in assets, mutual funds' share of financial wealth stood at 32.5%.[1] In the US, the figure is 22% (including assets in all US—registered investment companies—mutual funds, exchange-traded funds, closed-end funds, and unit investment trusts).[2] According to the OECD, Canada has the highest level of mutual fund ownership as a percentage of total financial assets.[3]

Figure 1: Mutual Funds as percentage of total financial assets – 2015 – OECD National Accounts



Source: OECD. Household Financial Assets - Mutual fund shares, % of total financial assets, 2015[4]

[1] Strategic Insight, 2017.

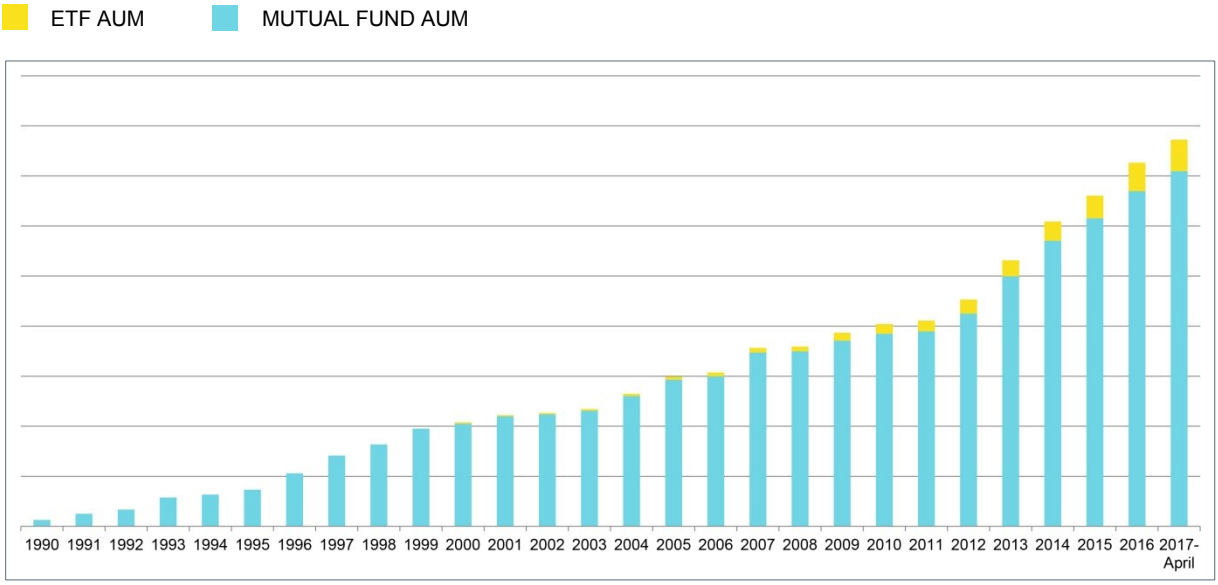
[2] ICI Factbook. 2017

[3] OECD. National Accounts. 2015. The OECD uses a different methodology than either Strategic Insight or ICI producing lower levels of overall ownership for both countries. However, the proportional differences do not change. OECD defines household financial assets as: currency and deposits; securities other than shares; loans; shares and other equity; net equity of households in life insurance reserves; net equity of households in pension funds; prepayments of premiums and reserves against outstanding claims; and other accounts receivable. https://data.oecd.org/chart/4QBe

[4] https://data.oecd.org/hha/household-financial-assets.htm

The mutual funds industry has been a strong promoter of government-sponsored savings initiatives, such as RRSPs, RESPs, RDSPs and TFSAs, which has led to increased participation and savings rates by Canadians in these vehicles. Indeed, mutual funds make up 55% of Canadians' registered assets.

Figure 2: Growth of mutual funds and ETFs in Canada in Billions (source: IFIC)



Mutual funds are also critical savings vehicles for modest investors. Most Canadians are modest investors, or have been at some point in their lifetimes. According to Strategic Insight data, up to 79% of Canadian households with financial assets may fall within this category today.

Recently published data from the Mutual Fund Dealers Association of Canada ("MFDA") finds that financial advisors licensed with the MFDA represent close to nine million households in Canada, or about 56% of all households. Of those households, 83% fall within the mass-market space, defined as those with less than $100,000.

Why should Canadian regulators be concerned about modest investors who have such relatively low levels of assets? The answer is that a significant proportion of these investors are at an early stage of their investing lifetimes and, with advice, over time their assets can grow substantially to serve their lifelong needs. The IFIC-sponsored Pollara investor survey indicates that more than half (55%) of mutual fund investors who began their advisor relationships with assets of less than $100,000 currently report investment assets exceeding $200,000.[5]

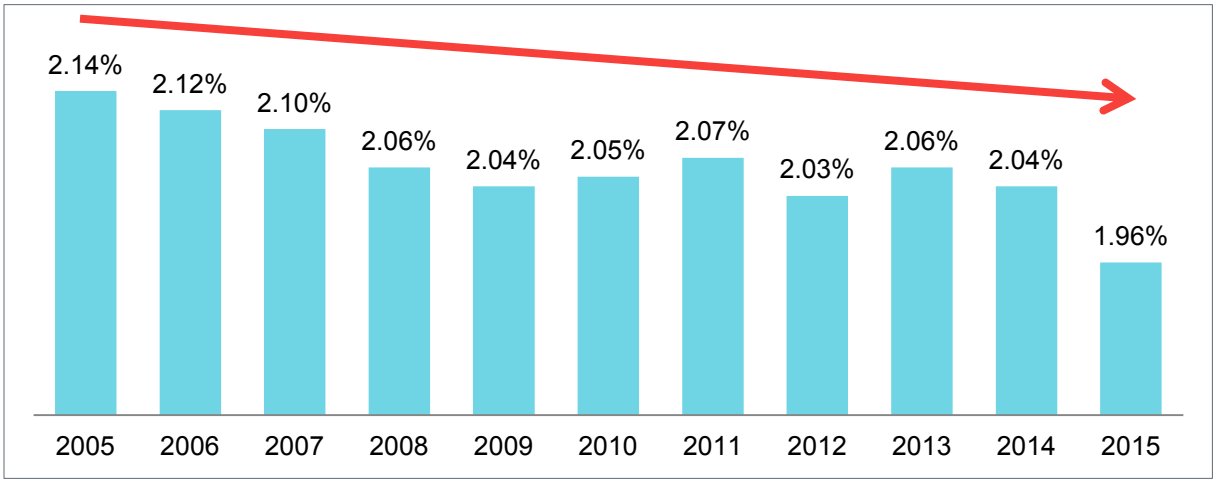
Competition and Price

Canada's investment funds industry has the hallmarks of a highly competitive industry, with over 115 mutual fund providers offering more than 3,300 unique funds and a combined 20,000 mutual fund series. The recent growth and proliferation of ETFs, both Canadian- and US-domiciled, by established players and by more recent entrants is providing an unprecedented degree of choice and competitive pressure. As observed by Strategic Insight in its 2016 review of the industry: "The continual rise in popularity of comparatively lower-cost investment vehicles—at least those populating the passively-managed end of the ETF shelf—in tandem with growing competitive pressures have begun to exert pressure on fund manufacturer revenue formulas."

[55] Pollara Investor Survey - 2016

The Canadian investor has seen a steady decline in mutual fund fees over the past decade. At 1.96% at the end of 2015, the asset-weighted MER for long-term mutual funds is at its lowest level—declining 8 bps in just one year.

Figure 3: Asset-Weighted MER for Long-Term Funds



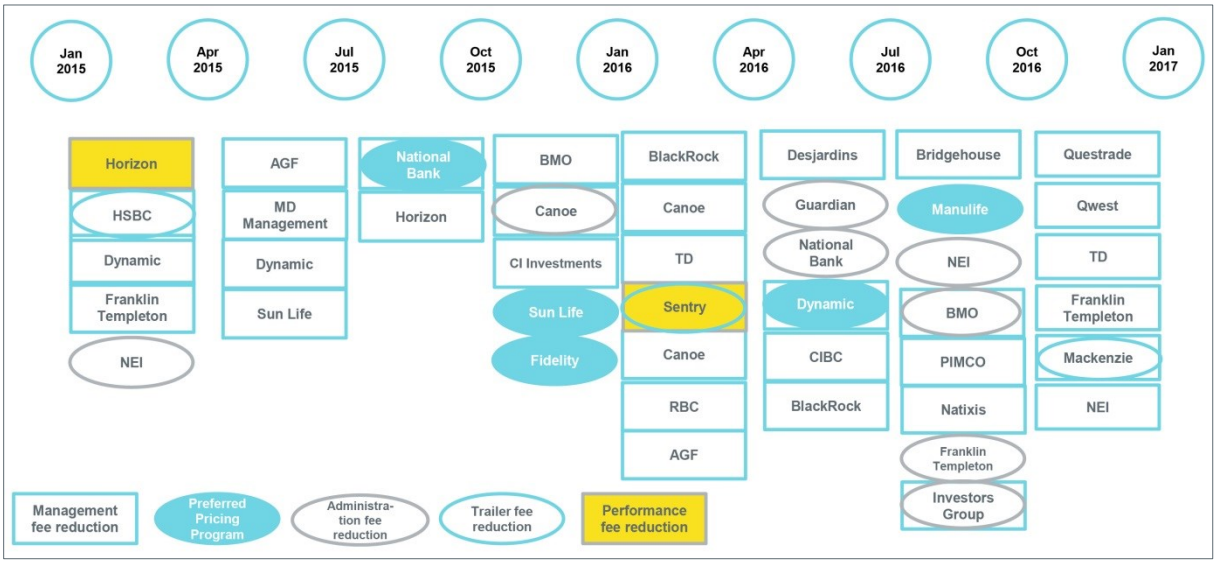
Source: Strategic Insight. *Insight*, January 2016

In 2016, at least 25 firms, including both mutual fund and ETF providers, reduced their fund pricing. And it is not just investment management fees and administration fees that are falling; there is increasing movement to lower trailer fees. The percentage of equity and balanced funds that pay above-average trailers (greater than 1%) sits at 4%. This is dramatically fewer funds than several years ago and a drop of over one half (from 10%) from just one year earlier.

Downward pressure on pricing almost certainly also relates to the lower expected global growth and lower expected returns that guide current thinking. These forces make fees an even more important determinant of future returns.[6] As well, the emergence of a growing array of financial services technologies is decreasing the cost of distribution, especially for the mass market.

[6] McKinsey, 2016 Paper: Diminishing Returns: Why Investors May Need to Lower Their Expectations. http://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/why-investors-may-need-to-lower-their-sights

Figure 4: Fee Reduction and Re-pricing Initiatives



Source: Strategic Insight. *Insight*, January 2016

The re-pricing trend is accelerating. Since the above chart was published in January, 2017, there has been a rash of fee reduction and re-pricing announcements, including from Scotia Asset Management, BMO Investments, Fiera Capital, Horizons ETFs, Mackenzie, and CI Investments.

Cost of Mutual Funds

The pressure on pricing can best be appreciated when comparing the cost of ownership of mutual funds between Canada and the United States, a market that is more than ten times the size of Canada's. Research commissioned by IFIC from Strategic Insight and referenced in the Paper shows that mutual fund fees in the US and Canada are comparable for advisor-assisted clients. On a tax-adjusted basis (there is no value-added tax in the US) the asset-weighted cost of ownership in Canadian advice channels is estimated to be 2.02% of invested assets compared to the level of approximately 2% in the US And for modest US investors (those with less than $100,000 to invest), the asset-weighted cost of ownership increases to 2.40%.[7]

The persistent statements about Canadian mutual funds being the highest priced in the world can be traced back to a 2011 Morningstar report which became a source for other reports and commentators. However, in 2015, Morningstar published an update that concludes that a more proper comparison would place Canada at: "the top half of lower fee markets" in the 25 countries that were studied.[8]

The flaw in the original analysis was its failure to recognize a key difference in the expense ratios reported in different countries. In Canada, published expense ratios generally include the costs of distribution. In the US and several other countries, most investors pay additional fees for advisor services that are not captured in the reported expense ratio. To properly compare expense ratios with Canada, the advisor fee must be added to expense ratios in other countries, as was done in the Strategic Insight report referenced above.

[7] 2015 Update - Monitoring Trends in Mutual Fund Cost of Ownership and Expense Ratios - A Canada – US Perspective - May 2015 Update to the 2012 study by Investor Economics and Strategic Insight

[8] http://corporate.morningstar.com/US/documents/2015%20Global%20Fund%20Investor%20Experience.pdf?INV=82e08cea-55, p. 22

New Fund Company Entrants and Changing Distribution Landscape

The Canadian mutual funds industry continues to attract new players. Over the past ten years (2007-2016), more than 50 firms have entered the segment, ranging from small independent firms to large U.S-based fund providers including PIMCO, BlackRock and Federated Investors.

Since the beginning of 2016, ten firms have begun to offer Canadian-listed ETFs, including several traditional mutual fund companies.

As noted in Appendix E, one of the most significant market trends in recent years, globally and in Canada, has been the rapid growth of passive ETF funds. While active management dominates the funds industry in terms of assets under management, sales of passive investment funds, particularly ETFs, are far higher than their relative market share. For example, while ETFs make up just 8% of investment fund assets, net sales in 2016 were 35.4% of investment fund sales. Currently in Canada, passive products make up 87% of the domiciled ETF industry.[9]

There is consolidation in the distribution side of the fund industry, however, technology is allowing for market innovations that are creating novel approaches to product sales and putting increased pressure on traditional channels.

While the robo-advice segment in Canada is a nascent offering, with likely no more than $1 billion in AUM at the end of December 2016[10], there are 16 firms now operating in this space.

New trading platforms are also disrupting traditional distribution, with platform-traded funds offering the ability for actively-managed mutual funds to be traded and settled in a similar manner as publicly-listed securities and ETFs. With growing assets traded through these platforms and a growing number of dealers utilizing them, they seek to provide a streamlined approach to trading with a lower transaction cost model.

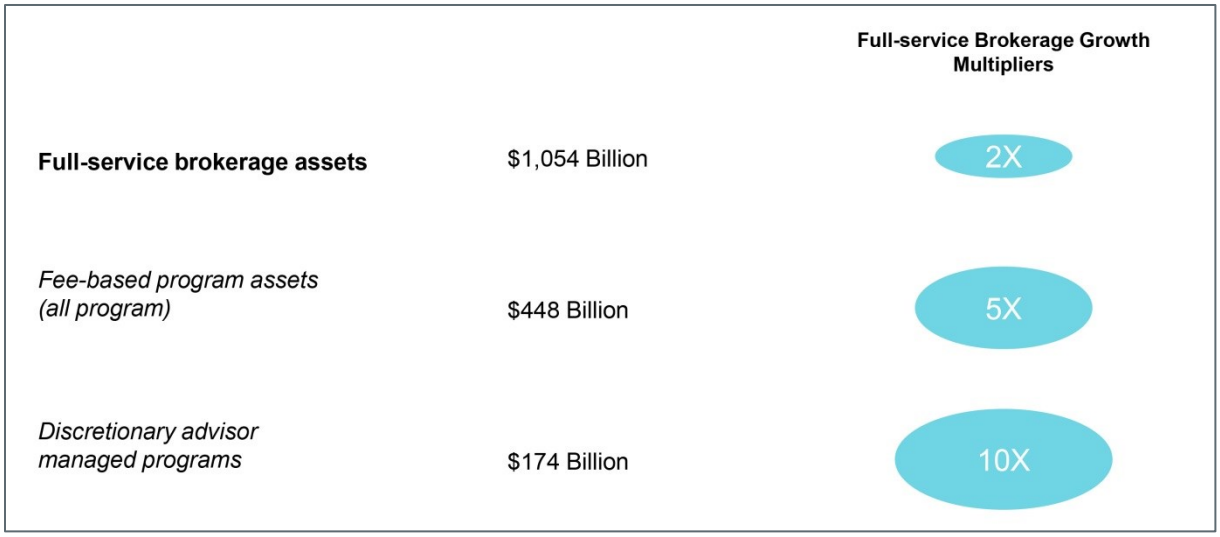
Furthermore, ETFs are beginning to be made available to advisors registered in the MFDA channel. While the MFDA permits ETFs to be sold in that channel, the majority of fund dealers do not currently have access to stock exchanges where ETFs are bought and sold. Through the work of the Canadian ETF Association and others, access to ETFs is being enabled for a growing number of MFDA dealer firms - a trend that is expected to continue.

Another major trend in the market today is the accelerating shift to fee-based accounts for investors with accounts of at least $100,000 in assets. While this trend is certainly dominant in the full-service brokerage business, it is evident too in the independent and life insurance businesses. Today, 20% of mutual fund assets are sold with unbundled compensation, double the amount from 2010. Over the same period there has been a ten-fold increase in discretionary advisor managed programs. In the last year, fee-based mutual fund assets grew by 41.6%, a faster rate of growth than any other fee structure.

[9] CSA Consultation Paper 81-408 – Consultation on the Option of Discontinuing Embedded Commissions

[10] Investor Economics, January 2017.

Figure 5: Assets in fee-based programs have significantly outgrown overall channel assets in the last 10 years



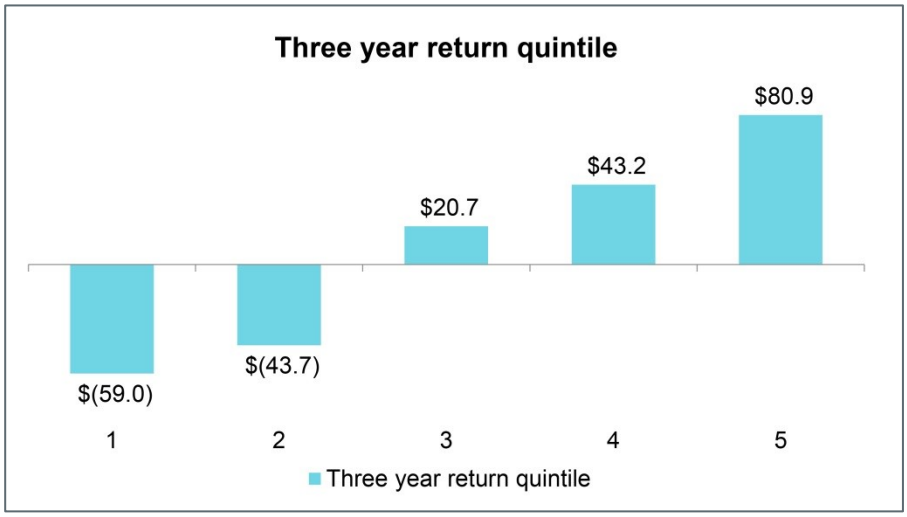
Source: Strategic Insight

Incentives for Performance

While most active portfolio managers' compensation is very directly tied to their ability to generate excess returns, a more fundamental reason that fund companies strive to generate good returns is that performance drives fund sales. One can argue whether investors are well-served by channelling money into funds that have performed better (based on one-month, one-year or even five-or-ten-year past performance) but the data is clear that money follows returns.

For example, the IFIC-commissioned Strategic Insight report, *Analysis of the Factors Influencing Sales, Retention and Redemptions of Mutual Fund Units*, 2015, and referenced in the Paper, identified over 40 factors that explain the sale and retention of mutual funds. The report finds that relative performance is the single biggest driver of flows.

Figure 6: Mutual fund net flows by three-year investment return quintile – all asset classes



Strategic Insight: Analysis of the Factors Influencing Sales, Retention and Redemptions of Mutual Fund Units, 2015

The chart above shows that funds that performed better than their peers by risk-adjusted returns, ranking in the top three quintiles of three-year returns, had positive inflows, while those in the bottom two quintiles experienced net redemptions. Simply put, funds that underperform quickly see their assets shrink. It is for this reason that investment fund companies care about, and are strongly motivated to deliver, returns.

Conclusion

There is no doubt that Canadians and, in fact, all investors are facing serious challenges in their ability to generate investment returns, not least of which are a low-growth global economy and a low natural rate of interest. A strong focus then on fees, competition, and performance in this investment environment is understandable. However, as Rob Carrick recently wrote in observing the trends in the retail marketplace, investors are in a "golden period of price competition".[11] Evidence shows a highly competitive, dynamic marketplace with a growing array of disrupting forces to traditional distribution channels. These forces will no doubt continue to build the value proposition of fund ownership in Canada for investors of all financial means.

[11] G&M. Robo-advisers face new rival as the cheapest place to get investing advice. September 16, 2016

http://www.theglobeandmail.com/globe-investor/investment-ideas/robo-advisers-already-being-challenged-as-the-cheapest-place-to-get-investing-advice/article31935358/

EFFECTIVENESS OF DISCLOSURE

The CSA Consultation Paper 81-408 – Consultation on the Option of Discontinuing Embedded Commissions ("the Paper") notes that while the impact of POS and CRM will take a number of years to fully evaluate, the CSA expects "the reforms to appreciably improve investors' awareness and understanding of mutual fund costs and performance, and make them more informed consumers of investment fund products and advice services."

More specifically, with respect to the three investor protection and market efficiency harms which the CSA believe are associated with embedded fees: 1) conflicts of interest that misalign the interests of investment fund managers, dealers and representatives with those of investors; 2) embedded commissions limiting investor awareness, understanding and control of dealer compensation, and 3) embedded commissions not aligning with the services provided to investors, the CSA conclude that POS and CRM2 disclosure will better enable investors to compare the costs of investing in one mutual fund over another and will equip investors with better tools to manage the impact of fund costs on their returns. The CSA also note that enhanced disclosure may help investors better evaluate and question the costs and value of the services they receive and that increased awareness may, over time, lead to positive changes in the consistency and level of services provided to investors and to better product choices on the part of investors.

Early Evidence of the Impact of Enhanced Disclosure

Early evidence is encouraging. According to a BCSC study that is surveying a group of BC investors prior to and following receipt of CRM2 statements, investors who received CRM2 statements are more aware of the fees, both direct and indirect, they are paying. Awareness of direct fees rose from 67% to 76% and awareness of indirect fees rose from 48% to 59%. The results also show that after receiving statements, some groups of investors were much more likely to switch advisors.[1]

It is notable too that almost half of investors (48%) reported that they spoke to their adviser about CRM2 prior to receiving their reports and one-third (34%) reported that they have discussed the report with their advisor since receiving it.

These results are consistent with IFIC's annual Pollara investor survey. While only measuring the lead-up to CRM2, the 2016 survey nevertheless found mutual fund investors reporting increased awareness of the fees and compensation they pay to their advisors. From 2015, clients who recalled discussing fees and commissions with their advisor rose six points, to 62%, clients who recalled discussing compensation rose eight points, and those who recalled discussing MERs rose four points[2].

Academic Research on Disclosure and Conflict of Interest

The Paper notes that there is research suggesting that advisors provide more biased advice when a conflict of interest is disclosed than when it is not, and other research showing that disclosure of a conflict of interest can have the perverse effect of advisees being more likely to follow conflicted advice. However, as even the authors of this research observe, this is not an argument against enhanced disclosure.

This early research on the limits of disclosure uses laboratory settings that do not reflect the full complexity of actual advisor and investor relationships. The much referenced study, *The Dirt on Coming Clean: Perverse Effects of Disclosing Conflicts of Interest* (Cain, Loewenstein, and Moore, 2005)[3] had "estimators" attempt to estimate an uncertain quantity of coins in a jar and rewarded them for their accuracy. "Advisors" were provided with more information than estimators and were instructed

---

[1] BCSC. Investor Readiness for Better Investing 2016-2017 Panel Study: Part 2 (report prepared by INNOVATE Research Group, April 26, 2017, p.8. *http://www.bcsc.bc.ca/uploadedFiles/About_Us/Publications/Wave_2_Survey_Report.pdf*

[2] Pollara Investor Survey 2016.

[3] The Dirt on Coming Clean: Perverse Effects of Disclosing Conflicts of Interest (Cain, Loewenstein, and Moore, 2005)

to provide estimators with advice. In a control treatment, advisors, like estimators, were paid more when estimators answered accurately. This alignment of incentives was disclosed. In two conflict-of-interest treatments, advisors were paid more when the estimator responded with a high (relative to actual value) rather than an accurate estimate. The researchers examined the impact of disclosure by disclosing this conflict of interest in one of the conflict of interest treatments but not in the other. The "perverse" finding of this study was that subjects did not discount advice from biased advisors as much as they should have, even when advisors' conflicts of interest were disclosed. Secondly, disclosure was found to increase the bias in advice because it led advisors to feel morally licensed and strategically encouraged to exaggerate their advice even further.

While a rigorous and illuminating study, there are two important points to consider in evaluating this work. One is that the conflict was set up so that a benefit to the "advisor" was of no benefit to the "estimator" and could even be a detriment to the "estimator". This is clearly different from a long-term advisory relationship where, using embedded commissions or a fee-based account, advisor compensation grows as the client's portfolio grows. The mutually beneficial aspect of growing assets cannot be captured in this study, nor does it create any reputational cost of providing bad advice.

To the authors' credit, these limits are acknowledged in the study: "Disclosure, at least in the context of the admittedly stylized experiment discussed in this paper, benefited the providers of information but not its recipients. We do not believe that this is a general result – that is, that disclosure always benefits providers and hurts **recipients** of advice."

One of the authors of this research, and today one of the most respected academics on conflicts of interest and disclosure, George Loewenstein, is a strong proponent of disclosure.[4] More recent research by academics who work in this field is seeking to identify those factors that help facilitate effective disclosure, and finds that these factors include the existence of a long-term relationship and the ability of recipients to make decisions about conflict in private. Disclosure is shown to be more effective when it is not made directly by the advisor. These conditions, it should be noted, are all met with CRM2 fee and performance statements, and by the Fund Facts and prospectus disclosure documents that are prepared by investment fund managers.

Also, research on public information disclosure in contexts such as health and safety warnings has generally found that some of the beneficial effects of disclosure are likely to result from the behavior of the "disclosee" (Archon Fung, Mary Graham, and David Weil 2007). Indeed, some observers might suggest that the recent trend of fee cuts and re-pricing programs at mutual fund companies was in part spurred by the impending CRM2 statements.

Disclosure experts also observe that disclosure enables third-parties, researchers, reporters, and advocates, to analyze disclosed data and draw investor and public attention to problems, enabling intermediaries to emerge who can make use of the data and convey it to consumers in ways that often have significant impact.

Conclusion

Disclosure should be viewed as a critical component of effective investor protection and education and a mechanism by which to manage conflicts of interest. There is a strong theoretical justification for enhanced disclosure that is supported by academic research. The early BCSC survey data supports this theory and is demonstrating the effectiveness of POS and CRM2 initiatives in making Canadians more informed and pro-active investors.

[4] In Appendix F of the National Academy report on Conflicts of Interest in Medicine, George Loewenstein (along with two other non-MDs) dissented in support of greater disclosure than the overall committee was ready to endorse.

MEASURING INVESTOR OUTCOMES

The CSA *Consultation Paper 81-408 – Consultation on the Option of Discontinuing Embedded Commissions* ("the Paper") states that part of the goal of any potential regulatory action will be to effect "positive outcomes for Canadian investors". Indeed, a sustainable and growing financial services industry depends upon positive investor outcomes. As such, it is critical to have a full understanding of what defines positive outcomes and to appreciate what contributes to these outcomes.

The goal of most investors is to build wealth over time with a portfolio that delivers favourable returns and that is consistent with their risk profiles and financial objectives. However, throughout the Paper, client outcomes are not defined as long-term savings or wealth accumulation, but rather are associated with investment performance and the cost of investment products and advice. While performance and cost are certainly important determinants of wealth generation, it is misleading to equate these with investor outcomes.

Measuring Harm

Much of the evidence of harm reviewed by the CSA focuses on the interplay of product cost, absence of outperformance and the effects of narrowly-defined conflicts of interest. Indeed, the CSA's selection of research positions "interest" as almost exclusively relating to product cost and compensation for outperformance. Furthermore, the studies often compound the distortion of the "fees pay for performance" view by looking for conflict of interest in the context of a mutual fund, and not in the context of the total client portfolio. While relevant and important, the research reviewed paints an incomplete picture of the total context of the client-advisor relationship. A complete view must include an examination of the total client portfolio, associated compensation, advisor services, a full consideration of client interest, preferences and suitability requirements, and long-term client outcomes in order to evaluate the value of advice, the presence of conflict of interest and potential harm. While the Paper does reference a number of specific studies that measure the value of financial advice, it does not connect this research to the "regulatory impact" analysis section of the Paper nor does it consider what less access to financial advice would mean in economic terms, either at the individual or societal level.

Value of Financial Advice

In the "regulatory impact" section of the Paper, the CSA state that a ban on embedded commissions may impact "mass market" investors' (those with investable assets below $100,000) access to financial advice. The Paper states: "It is fair to say that this group of investors is the group most at risk of falling into the "advice gap" – the group of investors who cannot obtain the amount of advice they desire at the price they are willing to pay". The Paper observes that for these mass market investors, who make up the largest number of households in Canada, the cost of "traditional advice" may rise. The CSA conclude that, "Some investors may be pushed into online advice relationships, other more simplified forms of advice, or the online/discount brokerage channel even though these services may not meet all their needs and even though they [the mass market] may prefer, but can no longer afford face-to-face advice." Client research undertaken by the MFDA finds that of the 15.8 million households in Canada, 8.9 million are within the MFDA client base and 7.4 million are "mass-market" household with $100,000 or less in investible assets.[1]

It is notable that the CSA recognize that banning embedded commissions may limit mass market investors' access to financial advice; however, the economic impact of this possible gap is not explored or measured. There is a substantial and growing body of research that measures the quantitative value of financial advice to investors. These studies include: research by Morningstar economists David Blanchett and Paul D. Caplan demonstrating that planning strategies increase retirement income[2]; research from Vanguard[3] on the quantitative value of coaching and strategic

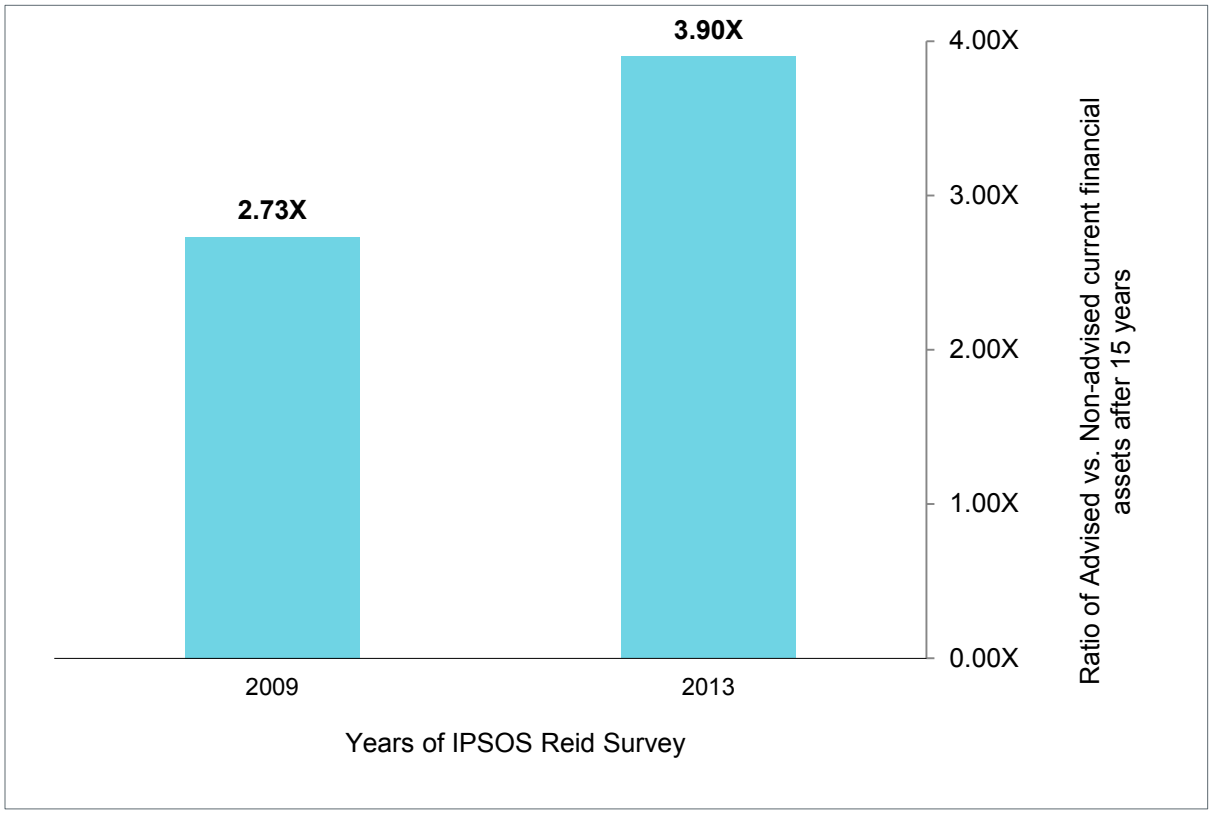
[1] MFDA Client Research. BULLETIN #0721 – C. http://mfda.ca/bulletin/0721-c/

[2] http://www.iijournals.com/doi/full/10.3905/pa.2014.1.4.036

discipline, and two consecutive studies by Claude Montmarquette and Nathalie Viennot-Briot[4], showing that the discipline imposed by a financial advisor on the financial behavior of households and the increased savings of advised households are key to improving asset values of households relative to comparable households with no advisor. While these studies are referenced in the Paper, the Paper wrongly concludes that the benefits of advice are largely "behavioral and thus intangible in nature". While the benefits are largely behavioural, they are measurable. These papers, referenced in greater detail in IFIC's submission to CSA Consultation Paper 33-404: Proposals to Enhance the Obligations of Advisers, Dealers, and Representatives Toward Their Clients, in fact show the measurable and quantitative value of advice.

For example, the Montmarquette research shows that, after adjusting for nearly 50 socio-economic and attitudinal differences, investors with advice are found to accumulate 290%, or 3.9 times, more assets after 15 years than comparable non-advised investors. These results are shows in Figure 1 below.

Figure 1: Ratio of Current Financial Assets for Advised and Non-Advised Investors after 15 years



A more recent analysis, *Do Human Advisor Fees Offer More Value than Robo-Advisor Fees?,* undertaken by Dave Faulkner, CEO of Razor Logic Systems Inc. and reported in Advisor.ca[5] provides a theoretical analysis of a typical low-cost robo-advice offering compared to a theoretical higher-cost human advisor account. The analysis finds that while the robo offering provides lower cost, the vast majority of Canadians would benefit in actual wealth accumulation through the education, tax, and retirement planning that human advice and coaching provides.

---

[3] https://www.vanguardcanada.ca/documents/aa-advisors-alpha-research.pdf

[4] https://www.cirano.qc.ca/files/publications/2016s-35.pdf

[5] http://www.advisor.ca/news/industry-news/do-human-advisor-fees-offer-more-value-than-robo-advisor-fees-225908

There is no evidence to suggest that robo-advice or online channels will deliver to Canadian investors, and in particular, mass affluent Canadian investors, the same benefits that are shown to accrue from human advice. Indeed, most "robo-advice" today involves asset allocation and rebalancing and lacks the fuller dimension of advice usually associated with buying investment fund products. It is noteworthy that "robo-advice" offerings are not designed to capture a view of "outside money" and do not attempt to capture a view of the global picture of a client's investments. As such, "robo-advice" offerings have an inability of looking at both sides of a client's balance sheet. There is also evidence that Canadians are not trusting of robo-advice. According to an HSBC global survey, of the 1,001 Canadians represented, only 7% said they're likely to trust recommendations delivered by a robo-advisor.[6]

The studies on the value of advice are a counterbalance to the preponderance of research that focuses on cost and the rate of return of a portfolio relative to a benchmark ('Alpha') as the ultimate measure of investment success. The latter body of research does not take into account 'Gamma', the additional return over time that can be generated from a portfolio if saving is more regular and if common investment errors are avoided.

Goals-Based Planning

The Paper's focus on cost and relative returns runs contrary to the industry trend in Canada and the US towards holistic goals-based planning. In goals-based planning, an advisor must have a thorough understanding of a client's life goals, as well as a client's assets and investment style. In goals-based planning, a client's goals and liabilities are defined, and a financial advisor works with a client to establish a timeline and risk-budget for each specific goal. This approach is a deliberate move away from measurement of returns relative to benchmarks and market performance and a move towards measuring progress relative to specific end goals.

The touted advantages of goals-based planning include: a greater potential for a long-term relationship with a client based on meeting life goals; fewer redemptions amid market turbulence, and the possibility of consolidating and growing existing clients' assets.

Banning Embedded Fees Will Cause Many Canadians to Pay More for Advice.

Evidence in the US and the UK, where the transition away from embedded commissions is largely complete, shows that costs to investors with lower balance accounts have increased.[7] The higher market price for advice for small accounts has led to advice gaps in both countries[8][9]. In the UK, this advice gap was confirmed by the Chief Executive of the Financial Conduct Authority, Andrew Bailey, who stated at the 2016 Annual General Meeting of the FCA that the Financial Advice Market Review (FAMR) found that, "affordability of advice was a barrier to the less well-off. Full, face-to-face advice can be expensive and not always cost-effective for consumers, particularly those with small amounts of money or simpler needs. Many consumers who want guidance or limited advice cannot find it or end up paying for advice, even if their needs are straightforward. In simple terms the Retail Distribution Review has achieved its objective of removing opaque charging through commissions and improving the training and qualification of advisors, but had– along with a number of other significant

---

[6] http://www.hsbc.com/trust-in-technology-report

[7] 2015 Update - Monitoring Trends in Mutual Fund Cost of Ownership and Expense Ratios - A Canada - US Perspective - May 2015 Update to the 2012 study by Investor Economics and Strategic Insight

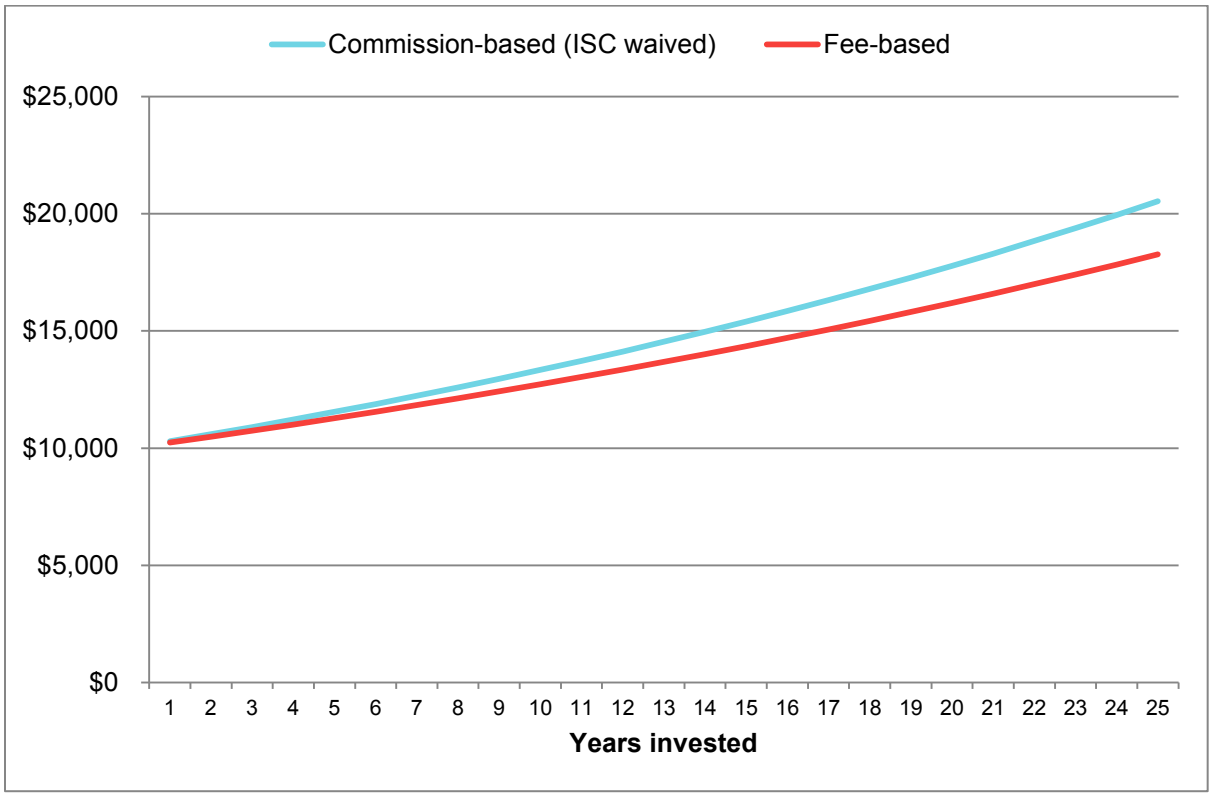
[8] Accounting and consulting firm Grant Thornton quarterly survey of wealth managers representing approximately 80% of industry (evaluating advice charge, platform charge, and fund change) finds that investors with £100,000 pay on average 2.56% annually in fees (10% less than before RDR, at 2.86%). Advisor service firm True Potential, tracking 4,000 advisors calculates that the average retail investor pays 3.1% in first year of their relationship with an advisor, up from 2.99% 2012, before RDR. *UK retail investing fees stay above 2.5% annually.* Financial Times. August 26, 2016. *https://www.ft.com/content/ba0ae18c-6a98-11e6-a0b1-d87a9fea034f* (requires subscription)

[9] ICI Submission Letter, Re: RIN 1210-AB79; Proposed Rule; Re-examination of Fiduciary Rule, April, 2017. *https://www.ici.org/pdf/17_ici_dol_fiduciary_reexamination_ltr.pdf*

developments – contributed to an advice gap opening up for the less well-off and those in need of single event type advice." In the US, the growing advice gap is documented by the Investment Company Institute's submission to the Department of Labor during its consultation on the proposed Fiduciary Duty Rule. The letter states that, "…some investors who had been in commission-based accounts are being moved to fee-based accounts. While both compensation models (fee-based and commission-based) have their advantages, the commission-based model can be a more cost-effective means to receive advice, particularly for buy-and-hold investors, which is the case for many investors with modest-sized accounts…in many instances, our members have been informed by their intermediary partners that they will no longer service certain account holders in light of the [proposed fiduciary] rule. These so-called "orphaned" account holders already number in the hundreds of thousands…"

Using existing data, the rising cost of advice that would result from a ban on embedded commissions can be projected using existing data. As an illustration, Figure 2 compares the account balances for a $10,000 initial investment in a typical Global Neutral Balanced Fund placed in a commission-based account as compared to a fee-based account. In the commission-based account, the typical cost, or MER, of an embedded A-series fund is 2.08%. For a typical fee-based account, the typical cost, or MER, of an F-series fund is 1%. Using published data from Pricemetrix[10], the typical advisory fee for accounts less than $250,000 is 1.43%, resulting in a total cost of 2.43% under the fee-based account. As can be seen in the chart below, modest investors are expected to pay more for advice and this will impact investment returns. As in the UK and the US, it may also lead to lower levels of advice.

Figure 2: Account Balances for $10,000 Initial Investment in Commission-Based versus Fee-Based Investment in typical Global Neutral Balanced Fund.



IFIC Analysis.

[10] https://www.theglobeandmail.com/globe-investor/investment-ideas/fee-based-accounts-dont-advertise-prices-but-its-good-for-business/article25043240/

Impact on Seniors and Vulnerable Investors

Increasingly, regulators are concerned about protection of vulnerable investors and seniors. Senior investors are no longer in the wealth accumulation stage of their investment strategy but are in the decumulation stage. This stage requires significant behavioural coaching and advice concerning tax implications. Vulnerable investors benefit from the assistance of advisors who know them and can identify if the client is making unusual or imprudent investment decisions, even in extreme cases of undue influence or abuse. It is not clear that robo-advisors will be able to provide this advice and oversight to protect vulnerable investors.

Conclusion

There are less tangible outcomes that are critical to the concept of investor outcomes. Indeed, there are things besides money that investors want from advice, including peace of mind. However, it is also clear that access to advice is critical to investor outcomes and that any future policy proposal must be measured against the degree to which it promotes or hinders access to advice. The embedded fee model provides access to advice to modest investors and this advice has positive and measurable outcomes.

ACTIVE AND PASSIVE MANAGEMENT

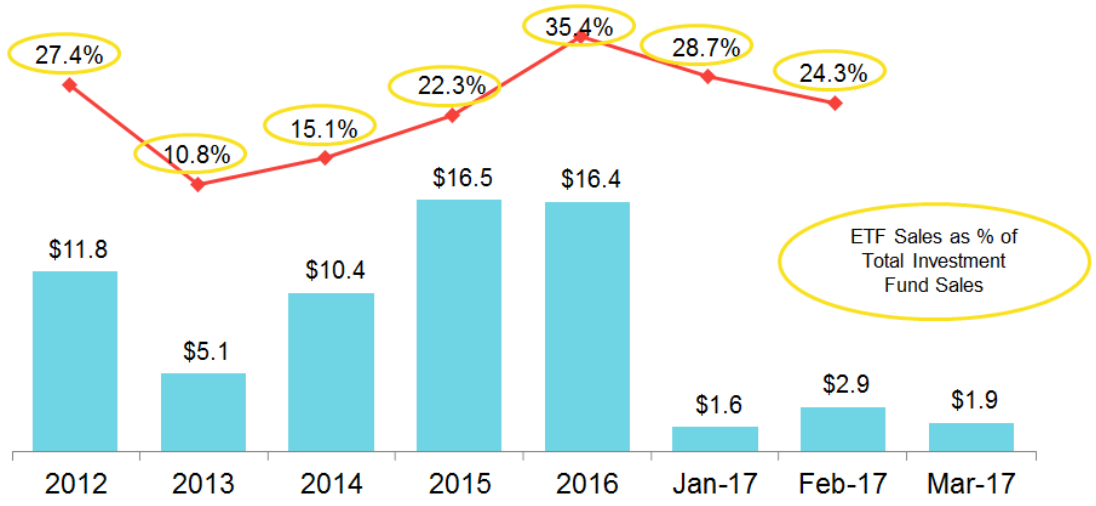
The CSA Consultation Paper 81-408 – Consultation on the Option of Discontinuing Embedded Commissions ("the Paper") asserts that research shows that actively managed funds do not perform sufficiently well to justify their fees and that actively managed funds can impair investor outcomes. The Paper also suggests that there is a lack of availability of low-cost funds in Canada.

The goal of most investors is to build wealth over time with a portfolio that delivers favourable returns and that is consistent with their risk profiles and financial objectives. Canadians currently have the full spectrum of investment strategies available in the marketplace: pure passive, one-factor smart beta, multi-factor smart beta, active management with low tracking error, and highly differentiated active management strategies with minimum constraints. These strategies, pursued by mutual funds and ETFs, are all used in Canadian investment accounts and openly compete in the retail marketplace.

Growth and Availability of Passive Funds

One of the most significant market trends in recent years, globally and in Canada, has been the rapid growth of passive ETF funds. While active management dominates the fund industry in terms of assets under management, sales of passive investment funds, particularly ETFs, are far higher than their relative market share. For example, while ETFs make up just 8% of investment fund assets, net sales in 2016 were 35.4% of investment fund sales. Currently in Canada, passive products make up 87% of the Canadian-domiciled ETF industry.[1]

CETFA Monthly ETF Report and Strategic Insight. Net Creations in $ billions and % of total investment fund sales.



Source: Strategic Insight with data from Canadian ETF Association (CETFA).

The ETF market is not a perfect proxy for the size of passive investment in any jurisdiction; however, Canada does have a well-established ETF market compared to other countries, when measured as a percentage of the total funds industry. In the US, which is by far the strongest market for passive investing, ETFs make up just 9.8% of investment fund assets.[2] Globally, ETFs make up 7.5% of the total fund industry.[3]

---

[1] Strategic Insight with data from Canadian ETF Association (CETFA).

[2] It should be noted that the US has a very large passive mutual fund industry as well as a large passive ETF industry.

[3] ETFGI report for November 2016 and IIFA Global Statistics

Comparisons of Active and Passive Investing

The Paper suggests that actively managed funds might not be delivering "value for money". While this position is partly based on the presumption that the primary goal of most investors is to "beat a benchmark" at the least possible cost, it is also based on research comparing active and passive strategies. Despite an ample supply of commercial and academic literature that purports to show that passive strategies are superior to active strategies, all of this research faces serious methodological challenges and analytical weaknesses.[4]

One of the most common weaknesses of studies evaluating active and passive strategies is comparing the performance of the active investment to an index rather than to an investment tracking the index. The two are not the same. Investors cannot purchase an index. They can only purchase an investment that attempts to perform like an index. Returns on passive investments will differ from their underlying index due to a number of factors, including transaction costs, bid/ask spreads and tracking error. Just focussing on tracking error as an example, when looking at a largely used ETF like XIN (iShares MSCI EAFE ETF CAD Hedge), with fees of 0.50% and a 10 year annual tracking error of 0.38% this generates an average annual impact of -0.88 bps/year over the last 10 years.[5]

One common misperception that is evident in a great deal of commercial research concerns the relative costs of active and passive instruments and this arises from the direct comparison of Management Expense Ratios (MERs) of actively-managed mutual funds with those of passively-managed ETFs. These direct comparisons are invalid cost comparisons as they fail to adjust for differences in services provided. For example, the mutual fund MER typically embeds the cost of advice, whereas the ETF MER has no advice component.[6]

Almost without exception, studies of relative returns of active investment strategies have been subject to the improper use of benchmarks. Researchers writing these reports typically assign broad market benchmarks to all managers after the fact rather than using the actual benchmark for each fund. As a result, active manager performance is frequently compared against the wrong benchmark, and the conclusions drawn from the analysis are consequently of limited value to investors. As a case in point, the S&P Dow Jones Indices SPIVA Canada Scorecard compares the performance of funds within very broad categories against single benchmarks.[7]

More fundamentally though, by definition, the average active manager cannot outperform the benchmark because the benchmark is a culmination, or a manifestation, of the sum of activity carried out by both active and passive managers. However, passive managers do not influence the direction of the benchmark. As stated by industry innovator Yves Choueifaty, "It is obvious that it is impossible for the average active manager to outperform (or underperform) the average active manager. The benchmark is, after all, the output of all the activities carried out by active managers."[8]

Market Efficiency

Proponents of passive investing often cite the Efficient Markets Hypothesis as a theoretical rationale for their preference for passive over active strategies. Developed by Eugene Fama in the mid-1960s, and later popularized by Burton Malkeil in the 1970s, the Efficient Markets Hypothesis views markets as efficient processors of all available information relevant to stock pricing and concludes that markets therefore cannot be reliably and systematically beaten by stock pickers. While efficient markets

---

[4] Active and Passive Investing. IFIC. https://www.ific.ca/wp-content/uploads/2013/08/IFIC-Active-and-Passive-Investing-Report-July-2011.pdf/1659/

[5] Ibid.

[6] Ibid.

[7] Ibid.

[8] Financial Times. Active managers can't beat a benchmark, they are the benchmark. January 2, 2016

theorists would accept that active investors can at times beat markets, they would say that on average their performance will be equal to, or lower than, that of the index (due to fees, transaction costs, wages, etc.). As noted above, there is a vast amount of literature demonstrating that passive management, on average, does outperform active management.

However, there is a growing concern, particularly in the US where approximately 30% of domiciled funds are now passive, that passive investing may make markets less efficient.[9] The respected investor Seth Klarman wrote in a recent note to clients of his Baupost Group, "The inherent irony of the efficient market theory is that the more people believe in it and correspondingly shun active management, the more inefficient the market is likely to become."[10] At the root of this observation is that passive investors are not engaged in decisions about where to allocate capital but merely track the decisions of active managers.

Risk

There is also a growing concern, expressed by academics, investment professionals, and policy-makers about the risks associated with larger and larger pools of passively-managed funds. One concern relates to the growing popularity of large market-cap weighted indices that are dominated by the largest companies. As noted in an October 2016 research note by J.P. Morgan, "The shift towards passive funds has the potential to concentrate investments to a few large products. This concentration potentially increases systemic risk making markets more susceptible to the flows of a few large passive products."

Conclusion

The issues described above relating to active and passive investing are not presented to suggest that either of the active or passive strategies is superior to the other. Problems of measurement, concerns over market efficiency and issues of risk are certainly associated with active management strategies too. However, the market should be the culmination of individual investor decisions, made according to their own needs and interests, and balanced by the risks and opportunities of each product.

[9] Flows & Liquidity Implications from the shift towards passive investing. J.P. Morgan. October 2016

[10] New York Times. A Quiet Giant of Investing Weighs In. February, 2017.
https://www.nytimes.com/2017/02/06/business/dealbook/sorkin-seth-klarman-trump-investors.html?_r=0

PEER REVIEW OF FUND FEE RESEARCH

The research paper, *A Dissection of Mutual Fund Fees, Flows, and Performance* by Douglas Cumming et al. was evaluated in three independent academic reviews. These reviews, similar in style to peer reviews that would be undertaken to evaluate work for publication, provide detailed evaluations of the methodology employed in the work along with assessments of the strength of the research findings and conclusions. The reviews are consistent in finding serious methodological weaknesses sufficient to put in jeopardy the conclusions put forward by Cumming and his fellow researchers.

In the first review, Allan Timmermann, Atkinson/Epstein Endowed Chair, Professor of Finance, Co-Director, Master of Finance Program, Rady School of Management, University of California, observes that for the most part Cumming et al. uses only one year (12 monthly observations) of monthly return data to estimate future performance, a practice out of step with the bulk of financial literature. A more common choice would be to use 24, 36, or 60 months of returns data. Mr. Timmermann also notes that the particular measurement of alpha used by Cumming et al. is "inappropriate" in that it uses the same set of factors regardless of the funds' asset class (i.e. bond vs. equity funds) and investment objective. Another major criticism of Timmermann's is that differences in alpha associated with different purchase options are very small in statistical terms and there are no associated calculations showing the economic effects of these. Specifically, "what is the estimated reduction in investment performance associated with higher trailer fees or various charges in basis points per year? How large are the effects both gross and net of fees?"

In the second review, Benoit Perron, Professor of Economics, Département de sciences économiques, Université de Montréal, expresses concern consistent with Timmermann about how alpha is used, and notes limited or missing observations. Perron's larger criticism relates to Cumming *et al.*'s interpretation of the results. Specifically, he observes that the "work does not seem to answer at all the question of whether fee-based or commission-based remuneration is better for individual investors. It is not clear at all what objective investors are assumed to be trying to achieve."

In their review, Oliver Linton, Professor of Political Economy and Econometrics at Cambridge University and a Fellow of Trinity College and student researcher Ondrej Tobek of the University of Cambridge, find that the conclusions put forward by Cumming et al. are "simply too strong to be justified by the analysis." They note that there is "…fragility in the results across time period and in other dimensions and that the economic magnitude of the effects they claim is open to different interpretations." Given a number of methodological issues and weak statistical relationships detailed in the Cumming et.al. analysis, the authors conclude that [the] "…causal interpretation that the authors are pushing is simply not defensible. At most they can claim some weak association in the data." In particular, they find that Cumming et al. has not sufficiently separated out the effects of past alpha on future alpha in the equations, resulting in a problem of endogeneity that is not addressed.

These academic reviews highlight serious limitations in the Cumming et al. analysis and suggest that any conclusions should be subject to skepticism due to outstanding methodological issues. All these authors offer constructive suggestions for an improved future iteration.

The full texts of the three reviews are published as appendices to a research report produced by PricewaterhouseCoopers LLP.[1]

[1] PricewaterhouseCoopers LLP, Economic Impact Assessment of Banning Embedded Commissions in the Sale of Mutual Funds, May 2017, attached as Appendix G.

ECONOMIC IMPACT ASSESSMENT OF BANNING EMBEDDED COMMISSIONS IN THE SALE OF MUTUAL FUNDS

Executive Summary 63
Introduction 67
Scope of Review 68
Approach and Methodology 69
The Mutual Funds Market in Canada 71
Mutual Fund Distribution Channels 72
The Role of Financial Advisors in the Sale of Mutual Funds 74
Advisor Compensation 74
Profile of Investors 76
Robo-Advisors 78
Growth in ETFs 80
Regulatory Environment 81
Accountability 84
Proposed Changes to Regulation 84
The Financial Advisory Sector 86
- Industry Structure by Financial Advisor Segment 87
- Dual Licensing 88
- Growth Trends 88
- Households by Investable Assets and Fund Ownership 89

The Value of Financial Advisors 90
- The Economic Theory 90
- Investor Attitudes to Advisors in Canada 91
- Empirical Evidence on the Value of Advisors 93
- Summary of Findings 95

Conflicts of Interest 96
- Economic Theory 96
- Mitigation of Conflict of Interest 97
- The Drivers of Conflict of Interest in the Sale of Mutual Funds 98
- The Profile of Mutual Fund Investors in Canada 99
- Longevity of Relationship between Advisor and Client in Canda 101
- Evidence on Existence of Conflict of Interest 103
- Summary of Findings 104

ECONOMIC IMPACT ASSESSMENT OF BANNING EMBEDDED COMMISSIONS IN THE SALE OF MUTUAL FUNDS

Embedded Commissions 105
- Economic Theory 105
- The Effects of Embedded Commissions in the Sale of Mutual Funds 106
- Variation of trailing commissions across mutual funds in Canada 108
- Relationship between fund performance and trailing commission 110
- Conflicts of Interest under Alternative Compensation Schemes 112
- Summary of Findings 113

Cost of Financial Advice in Canada 115
- The Cost of Advice 115
- Financial Advisor Compensation 116
- Summary of Findings 117

Hypotheses Regarding the Likely Impacts of a Ban on Embedded Commissions 118

Sensitivity Analysis on the Potential Impact of a Ban on Canada's Economic Footprint 120

Jurisdictional Review 125
- Introduction 125
- Mapping Embedded Commissions 125
- Case Study: UK 129
- Case Study: Australia 133
- Transparency and Disclosure 133
- Countries that Contemplated and Rejected a Ban 134

Summary of Findings 137

Conclusions 138

Appendix A: Limitations 139

Appendix B: List of Sources Used 140

Appendix C: Glossary 145

Appendix D: List of Acronyms 146

Appendix E: Reviews of Cumming et al (2015) 147

Economic Impact Assessment of Banning Embedded Commissions in the Sale of Mutual Funds

June, 2017

Table of Contents

Executive summary	i
Introduction	1
Scope of Review	2
Approach and Methodology	3
The Mutual Funds Market in Canada	5
Mutual Fund Distribution Channels	6
The Role of Financial Advisors in the Sale of Mutual Funds	8
Advisor Compensation	8
Profile of Investors	10
Robo-Advisors	12
Growth in ETFs	14
Regulatory Environment	15
Accountability	18
Proposed Changes to Regulation	18
The Financial Advisory Sector	20
Industry Structure by Financial Advisor Segment	21
Dual Licensing	22
Growth Trends	22
Households by Investable Assets and Fund Ownership	23
The Value of Financial Advisors	24
The Economic Theory	24
Investors Attitudes to Advisors in Canada	25
Empirical Evidence on the Value of Advisors	27
Summary of Findings	29
Conflict of Interest	30
Economic Theory	30
Mitigation of Conflict of Interest	31
The Drivers of Conflict of Interest in the Sale of Mutual Funds	32
The Profile of Mutual Fund Investors in Canada	33
Longevity of Relationship between Advisor and Client in Canada	35

Evidence on Existence of Conflict of Interest 37
Summary of Findings 38
Embedded Commissions 39
Economic Theory 39
The Effects of Embedded Commissions in the Sale of Mutual Funds 40
Variation of trailing commissions across mutual funds in Canada 42
Relationship between fund performance and trailing commission 44
Conflicts of Interest under Alternative Compensation Schemes 46
Summary of Findings 47
Cost of Financial Advice in Canada 49
The Cost of Advice 49
Financial Advisor Compensation 50
Summary of Findings 51
Hypotheses Regarding the Likely Impacts of a Ban on Embedded Commissions 52
Sensitivity Analysis on the Potential Impact of a Ban on Canada's Economic Footprint 54
Economic Footprint of Canada's Investment Advisory Industry 54
Jurisdictional Review 59
Introduction 59
Mapping Embedded Commissions 59
Case Study: UK 63
Case Study: Australia 67
Transparency and Disclosure 67
Countries that Contemplated and Rejected a Ban 68
Summary of Findings 71
Conclusions 72
Appendix A: Limitations 73
Appendix B: List of Sources Used 74
Appendix C: Glossary 79
Appendix D: List of Acronyms 80
Appendix E: Reviews of Cumming et al (2015) 81

Executive summary

PwC has been retained by The Investment Funds Institute of Canada ("IFIC") to provide an independent economic assessment of the likely impacts that would result from a ban on embedded commissions in the sale of mutual funds in Canada through financial advisors. To that end, we have engaged in the following major steps:

1. Assessed the benefits of the use of financial advisors;
2. Studied the current evidence of a conflict of interest between financial advisors and clients in Canada;
3. Analysed the current impact of embedded commissions on the sale of mutual funds in Canada;
4. Assessed the overall cost of financial advice in Canada;
5. Based on the above, developed hypotheses on how a ban on embedded commissions will impact the market for mutual funds in Canada and the Canadian economy;
6. Conducted a jurisdictional review of countries that have contemplated and/or implemented a ban on embedded commissions; and
7. Concluded on the likely impacts of a ban on embedded commissions on the market for mutual funds in Canada and on the Canadian economy.

The Value of Financial Advice

Taken together, the academic empirical research shows that while financial advisors are not able in their investment choices to consistently beat relevant market benchmarks after fees, their advice generates significant net benefits to investors in terms of a more disciplined savings behaviour, overall higher asset values, more efficient tax planning, and retirement confidence. In addition, survey results indicate that Canadian mutual fund investors seeking financial advice place high trust in their advisor and believe that the use of a financial advisor helps them to achieve their financial goals. Moreover, since the high level of trust that Canadian investors have in their advisors is likely driven by long term relationships, the academic literature suggests that such trust is generally justified, as investors' benefits tends to increase with the longevity of their relationship with their advisor.

The main reason that empirical studies show significant net benefits from the use of advisors is founded in behavioural economics. According to research from this field, investors tend to suffer from behavioural biases such as loss aversion, short-termism, and overconfidence. Sound financial advice helps to mitigate these biases and, as a consequence, helps investors to achieve higher savings. In an ageing society, assisting people in saving sufficiently for a comfortable retirement is a critical public policy issue. As financial advisors help investors in generating overall higher savings for their old age, financial advice is an important component in a policy strategy to achieve this goal.

Conflict of Interest

Financial advisory services are characterized by asymmetric information between advisors and clients. Potential conflicts exist in any such relationship irrespective of the fee structure. Moreover, financial advice is a "credence good," meaning that many investors are unable to confidently assess the quality of services provided.

In general, conflicts of interest in financial advice can be mitigated by increased financial literacy, increased disclosure and transparency, and longevity of relationship between advisor and investor.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

The general level of education of Canadian mutual fund investors is relatively high, however this may not be a good proxy for financial literacy. The increased transparency rules that were fully implemented in Canada in 2016 are capable of mitigating the fee information gap that existed prior to this legislation. We do not have yet empirical data to test the validity of the effectiveness of these rules in conveying fee information to investors. However, the relatively high education profile of Canadian investors and the fact that currently the majority of Canadian investors in mutual funds are informed support the hypothesis that Canadian investors would be able to understand information disclosed about their investments, even upon a cursory review of the statements sent to them. Moreover, the current share of informed mutual investors and the heavy reliance of financial advisors and their firms on reputation and long term relationship with investors suggest that a critical mass of informed investors does exist which effectively discourages widespread misconduct by financial advisors.

In general, Canadian investors appear to have long-term relationships with their advisors and overwhelmingly trust their advisors. The following suggests that this trust is positive and mutual in nature and that advisors in Canada generally align their interests with those of their investors:

- a majority of investors evaluate the performance of their investment portfolios in some form or another;
- investors do punish their advisors when they perceive sub-performance;
- academic research shows that long term relationships between advisors and investors lead to significantly better outcomes for the investor; and
- a recent academic study in Canada shows that the portfolio of advisors who invest for themselves does not differ significantly from the portfolio they recommend to their clients.

Cost of Advice

Canada has higher average fund management fees than most developed countries. However, in many of those countries compensation for advisors is paid through direct payments rather than included in fund management fees. Since, unlike embedded commissions, data on direct fees is not easily available, it is not possible to ascertain whether the overall cost of advice in Canada is higher than in those countries. However, a detailed study done in this regard suggests that the overall cost of advice in Canada and the US is similar even though the US boasts the lowest fund management fees in the world.

The average advisor compensation in Canada is lower than in the US, UK and Australia. Thus, it is doubtful that advisor compensation is the main driver of the higher fund management fees in Canada. Embedded commissions do not appear to be inflating advisor compensation above international norms.

Hypotheses

The following hypotheses represent our predictions of what would happen following a ban on embedded commissions. They are based on the evidence and theory reviewed in this Report, but are not directly testable.

Hypothesis 1 – A ban will reduce the demand for advisor services as well as the supply of advice, both of which will act to reduce the use of or access to advisors by mass-market[1] investors. Mass-market investors who would continue to use an advisor will likely see an increase in the cost of advice.

Hypothesis 2 – A ban on embedded commissions will likely eliminate some existing misalignments between advisors' and investors' interests, but may give rise to new misalignments.

Hypothesis 3 - Reduced profitability for some players may lead to consolidation of the advisory industry and a risk of increased bias towards funds produced by the same organizations that provides the advice. Banks are generally in the best position to serve mass-market clients who stop using independent advisors.

[1] Mass-market investors have less than $100,000 of investable assets.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Jurisdictional Review

Current transparency rules in Canada are significantly stronger than in the UK and Australia both prior to their respective bans on embedded commissions and currently. Thus, given that transparency is one of the means to mitigate the risks inherent in agent-principal relationships, these risks should be significantly less acute in Canada.

There is no strong evidence from the UK or Australia that cost of advice has decreased as a result of the ban on embedded commissions. The shift to lower cost products such as ETFs following the ban is a continuation of a trend that has been evident in many countries including Canada and it is difficult to ascertain to what extent, if any, banning embedded commissions accelerated this process.

On the other hand, it is not clear whether an advice gap was created in these countries following the ban on embedded commissions. In this regard, we note that in Canada the use of embedded commissions is more wide spread and thus the likelihood of an advice gap would be more pronounced than in those countries. We further note that bans on embedded commissions in UK and Australia followed evidence of major mis-selling of investment products in those countries,[2,3,4] but that Canada has not seen mis-selling on this scale.

Other countries have contemplated a ban on embedded commissions and have rejected it, generally for the fear of an advice gap. Instead they generally opted for more disclosure as a solution to conflict of interest issues.

Conclusions and Quantification of Economic Impacts

Based on our assessment and subject to the scope of review and limitations of this report we conclude the following:

1. Transparency, financial literacy and long term relationships between advisors and investors are the ultimate assurance for a well-functioning financial advisory market, where interests of advisors and investors are aligned.
2. Canadian investors who use advisors are generally well educated and have trust in their advisors that has developed through long term relationships.
3. Current transparency rules in Canada are at a level that creates a critical mass of informed Canadian investors which acts as an effective deterrence against the possibility of misconduct by financial advisors.
4. There is no significant evidence that embedded commissions in Canada have been leading to conflicts of interest influencing financial advisors' behaviour. A ban on embedded commissions would likely eliminate some of these influences, but would create new instances of misalignment of interests between investors and advisors via new fee schemes.
5. Banning embedded commissions in Canada would likely lead to negative consequences for the mass-market investors in the form of:
    a. Less access to financial advice;
    b. Lower savings available at retirement; and
    c. Higher cost of advice for those who would want to continue receiving financial advice.
6. Robo-advice is a viable alternative solution for some investors who would stop using an advisor but not for all.
7. Banning embedded commissions may lead to industry concentration that would create other forms of biases such as those created by greater vertical integration.
8. The estimated economic footprint of Canada's investment advisory industry amounts to around $25 billion in total output, $12 billion in total GDP, $8 billion in labour income and 116,000 full-time equivalent jobs. These figures include the direct, indirect and induced impacts on Canada's economy.

[2] Ferguson & Vedelago, 2013
[3] Money Marketing, 2009
[4] Hyde, 2013

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

9. In the absence of embedded commissions, the potential imposition of a $100,000 minimum investment threshold for providing advice[5] would have a significant negative impact on the economic footprint of the investment advisory industry in Canada. For example, if no new advice models were introduced, the contribution to GDP from the industry would shrink by between approximately $2.8 and $3.3 billion.

10. The move from an advisor to DIY[6] investing is expected to reduce the amount of savings available to those Canadians at retirement. On an order of magnitude basis, those who could potentially be deprived of access to financial advice following the ban on embedded commissions would accumulate on average $240,000 less in savings prior to retirement than those with access to advice.

[5] The common threshold in Canada for fee-based service is $100,000 to $250,000.
[6] DIY investors do not use the services of a financial advisor. They may research investment products themselves and purchase them using an intermediary such as a bank or online brokerage.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Introduction

On January 10, 2017, the Canadian Securities Administrators ("CSA") released CSA Consultation Paper 81-408 – Consultation on the Option of Discontinuing Embedded Commissions ("CSA Paper"), which contemplates the banning of embedded commissions in investment fund products.

The CSA Paper hypothesises that embedded commissions raise three main investor protection and market efficiency issues:

1. Embedded commissions result in conflicts of interest that misalign the interests of investment fund managers, dealers and advisors against those of their clients (investors);

2. Embedded commissions limit investor awareness, understanding, and control of dealer compensation costs; and

3. Embedded commissions generally do not align with the services provided to investors.

The concerns raised in the CSA Paper led the CSA to conclude that a change to a different compensation model must be considered, but the CSA emphasizes that it has not made a decision to discontinue embedded commissions. The CSA will reach its final decision in this regard following a consultation process.

As part of this consultation process, PwC (or "we") have been engaged by the Investment Funds Institute of Canada ("IFIC") in order to independently assess the likely economic outcomes if Canada were to ban embedded commissions (our "Assessment").

This report (the "Report") presents the findings of our assessment, the scope of our review, the data collected, as well as our analysis.

The following PwC staff contributed to this study:

Michael Dobner – Partner, Leader of PwC Economics Practice
Matthias Oschinski, PhD – Senior Economist
Gemma Stanton-Hagan – Economist
Michal Staszewski – Economist

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Scope of Review

To prepare this assessment, we have reviewed and, where appropriate, relied upon various documents and sources of information.

By general classification, these sources include:

- Data Sources on Advisors and Investors
    - PwC Survey
    - Interviews with market participants
    - Strategic Insight
    - Pollara Survey
    - Innovative Canada Survey
    - Morningstar
    - Financial Conduct Authority (FCA) UK
    - Academic Studies
- Data Sources on Regulatory Environment
    - Fundscape
    - Strategic Insight
    - Europe Economics
    - Financial Services Council
    - Investment Management Association
    - Financial Conduct Authority (FCA) UK
    - Australian Bureau of Statistics

A list of sources and articles used for the purpose of this assessment is available in Appendix B.

We note that PwC relied upon the completeness, accuracy, and fair presentation of all information, data, advice, opinions or representations obtained from various sources, which were not audited or otherwise verified by us.

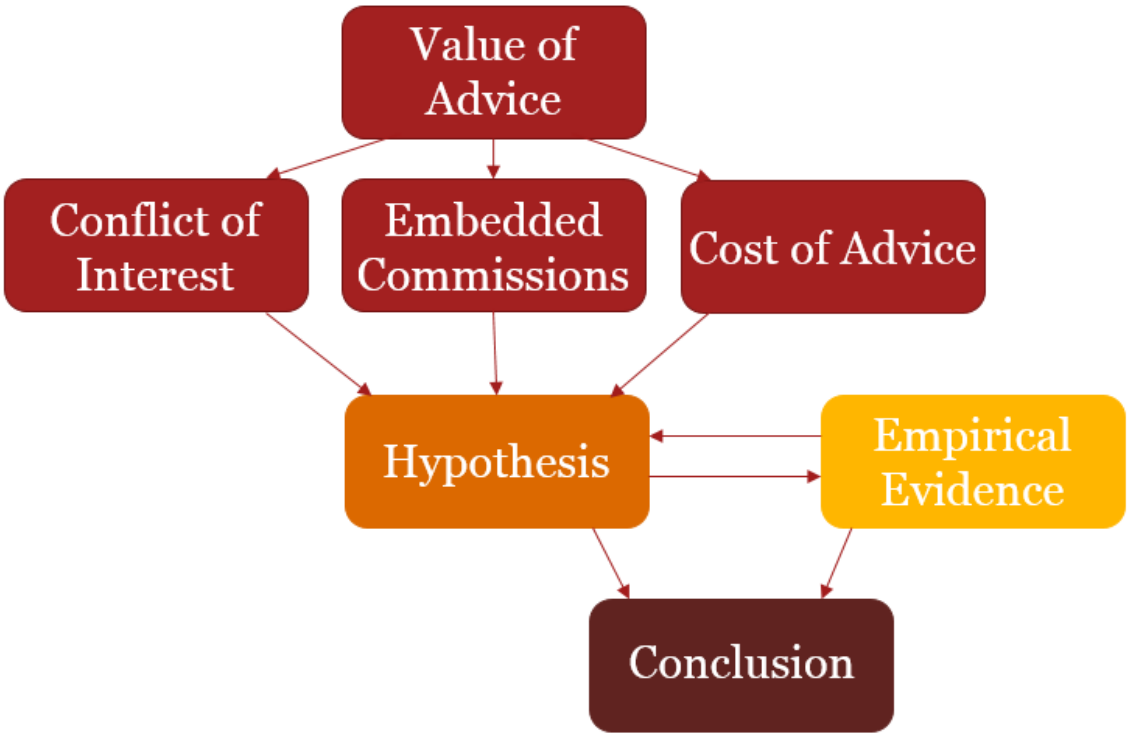
© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Approach and Methodology

At the core of our approach is the value of financial advice. It is through this lens that we approach the question of embedded commissions and their impact on the mutual fund industry. We examine how the value of advice is related to conflicts of interest, embedded commissions, and to the overall cost of advice to the investor. Based on these theoretical and empirical underpinnings, we developed our hypotheses, which further evolved based on findings from empirical evidence in other countries.

Figure 1: Approach



Assessing the likely economic impacts of a contemplated change in legislation is a complicated process and does not lend itself to a "black and white" analysis. One of the more common mistakes made in such assessments is the use of a static analysis that ignores likely chain reaction effects and longer term responses by market participants to such change. This type of mistake often leads to an assessment that does not consider unintended consequences and does not enable a proper cost benefit analysis of the likely positive impacts against the likely negative impacts of the contemplated change in legislation.

In our assessment, a deliberate effort was made to avoid the situation described above. To this end, our approach to this assessment was holistic in nature. It involved an identification of the players involved in the mutual fund market in Canada, and an understanding of their interests in light of the current structure of advisor compensation and the current regulatory environment. This was achieved through the collection of data, market surveys, and through interviews. We have also conducted a broad literature review regarding issues relevant to our assessment in order to incorporate relevant theoretical and empirical studies into our analysis. Finally we conducted a jurisdictional review of a sample of countries where a ban on embedded commissions was contemplated. This was

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

done with the aim of understanding why some of these countries decided not to implement the ban while others did. For two of the countries that did implement the ban (Australia and the UK), we have examined the impacts following the implementation of the ban.

The above process enabled us to develop informed hypotheses regarding the likely impacts of a ban and to test these hypotheses against the findings of our jurisdictional review.

Our conclusions therefore represent the culmination of an informed and holistic review. Our conclusions are not meant to serve as a recommendation to policy makers, rather they intend to serve as a framework for an informed decision making. In other words, our conclusions intend to provide policy makers a balanced view of the likely impacts of a ban on embedded commissions.

Given our approach, our methodology included the following major steps:

8. Assessed the benefits of the use of financial advisors;
9. Studied the current evidence of a conflict of interest between financial advisors and clients in Canada;
10. Analysed the current impact of embedded commissions on the sale of mutual funds in Canada;
11. Assessed the overall cost of financial advice in Canada;
12. Based on the above, developed hypotheses on how a ban on embedded commissions will impact the market for mutual funds in Canada and the Canadian economy;
13. Conducted a jurisdictional review of countries that have contemplated and/or implemented a ban on embedded commissions; and
14. Concluded on the likely impacts of a ban on embedded commissions on the market for mutual funds in Canada and on the Canadian economy.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

The Mutual Funds Market in Canada

In order to contextualize the policy discussion about embedded commissions, the following section provides background on the mutual funds market in Canada. It reviews the role of financial advisors, distribution channels for mutual funds, and current models of advisor compensation. It then discusses investor profiles, and recent changes in the investment industry. Finally, we review the current regulatory environment in Canada along with proposed changes.

Mutual funds in Canada are manufactured by dedicated mutual fund manufacturers, investment management firms, as well as financial institutions such as banks that offer diverse savings products and financial services to their clients in addition to investments.

In 2016, Canada had around 115 fund companies offering more than 3,500 unique mutual fund products. Long-term investment fund assets amounted to $1.4 trillion. Banks accounted for roughly 48 per cent of investment fund assets, followed by independents (such as Fidelity Investments and Investors Group) with a combined share of 38 per cent of investment fund assets, and life insurers and ETF firms with a 5 percentage share each.[7]

Table 1 depicts the largest 20 Canadian mutual fund manufacturers by market share as of December 2016. As the table shows, the top ten companies had a combined market share of around 66 per cent, and the top 20 companies a combined market share of roughly 80 per cent.

Table 1: Asset Market Share of All Mutual Funds (Dec. 2016 assets)[8]

Manager	Share of All Mutual Funds
RBC Global Asset Management	14.1%
TD Asset Management	8.9%
Fidelity	7.4%
BMO Investments	6.6%
Scotia Global Asset Management	6.5%
CIBC Asset Management	6.4%
Investors Group	5.7%
BlackRock Canada	3.8%
Mackenzie	3.5%
Manulife Mutual Funds	3.5%
Top 10 (as of Dec. 2016)	66.3%
MD Financial	2.2%
Desjardins Investments	1.9%
National Bank	1.8%
Franklin Templeton	1.4%
Sentry Investments	1.3%
AGF Investments	1.2%
IA Clarington	1.0%
Beutel Goodman	1.0%
SEI Investments Canada	0.9%
Top 20 (as of Dec. 2016)	80.2%

[7] Strategic Insight, Investor Economics Insight, January 2017.
[8] Strategic Insight, Investor Economics Insight, January 2017.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

The largest manufacturers of mutual funds in Canada are banks, which constitute the top four fund managers by assets under management (AUM). Other significant manufacturers include multinational investment management firms such as Fidelity and Franklin Templeton, as well as Canadian firms including Investors Group, Mackenzie and Manulife Mutual Funds.

In addition to being the largest fund manufacturers, banks also manage the majority of the twenty largest Canadian funds.

Mutual Fund Distribution Channels

Mutual funds are distributed through both independent and exclusive channels. An exclusive firm primarily offers its own funds, with a few external fund managers possibly catering to niche markets.

An independent mutual fund dealer typically offers funds from several, if not all, major mutual fund manufacturers, and this model is referred to as an "open shelf" concept. A significant number of financial advisors working with independent mutual fund dealer firms also deal with one or more managing general agents (MGAs) for insurance product offerings, as they also carry an insurance license. Unlike life insurance licensed advisors, who can work through multiple channels or distributors, financial advisors who are licensed for mutual funds may only be a representative of one mutual fund dealer.

Two main dealer-based Self-regulatory organizations (SROs) oversee the sale of mutual funds and securities to Canada's investors: the Mutual Fund Dealers Association (MFDA) and the Investment Industry Regulatory Organization of Canada (IIROC). These organizations are overseen by the CSA. The Ontario Securities Commission defines an SRO as, "an entity that is organized for the purpose of regulating the operations and the standards of practice and business conduct of its members and their representatives with a view to promoting the protection of investors and the public interest."[9]

Mutual fund dealers regulated by the MFDA include 111 firms, 81,894 sales persons and $502.6 billion of collective assets under administration (AUA).[10] .

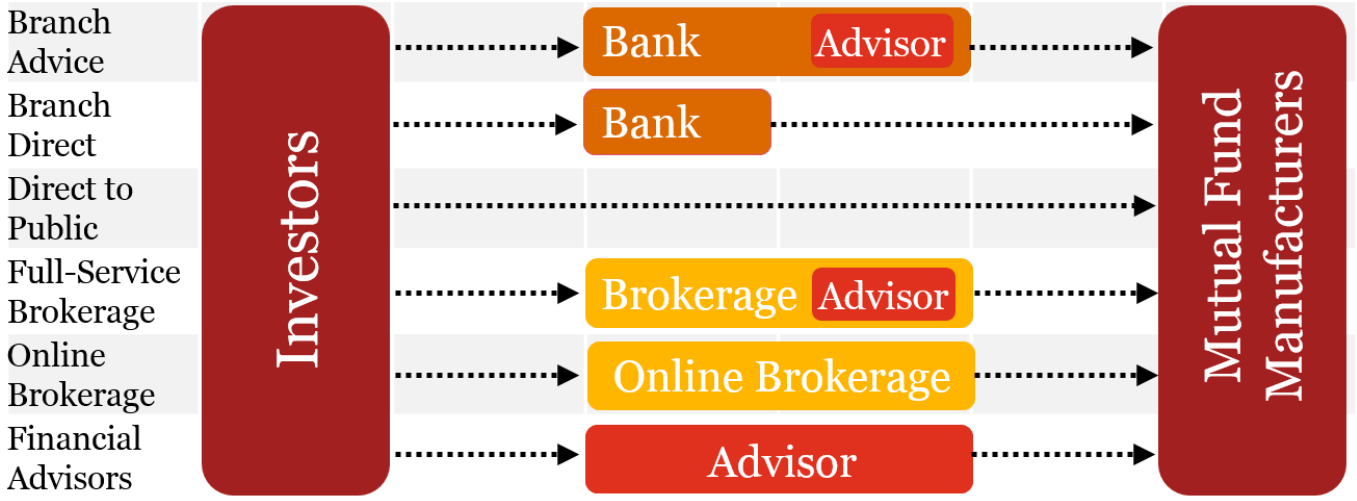
Securities dealers regulated by IIROC represent 180 firms, and 28,704 dealers.[11] IIROC's regulatory focus is directed specifically at member firms and their registered employees who sell a wider range of products, including mutual funds and exchange traded funds (ETFs), guaranteed investment certificates, stocks, bonds, derivatives and alternative investments including hedge funds. In Quebec, the Chambre de la sécurité financière (CSF) and the Autorité des marchés financiers (AMF) also regulate securities and mutual fund markets.

[9] Refer to "Regulatory Environment" for further information on SROs.
[10] MFDA Membership Statistics
[11] IIROC, 2016

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Figure 2: Mutual Fund Distribution Channels



Mutual funds in Canada can be purchased through one of the following distribution channels:

- **Branch advice** – distribution channel that offers financial planning and investment products through branches of deposit-taking institutions such as major banks and credit unions. The channel is made up of in-branch advisors who typically hold MFDA licensing, although some are also registered through IIROC.

- **Branch direct** – distribution channel made up of banking and other employees available to "walk-in" clients, who provide limited financial advice and initiate mutual fund transactions. Branch direct clients may move to the branch advice channel to receive more complete financial advice. The dealers operating through the branch direct channel are registered as mutual fund dealers with the provincial securities regulators. Within this channel, the majority of advisors are not paid a portion of the trailing commission. Rather, they are paid on a base and bonus structure. The branch direct channel is one of the fastest growing segments of the market.

- **Direct-to-public** – distribution channel that offers the sale of mutual funds directly to the investor. The channel includes registered mutual fund dealers such as private investment counsellors and specialist firms.[12] The services provided through this channel are primarily transaction focused.

- **Full-service brokerage** – this distribution channel offers full range of investment services to investors, including equity and fixed income securities, mutual funds, ETFs and other securities. The channel includes those IIROC member firms that have client-facing advisors with a retail offering of directly-held securities and fee-based managed asset solutions.

- **Online brokerage** – distribution channel delivering a wide range of investment products to do-it-yourself investors. Investment advice is typically not offered through this channel and products are delivered through centrally managed platforms. The online channel has been growing significantly in recent years, both in terms of the number of investors and assets under management. However, it remains small as a share of total AUM.

- **Financial advisors** – distribution channel made up of various firms, including dealer firms that offer a comprehensive range of investment services, as well as unregistered fee-only planning firms. These business models have varying degrees of independence and different product shelf capabilities.

[12] Investor Economics & Strategic Insight, 2012

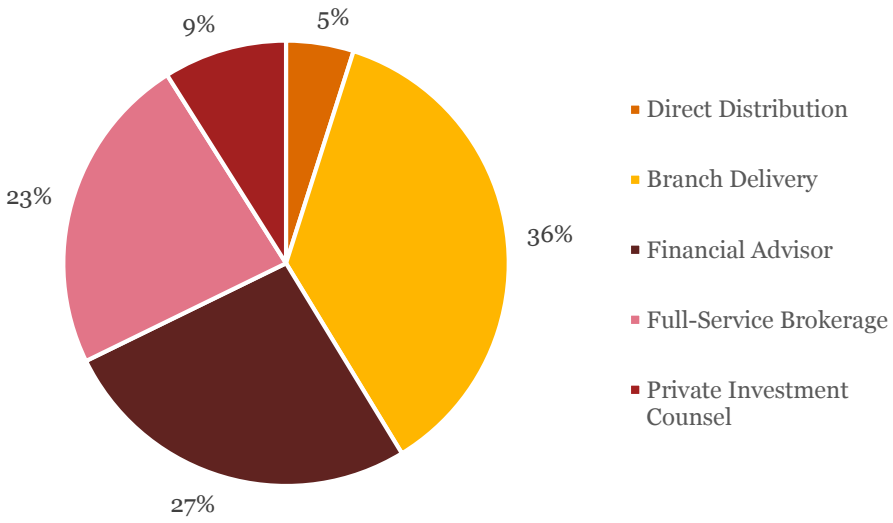
© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

The Role of Financial Advisors in the Sale of Mutual Funds

The following figure shows each distribution channel's share of total AUM as of 2016. In reference to the classification in Figure 2, Financial Advisors and Private Investment Counsel would both be considered "Financial Advisors." Branch delivery refers to both branch advice and branch direct channels. Direct distribution includes online brokerages.

Figure 3: Mutual Fund Assets by Distribution Channel, June 2016[13],



Advisor Compensation

Advisors are paid for the sale of mutual funds in a variety of ways, which can often be selected by the consumer in conjunction with their advisor. Some advisors only offer funds with specific fee structure, such as no-load funds. Mutual fund manufacturers pay embedded commissions to the mutual fund dealer, who in turn typically have a commission sharing agreement with their advisors.

Table 2: Compensation Models for Financial Advisors

	Time Paid	To Whom	Embedded	Accessible to Mass Market (<100K)[14] Investors
Front End Load (Sales Commission)	Time of purchase	Dealer	No	Yes
Back End Load (DSC)	When fund is redeemed (if within 5-7 years)	Fund Manager pays the Dealer	Yes, commission is paid to the dealer at the time of purchase	Yes

[13] SI Investor Economics Insight, 2017
[14] Mass-market investors have less than $100,000 in investable assets.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Low Load DSC	When fund is redeemed (if sold within 1-3 years)	Fund Manager pays the Dealer	Yes, commission is paid to the dealer at the time of purchase	Yes
Trailer Commission	Ongoing	Fund Manager pays the Dealer	Yes, commission is paid to dealer on an ongoing basis	Yes
Fee-Based	Ongoing	Dealer	No	No[15]
Hourly Fee	At time of purchase	Dealer or Advisor	No	No[16]

The most common structures for compensation include:

1. Fees Paid at Time of Purchase or Sale

- **Front End Load:** A set percentage of the investment is paid by the customer to the advisor's firm at time of purchase – resulting in a lower net investment of funds by the client. This commission is usually negotiable up front, and often ranges from 0% to 5%. We note that for funds with this fee structure, the load charge is often waived.

- **Back End Load:** Commission is paid by the fund company to the advisor's firm at the time of purchase (i.e. no commission is paid by the investor. Hence, the amount of the commission is not deducted from the initial investment made by the customer.

  Instead, a redemption schedule is established outlining the amount of time the customer is required to stay invested in the fund in order for the fund company to recover its costs associated with the upfront commission payment. If the customer decides to redeem the mutual fund prior to the expiration of the redemption period, a redemption fee is charged.

  There are 2 types of Back End Load fund structures:
  - *Deferred Sales Charge (DSC)*: The commission rate paid to the advisor's firm is typically 5%. The redemption fee rate is set on a sliding scale, starting at up to 7%, which diminishes to 0% over a 5 to 7 year period.
  - *Low Load*: Similar to DSC, but with a lower, negotiable commission rate (i.e. typically 1% to 3%), lower redemption rate and shorter schedule (typically 1 to 3 years).

- **No load:** No sales commission is charged or paid when a fund is purchased or redeemed. This structure is normally offered only by direct sellers/manufacturers.

2. Ongoing Fees based on Cumulative Assets Held

- **Fee-Based:** Similar to No Load, but sold by a financial advisor who may charge a fee percentage based on the total of the assets or for other services.

- **Trailer fees:** In addition to the sales charges described above, advisors may also receive a trailer commission from their dealer, which is an annual service commission, based on the percentage of assets held by the client, paid to the dealer by the mutual fund manufacturer for as long as the customer maintains their investment in the mutual fund. The financial advisor who receives a portion of this service commission is expected to provide the customer with ongoing services, such as answering questions regarding fund performance, account details and tax issues.

[15] In the United States, some institutions now offer fee-based services to mass-market investors, but these services are not yet available in Canada. Robo-advisors are not considered financial advisors for the purpose of this comparison.
[16] Hourly advice is accessible to mass-market investors, but given of the relatively small portfolio size, it is not practical for most.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

An advisor's compensation is paid pursuant to a commission grid. For mutual fund dealers, the firm will pay between 60 per cent and 80 per cent of the trailer fee to the advisor depending on their volume of business and their relationship with the firm. These advisors operate independently and pay many of the expenses related to their financial advice practice themselves. Full service brokerage firms typically provide more services to their advisors, therefore pay out a smaller percentage of the commissions, ranging from 25 to 55 per cent.

Fee-based platforms

Advisors at IIROC-licensed full service brokerage firms and mutual fund dealers may also offer their clients a fee-based investment program. This platform has become more popular in recent years: Investor Economics estimates that in 2015 37 per cent of all assets in the full-service brokerages of the big six banks were held in fee-based accounts, compared to 16 per cent in 2005. In 2015 26 per cent of assets in independent full-service brokerages were in fee-based accounts, compared to 16 per cent in 2005.[17]

At traditional fee-based retail brokerages, clients are charged a straightforward percentage of the money they invest – typically about 1-2 per cent of the assets under their watch – and they forgo mutual fund trailer fees and commissions on stock trades.[18] Advisors receive a share of this fee. However, fee-based platforms typically have a minimum investment level of at least $100,000, thereby making them inaccessible to mass-market investors.

Hourly Rates for Advice

Investors may also hire financial advisors on a per-hour basis. Advisors in Canada typically charge between $100 and $300 dollars per hour, or between $1,000 and $5,000 for a full financial plan.[19] These fee levels make hourly advice impractical for mass-market and even some mass-affluent investors.

Profile of Investors

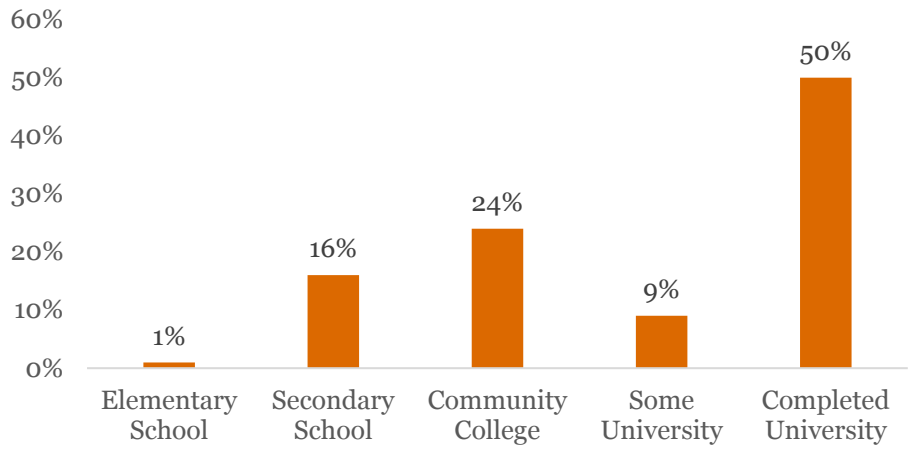
According to the Pollara survey on Canada's mutual fund investors, over 80 per cent have a post-secondary degree (see Figure 4). Approximately half of all investors graduated from university, approximately 10 per cent received some university education and approximately one quarter graduated from a community college.

[17] Collie, 2015
[18] Kiladze, 2013
[19] Macleans, 2015

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

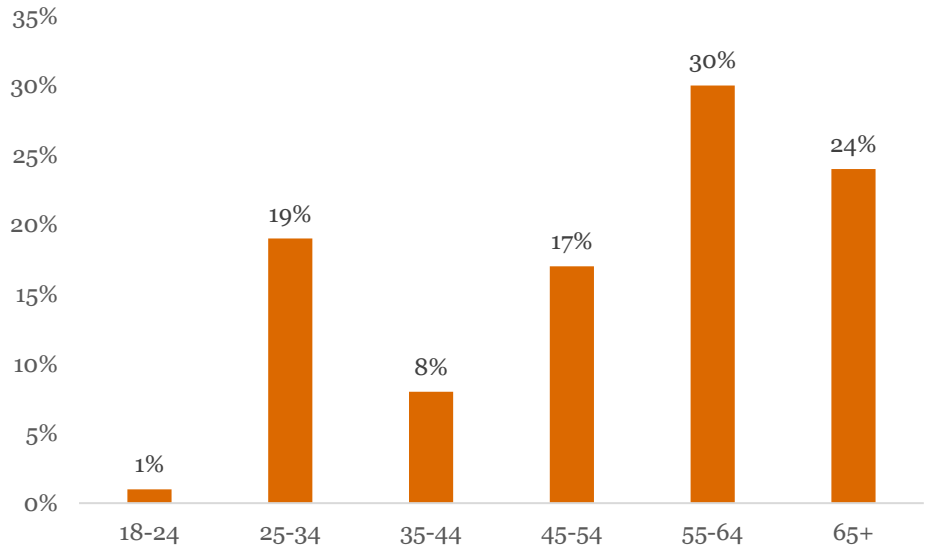
PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Figure 4: Educational Level of Mutual Fund Investors in Canada[20]



The vast majority, roughly 70 per cent, of mutual fund investors in Canada are over the age of 45 (see Figure 6). In fact, around 30 per cent are in the age cohort of 55 to 64 years and almost one quarter are in the age cohort of 65 years and over. Investors between ages 25 and 34 make up approximately 18 per cent.

Figure 5: Mutual Fund Investors by Age[21]



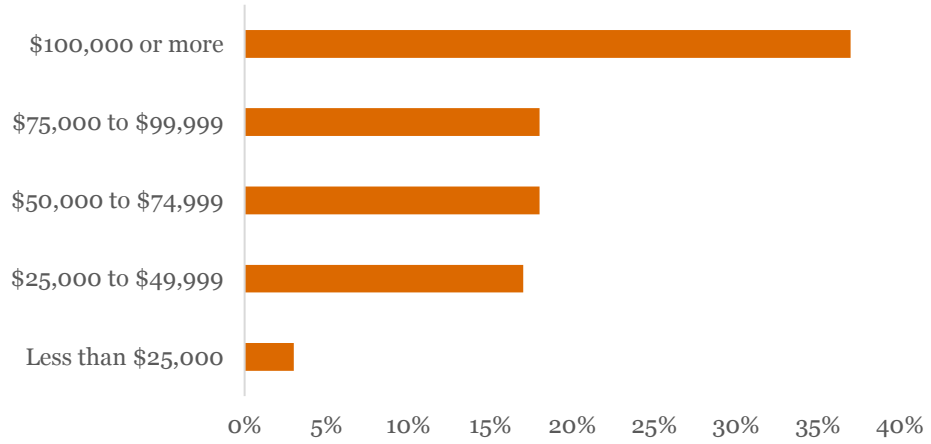
Around 37 per cent of households have total household income of $100,000 or more. Around 36 per cent of households have total household income ranging from $50,000 to $99,999. Finally, around 20 per cent of households have a total household income below $50,000 (Figure 6).

[20] Pollara, 2016
[21] Pollara, 2016

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

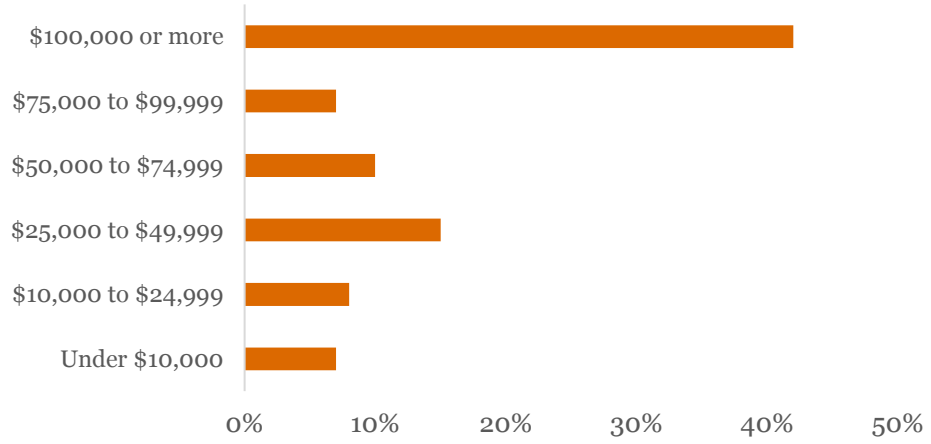
PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Figure 6: Household Income of Canadian Mutual Fund Investors[22]



Among Canadian households who own mutual funds, over 40 per cent own more than $100,000 of mutual funds (Figure 7). Around 7 per cent of households hold between $75,000 and $99,999 in mutual funds and 10 per cent of households have current investments in mutual funds between $50,000 and $74,999.

Figure 7: Household's current investment value in mutual funds[23]



Investors are grouped into three categories based on their net worth. Mass-market investors have under $100,000 in investable assets. Mass-affluent investors have between $100,000 and $500,000. Affluent investors have over $500,000.

Robo-Advisors

Traditional distribution channels are now faced with the rise of the "digital advice" channel, otherwise known as "robo-advice." The global advent of robo-advice started less than 10 years ago when firms launched a digital user interface that utilized sophisticated algorithms to develop automated asset allocation / portfolio models and create

[22] Pollara, 2016
[23] Pollara, 2016

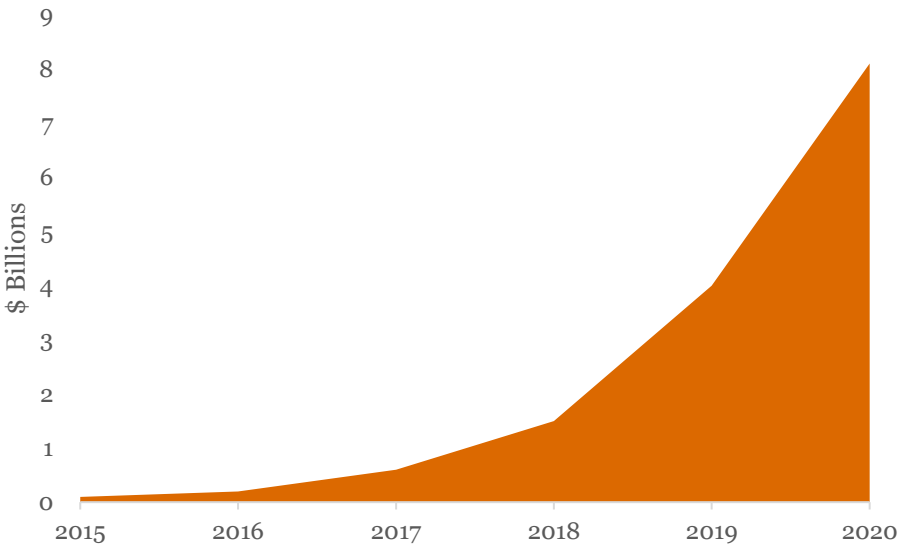
© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

specific investment recommendations tailored to meet investors' needs. Robo-advisors typically provide these solutions at considerably lower costs when compared to traditional investment fund distribution channels. In Canada most robo-advisors charge an "advice fee" or direct fee in the range of 0.25 to 0.65 per cent, which is paid in addition to the MER of investment funds.

Consequently, global growth of robo-advisors has experienced substantial growth with assets under management totalling approximately $60 billion USD at the end of 2016.[24] Global robo-advice assets are projected to grow to over $8 trillion USD by the end of 2020.[25] The Canadian investment fund distribution landscape began evolving with the launch of almost half a dozen robo-advisors in 2014. Since then, Canada's robo-advisor industry has experienced fast growth with a currently estimated $1 billion in assets under management.[26] The market leader in Canada, WealthSimple, currently serves over 15,000 clients and has over $750 million in assets under management, and anticipates to have over $1 billion by the end of 2017.[27] In January 2016, Canada's first bank owned robo-advisor (BMO Smartfolio) launched, signalling the entry of Canada's big banks into the robo-advice space.

Figure 8: Global AUM by Robo-Advisors[28]



While it is common for robo-advisors to primarily sell ETFs, some also sell mutual funds.

Robo-advisor channels tend to be marketed towards millennial investors, but in a 2016 survey the average investor age was 43, similar to the average investor age for traditional channels.[29] Robo-advisors tend to target smaller investors and generally have no minimum investment, or a low minimum such as $5,000. Most robo-advisors in Canada offer model portfolios based on investor profiles rather than customized options.

The main function of robo-advisors is to select a portfolio, invest and rebalance automatically based on algorithms. However, some robo-advisors in Canada offer guidance on account choice and written financial plans that go

[24] Moyer, 2015
[25] Kocianski, 2016
[26] BMO Global Asset Management research, 2016
[27] Ho, 2017
[28] Kocianski, 2016
[29] Carrick, 2016

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

beyond portfolio design.[30] Wealthbar is the only firm to include an annual review with an advisor. The costs of these services are included in the direct fee paid as a share of assets or fixed a monthly charge.

Some robo-advisors in the US such as Personal Capital and Vanguard Personal Advisor Services offer more extensive financial advice from humans along with automated investment services. These hybrid advice services may also have portfolio minimums, meaning that they are not accessible to all mass-market investors. For example, Personal Capital has a $25,000 USD minimum and Vanguard Personal Advisor Services has a $50,000 USD minimum. As far as we are aware, no such hybrid services are offered in Canada at this time.

While robo-advice does seem to appeal to growing parts of the investor population, it is apparent that the current technology has limitations that do not enable it to effectively service all clients. While robo-advisors offer some guidance, robo-advisors in Canada currently do not offer complete financial advisory services. This may make them inadequate for investors with more complex financial planning needs such as estate planning and tax planning. Secondly, the questionnaires provided by robo-advisors to assess investors' needs may be too simplistic to provide appropriate advice. For example, many do not ask about assets outside of what the investor would like to invest with the firm, and therefore do not take into account factors like debt and real estate holdings. Additionally, many investors are still uncomfortable with the idea of robo-advice. Finally, as this technology is fairly new, it is not yet clear whether robo-advisors can provide a substitute for the behavioural coaching that advisors provide. As discussed later in this Report, human financial advisors have been shown to help investors to save more and counter investor biases in investing strategy.

Generally speaking, robo-advice is a platform that offers a lower cost alternative to mass-market investors. Notwithstanding the above limitations and any changes in regulations, it appears that the growth in the use of robo-advice will continue to accelerate, driven by evolving technology such as artificial intelligence, and the increasing adoption of such technology by younger generations.

Growth in ETFs

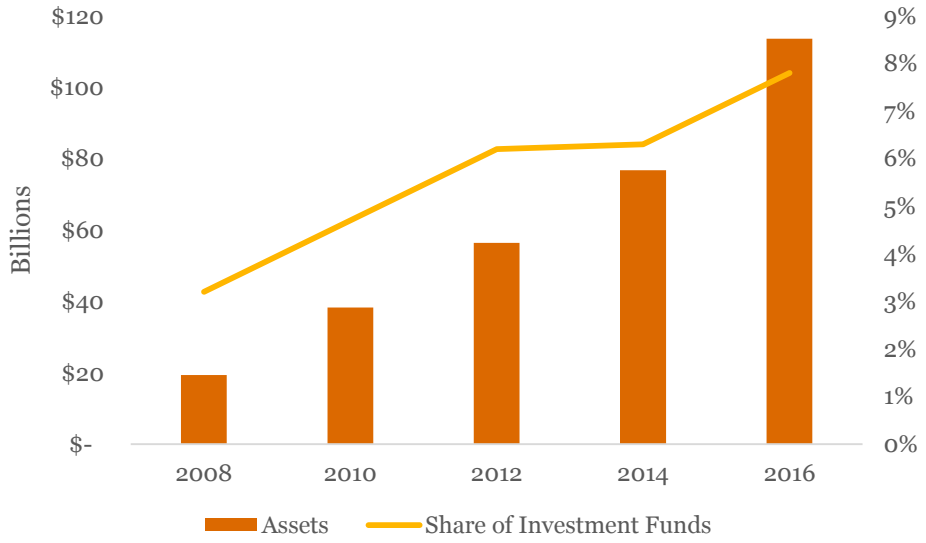
Another important change in the investment industry is the recent growth of exchange-traded funds (ETFs). ETFs are investment funds that trade on the stock exchange. Most ETFs track indices of other stocks such as the S&P 500, but there are ETFs for many smaller market segments and for funds of funds including mutual funds. ETFs tend to have lower fees than mutual funds because they passively track an index of stocks rather than actively managing the fund. Since 2008, the ETF market in Canada has grown significantly, totalling 478 funds and $122.9 billion in assets, as of March 2017. Figure 9 shows the increase in assets in ETFs and in these assets as a share of total investments.

[30] Carrick, 2016

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Figure 9: Assets in ETFs as of December of Each Year[31]



As described in PwC's "A Roadmap to Growth" publication in 2016, the manner in which ETFs across the globe continue to evolve. Based on that survey, financial advisors, online platforms, and retail investors are expected to be the top three segments driving global demand for ETFs over the next five years. Almost 86 per cent of North American respondents expect that financial advisors will continue to create significant demand for ETFs over the next five years, contrasted with approximately 43 per cent for Europe and Asia.

Regulatory Environment

The regulatory system for Canada's investment fund industry focuses on achieving a balance of promoting investor protection, confidence and fairness, while also attempting to improve regulatory "harmonization" through the development of uniform rules to be applied to all investment funds sold to retail investors including mutual funds, exchange traded funds, closed-ended funds and scholarship plans.

In Canada, the manufacturing and distribution of investment funds and other securities is regulated under provincial securities legislation and through rules and guidance set by provincial securities commissions. The main rules and guidelines that govern investment funds, dealers and investment fund managers are incorporated into national and multi-lateral instruments and related guidance. These rules and guidelines were created and are managed by Canada's provincial and territorial securities regulators, also known as the Canadian Securities Administrators (CSA). The provincial and territorial regulators work together to coordinate and harmonize the regulation of Canadian capital markets through the CSA. Key activities of the CSA include:

- Developing uniform rules and guidelines for securities market participants;
- Coordinating approval processes;
- Developing national electronic systems through which regulatory filings can be made and processed by all jurisdictions; and
- Coordinating compliance and enforcement activities.

The main rules that govern mutual funds and investment fund managers are created and harmonized by the CSA and adopted by each provincial and territorial securities regulatory authority. These unified rules, also known as

[31] Canadian ETF Association, 2017

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

National Instruments[32] (or in the case of rules not harmonized across all provinces, multi-lateral instruments), cover the governance, disclosure, custody of assets, investment restrictions, sales practices, calculation of net asset value and operations of investment funds and the regulation of investment fund managers themselves.

The key regulatory instruments that apply to investment funds are provided below:

- National Instrument 81-102 Investment Funds: sets out core investment restrictions and fundamental operational requirements including investment activities and the sale and redemption of its securities.
- National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations: sets out registration requirements and the activities of registrants, including the harmonization, optimization and modernization of registration requirements across Canada for firms and individuals who sell securities, offer investment advice or manage investment funds. The instrument also addresses internal controls and systems and financial requirements for registrants, along with requirements for dealing with clients, and managing conflicts of interest.
- National Instrument 81-101 Mutual Funds Prospectus Disclosure: establishes requirements for mutual funds with respect to the preparation, filing and delivery of prospectuses and annual information forms such as the Fund Facts document.
- National Instrument 81-105 Mutual Fund Sales Practices: regulates Mutual Fund sales practices including compensation, sales incentives, marketing and educational practices for conferences, business promotional activities, and related disclosure requirements.
- National Instrument 81-106 Investment Fund Continuous Disclosure: regulates the financial and other information that mutual funds must disclose, including financial statement requirements.
- National Instrument 81-107 Independent Review Committee for Investment Funds: requires mutual funds to have independent review committees to help manage and oversee all decisions involving perceived or actual conflicts of interest faced by the investment fund manager as it pertains to any operational aspects of the fund.

In addition to the CSA and the provincial/territorial securities regulators, there are three regulatory organizations made up of investment dealer firms that monitor and enforce their own members' compliance with applicable securities laws pertaining to the sale of mutual funds and securities to Canada's investors. These SROs are subject to the authority of the securities commissions and include:

- The Mutual Fund Dealers Association of Canada (MFDA), which oversees the operations, standards of practice and business conduct of mutual fund dealers, and
- The Investment Industry Regulatory Organization of Canada (IIROC), which provides oversight of the trading activity on debt and equity marketplaces of all investment dealers in Canada. IIROC sets and enforces rules regarding the proficiency, business and financial conduct of dealer firms and their registered employees. It also sets and enforces market integrity rules regarding trading activity on Canadian equity markets.
- The Chambre de sécurité financière (CSF) oversees the training and ethics of financial planners and other investment professionals.

Additionally, these organizations maintain investor protection funds that will reimburse investors, up to specific limits, if a member firm becomes insolvent or goes bankrupt.

Representative licensing and registration regulation involves both securities regulators and SROs. To qualify and act as a representative selling mutual funds in Canada, individuals must meet proficiency, dealer sponsorship and securities registration requirements established by the securities regulatory authority in each jurisdiction in which

[32] Further information on CSA's regulatory framework for mutual funds (National Instruments) can be found on the Ontario Security Commission's website (http://www.osc.gov.on.ca/en/6449.htm).

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

they operate. The individuals sponsored by a dealer are also regulated by the MFDA or IIROC or, in the case of Quebec, the CSF or IIROC. Furthermore, any organization seeking to distribute or sell mutual funds in Canada, other than Quebec, must apply and obtain approval for membership with the MFDA or IIROC, in addition to being registered with the appropriate securities regulatory authority. In Quebec, the organization must apply and obtain approval for membership with IIROC or the provincial securities regulator.

Conflict of Interest and Suitability

Against a backdrop of global concerns regarding investor conflict of interest and suitability, securities regulators, the MFDA, the CSF and IIROC continue to develop legislation to address conflicts of interest, fee transparency and disclosure.

The current statutory standard of care for registrants is the duty to deal with clients fairly, honestly and in good faith. Investment recommendations must be suitable for a client's investment knowledge, risk tolerance, and investment goals. This process is guided by "Know Your Client" (KYC) rules.

In addition to the KYC Rule, regulators also require both registered firms and advisors to comply with the "Know Your Product" ("KYP"), which requires the advisor to fully understand any investment product they recommend and properly determine product suitability or fit for a client. Additionally, firms are expected to have processes in place for new product reviews and/or changes, and these firms must also have the resources with skills and experience necessary to conduct these reviews on their own.

In assessing new or updated investment products, there are several key steps that firms and advisors need to perform, including:

- General Structure – understand product complexity and transparency, basis of return, any conflicts of interest that may arise due to its return structure, and any unique features that may introduce unusual risks.
- Risks – identify product related risks, including liquidity, price volatility, derivative or structured product related risks, and default risks – with a lens of the possibility / likelihood and extent of the investment loss a client may experience.
- Costs – determine investment costs for the client, includes sales charges, commissions, referral fees, early redemption fees, embedded costs and other charges.
- Identifying parties involved – obtain the history and financial position, qualifications, reputation of the issuer including fund managers, portfolio managers, product manufacturers and guarantors involved with the product or transaction.
- Legal Framework – provide frequent and comprehensive disclosure in order to obtain an accurate view of a firm's general structure and risk.
- Policies and Procedures – maintain written policies and procedures to ensure that they are satisfying the KYP requirement.

Enhanced Transparency and Disclosure: CRM2 and POS

Regulatory changes to increase transparency and disclosure were implemented as part of the Point of Sale framework, which requires mutual fund and insurance companies to provide an additional disclosure document ("Fund Facts"). This disclosure document has been designed to provide investors with timely and relevant mutual fund or segregated fund information in a simple and concise manner. Information listed on the Fund Facts statement includes fund investment composition, performance, benefits, risks and costs, and advisor fees. The intent of this regulatory change was to better enable the investor to properly research and compare different fund options to make effective buying decisions. The Funds Facts disclosure document is required to be provided to the client prior to the decision to buy, and replaces the simplified prospectus that was previously required.

Introduced in July 2013, CRM2 intends to improve the transparency and disclosure of advisor compensation including embedded fees, and specific fund performance information to clients. Changes to the client reporting

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

vehicles including trade confirmations, client statements and annual reports involving disclosure of charges, advisor compensation, fund cost information, update fund market value, fund performance and other forms of compensation were implemented over a 3 year, 3 phase timeline from 2014 to 2016.[33] New disclosure documents must be delivered to clients by July 2017. The most recent and final phase of CRM2 relates to the implementation of two annual statements: Charges and Compensation Report and Investment Performance Report. The Charges and Compensation Report includes charges an investor pays in relation to their account including trailing commissions in dollar terms. The Investment Performance Report provides the annual percentage performance on a money weighted basis, net of fees. It is still too early to fully understand the impact these changes will have with respect to transparency and client understanding. Further study will be required in the coming years.

We note that in 2015, prior to the full implementation of CRM 2 and POS, disclosure laws in Canada were considered to be investor-friendly: Morningstar's bi-annual Global Fund Investor Experience Study rated Canada "A-" on a grade scale for disclosure, the third best disclosure rating in the survey.[34]

Accountability

In comparison to other developed capital markets Canada has a strong regulatory framework which increases the likelihood that financial advisors are following best practices in performing their professional activities. For example, the CSA and the SROs investigate and prosecute in appropriate cases, allegations of misconduct in financial services. Penalties range from license suspension to financial penalties and jail time. The CSA also issues investor warnings and alerts based on complaints they receive.

SROs can also investigate wrongdoing and deliver disciplinary action against advisors. In 2015/2016, IIROC received 42,271 reports on advisors.[35] In addition, all MFDA and IIROC members must be subject to the Ombudsman for Banking Services and Investments (OBSI). This body carries out investigations of misconduct and can recommend advisors to provide financial or non-financial compensation to clients.[36] In all, there is a robust complaints system for investors who would like to report misconduct.

Proposed Changes to Regulation

In December 2012 and January 2017, the CSA published consultation papers presenting evidence that they have gathered on the effects of embedded commissions. The purpose of these papers was to provide evidence for their assertion that embedded commissions distort behaviour in the mutual funds market in an undesirable way, and to seek input from stakeholders on any issues that they may not have considered.

Based on the CSA's consultation papers, their position is that there are three main problems with embedded commissions:

1. "Embedded commissions raise conflicts of interest that misalign the interests of investment fund managers, dealers and representatives with those of investors;
2. Embedded commissions limit investor awareness, understanding and control of dealer compensation costs; and
3. Embedded commissions paid generally do not align with the services provided to investors."

The 2017 paper (CSA Paper) claims that the existence of embedded commissions leads to undesirable behaviours including the following:

[33] OSC, 2017
[34] Morningstar, 2015
[35] IIROC, 2016
[36] OBSI, 2017

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

1. Investment fund managers rely more on payments to dealers than on performance to raise and preserve assets;
2. Dealers recommend funds to clients based on the highest embedded commissions; Investors have no ability to manage or negotiate their dealer compensation costs; and Dealer compensation may not reflect the level of service the investor receives.

The above concerns have led the CSA to conclude that a change to a different compensation model must be considered, but the CSA emphasizes that it has not made a decision to discontinue embedded commissions. The CSA will reach its final decision in this regard following a consultation process.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

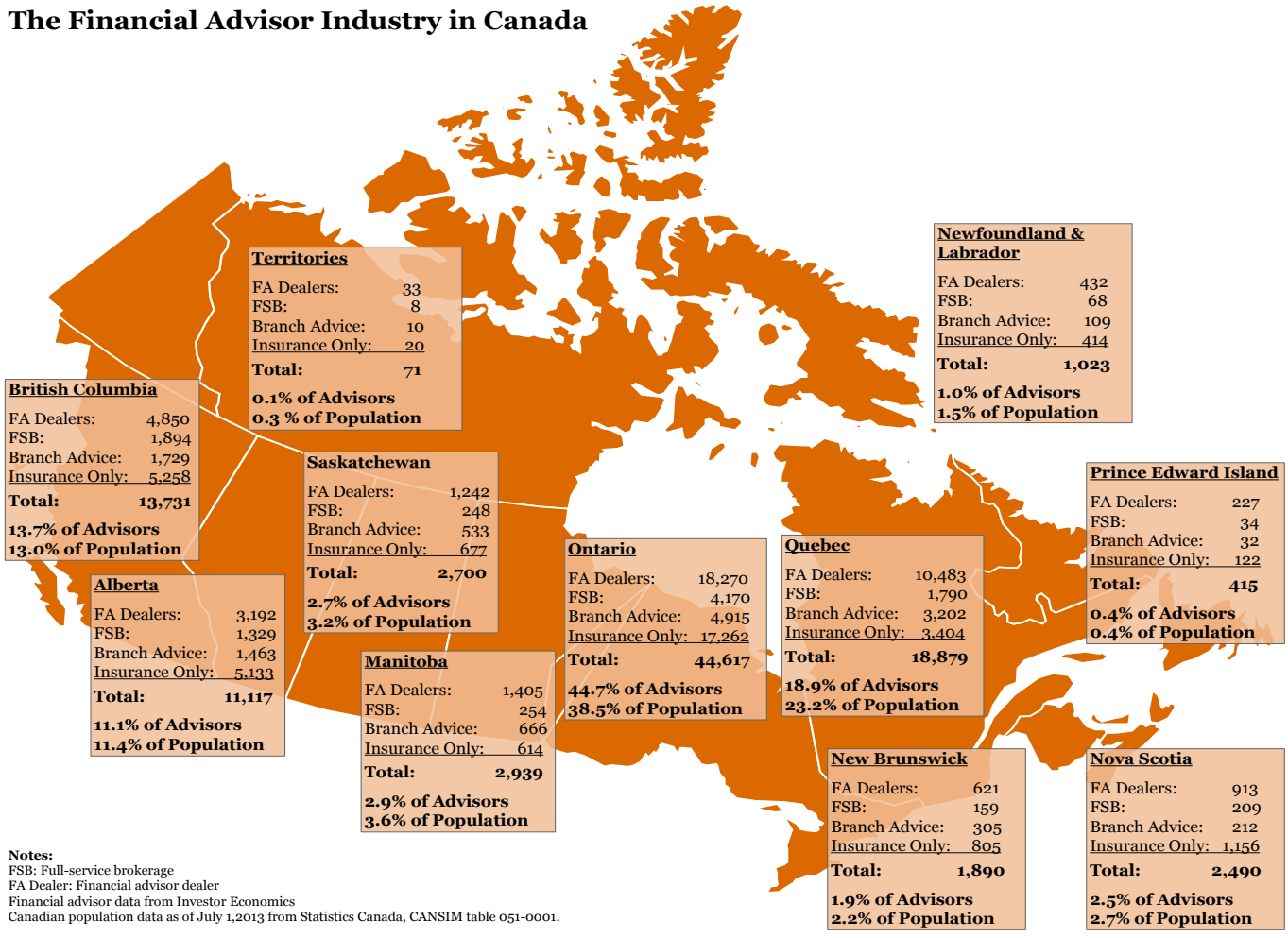
PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

The Financial Advisory Sector

This section provides an overview of employment and asset levels and distributions in the financial advisory sector in Canada, and overviews the distribution of assets of Canadian households. It outlines the number of financial advisors by province and reviews the services offered by different types of financial advisors. We also note recent trends in the number of advisors and in household wealth allocation.

The following figure provides an overview of the provincial breakdown of financial advisors across each segment and a comparison of relative advisor coverage by province[37]. The percentage of advisors in each province or territory generally mirrors their population share, with the exception of Ontario which has a higher percentage share of advisors relative to population share (45 per cent of advisors versus 39 per cent population) and Quebec, which has a lower percentage share of advisors relative to population share (19 per cent of advisors versus 24 per cent population).

Figure 10: The Financial Advisor Industry in Canada



[37] Investor Economics, 2014

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Under Canada's various regulatory regimes, financial advisors typically fall into 4 broad segments: Full Service Brokerage, Branch Advice, Insurance-based and Financial Advisor Dealer. The focus of these advisors depends on both their licensing and the orientation of the channel through which they do business.

The following is a description of each segment:[38]

- **Full Service Brokerage:** Advisors working through full service brokerage firms that provide financial advice and a wide range of discretionary and non-discretionary investment services based on funds, individual securities and insurance. Over two-thirds of these advisors work for full-service brokerage firms that are owned by deposit-taking (e.g. bank owned) firms, while the remaining advisors work in non-bank owned or independent organizations.
- **Branch Advice:** Advisors that offer a limited range of financial planning and investment products and services through branches of deposit-taking institutions such as banks and credit unions.
- **Insurance-based:** These advisors are only licensed to sell insurance products.
- **Financial Advisor Dealer:** Advisors operating outside of deposit-taking branch network who provide access to a wide range of services including planning, investment and insurance services. These advisors fall into two categories:
  - **Independent Advisors:** These advisors are typically small and medium-sized business owner-operators (i.e. single person or small advisory firms with more than one advisor). They are independently-contracted to distribute life and health insurance and wealth products (e.g. mutual funds, securities) and services through multiple financial services manufacturers (e.g. life insurance companies, fund managers).
  - **Career Exclusive Advisors**: These advisors are affiliated exclusively with a major insurance company or investment firm to sell specific products but are independently contracted. As a result, they are considered to be small businesses i.e. their contract is not based on an employee-employer relationship. However, some product offerings distributed by this segment are also available from third-party financial services providers.

Industry Structure by Financial Advisor Segment

Over 98,000 individuals in Canada carry one or more financial service licenses and fall into one of the four financial advisor segments.

The table and graph below provide a breakdown of the number of financial advisors in each segment, along with the market share of each segment in 2016.

Table 3: Number of Advisors by Industry Segment, 2016[39]

Industry Segment	Number of Advisors	% of Industry
Full Service Brokerage	9,950	10%
Branch Advice	13,600	13%
Insurance-based	40,700	35%
Financial Advisor Dealer	33,900	41%
Total	**98,150**	**100%**

[38] Investor Economics, 2014; Advocis, 2012
[39] Investor Economics, 2016

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Dual Licensing

Many MFDA and IIROC firms have sister companies offering Life Insurance products. These companies and are most often set up as Managing General Agents (MGAs) or National Accounts under the IIROC channel. It is estimated that as many as 80 per cent of MFDA advisors are dual-licensed and are holding an insurance license. Life insurance agents working with an MGA may have multiple MGA relationships and even direct-to-insurance-company contracts, thus in the absence of actual source data, reporting of their total income is difficult to estimate and runs the risk of double counting. However, repeated research studies going back as far as the early 2000s consistently have shown that advisor's incomes are highly weighted to their "primary" license. This means that if they were initial licenced as mutual fund representatives, then the activities in this licensing category make up 60 per cent or more of their income, with life insurance making up 17 per cent and Individual Variable Insurance Contracts (IVICs), 10 per cent. In contrast, those starting in the advisory business as life insurance agents would have the reverse income ratios with IVICs having a larger share. Dual-licensed advisors are able to sell segregated funds, which are mutual funds whose value is insured. Unlike traditional mutual funds, segregated funds are not regulated by the CSA. It is important to note that advisors licensed and employed by bank-owned dealers are precluded from obtaining a life insurance licence due to restrictions in the Bank Act.

Growth Trends

The total number of licensed advisors has grown by 2,658, or 2.8 per cent, over the past six years. During this time, most advisor segments have shown a slightly upward trend with the exception of the full service brokerage segment, which shrank by 342 advisors, or 3.3 per cent. Note that relative to 2013, the aggregate number of advisors declined in 2016, from 99,871 to 98,150, a 1.7 per cent decline.

The following table provides a comparison of industry participants per sector between 2010, 2013 and 2016.

Table 4: Financial Advisor Population in 2010, 2013 and 2016[40]

Industry Segment	2010	2013	2016	Growth rate 2010-2016
Full Service Brokerage	10,292	10,162	9,950	-3.3%
Branch Advice	13,000	13,177	13,600	4.6%
Insurance-based	39,437	44,074	40,700	3.2%
Financial Advisor Dealer	32,763	32,458	33,900	3.5%
Total	**95,492**	**99,871**	**98,150**	**2.8%**

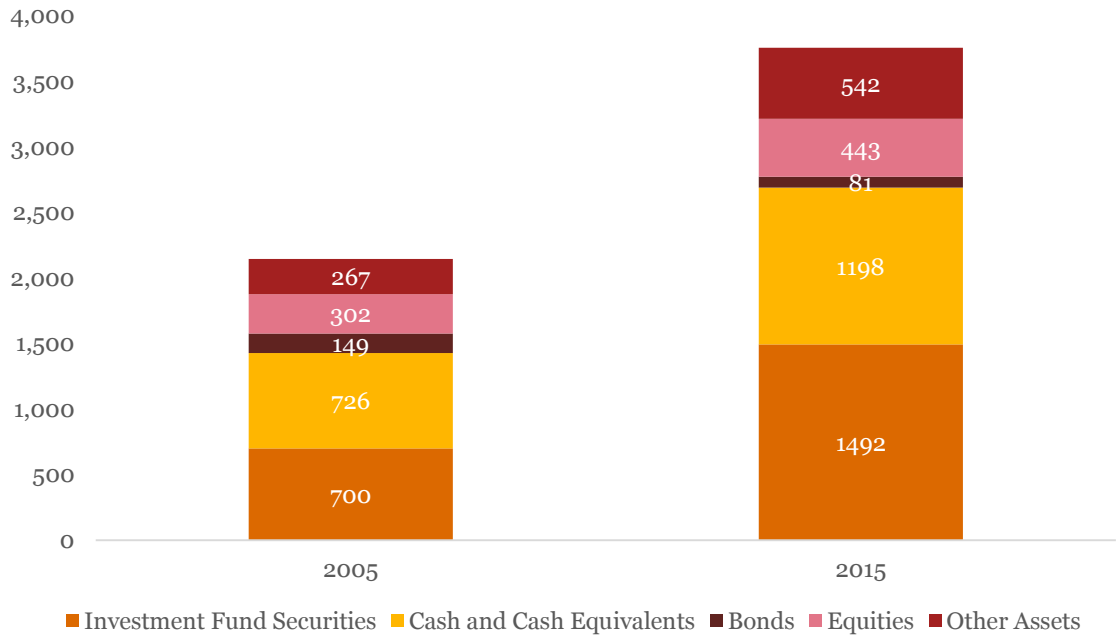
Canadian households' wealth has increased considerably over the last decade, and so did their holdings of investment fund securities including mutual funds, ETFs, and other types of funds. Between 2005 and 2015, households' wealth has increased from $2.1 trillion to $3.8 trillion, an annual average rate of 6.1 per cent increase. At the end of 2015, Canadian households held $1.5 trillion or 40 per cent of their aggregate financial wealth in investment fund securities and 32 per cent in cash and cash equivalents. By contrast, securities such as stocks and bonds made up only 14 per cent of aggregate financial wealth in that year. Figure 11 shows these allocations:

[40] Investor Economics, 2016

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Figure 11: Canadian Household Assets in 2005 and 2015, $billion[41]



Households by Investable Assets and Fund Ownership

The majority of Canadian households do not own investment funds,[42] as illustrated in the table below:

Table 5: Canadian Household Assets in 2005 and 2015, $billion[43]

Household Investable Assets	Own investment funds	Do not own investment funds	% of total households
Less than $100,000	22%	78%	67%
$100,000 to $500,000	67%	33%	27%
Over $500,000	76%	24%	6%
% of total households	**37%**	**63%**	**100%**

The figures in Table 5 also suggest that those with higher level of investable assets are more likely to hold investment funds than those with lower levels of wealth.

At the end of March 2017, mutual fund asset under management were $1,392 billion.[44] According to the Pollara 2016 survey the overwhelming majority of mutual funds – nine out of ten - were purchased through a financial advisor.[45] On that basis, advisors handle an overall mutual funds portfolio of $1,253 billion.

[41] CSA 81-408
[42] Investment funds include mutual funds, ETFs, pooled funds and other types of funds.
[43] CSA 81-408

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

The Value of Financial Advisors

This section outlines the theory and evidence on the value provided by financial advisors. We outline relevant principles from behavioural economics that help to explain this value, and review academic literature on the subject.

The Economic Theory

From an economic point of view, using a financial advisor has a net positive value to an investor if the opportunity cost of spending that investor's resources on the tasks performed by the financial advisor are higher than the cost of financial advice, provided that the outcome in both is identical. The opportunity cost to the investor is a function of the time they would otherwise spend on such tasks as well as the value of a time unit to them. Since in many instances advisors have expertise that investors generally do not have, in theory the use of an advisor should provide the investor a superior outcome compared to DIY-investing. Moreover, the emotional stress that may accompany managing of such tasks alone could further increase the opportunity cost and thus increase the net value of using a financial advisor.

Financial advisors perform a variety of tasks for investors including:

- Evaluating the client's total financial situation;
- Making recommendations on the allocation of financial assets;
- Assessing alternative investment options; and
- Determining whether the client's current rate of savings is sufficient for a comfortable retirement.

Research conducted in behavioural economics shows that, contrary to classic economic theory, people suffer from behavioural biases and do not always act rationally. With regard to investors, research conducted by Richard Thaler and others indicates three main behavioural biases: loss aversion, a tendency toward short-term thinking, and overconfidence.[46]

As the work of Richard Thaler shows, financial losses have about twice the emotional impact on investors as equivalent gains. As a consequence, investors might overreact to short-term negative financial news that would prevent them from taking advantage of long-term gains. The behavioural bias towards short-term thinking can lead investors to under-save for retirement. Overconfidence, may lead investors to under-diversify and over-trade, thus unwisely increasing risk and transactions costs.

Financial advisors can play an important role in this regard for several reasons. First, they can help counteract investors' short-term bias and encourage the discipline to save for the longer term. Second, they can help in addressing investors' loss aversion by advising against panic sales. Finally, advisors can play a crucial role in providing better quality information to investors which is shown to improve financial decision-making.[47] As Robert Shiller points out:

---

[44] IFIC, 2017
[45] POLLARA, 2016
[46] See for example: Benartzi & Thaler, 2007; Thaler, 2005; Shiller, 2003; Barberis et al., 1998); Benartzi & Thaler, 1995
[47] Gaudecker, 2015

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

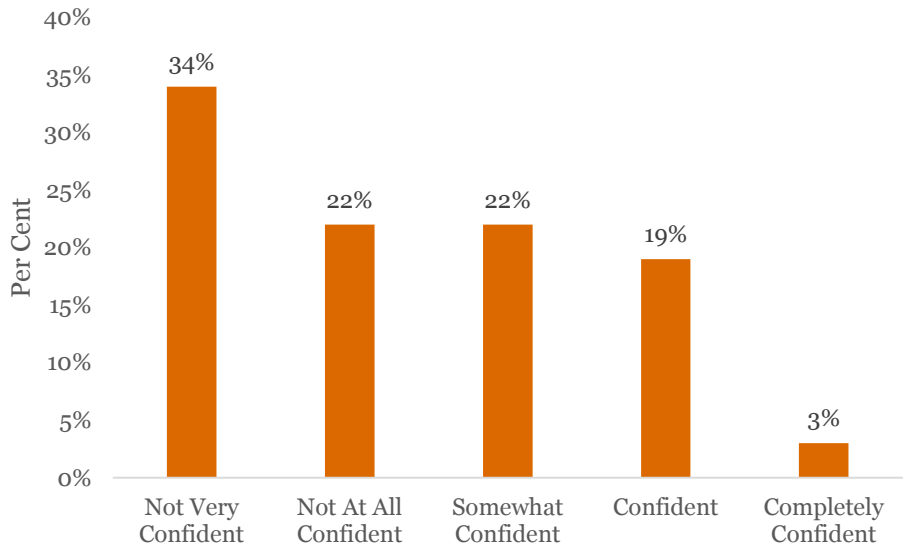
"Financial advice is in some respects like medical advice: we need both on an ongoing basis and failure to obtain either can impose costs on society when our health—physical or financial—suffers. There's a strong case to be made that the government should subsidize comprehensive financial advice … to help prevent bubbly thinking and financial overextension."[48]

Investors Attitudes to Advisors in Canada

In 2016, Pollara conducted a survey among mutual funds investors. This survey (hereafter the "Pollara Survey") is based on telephone interviews among 1,000 mutual fund holders eighteen years of age or older, who make all or some of the decisions regarding mutual fund purchases in their household. Interviews were conducted across all provinces and the national results are representative of mutual fund holders by region and gender. In this section we present the results of this survey as they pertain to the issue of "value of advice."

In 2016, nine out of ten mutual funds were purchased through a financial advisor. According to the Pollara Survey 56 per cent of mutual fund investors do not "feel at all confident" (22 per cent) or "not very confident" (34 per cent) buying mutual funds without an advisor (see Figure 12).

Figure 12: Answers to the Question "How confident would you be in selecting and purchasing mutual funds on your own, without the help of an advisor?"[49]



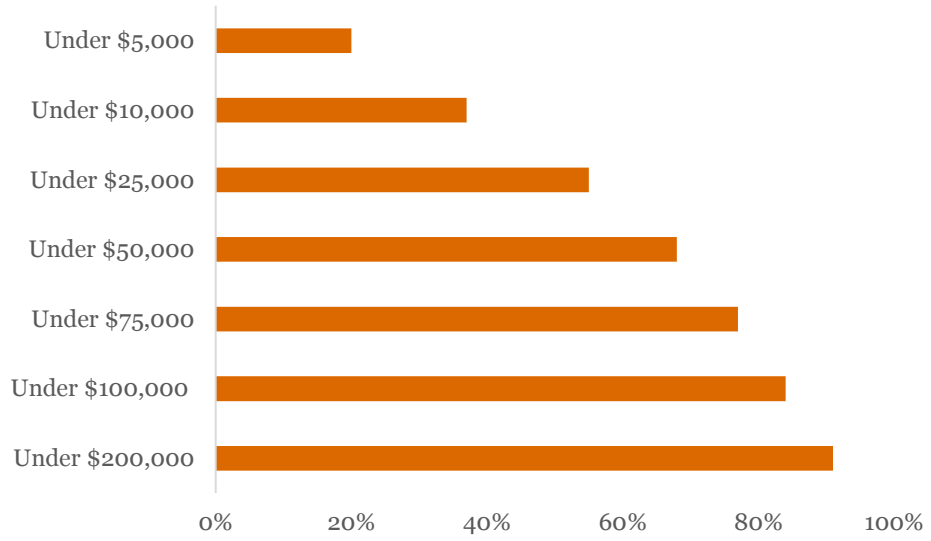
Approximately 37 per cent of mutual fund investors had less than $10,000 in total savings when they first approached a financial advisor – 20 per cent of which had total savings below $5,000. In fact, almost 70 per cent of mutual fund investors had total savings below $50,000 when they first used a financial advisor (Figure 13).

[48] Shiller, 2009
[49] Pollara, 2016

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

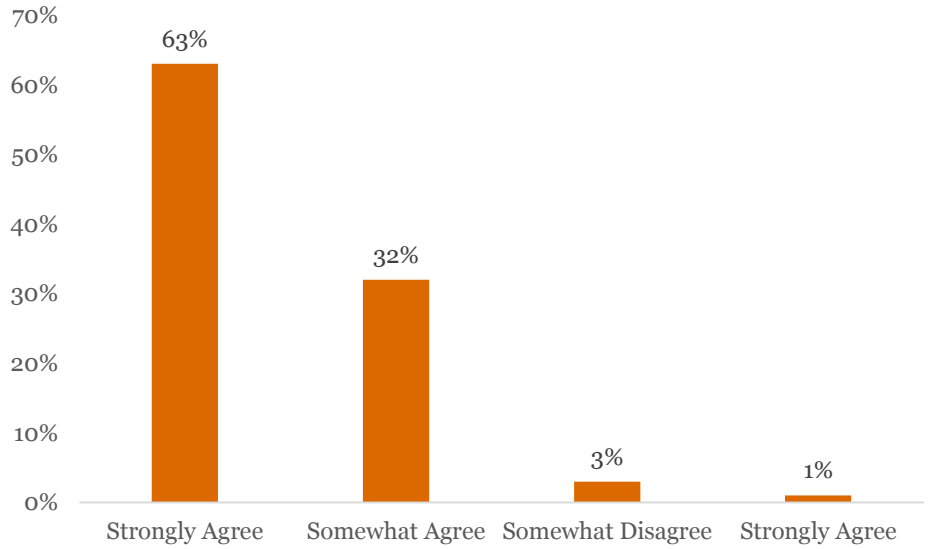
PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Figure 13: Total Value of Savings and Investments When Started Using a Financial Advisor[50]



The vast majority of investors, 95 per cent, state that they have some or high level of trust in their advisor to give them sound advice (see Figure 14).

Figure 14: Answers to the Question "I can trust my advisor to give me sound advice"[51]



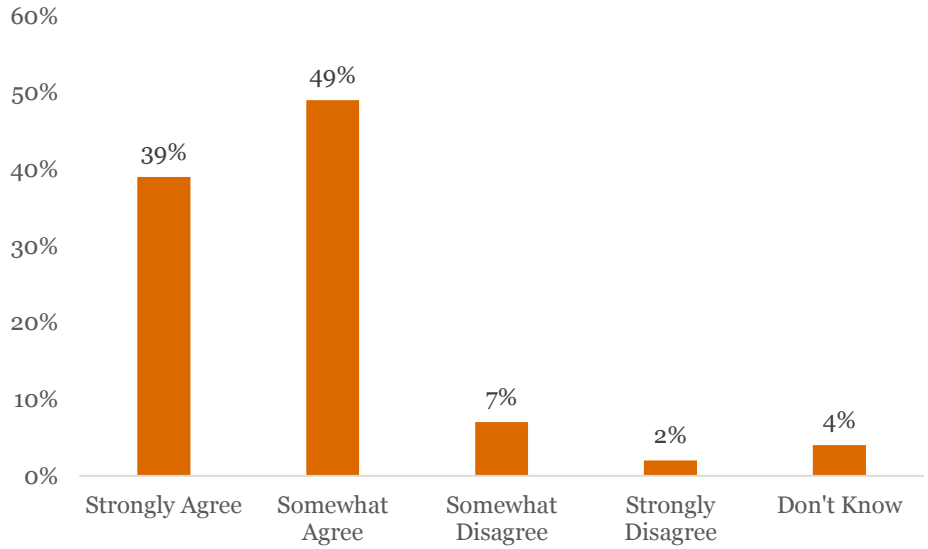
In addition, a majority of investors, 88 per cent, believe that they get better results when using a financial advisor (Figure 15).

[50] Pollara, 2016
[51] Pollara, 2016

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Figure 15: Answers to the Question "Overall I get better return on my investments because of the advice of my advisor."[52]



Finally, the Pollara Survey also reveals that some 82 per cent of investors are in agreement that they have better savings and investment habits because of their financial advisor, and that 38 per cent strongly agree.

The results of the Pollara Survey suggest that a significant majority of Canadian investors in mutual funds are relatively small investors who believe that they get a net benefit from using an advisor. The large majority of this group uses an advisor.

Empirical Evidence on the Value of Advisors

As noted previously, a majority of Canadian mutual fund investor's trust the ability of their advisors to help them select the right investment vehicles, to generate better returns and to develop better savings habits. This perception is supportive of the notion that financial advisors provide net benefit to Canadian investors in mutual funds and implies that the use of an advisor makes the process of investing less stressful. However, this perception, on its own, is not sufficient evidence to demonstrate the objective value of financial advice. For one, investors lack knowledge of the counterfactual, i.e. how their investments would have performed without the assistance of a financial advisor. Secondly, there is the possibility of self-selection process with regard to financial advice. Put differently, there is a possibility that those investors who seek the help of financial advisors have better savings habits to begin with and thus it appears that investors using a financial advisor perform better than those who do not. Thus, in order to obtain an objective assessment of the value of financial advice, we need to turn to empirical research that meets high academic standards.

A considerable portion of the academic literature has focused on the question of whether financial advisors help investors select outperforming funds i.e. funds that provide a higher return than the market as a whole.[53] The majority of these studies do not find evidence that financial advisors are able to pick outperforming funds for their clients. This finding is consistent with the predictions of financial theory. However, as most academics now recognize, this type of research does not answer the question of whether a financial advisor is providing overall net benefits to an investor. For one, using this as evidence that financial advisors do not provide net benefits to investors, implies that individual investors who do not use financial advisors are on average achieving returns that

[52] Pollara, 2016
[53] See for example, Bergstresser et al., 2009; Chalmers & Reuter, 2012; Del Guercio & Reuter 2014; Hackethal et al., 2012

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

are commensurate with market returns. This implied assumption is not likely reflective of reality and thus benchmarking advisor driven returns to the market is not relevant to the issue of the value of financial advice. Second, it is rather simplistic to assess the value of advice based on one parameter, in this case gross return. As noted above, investors seek various services to help them meet their financial targets, which requires skills they may not have. Thirdly, investors pay income tax on their returns and without an advisor may invest in tax-inefficient instruments that reduce their net return. Finally, there is an opportunity cost to DIY investing that includes time and emotional stress.

We have conducted a literature review aiming to identify studies conducted by reputable researchers who have specifically looked at the issue of the value of financial advice in a broad context. From our review, it appears that the majority of such studies support the notion that financial advisors do provide net benefits to investors.

Our literature review suggests that more recently, empirical studies have moved away from assessing financial advice purely on a "beat-the-market" perspective. Instead, they tend to focus on the overall benefits generated through wealth management practices by advisors. This is especially important since around 64 per cent of mutual fund investors in Canada state that their motivation for investing is to fund retirement or have supplementary income for retirement (Pollara, 2016).

In this context, Blanchett and Kaplan (2013) aim to quantify the value of financial advice that goes beyond the goal of higher returns by beating the market, i.e. "alpha decisions," and pure asset allocation, i.e. 'beta decisions'. The authors coin the term "gamma decisions" to describe their approach. This approach takes a more holistic view towards financial investments assuming that most investors pursue broader objectives than short-term high returns with a "beat-the-market-strategy." More specifically, the authors assumptions with regard to a financial planning strategy focuses on optimal asset allocation, a dynamic withdrawal strategy, tax-efficient allocation decisions, and a portfolio optimization that takes into account investors' liabilities. Using historical data on returns for different asset classes, the authors conduct a statistical analysis to determine the additional value generated by following a broader investment strategy. Blanchett's and Kaplan's results suggest that investors following the broader investment strategy outlined in their paper generates a 1.82 per cent higher net return per year compared to other investors. As a consequence, the authors conclude that the value of financial advice should be measured in terms of these more complex goals.

Similarly, a recent study by Hermansson and Song (2016), shows that the use of a financial advisor has a significantly positive effect on investors' savings behaviour. Studying the impact on savings generated by a group of Swedish investors that received advice compared to a control group that invested without the aid of a financial advisor, the study finds that the group receiving advice generated 22 per cent higher savings.

Research conducted in Australia presents similar results. A study by KPMG EconTech on the savings behaviour of investors with and without financial advice finds that individuals using a financial advisor save an additional $1,590 per year compared to individuals without a financial advisor. Importantly, their regression analysis controls for other factors that may influence saving behavior, such as an individual's level of wealth, employment status, and salary. Extending their analysis to the overall economy, the authors establish that as financial advice increases individual household's savings, overall national savings increase in turn.

A study by Marsden et al. (2011) on retirement planning in the United States delivers similar findings. The authors examine the differences in retirement planning for individuals who use the help of a financial advisor compared to individuals who do not use an advisor. Applying propensity score matching, a statistical technique applied to ensure comparability between the two groups, the study shows that using a financial advisor improves an individual's savings behaviour due to the positive impact on their overall financial planning, such as awareness of retirement needs and diversification of retirement savings. In addition, the results indicate that individuals who received financial advice demonstrated some positive behavioural changes in response to the financial crisis that had hit the United States in 2008. Individuals who used a financial advisor reported that they spent more time learning about financial topics, saved more or postponed retirement.

Analyzing the impact of financial advice on the savings behaviour of investors in Canada, Montmarquette and Viennot-Briot (2017) conducted a regression analysis to test whether investors who use an advisor are subsequently

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

better off compared to those who don't.[54] Their findings confirm the results of studies conducted in other jurisdictions showing that individuals who receive financial advice display better savings behaviour compared to those who don't. In addition, the authors point out that dropping (or losing) financial advice diminishes returns to investors. Their results indicate that individuals who dropped an advisor in 2010 experienced asset growth of 1.7 per cent by 2014 compared to 16.4 per cent for those who kept their advisor. The findings suggest that the tenure in receiving advice is a decisive factor. A household receiving long-tenured advice (15 years plus) displays 3.9 times the value of assets of a non-advised household.

A study by Cici et al. (2016) on mutual fund investors in the United States found that advisors produce tangible results for their clients by helping them to reduce the tax burden of investments.

Summary of Findings

Taken together, the academic empirical research shows that while financial advisors are not able in their investment choices to consistently beat relevant market benchmarks after fees, their advice generates significant net benefits to investors in terms of a more disciplined savings behaviour, overall higher asset values, more efficient tax planning, and retirement confidence. In addition, survey results indicate that mutual fund investors seeking financial advice place high trust in their advisor and believe that the use of a financial advisor helps them to achieve their financial goals. Moreover, since the high level of trust that Canadian investors have in their advisors is likely driven by long term relationships, the academic literature suggests that such trust is generally justified, as investors' benefits tends to increase with the longevity of their relationship with their advisor.

The main reason that empirical studies show significant net benefits from the use of advisors is founded in behavioural economics. According to research from this field, investors tend to suffer from behavioural biases such as loss aversion, short-termism, and overconfidence. Sound financial advice helps to mitigate these biases and, as a consequence, helps investors to achieve higher savings. In an ageing society, assisting people in saving sufficiently for a comfortable retirement is a critical public policy issue. As financial advisors help investors in generating overall higher savings for their old age, financial advice is an important component in a policy strategy to achieve this goal.

[54] The authors apply an instrument variable regression to control for endogeneity, i.e. to ensure that causality runs in the right direction.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Conflict of Interest

This section outlines the potential for conflicts of interest in the relationship between financial advisors and their clients. First, it describes the economic theory behind conflicts of interest in the investor-advisor relationship, and how this conflict might be mitigated. It then assesses the potential for conflicts of interest of this type in Canada, given empirical evidence on investor characteristics and attitudes toward financial advisor as well as the existing regulatory environment. Finally it reviews the empirical literature on the existence of conflicts of interest.

Economic Theory

Potential conflicts of interest are a common phenomenon in service industries. Providers of advice in auto repair, tradespersons, real estate, the health sector and financial services, to name a few, commonly have substantial expert knowledge that their clients do not possess. As a consequence, expert service industries are often characterized by asymmetric information between the service provider and the client. Darby and Karni (1973) have introduced the term credence goods to classify these markets and added it to Nelson's (1970) classification of ordinary, search and experience goods.[55] Credence goods have the characteristic that the consumer cannot judge ex-post whether the type or quality of good or service she received was what was needed ex-ante. In addition, she may also be unable to judge ex-post which type or quality she actually received.

In economic theory, the principal-agent problem also applies to the relationship between investor and advisor. In a principal-agent framework, the agent acts on behalf of the principal due to the agent's comparative advantage in some activities. The fact that financial advice is a credence good exacerbates the misalignment that may be caused by the principal-agent character of the investor-advisor relationship.

The principal-agent problem arises when two factors come into play. The first is conflicting incentives between the principal and the agent. The second is private or asymmetric information such that the agent possesses more information about a specific issue than the principal. If incentives between principal and agent are aligned, the principal can be confident that the agent will act in his best interest. Similarly, without asymmetric information the principal is able to judge whether the agent's action or advice are in the best interest of the principal's goals. In cases where incentives between principal and agent differ and the agent possesses private information, there exists a potential conflict of interest as the potential exists for the agent to act against the principal's interests.

As mentioned above, the principal-agent problem can arise in a variety of service industries – from the real estate sector to auto repairs. Levitt and Syverson (2008), for example, find that real estate agents invest more effort and secure a higher price for the sale of their own property, relative to their customers' homes. They also find that the difference between agent-owned and non-agent-owned sale prices is increasing with the degree of asymmetric information about property values.

With regard to health care, Gruber et al. (1999) find that relative frequency of Caesarean deliveries compared to regular child births is strongly correlated with the fee differentials of health insurance providers. In another instance, audits of German hospitals have shown that decisions for surgeries on patients are made too fast and too often – especially in cases where profit margins were highest.[56] Emons (1997) provides an example showing that the average person's probability of receiving one of seven major surgical interventions is one third above that of a physician or a member of a physician's family.

[55] Ordinary goods, such as petrol, have well-known characteristics, and subjects know where to get them. Search goods, e.g. like clothes, can be inspected before buying to observe their characteristics. Experience goods, like wine, have unknown characteristics, but they are revealed after buying or consuming them.
[56] Deutsche Presse-Agentur, 2012

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

With regard to auto repair in the US, Wolinsky (1993, 1995) presents survey results provided by the Department of Transportation that indicate that more than half of all auto repairs are unnecessary.

In sum, conflicts of interest are inherent to many business relationships in the services sector. The degree of misalignment of incentives between the principal and the agent and the extent of information asymmetry between the two parties influence the likelihood and severity of a conflict of interest.

Mitigation of Conflict of Interest

As indicated previously, the principal-agent problem arises when the principal and the agent have different incentives and/or when the principal is unable to fully monitor the agent's actions. As a consequence, mitigating the conflict of interest arising in a principal-agent setting can be achieved either by better monitoring of an agent's action or by better aligning the incentives of the principal and the agent.

For example, a typical policy used by publicly listed companies in order to better align the incentives of principal and agent is performance-based pay. Year-end bonuses are a common form of offering performance-based pay and in trying to mitigate the conflict of interest arising from different incentive structures between principal and agent. An alternative form of performance-based pay is paying a "piece rate" where employees are compensated per unit of work.

As outlined above, one approach to mitigate the conflict of interest between principal and agent is to improve monitoring of the agent's efforts and actions. Monitoring can take the form of increased transparency rules or the principal's own efforts to observe the agents actions. An individual in need of the services of a tradesperson such as an electrician or a roofer, or a lawyer, for example, can use the Internet to educate herself about the particular problem at hand which would reduce the degree of asymmetric information between principal and agent. In addition, she might be able to find information and ratings on specific companies in her region, providing her with greater transparency. Thus, technology assists in increasing transparency and knowledge for a prospective client thereby mitigating the problem of asymmetric information. While increased knowledge and transparency help mitigate a potential conflict of interest, it is important to keep in mind that this comes at a cost. Rules for more transparency can increase bureaucracy both within a firm and outside, thus increasing the cost of doing business and lowering productivity.[57]

Another important factor in the context of mitigating conflicts of interest between principal and agent is the time frame of the relationship between the two. In a short-term relationship, e.g. a one-time visit to a doctor, car mechanic or lawyer, the risk for the agent to be exposed and subsequently "punished" for their actions is lower than in a long-term relationship. In economic game-theory parlance, long-term relationships between principal and agent are called "repeated games." It has been shown that the risk of a conflict of interest is lower in a repeated principal-agent game as there is an increased opportunity for the principal to observe the results generated by the agent and to evaluate whether the agent is taking the appropriate actions.[58] Provided that the principal is able to judge the agent's actions due to information on past behaviour, the agent risks a loss of reputation and, as a consequence, repeated business.[59] In long-term relationships between principal and agent, then, the conflict of interest between the two parties is mitigated by the fact that the principal is able to "punish" the agent for not taking the appropriate actions in pursuing the principal's goals.

[57] See Enriques and Volpin, 2007; Luez and Verrecchia, 2000
[58] See, for example, Sannikov, 2008; Pearce and Stacchetti, 1998; Radner, 1985
[59] Fudenberg and Levine, 1989

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

The Drivers of Conflict of Interest in the Sale of Mutual Funds

In the mutual fund industry, the advisor takes the role of the agent and the investor the role of the principal. The investor compensates the advisor for her expertise and believes that, taking into account the buyer's needs and characteristics, the agent would over time achieve better financial outcomes than the alternative of DIY-investing.

Investors typically pay for financial advice directly in the form of fees, and/or indirectly through embedded commissions paid by product providers (such as mutual fund manufacturers) to brokers, and other intermediaries.[60] According to regulatory changes that came into full effect in July 2016 (CRM2), investment dealers are required to report in dollars their compensation earned, such as trailing commissions, as well as other earnings such as deferred sales charges or referral fees. In addition, it requires a disclosure of payments from fund companies to brokers. The statement to the client also includes annual administration and transaction fees. As these transparency requirements are fairly recent, it might be too early to draw firm conclusions on potential behavioural changes among mutual fund investors. However, suffice it to say that for those investors who are interested in knowing what they pay for advice the information provided under Canadian legislation is sufficient at least for raising questions with their advisor. There is evidence that most investors are aware of what is in investment fund documents: according to a survey by the British Columbia Securities Commission, 77 per cent of investors regularly review their portfolio holdings and 74 per cent review account documents provided by the advisor.[61] . Since there is no data on whether Canadian investors review their statements, it is difficult to make any reasonable assessment as to the efficacy of these rules.

In the context of the sale of mutual funds, it is in the investor's interest to make sound, sensible investments that have a high probability of paying off with a small chance of suffering a large loss. From the perspective of the advisor, the incentive is to attract as much money into funds as possible as they are paid a percentage of assets under management.

A potential conflict of interest exists between investor and advisor, as the advisor has an incentive to recommend those funds that generate the largest commissions, rather than those most aligned with the investors' overall preferences and interests. Thus, the likelihood of a conflict of interest is larger if there is a high variance in commissions between different funds. In the next section of this report, we address this issue specifically in relation to embedded commissions.

A number of factors can act to mitigate the potential for conflict of interest in the sale of mutual funds. First, higher financial literacy among investors is likely to mitigate the conflict of interest, as it alleviates the problem of asymmetric information between advisor and investor. Second, higher transparency will lower the likelihood of a conflict of interest as it allows the investor to better monitor the actions of the advisor. In addition, we note that there is an element of performance-based pay involved in trailing commissions that could act to further align the interests of advisors and investors vis a vis maximizing portfolio value.

We note that one of the key conditions for high transparency is for prices to be easily available to the public. In the case of mutual funds, for example, an investor is able to conduct an Internet search to check for typical fees associated with specific mutual fund products enabling her to better judge the recommendations provided to her by the advisor. This particular option does not exist under fee-based platforms, however. Where investors are able to negotiate individual fees directly with an advisor, transparency on standard fees for specific products is more limited.

Finally, as the previous section has indicated, the potential for a conflict of interest is lower in long-term relationships between investors and advisors, as it allows the investor to observe the results of the advisor's actions

[60] See section "Advisor Compensation" under "The Mutual Funds Market in Canada" for more information.
[61] BCSC, 2016

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

and to "punish" him (e.g. by changing advisors) if these results are not aligned with the investors interests. Accordingly, assuming that a sufficient number[62] of clients are able and willing to evaluate advisors' actions, advisors and their firms risk losing their reputation if they do not act in their clients' best interest.

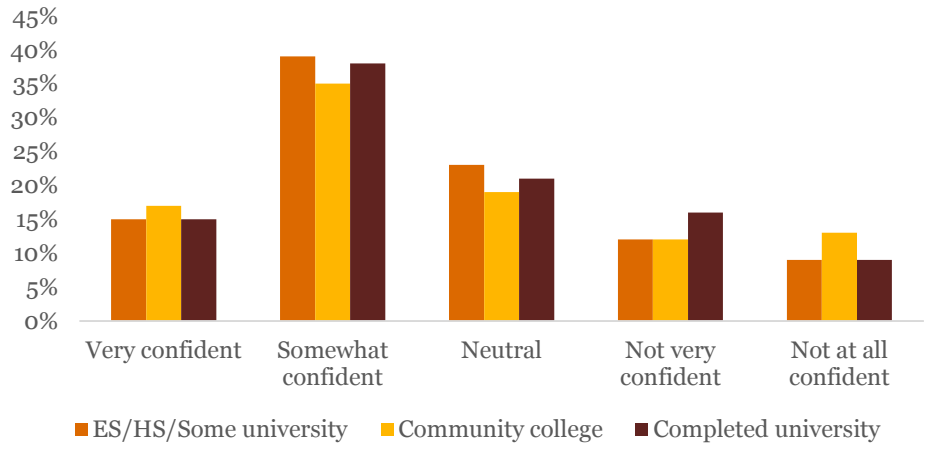
In the next two sub-sections we explore the existence of these last three mitigating factors (i.e. financial literacy, transparency and long term relationship) in the financial advisory market in Canada, as they relate to mutual funds.

The Profile of Mutual Fund Investors in Canada

As discussed earlier in this Report,[63] according to the Pollara survey, Canada's mutual fund investors are fairly well educated (see Figure 16). Half of all investors graduated from university, and around 80 per cent received some post-graduate education. Only a small fraction do not have a secondary school diploma.

The evidence collected through the Pollara survey suggests that mutual fund investors in Canada are overall rather well-educated. Interestingly, though, the self-reported knowledge of fees paid in the mutual fund industry does not vary much by education, as Figure 16 shows. It appears that, irrespective of the level of education, just over 50 per cent of mutual fund investors state that they are 'very confident' or 'somewhat confident' about the fee structure in the mutual fund industry (Figure 17).

Figure 16: Knowledge of Fees Paid in Mutual Funds by Educational Attainment[64]



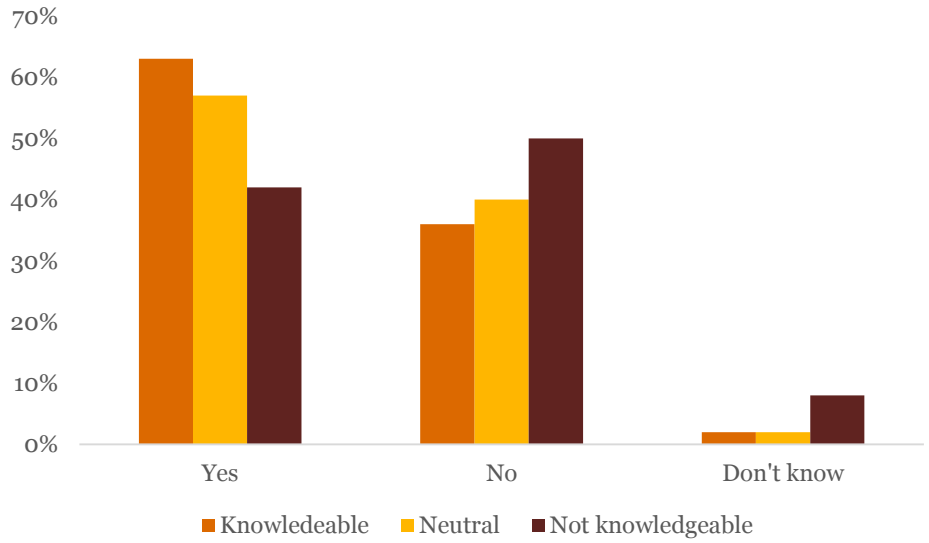
A more decisive factor with respect to awareness of the fee structure within the mutual fund industry is knowledge of the mutual fund industry itself. As Figure 17 illustrates, over 60 per cent of investors with self-reported knowledge of the mutual fund industry state that they are aware of fees paid. In contrast, only 42 per cent of investors "not knowledgeable" on mutual funds, claim to be aware of the industry's fee structure, whereas 50 per cent of investors with no knowledge of the mutual fund industry state that they are not aware of how their advisor is compensated. This suggests that the level of formal education is not a good proxy for financial literacy.

[62] See section below for an illustration of this process.
[63] See Section "The Mutual Funds Market in Canada" for more information.
[64] Pollara, 2016

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Figure 17: Answers to the Question "Did your advisor make you aware of how he/she compensated?" by knowledge of Mutual Funds[65]



That said, a majority of mutual fund investors appear to have some understanding that portions of their fees paid are used to compensate their advisor. According to Pollara's survey results, more than a quarter of mutual fund investors state that this is definitely the case, and an additional 45 per cent of investors assume that this is the case. In contrast, only around 20 per cent of investors answer this question in the negative. It is also important to note that these results do not fully reflect the new transparency regulation (CRM2) that was fully implemented in 2016.[66] It is reasonable to assume that, given the level of education of Canadian investors, the increased transparency and simplicity of investor statements will actually inform Canadian investors who previously were not informed.

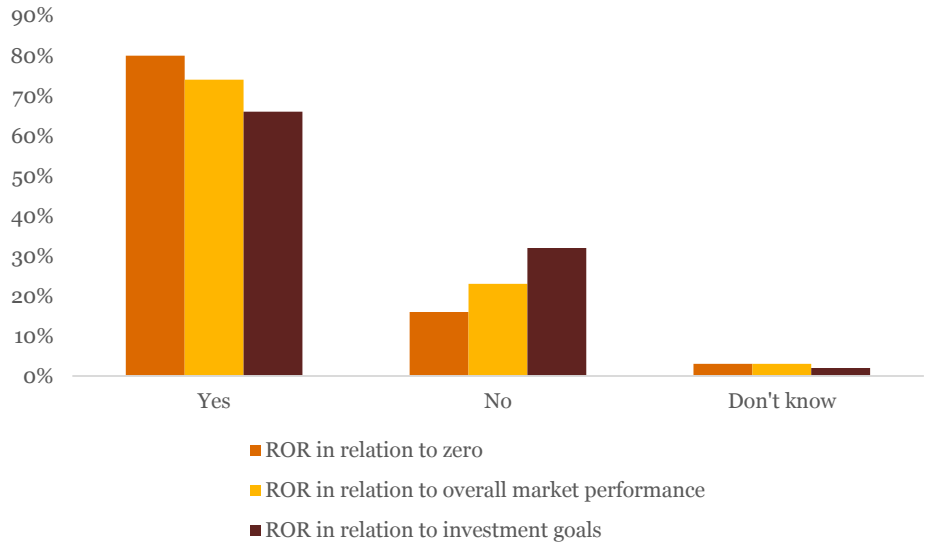
A sign of financial literacy among Canadian investors is the fact that the majority of them evaluate the performance of their investment portfolios in some form or other. As Figure 18 shows, the most popular method of evaluating investment performance is the direct comparison of the rate of return (ROR) to zero, as indicated by 80 per cent of mutual fund investors. Approximately three-quarters of investors compare the ROR of their investments to the overall market performance, while two-thirds evaluate ROR in relation to their investment goals.

[65] Pollara, 2016
[66] See "Regulatory Environment" under "The Mutual Funds Market in Canada" for more information.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Figure 18: Methods Applied to Evaluate Investment Performance[67]



The above evidence appears to suggest that a large majority of investors would take advantage of the transparency brought by CRM2. Moreover, we note that according to economic theory, where a certain market is characterized by asymmetrical information, there is no need for all consumers to be informed in order to effectively discourage misconduct by service providers. The rationale is that the service provider who is intent on taking advantage of a consumer will weigh the benefit of taking advantage against the cost of being exposed and losing a client and reputation. Thus the higher the percentage of informed consumers, the higher the risk of being exposed.[68] It is therefore likely that a critical mass of informed consumers that is below 100 per cent does exist, where the cost to the agent will outweigh the benefit to him of taking advantage of the uninformed principal. In the financial advisory industry, where advisors depend heavily on their reputation, their firm reputation, and long-term relationship with investors, it is reasonable to assume that the critical mass required is relatively low compared to other markets of credence goods, where relationships are more ad-hoc. Given the fact that even before the full implementation of CRM2, the majority of investors in mutual funds were already fairly informed, it appears that current transparency rules do act as an effective deterrent against misconduct by mutual funds and advisors. This argument is consistent with academic research.[69]

Longevity of Relationship between Advisor and Client in Canada

As has been discussed previously, the longevity of the relationship between advisor and investor can mitigate conflict of interest. As we showed, academic research shows that a longer relationship between advisor and investor leads to better results for the investor. Thus longevity of relationship is associated with positive trust. For positive trust to exist, advisors need to know that they can be punished by investors.

---

[67] Pollara, 2016
[68] We assume that that the service provider has no perfect mechanism to identify and isolate uninformed consumers, which is reasonable in the circumstances.
[69] For example Dulleck et al., 2011 show that repeated interaction decreases the incentive to overcharge, as experts find it optimal to forgo short-term profits from overcharging because they benefit more from higher profits due to reputation in the future. Wolinsky, 1993 and Park, 2005 have consistent findings. Henze et al., 2015 show that by informing only a portion of consumers creates positive informational externalities for those who remain uninformed and the outcomes could be very close to situation where all consumers have full information.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

One indication of the tendency of the Canadian investor to punish advisors is given by the Pollara survey. When asked how often information given on their financial statements have caused them to make changes to their portfolios or contact their advisor for more information, 27 per cent stated "never," and 43 per cent answer "rarely." Only 3 per cent of investors state that they do this frequently.

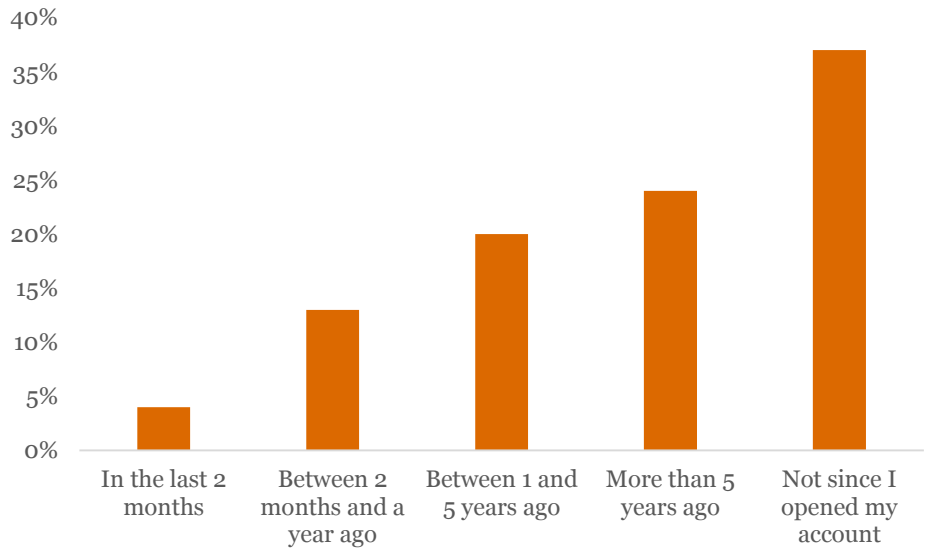
More direct evidence of a change of advisors is presented in a survey conducted by Innovative Research Group in British Columbia. In 2016, an online survey was conducted among 800 mutual fund investors in BC who use the services of an advisor. It must be noted that the survey was not random and, as such, no margins of error could be calculated.[70] Among other issues, the survey enquires about the frequency of advisor change. According to the results, 17 per cent of investors state that they changed their advisor within the past year. In contrast, more than one third of respondents did not change their advisor since opening an investment account (Figure 19). This result suggests that Canadian investors do "punish" advisors when they perceive them not be effective agents for them. The fact that punishment exists acts as a deterrent to other advisors. As indicated above, punishment does not need to be widespread for it to act as an effective deterrent, because the cost of being punished may go well beyond one disgruntled client, as it will likely affect the reputation of the advisor and his firm in the market.

[70] The BCSC Investor survey was conducted by Innovative Research Group in 2016. Respondents to this online survey have come from INNOVATIVE's Canada 20/20 panel with additional respondents from Survey Sampling International (SSI), a leading provider of online samples. INNOVATIVE provides each panelist with a unique URL via an email invitation so that only invited panel members are able to complete the survey and panel members can only complete a particular survey once. Only respondents who hold securities and invest through an advisor were eligible for the study. The sample was weighted according to Statistics Canada census data by age, gender, and region. Of the total 2,021 respondents to the survey invitation, 840 were eligible investors with advisors, 804 completed the entire survey, and the final sample is weighted to N=800. Note that the survey suffers from the sample selection biased, as the sample of survey respondents was non-random. In particular, the sample was drawn from the population of mutual fund investors using the Internet. As such, their characteristics may be different that those of the general population, thus resulting in a biased responses. In addition, the sample was based solely on INNOVATIVE'S Canada 20/20 panel and SSI, although we do not know the proportions of each source of respondents. Therefore, the entire population of mutual funds investors who did not participate in the panel and were not selected by SSI were ignored in the survey. This would not cause bias as long as relevant characteristics of survey participants were on average identical to those of non-participants. However, we do expect internet users to possess different characteristics than non-users that would in turn impact their responses to particular questions and cause the sample bias. Note that selection bias is a problem with virtually any survey. While it can be partially overcome by ensuring sample representativeness by presenting respondents' demographics (as done in the Pollara survey), survey results should nevertheless be interpreted with a grain of salt and caution should be applied when drawing far-reaching conclusions from such survey data.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Figure 19: Change of advisor by mutual fund investor[71]



Evidence on Existence of Conflict of Interest

Having understood the factors that can influence conflict of interest between an advisor and an investor, we have conducted a literature review to identify evidence regarding the actual behaviours of advisors given the potential of such conflicts.

With regard to Canadian retail investment, Foerster et al. (2015) and Linnainmaa et al. (2016) found that the portfolio of advisors who invest for themselves does not differ significantly from the portfolio they recommend to their clients. This provides a strong indication that the advice provided by Canadian financial advisors is not influenced by their potential personal gain from recommending mutual funds that provide them a higher commission. This finding is consistent with the observation made earlier in this Report regarding the overwhelming trust that Canadian investors have developed in their advisors, which we conclude is driven by the fact that most Canadian investors who use an advisor have a long term relationship with that advisor. As noted previously, academic research found that long term relationship leads to positive trust and superior outcomes for investors.

[71] Innovation Research Group, 2016

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Summary of Findings

Financial advisory services are characterized by asymmetric information between advisors and clients. Potential conflicts exist in any such relationship irrespective of the fee structure. Moreover, financial advice is a "credence good," meaning that many investors are unable to confidently assess the quality of services provided.

In general, conflicts of interest in financial advice can be mitigated by increased financial literacy, increased disclosure and transparency, and longevity of relationship between advisor and investor.

The general level of education of mutual fund investors is relatively high, however this may not be a good proxy for financial literacy. The increased transparency rules that were fully implemented in Canada in 2016 are capable of mitigating the fee information gap that existed prior to this legislation. We do not have yet empirical data to test the validity of the effectiveness of these rules in conveying fee information to investors. However, the relatively high education profile of Canadian investors and the fact that currently the majority of Canadian investors in mutual funds are informed support the hypothesis that Canadian investors would be able to understand information disclosed about their investments, even upon a cursory review of the statements sent to them. Moreover, the current share of informed mutual investors and the heavy reliance of financial advisors and their firms on reputation and long term relationship with investors suggest that a critical mass of informed investors does exist which effectively discourages widespread misconduct by financial advisors..

In general, Canadian investors appear to have long-term relationships with their advisors and overwhelmingly trust their advisors. The following suggests that this trust is positive and mutual in nature and that advisors in Canada generally align their interests with those of their investors:

- a majority of investors evaluate the performance of their investment portfolios in some form or another;
- investors do punish their advisors when they perceive sub-performance;
- academic research shows that long term relationships between advisors and investors lead to significantly better outcomes for the investor; and
- a recent academic study in Canada shows that the portfolio of advisors who invest for themselves does not differ significantly from the portfolio they recommend to their clients.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Embedded Commissions

The following section weighs the evidence regarding the effects of embedded commissions on the mutual fund market in Canada. It first describes the economic theory of how the way that fees are charged can impact demand. We then review the forms of embedded commissions in Canada and the ways that they impact the market for mutual funds. We assess evidence on these effects in the Canadian context, and describe the potential for further conflicts of interest that could be created under alternative compensation schemes.

Economic Theory

Embedded costs are a fairly common feature in various parts of economic life. Embedded fees are paid in the real estate industry and the insurance sector. Travel agents also might receive commissions from a tour operator and mobile phone shops that facilitate contracts between consumers and mobile phone operators may receive commission payments from the mobile phone operator. In some instances, embedded costs can be regarded as payments for the distribution of products or services.

Similarly, embedded costs exist in the financial services industry – especially with respect to financial intermediaries who facilitate transactions between consumers and the providers of financial products. The nature of these services ranges from simply providing access to specific products to providing advice on which products best suits the customers' preferences.

The form of payment in each of these industries can have an impact on consumer demand. From a traditional economics perspective, which assumes that consumers act in a rational manner, consumer behaviour should not be affected by the way fees are charged. Yet, behavioural economics shows that traditional assumptions of rationality in consumer behaviour often do not hold in reality, thus the way fees are charged can have a significant impact on demand for goods and services. One reason for this is an individual's loss aversion.

An example from the retail industry illustrates this point. To reduce the amount of plastic bags used by consumers, Washington, D. C. introduced a tax of 5-cent per bag on disposable plastic and paper bags. A neighbouring jurisdiction, Montgomery County in Maryland, meanwhile, introduced a 5-cent bonus for consumers using a reusable bag.[72] Behavioural economics suggests that consumers would react more strongly to a 5-cent tax due to loss aversion and this study among consumers in the Washington D. C. area confirmed just that. The tax on disposable bags reduced the use of plastic bags by over 40 per cent. In contrast, the 5-cent bonus for reusable bags had virtually no effect on consumer behaviour.

Similarly, in a study on consumer behaviour, Chetty et al. (2009), conducted an experiment at a grocery store to test how customers react to tax-inclusive pricing versus pricing where sales taxes are added at the cash register. Traditional economic theory posits that consumer behaviour would not be affected by this, as a rational individual would be aware that they have to pay taxes on the products they buy either way. Yet, the experiment shows that consumption drops significantly when taxes are included in the shelf price and hence more salient to the consumer.

In an example from the mutual funds industry, Barber, Odean and Zhang (2005) find that demand for mutual funds is responsive to changes in load fees, but not responsive to changes in the expense ratio. Their explanation is that load fees are highly salient, as they are negotiated and paid upfront, but the expense ratio is not salient because it is deducted before returns are reported. This finding suggests that if trailer fees, which are part of the expense ratio, were charged directly by the advisor, they would be more salient to investors and investors would subsequently reduce their demand for advisors.

[72] Homonoff, 2015

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Public policy makers have long understood the principles of behavioural economics and thus have used embedded costs to encourage individual behaviour that they believe to be beneficial to society as a whole. For example, policy makers who believe in the benefits of education or health care almost exclusively facilitate the use of these services by embedding the cost of such services in the taxes that people pay without providing them the choice to pay directly for such services. The alternative policy open to public policy makers of using the taxation and transfer systems to enable all individuals to have sufficient funds in order to afford those essential services and be free to make the choice to consume them is usually rejected. The underlying rationale for the rejection of individual choice is deeply rooted in behavioural economics that predicts that given the choice, many individuals will not make the optimal decision from a society's standpoint, especially when the benefits are not fully understood and will mostly materialize over the long term.

The above shows that embedded costs are prevalent throughout the economy and when costs are made salient to individuals, they would opt to change their demand in a manner that may or may not be consistent with public policy objectives. Thus, from the overall society's standpoint, allowing or disallowing embedded costs should be a function of the behaviours that this society wants to encourage as opposed to focusing on arguments of consumer empowerment.

The Effects of Embedded Commissions in the Sale of Mutual Funds

Advocates for the elimination of embedded fees argue that differences in trailing commissions among many Canadian funds present a conflict of interest, as financial advisors may decide to favour certain funds that offer higher commissions. Other industry stakeholders agree that the potential for conflict of interest exists, but strongly feel that investor access and choice would be significantly compromised with the elimination of embedded fees. Some suggest that conflicts of interest could be better mitigated if commissions were standardized or capped.

An embedded commission is defined as any payment from a mutual fund manager to dealers. There are two common forms in Canada: trailer commissions and commissions associated with deferred sales charges (DSCs). Trailer fees are charged on an ongoing basis, i.e. the commissions are paid as long as an investor owns the fund. The commission on the DSC is paid to the dealer by the fund manager at the time of purchase, but the redemption charge is not paid by the investor unless and until the investor redeems the fund within a certain number of years from the date of the purchase.[73] Embedded commissions are paid by the mutual fund manufacturer to the mutual fund dealer, and are intended to cover costs for services and advice by the representatives of the dealer's firm. Trailing commissions are paid annually to the dealer and are linked to the sales charge option selected. For example, if the client chooses a front end load sales charge or a low-load sales charge, the trailing commission would typically be 1% of the value of the investment. For a deferred sales charge (redemption charge option) the trailing commission would normally by 0.5% of the fund value.

The embedded commission as a share of funds does not generally vary with size of investment. There are economies of scale in advising clients because the time and effort spent on advice and related administration as a share of investment decreases with the size of the investment. This suggests that mass-market investors are in effect subsidized by wealthier investors who are on the same fee arrangement and purchase similar products.

Data on embedded commissions is disclosed in detail in the simplified prospectus and the fund facts which under point of sale (POS) regulations must be provided to the investor before the actual purchase. In this respect, embedded commissions are actually more transparent than advisor fees based on individual arrangements between client and advisor, as the price negotiated is not available to other market participants. Thus one of the tenets of competitive market conditions, full price information to all market participants, is actually violated by fee schemes that require individual negotiation.

[73] See "Advisor Compensation" in "The Mutual Funds Market in Canada" for more information.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

There is limited Canadian evidence on the effects of embedded commissions on the mutual funds market. Research by Douglas Cumming et al. (2015) analyses Canadian mutual fund data with regard to fee structures, fund flows and fund performance. The authors claim to show that funds with strong past performance generally attract more flows. Yet, this relationship weakens when funds are sold through affiliated dealership and weakens further when funds are sold with trailer fees.

There are several issues with the methodology of Cumming's paper. As both Timmerman, and Linton and Tobek point out, while future alpha (risk-adjusted returns) are assumed to depend on past alpha, past values of alpha are not included in Cumming's analysis, an omission which may bias the results.[74]

In addition, there are problems with the conclusions drawn by this report. Firstly, as Perron notes, the report is not clear about what objective investors are trying to achieve. Therefore, it does not have a metric on which to clearly compare embedded commissions and other forms of compensation. Without such a metric, one cannot answer whether fee-based or commission-based remuneration is better for individual investors.[75] See Appendix E for the full text of the three papers mentioned here, which were funded by IFIC.

Moreover, we note that Cumming's results depend on the assumption that past fund performance is a good predictor of future performance, and therefore that it is good for investors when advisors' choices depend on past results. Were this not the case, his conclusions that embedded commissions reduce sensitivity of flows to past performance would not act as an argument against embedded fees. However, much research suggests that past fund performance is a poor predictor of future performance.[76] Our own analysis of Canadian funds also supports this conclusion. Using data on annualized average performance in two consecutive 5 year periods, we find no evidence of persistency in funds' annualized net return relative to group average for Canadian Equity, US Equity and Global Equity mutual funds. Moreover, we find a strong negative correlation between the net performances in the two periods, indicating that funds that over perform relative to their group in one period tend to underperform in the next period. The following figure illustrates the point:

[74] Timmerman, 2016; Linton and Tobek, 2016
[75] Perron, 2016
[76] For example, see Carhart, 1997

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Figure 20: Persistence of Mutual Fund Returns

Further, Cumming's results are inconsistent with evidence from studies presented in this Report that suggests:

1. Advisors provide significant value to investors;
2. Advisors in Canada invest in the same products they recommend to their clients;
3. Canadian trust their advisors but also punish them; and
4. Trust is created through a long term relationship and studies show that long term relationships significantly reduce the risks inherent to conflict of interest situations and lead to superior results.

Variation of trailing commissions across mutual funds in Canada

Any variation in trailing commissions across mutual funds can in principle incentivize financial advisors to recommend funds that pay higher commissions. This, in turn, could lead to advisors recommending funds not purely based on the suitability for investors' needs and preferences.

To investigate the degree of variation of trailing commissions paid by mutual funds in Canada, we have gathered data on trailing commissions paid by lead retail series of Canadian Equity, Global Equity and U.S. Equity funds sold on a no-load basis. These funds represent Series A and Investor Series funds manufactured mainly by Canadian banks. We did not include funds sold through fee-based platforms, funds with front-end load and back-end load, because different compensation arrangements between mutual fund manufacturers and financial advisors in each of those fund types do not enable a proper comparison. No-load funds that we used in the comparison do not pay sales commissions and the only compensation for the dealer is the trailing commissions paid by the fund manufacturers.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

In a sample of 82 mutual funds,[77] we find an average trailer fee of 1.03%, with a standard deviation as a ratio of average equal to 14.8%:

Table 6: Trailing Commissions for No Load Funds, A Series Only[78]

Trailing Commissions for No Load Funds, A series only			
Funds Type	**Average Trailer**	**Trailer Standard Deviation as a Share of Average Trailer**	**Number of observations**
Canadian Equity	1.03%	10.1%	14
US Equity	0.99%	9.4%	36
Global Equity	1.00%	11.1%	32
Combined	**1.00%**	**10.2%**	**82**

We found the average and the standard deviation as a share of average trailing commission to be similar across the three types of mutual funds fund the sample. Overall, we find some degree of variation in trailing commissions across mutual funds in the sample, which suggests a potential for conflicts of interest.

The following table shows the trailers for no-load money market and fixed income mutual funds.

Table 7: Trailing Commissions for No Load Funds, A Series Only

Trailing Commissions for No Load Funds, A series only			
Funds Type	**Average Trailer**	**Trailer Standard Deviation as a share of average**	**Number of observations**
Canadian Money Market	0.23%	64.5%	17
Canadian Fixed Income	0.53%	12.2%	17
Global Fixed Income	0.65%	24.3%	13

The above table suggests a greater level of relative variation in trailers on money market and fixed income funds compared to equity funds.

[77] The sample was collected through fundlibrary.com and represents all no load, A series funds with assets of at least $10 million for which trailer information was available.
[78] Fundlibrary.com, 2017

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

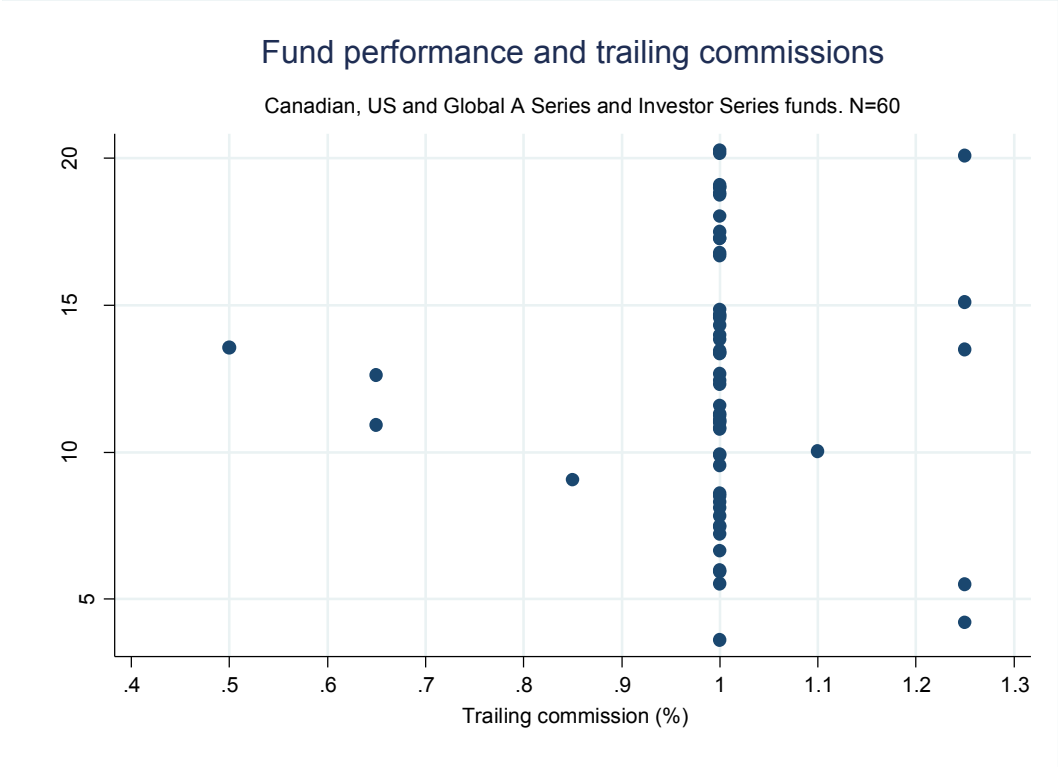
PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Relationship between fund performance and trailing commission

In this section we investigate the relationships between the level of trailing commission and a fund's performance. If financial advisors recommended mutual funds based on trailer fees rather than maximization of investors' returns, we would expect a negative relationship between funds' return and trailing commissions. Conversely, a lack of significant relationship would indicate that the variation in trailing commissions does not lead to adverse outcomes for investors.

For the same sample of no-load Canadian Equity, US Equity and Global Equity mutual funds that pay trailing commissions, and separately for money market and fixed income funds, we find no statistically significant relationship between 5 year net fund performance and the level of trailing commission at a conventional statistical significance level of 5 per cent. The lack of relationship is illustrated in the figure below, which plots funds' average annualized 5 year net performance against the level of trailing commissions, and separately for bond funds.

Figure 21: Fund Performance and Trailing Commissions, Canadian, US, and Global A-Series



© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Figure 22: Fund Performance and Trailing Commissions, Canadian and Global Fixed Income A-Series and Investor Series

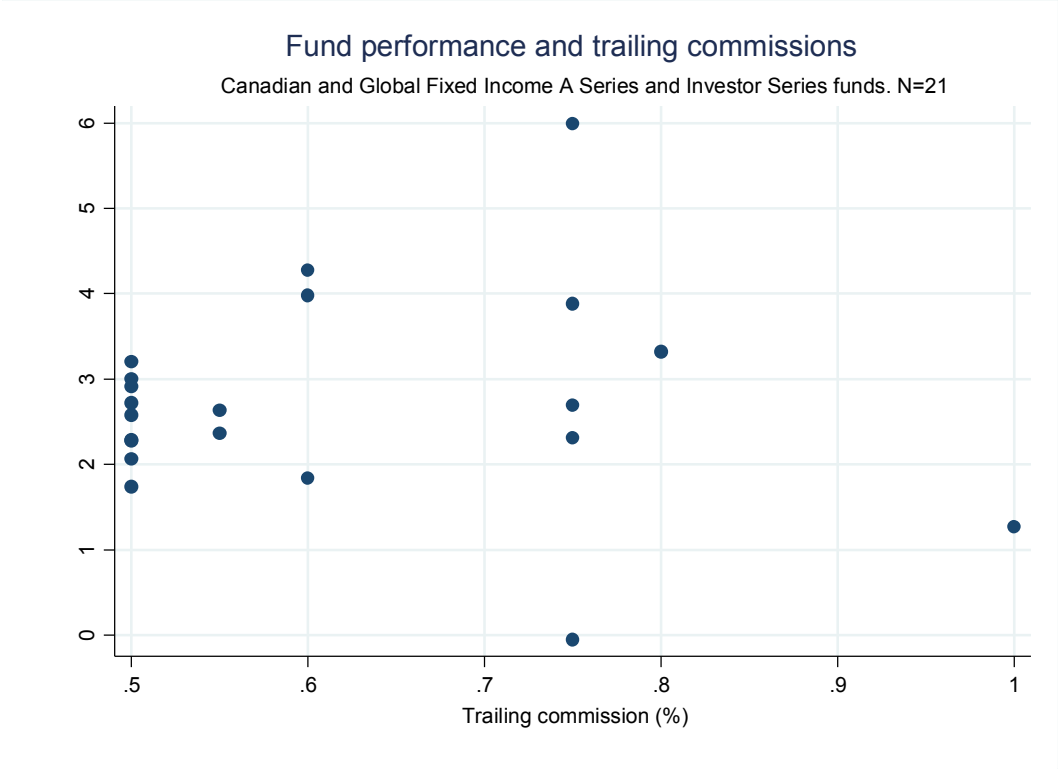
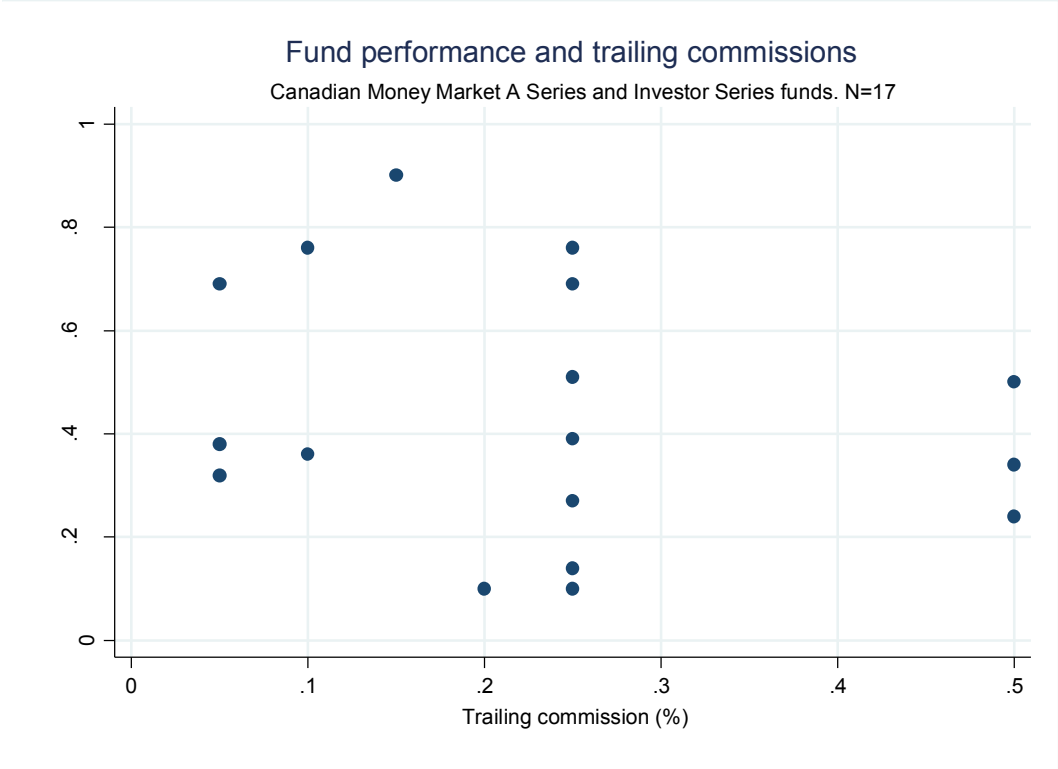


Figure 23: Fund Performance and Trailing Commissions, Canadian Money Market, A-Series and Investor Series



© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

We conclude that, despite some variation in trailing commissions across no-load mutual funds sold in Canada, there is no evidence that higher levels of trailing commissions lead to suboptimal fund performance for investors.

Conflicts of Interest under Alternative Compensation Schemes

Banning embedded commissions will increase the prevalence of other compensation schemes. The inherent relationship between agent and principal suggests that any compensation scheme creates a potential for conflict. In this section we look at the potential conflicts under alternative compensation schemes for advisors. We note that to some extent, the conflicts of interests under alternative compensation schemes are rather similar to those under embedded fees. Thus, to the extent that this is the case, a ban on embedded commissions would not remove the conflict of interest between advisor and investor.

One such alternative compensation scheme is the fee-based platform. In this arrangement, the advisor receives fees from the investor in form of a percentage of AUM. This scheme, while fully transparent to the client, creates potential conflicts of interest.

One example of such conflict is the fact that advisors may be tempted to take undue risks to grow their clients' accounts and thereby boost their own fees. This may be against the best interest of some investors who would find it optimal to have lower amounts invested in mutual funds. Moreover, fee-based platforms are characterized by financial advisors' strong disincentive to provide investment, financial planning and tax solutions that do not involve advisor management or which might reduce the amount of investor assets under management. For example, the advisor might be disinclined to advise investors to reduce debt or invest in assets such as real estate which would nevertheless be optimal for an investor given his or her situation, risk profile or other characteristics. Similarly, an asset-based advisor might also be reluctant to recommend holding cash or static bond portfolios outside of the fee arrangement, which could lead to inferior outcomes for investors. Overall, fee-based platforms incentivize financial advisors to recommend investment strategies that focus on maximizing fee-eligible assets that benefit the financial advisors rather than focusing on fulfilling the investor's objectives. In a recent report on conflicts of interest under fee-based platforms in the UK, for instance, the FCA expressed concerns that advisors have an incentive to grow the size of their funds in order to increase AUM – which is not necessarily aligned with investors' interests.[79] An additional conflict can arise where advisors feel the need to demonstrate their value to the client by frequently changing portfolios when a "buy-and-hold" strategy would provide better returns.[80]

As noted previously, in Canada, it is common for MFDA-licensed dealers to also be licensed as dealers of insurance products. Therefore, in addition to traditional mutual funds they are able to sell segregated funds, a type of mutual fund that includes insurance and is appropriate only for investors with certain goals. Segregated funds are more expensive than traditional mutual funds, and may have embedded commissions. Because these funds are insurance products, they are not regulated by the CSA and therefore existing regulations such as the CRM-2 do not apply to them. This may create incentives for advisors to recommend segregated funds instead of traditional mutual funds, if embedded commissions are banned by the CSA.

A third alternative is an account where the advisor charges the investor on a per transaction basis. This provides the advisor with an incentive to increase the number of transactions in order to earn higher fees. This would give rise to "churning" (artificially high turnover rates) and would go against the best interest of the investor.

Another alternative to embedded commissions are arrangements with hourly fees, where the investor pays the advisor a flat fee per hour of work. Within this framework, there is a comparatively low risk with regard to a potential misalignment on specific fund selection between advisor and investor. That said, there still exists a potential conflict of interest under this scheme. As advisors get paid at an hourly basis, they have an incentive to

[79] Financial Conduct Authority, 2016
[80] Strategic Insight, 2012

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

report longer hours to the investor. Due to asymmetric information with regard to the amount of hours required to complete specific tasks coupled with limited possibilities for the investor to monitor the advisor's behaviour, the advisor is in a position to overcharge the investor. In addition, the advisor has an incentive to recommend products requiring active asset management in order to get more paid hours which might not necessarily be aligned with the interests of the investor.

As shown previously, recent academic study in Canada indicated that generally advisors in Canada act in an honest manner and their advice is not influenced by their potential personal gain. We have shown previously that the overwhelming majority of Canadian investors seem to have developed mutual trust with their advisors.

In contrast, there is strong evidence of conflicts of interest driven by advisor compensation in the United States, where advisors are not compensated via trailing commissions.[81] The study's findings were in line with similar studies conducted by Zhao (2008). Zhao (2008) analysed mutual fund data for the US from 1992 to 2001 and found that load funds with higher loads and 12b-1 fees receive higher flows. A similar result was shown by Bergstresser et al. (2009). The authors analysed US fund flows sold through advisory channels and through direct channels without an advisor. Analysing funds sold through the advisory channel showed that fund flows increase with the load paid to the advisor.

Chalmers and Reuter (2013) analysed the potential conflict of interest with regard to investment providers in the Oregon University system. Their study showed that mainly younger, less highly educated and less highly paid employees took advantage of an offer to meet with a financial advisor. The authors compared the portfolios of investors with an advisor to portfolios of self-directed investors and found that advised investor portfolios were significantly riskier. In addition, the fund allocation of advised investors suggested that they tended to purchase funds associated with higher fees.

Mullainathan et al. (2012) conducted an experiment in which trained auditors sought the help of a financial advisor. One set of investors presented the advisors with a portfolio largely in line with the advisors' financial interests whereas another set of investors presented a portfolio less aligned with the advisors' financial interests. The results indicated that advisors tend to confirm investors' biases when those biases are in the advisors' interest. In addition, advisors are inclined to recommend actively managed funds which pay higher fees even in cases where investors present a well-balanced low-fee portfolio.

While embedded fees are not common in the United States, there are clearly significant problems with conflicts of interest. This suggests that other factors also drive conflicts of interest and that conflicts can exist through various fee structures.

Summary of Findings

Any agent fee scheme, including the ones applicable to financial advisors, create their own set of potential conflict of interest between the principal and the agent. Thus the replacement of embedded fees by another fee scheme will not eliminate the potential for conflict interest.

The variation in the magnitude of commissions paid by different funds to advisors in Canada do create an incentive for advisors to recommend particular funds. However, we did not find evidence to suggest that Canadian investors consistently lose from purchasing certain compensation type of mutual funds.

There is no credible evidence for negative consequences of this potential conflict of interest in Canada. In fact in the US where embedded commissions are substantially less prevalent than in Canada, there is significant evidence of advisors interests not being aligned with their clients where in Canada there is evidence to the contrary.

[81] In the US, 12-1b fees are charged in a similar way to trailing commissions, but they are used for marketing rather than advisor compensation.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Canada's current transparency rules make embedded commissions fully known to investors and in contrast to negotiated fees between investor and advisor they can be compared among advisors and clients. One of the principles of a perfectly competitive market is that information on prices should be known to all market participants. Moving away from embedded fees to individually negotiated fees will violate this principle and therefore may actually reduce competition.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

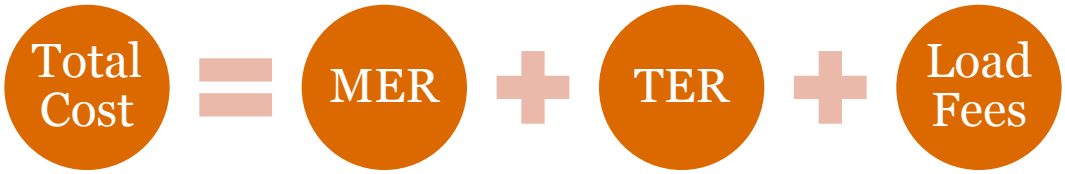
Cost of Financial Advice in Canada

The costs of financial advice and owning mutual funds are complex, and different countries charge investors in different ways. The full cost of advice to an investor includes any direct fees, hourly fees, trailer fees, and sales commissions. Further, costs of owning funds include the management expense ratio (MER), an ongoing management fee taken off the top of returns by the fund manager, and any front and back end loads. Comparing the MER between different countries fails to take into account all of these cost channels. The following section describes the typical cost channels in Canada and internationally.

The Cost of Advice

The typical (non-fee-based) cost structure for investing in Canada involves three different types of payments: the management expense ratio, the trade expense ratio and any load fees. Together, these fees reflect the full cost of owning the fund. The following figure illustrates this model.

Figure 24: Total Cost of Mutual Fund Ownership on Non-Fee-Based Platforms



The **management expense ratio** is usually the largest part of the fee. It includes:

- Charges for investment management;
- Any trailing commissions;
- Operating expenses such as record keeping, audits, and legal fees; and
- HST.

Figure 25: Components of Management Expense Ratio

The MER is calculated as a share of assets under management, and is charged annually on an ongoing basis. When investors see their net returns, the MER has been subtracted from their gross returns. As noted above, trailing commissions are charged as part of the MER. The MER is available on the Fund Facts sheet and a fund's simplified prospectus. Historical MERs are available on the Management Report on Fund Performance (MRFP). Typically, Canadian investors buying funds with trailing commissions do not pay for advice outside of the above charges.[82]

International Comparison

[82] RBC Global Asset Management, 2016

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Trailer fees as a form of advisor compensation are more common in Canada than they are in other countries, and this makes it difficult to compare the total cost of investing. Canada consistently has among the highest MERs in the world, but comparing MERs alone would be misleading, as Canadian MERs include the fee investors pay for advice while in most other countries it is often paid separately. However, we note that the typical trailer levels in Canada are higher than those in the UK and Australia prior to their bans on embedded commissions, even though in all three countries, trailers usually cover the full cost of advice. On the other hand, while the US has some of the lowest MERs in the world, a detailed study done by Strategic Insight for IFIC showed that when taking all relevant fees into account, the cost of investing in the US and Canada is similar.

In countries where trailers are not common, advice is usually paid for on a direct-fee basis. Emerging models of advice are able to provide direct-fee platforms for mass-market investors. For example, in the United States Vanguard offers direct-fee advice for investors with at least $50,000 and Merrill Lynch offers direct-fee telephone and online services with an investment minimum of $5,000.

Financial Advisor Compensation

The following table shows international data on the average compensation of financial advisors.[83] We note that the data is expressed in Canadian dollars based on the current exchange rate:

Table 8: Salaries for Financial Advisors[84]

Country	Average Salary of Financial Advisor	Ratio to National Average Salary
Canada	$ 48,483	0.97
United States	$ 76,013	1.71
United Kingdom	$ 58,624	2.12
Australia	$ 67,372	0.93

The above table shows that Canadian financial advisors' compensation is the lowest among the sample countries. The table also shows that Canada and Australia compensation schemes for financial advisors provide them with

[83] PayScale defines personal financial advisor as: "Financial advisors work primarily for financial institutions such as banks, mutual fund companies, and insurance companies. Generally, they work with individuals or institutional clients to assess their financial needs and help them achieve financial goals, such as choosing investments (money market, real estate investments, stocks and bonds), and they also explain tax laws relevant to certain investments and help with insurance decisions.

Financial advisors help clients plan for both short-term and long-term goals, such as education expenses if they have children who are going to college, or for their own retirement, and they recommend various investments to match clients' goals. A bachelor's degree in accounting, business, finance, or a related field is generally required for this position, and those with prior work experience with similar financial institutions may be preferred by some employers.

Applicants may be required to pass Series 6 and Series 7 exams and must be willing to learn their institution's computer system. Knowledge of Microsoft Office programs (Word, Excel, PowerPoint, Outlook) is important, and they must also have excellent verbal and written communication skills and work well with diverse people. They must have thorough knowledge of government (federal, state, local) laws and regulations and follow Security Exchange Commission (SEC) rules and guidelines, as well. They should stay up-to-date with frequent changes in monetary rules and regulations, and some may visit companies with which their institutions are interested in investing. Some may also train or mentor junior financial advisors.

[84] Payscale.com

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

average compensation that is close to the national average of all workers in their respective countries, while in the US and the UK financial advisors' compensation is around double the national average for all workers in those countries. This appears to suggest that financial advisor compensation in Canada is not a key driver of the cost of mutual funds for investors.

Summary of Findings

Canada has higher average fund management fees than most developed countries. However, in many of those countries compensation for advisors is paid through direct payments rather than included in fund management fees. Since, unlike embedded commissions, data on direct fees is not easily available, it is not possible to ascertain whether the overall cost of advice in Canada is higher than in those countries. However, a detailed study done in this regard suggests that the overall cost of advice in Canada and the US is similar even though the US boasts the lowest fund management fees in the world.

The average advisor compensation in Canada is lower than in the US, UK and Australia. Thus, it is doubtful that advisor compensation is the main driver of the higher fund management fees in Canada. Embedded commissions do not appear to be inflating advisor compensation above international norms.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Hypotheses Regarding the Likely Impacts of a Ban on Embedded Commissions

The following provides our hypotheses regarding the likely impacts of a ban on embedded fees. Our hypotheses are based on economic principles and the empirical evidence presented in this Report. These hypotheses represent our best estimates of what may happen following a ban on embedded commissions, but we are not able to test them due to practical limitations on the types of causal inference we are able to make. The following section estimates the potential effect of a ban on the economic footprint of the financial advice industry. In the section after that we bring evidence from other jurisdictions that were considered in developing our hypotheses.

Hypothesis 1 – A ban will reduce the demand for advisor services as well as the supply of advice, both of which will act to reduce the use of or access to advisors by mass-market investors. Mass-market investors who would continue to use an advisor will likely see an increase in the cost of advice.

Why are we saying that?

1. Behavioural economics teaches us that consumers reduce their demand for a service when the fees for that service are salient and subject to negotiation as opposed to being embedded in the overall price of the product, even if they have full knowledge of the embedded fee. This combined with the fact that consumers will not be able to benchmark the outcome of their negotiation with their advisor using published information, will in our view lead investors who currently use an advisor to stop using her.
2. Fee based platforms in Canada require a minimum size of portfolio. Depending on the firm offering this platform this minimum typically ranges from $100,000 to $300,000The reason for the minimum is the economies of scale involved in serving the financial needs of clients. Many investors who currently use an advisor do not meet this threshold.
3. Advisors who serve mass-market investors will not find it economically worthwhile to continue to serve some of those clients, if they are forced to reduce their fee significantly below what they currently receive from embedded fees. In those cases, mass-market investors who wish to continue being served by a financial advisor will find the cost of advice higher as a result of the need to compensate for the dis-economies of scale involved in serving smaller account. In other words, the hidden subsidy that currently exists as a result of embedded commissions will disappear when advisors will negotiate a separate fee arrangement with each client.

Hypothesis 2 – A ban on embedded commissions will likely eliminate some existing misalignments between advisors' and investors' interests but may give rise to new misalignments.

Why are we saying that?

1. A ban on embedded commissions in the sale of mutual funds would eliminate the incentive to recommend funds based on the commission the advisor would receive. Our assessment shows that there is some degree of variation in trailing commissions which suggests potential conflicts of interest.
2. In principle-agent relationships, any compensation scheme creates a potential for conflicts of interest. Thus, misalignments between the interests of an advisor and an investor can occur under alternative compensation

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

schemes as well. Under a fee-based platform, for instance, advisors might be incentivized to take undue risks to boost their own fees even where this is not in the best interest of their clients.

Hypothesis 3 - Reduced profitability for some players may lead to consolidation of the advisory industry and the risk of increased bias towards funds produced by the same organizations that provides the advice. Banks are generally in the best position to serve mass-market clients who will stop using independent advisors.

Why are we saying that?

1. Advisors and dealers who rely significantly on mass-market investors may become economically non-viable or would have to shrink their business significantly.
2. Canadian investors who will stop using an advisor, will either invest without the aid of an advisor, use robo-advice, or use an institution that will provide tailored advice to mass-market investors.
3. Canadian banks are best positioned as far as infrastructure and reputation, to serve the mass-market advisors through robo-advice and advice models that are affordable to those investors. This is especially relevant for smaller and more remote communities, where banks might be the only option to a local independent advisor that can afford to continue to serve their clients.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Sensitivity Analysis on the Potential Impact of a Ban on Canada's Economic Footprint

This section attempts to estimate the potential impacts of a ban on embedded commissions on the economic footprint of the investment advisory industry in Canada. The economic footprint includes Output, GDP, labour income and jobs. Our estimates should be seen as the part of the Canadian economy that is at risk as a result of a ban on embedded commissions and not as the actual loss to the economy. In reality some of that risk will be mitigated through restructuring in the economy, which is not possible to estimate at this point.

Economic Footprint of Canada's Investment Advisory Industry

To assess the economic footprint of the investment advisory industry in Canada, we rely on confidential operating data received from our survey of mutual fund dealers. We use the survey responses in accordance with other data on the number of financial advisors by province to develop an estimate for the number of financial advisors and revenues generated by the advisors in Canada.

Methodology

The fundamental philosophy behind our economic footprint analysis is that spending on goods and services has attendant impacts throughout the economy. For instance, providing financial advice will generate demand for the inputs to this process (primarily labour) that in turn generates additional demand that extends beyond the initial spending. Our economic footprint analysis permits the estimation of this cascading effect by using the multipliers calculated by Statistics Canada based on its input-output model of the provincial economies.

Our analysis estimates the relationship between the revenues generated by investment advisory agents and the resulting impacts throughout the economy (including demand for other goods and services). For the purpose of this report, economic footprints were estimated for the following measures of economic activity:

- **Output** – the total gross value of goods and services produced, measured by the price paid to the producer. Output double counts the value of intermediate inputs and so GDP is usually a preferable measure of economic activity.
- **Value added or GDP** – the value added to the economy, or the unduplicated total value of goods and services. GDP includes only final goods to avoid double counting of products sold during a certain accounting period.
- **Labour Income** – the salaries and wages accrued by employees.
- **Employment** – the number of jobs created or supported. It is expressed as the number of full-time equivalent ("FTE") jobs indicated in person years.

Economic impacts are typically estimated at the direct, indirect and induced levels:

- **Direct impacts** result from the investment advisory agents' spending on suppliers and employees.
- **Indirect impacts** arise from the activities of the firms providing inputs to the investment advisory agents' suppliers (in other words, the suppliers of its suppliers).
- **Induced impacts** are the result of consumer spending by employees of the businesses stimulated by direct and indirect expenditures.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

- **The total economic impact** equals the sum of the direct, indirect, and induced economic impacts.

Baseline Provincial and National Economic Footprints

Using the aforementioned framework, we estimated the total (i.e., including direct, indirect, and induced impacts) 2016 economic footprint of the investment advisory industry.[85] The results are summarized in the table below:

Table 9: Total Economic Impact by Province

Total Economic Impact	Output ($ million)	GDP ($ million)	Labour Income ($ million)	FTE Jobs
NL	243.6	122.5	83.3	990
PE	98.3	50.2	31.4	533
NS	638.3	307.9	204.5	3,718
NB	490.2	240.1	156.1	3,007
QC	4,304.0	2,146.4	1,432.6	21,656
ON	11,408.1	5,361.0	3,605.1	51,781
MB	639.3	305.8	192.0	3,446
SK	595.3	272.9	170.4	2,734
AB	2,810.5	1,339.7	885.0	11,121
BC	3,696.3	1,731.4	1,113.3	17,098
Total	**24,924.0**	**11,877.8**	**7,873.6**	**116,086**

Sensitivity Analysis

One potential consequence of banning embedded commissions would be that advice is only available on a direct-fee basis. Currently, direct fee platforms have a minimum threshold on investment size, typically at least $100,000 but often more.

We understand from our discussions with dealers that, under the current embedded commission framework, fund manufacturers deal with all operating fees (i.e. the administration of getting the fees from the investors etc.) and then pass a portion of these fees along to the dealer. However, with direct fees (i.e. banned embedded commissions), the dealers would need to set up their own administrative processes to take on the work previously done by the fund manufacturers, thus incurring higher administrative costs. This reality means that dealers would likely set a minimum investment size to ensure that their administrative costs do not exceed their expected fees. For the purposes of our analysis, we have assumed that a minimum investment threshold of $100,000 would be instituted across all advisors, which is in line with existing research.[86]

We identified investors who have under $100,000 to invest as the group at risk of losing financial advice through traditional channels in the case of a ban on embedded commissions. Among investors with MFDA-licensed dealers, as opposed to IIROC-licensed dealers, this group accounts for approximately 83 per cent of investors worth 28 per cent of the total assets under management.[87] We focus on those with an MFDA-licensed dealer because those dealers can sell only mutual funds. As noted earlier in this report, many MFDA advisors are dual licensed. We note that this could potentially allow for regulatory arbitrage with those advisors being able to sell commission-based

[85] PwC Dealer Survey
[86] PwC Dealer Survey
[87] POLLARA, 2016

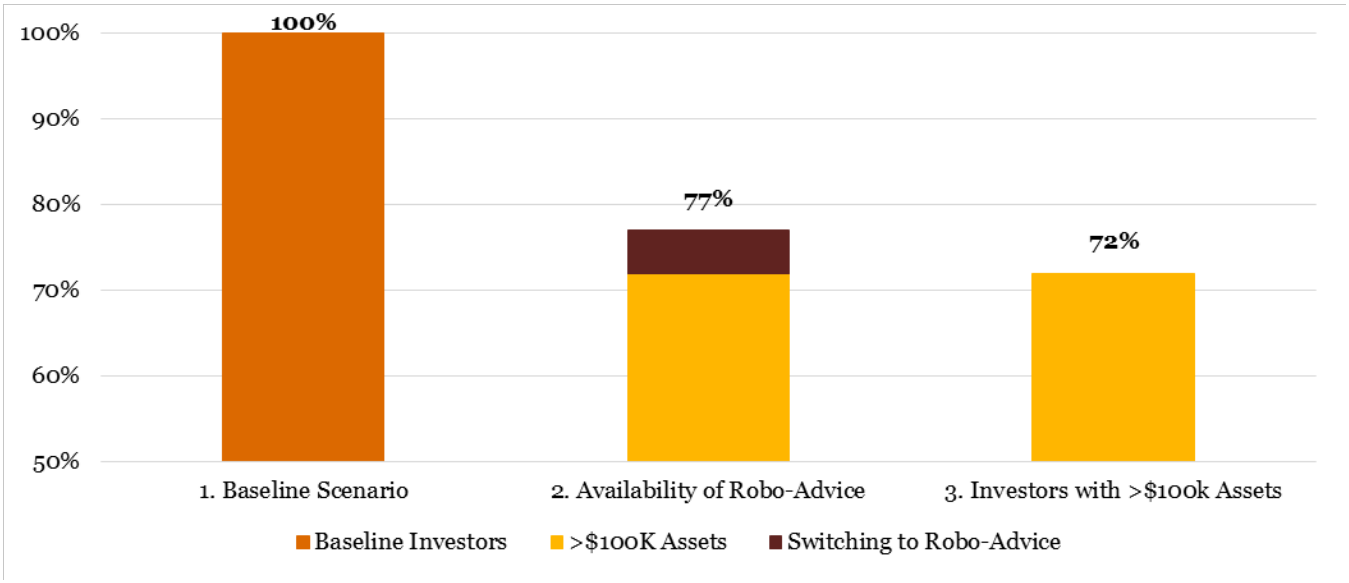
© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

segregated funds as these would not be captured by a CSA ban.[88]As we do not know how many advisors might take advantage of this option, this consideration is excluded from our analysis.

Based on the 2016 Pollara survey, we found that approximately 17 per cent of those investors who would be affected by the imposition of a $100,000 threshold would not be opposed to relying on robo-advice as a substitute to traditional financial advisors. Our figures for investors comfortable with robo-advice are based on the 2016 Pollara survey of mutual fund holders.

Figure 26: Advisor Revenue as a Share of Current Level under Different Scenarios



The above chart graphically depicts the effect that a $100,000 minimum investment threshold would have in three separate scenarios:

- **Scenario 1: Baseline Investors –** Under the Baseline Scenario, we ignore the effect of a minimum investment threshold. Clearly, the economic footprint in this scenario would be identical to the one calculated above (i.e. 100 per cent of the Baseline economic footprint).
- **Scenario 2: Availability of Robo-Advice –** Scenario 2 considers the situation where all investors currently with less than $100,000 in investments would not be able to seek traditional financial advice. However, in this scenario, we assume that investors who are comfortable with robo-advice will still be receiving financial advice (albeit, not through a traditional, in-person advisor). This would shrink the economic footprint of the investment advisory industry by approximately 23 per cent compared to the Baseline Scenario.
- **Scenario 3: Investors with >$100,000 in Assets –** Scenario 3 considers the situation where all investors currently with less than $100,000 in investments are not able to seek financial advice. In this scenario, we assume that no investors will switch to robo-advice and instead investors with more than $100,000 in assets will have access to advice, because they meet the minimum threshold to be eligible for direct fees. This scenario shrinks the economic footprint of the investment advisory industry by approximately 28 per cent compared to the Baseline Scenario.

[88] See "Conflicts of Interest under Alternative Compensation Schemes" for more information.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Based on the above sensitivity analysis, we estimated the total (i.e., including direct, indirect, and induced impacts) expected shrinkage that Scenarios 2 and 3 would have on the economic footprint of the investment advisory industry.[89] The results are summarized in the table below:

Table 10: Economic Loss Compared to Baseline Scenario, by Province

Total Economic Impact	Output ($ million)		GDP ($ million)		Labour Income ($million)		FTE Jobs	
	Sc.2	Sc.3	Sc.2	Sc.3	Sc.2	Sc.3	Sc.2	Sc.3
NL	56.6	68.2	28.5	34.3	19.4	23.3	230	277
PE	22.8	27.5	11.7	14.0	7.3	8.8	124	149
NS	148.3	178.7	71.6	86.2	47.5	57.3	864	1,041
NB	113.9	137.3	55.8	67.2	36.3	43.7	699	842
QC	1,000.3	1,205.1	498.8	601.0	332.9	401.1	5,033	6,064
ON	2,651.2	3,194.3	1,245.9	1,501.1	837.8	1,009.4	12,034	14,499
MB	148.6	179.0	71.1	85.6	44.6	53.8	801	965
SK	138.3	166.7	63.4	76.4	39.6	47.7	635	766
AB	653.2	786.9	311.4	375.1	205.7	247.8	2,585	3,114
BC	859.0	1,035.0	402.4	484.8	258.7	311.7	3,974	4,787
Total	**5,792.2**	**6,978.7**	**2,760.6**	**3,325.7**	**1,829.8**	**2,204.6**	**26,979**	**32,504**

The imposition of a $100,000 minimum investment threshold would clearly have a significant negative impact on the economic footprint of the investment advisory industry in Canada. For example, the contribution to GDP from the industry would shrink by between approximately $2.8 and $3.3 billion.

However, it is important to note that the above estimate assumes that either all of these investors will stop using their current advisor and turn to DIY-investing or only those comfortable with robo-advice will continue receiving financial advice. . In reality, we expect that some will find other alternatives offsetting some of this economic loss. For example, in other jurisdictions, where a ban on embedded commissions was imposed, the ban was announced years ahead of its implementation, giving financial advisors time to develop new products and services for mass-market investors. In Canada, banks are the most likely to be in a position to offer these new types of services, as they already have a client base and technological platforms. For example, BMO has already introduced a robo-advice service, and such services can be combined with existing client service offerings.

The move from an advisor to DIY-investing is expected to reduce the amount of savings available to those Canadians at retirement. To estimate the impact, we relied on a 2016 Canadian study by Montmarquette and Viennot-Briot that found that after controlling for potential influencing factors, having financial advice for 15 years or more increased household assets by 290 per cent compared with those households without a financial advisor (3.9 times the value of assets of the equivalent non-advised households)[90].

For the purpose of our analysis we assumed that the average Canadian accumulates approximately $200,000[91] in financial assets prior to retirement. Since approximately half of households in Canada use a financial advisor[92], it

[89] Pollara Survey, PwC Survey Results
[90] Montmarquette and Viennot-Briot, 2016
[91] Based on two sources: BlackRock 2015 Global Investor Pulse Survey finds the average savings of pre-retirees of $125,000. According to Statistics Canada, the average value of private pension assets and non-pension financial assets in 2012 was $280,000 among those ages 55 to 64.
[92] Conference Board of Canada, 2014

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

follows that the average savings of retirees who do not use an advisor for at least 15 years are equal to $80,000 prior to retirement. For those who use an advisor, the average savings accumulated equal approximately $320,000.

The above analysis indicate that, on an order of magnitude basis, those who could potentially be deprived of access to financial advice following the ban on embedded commissions would accumulate on average $240,000 less in savings prior to retirement than those with access to advice.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Jurisdictional Review

Introduction

Assessing the impact of a ban on embedded commissions in Canada, inherently, lacks the perspective of a direct empirical study. In other words, we do not have the luxury of a controlled experiment in Canada that would tell us how stakeholders will react and what will be the economic impacts of a ban on embedded fees. That is the reason that our Report, thus far, has used economic theory and empirical studies on relevant issues that indirectly assist us in developing informed hypotheses. Having said that, the use of international comparisons can act as somewhat of a proxy for the direct empirical study we are missing in this assessment and to assist us in developing our hypotheses. Some countries have already banned trailing commissions, and more have considered such a ban. The following section provides an overview of the global regulatory environment concerning embedded commissions.

Broadly, there are three types of regulatory environments. Countries that have enacted a ban on embedded commissions, countries that have enacted a partial ban on embedded commissions, and countries that have no ban in place. Countries that have enacted a ban include the UK, Australia, and the Netherlands. We have chosen the UK and Australia as case studies due to data and information availability. Countries with a partial ban include all countries in the EU, which are subject to the Markets in Financial Instruments Directive (MiFID II). MiFID II prohibits independent advisors and portfolio managers from accepting and retaining commissions, unless they are minor, non-monetary benefits such as hospitality of a reasonable value. Independent distribution represents approximately 11 per cent of the European fund industry. Advisors that are not independent will continue to be able to receive fees and commissions from third parties. These regulations will come into effect on January 3, 2018. In addition to the MiFID II regulations, countries in the EU may impose additional regulations on financial services, and many have done so. Finally, many countries have no bans or restrictions on embedded commissions. Of these countries, many have considered a ban as part of a review of financial regulations. Some financial regulators indicated their reasons for not pursuing such a ban, and we have included case studies on some of these countries including New Zealand, Switzerland, and Singapore.

There are a few important considerations when looking at case studies. Each country has a different regulatory environment and each has made different choices in policy design. Bans also usually accompany other changes to financial services regulation, so it may be difficult to isolate the effects of the ban. Another challenge is that our main case studies, Australia and the UK, banned embedded commissions in 2012 and 2013 respectively, and included grandfathering provisions, meaning that it may be too early to see the full effects of the policy change. When drawing our conclusions from these case studies, we took into account these challenges.

Mapping Embedded Commissions

The following chart provides information on the regulatory status of embedded commissions in the 35 OECD countries plus India, Singapore, Hong Kong and South Africa.

Table 11: Regulatory Status of Embedded Commissions by Country

Country	Ban	Effective Date	
Australia	Yes	1-Jun-13	The Australian Government introduced 'Future of Financial Advice' (FoFA) reforms in 2012, with compliance beginning in 2013. Reforms include a ban on conflicted remuneration structures including commissions and volume based payments, in relation to the distribution of and advice about a range of retail investment products.
Austria	Partial	3-Jan-18	Subject to MiFID II

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Belgium	Partial	3-Jan-18	Subject to MiFID II. Belgium has also banned commission payments for insurance products.
Chile	No		The most recent reform, the "Capital Market Reform III", was introduced in 2010 and aimed at increasing security levels of financial transactions and reinforcing regulatory and supervision capabilities. This set of reforms enhanced competition in the credit market by increasing available credit instruments and improving consumer information. However, the Reform did not remove commissions that advisors receive, though it discussed imposing a ceiling to broker's commissions.
Czech Republic	Partial	3-Jan-18	Subject to MiFID II.
Denmark	Yes	1-Jul-17	Subject to MiFID II. Additionally, the Danish Financial Supervisory Authority has banned commissions from investment funds in connection with discretionary portfolio management. This is part of the Danish financial Business Act (FIL).
Estonia	Partial	3-Jan-18	Subject to MiFID II.
Finland	Partial	3-Jan-18	Subject to MiFID II.
France	Partial	3-Jan-18	Subject to MiFID II. In 2016, the Autorité des Marchés Financiers (AMF) released its consultation paper interpreting the research payment provisions in the MiFID II Delegated Acts, and suggested that the French will continue to allow commissions but try to be accommodating to industry concerns so long as they do not conflict with the MiFID II language. Specifically, the AMF was very clear that the Mifid II rules do not conflict with the continued use of commission-sharing agreements.
Germany	No		Through a series of reforms in 2012 and 2014, Germany has adopted rules to raise standards for advisors, enhance fee and commission disclosure, and create a separate designation for fee-based advisors. The German securities regulator, BaFin, has indicated that it does not intend to ban embedded commissions and will not go beyond MiFID requirements in regulating fees.
Greece	Partial	3-Jan-18	Subject to MiFID II.
HK	No		Hong Kong has considered a range of regulatory reforms and has decided to consult on targeted reforms and enhanced disclosure. After reviewing global regulatory initiatives and impacts as well as conducting its own research, the SFC determined that it would rule out banning embedded fees but would focus on enhanced disclosure and targeted reforms.
Hungary	Partial	3-Jan-18	Subject to MiFID II.
Iceland	Partial	3-Jan-18	Subject to MiFID II.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

India	No		In August 2009, the Securities & Exchange Board of India (SEBI) banned front-end load fees for all mutual fund schemes. In the fall of 2016, SEBI issued a consultation where it proposed preventing mutual fund "distributors" (mutual fund sales agents) from providing incidental or basic investment advice with respect to mutual fund products. In 2016, SEBI enhanced disclosure rules requiring absolute amounts of commissions disclosed in semi-annual consolidated account statements provided to investors.
Ireland	Partial	3-Jan-18	Subject to MiFID II.
Israel	No		According to the Israel Securities Authority, licensed investment advisors and portfolio managers are obligated to comply with fair disclosure principles, including: In the case of marketing agents, disclosure of ties and preference to certain financial instruments; Disclosure of all fees and commissions levied on the client.
Italy	Partial	3-Jan-18	Subject to MiFID II.
Japan	No		The Amendment of the Financial Instruments and Exchange Act of 2006 approved several changes related to promoting full compliance with investor protection rules and improving investor convenience. A ban on commissions was not one of these changes. However, the Financial Instruments and Exchange Law stipulated that financial instruments firms should comply with additional rules of conducts in conducting sales or solicitation of securities or derivative transactions.
South Korea	Partial	2016	The Financial Services Commission (FSC), the Financial Supervisory Service and a number of financial arms of the government in Korea announced that created a designation for Independent Financial Advisors (IFAs) in early 2016. IFAs are not allowed to receive any kind of commission or benefits from financial companies. Instead, they only receive commissions from their clients. The commissions will be set based on the customer's assets and number of consultations, and will be neutral from the content of portfolios. Also, IFAs will not be allowed to design or sell financial products, but only allowed to conduct discretionary investment management services, in which they advise customers about the products on what to invest in.
Latvia	Partial	3-Jan-18	Subject to MiFID II.
Luxembourg	Partial	3-Jan-18	Subject to MiFID II.
Mexico	No		In Mexico, investment advisors are not permitted to keep custody of client assets, offer guaranteed returns or receive fees from intermediaries for referrals or for promotion of any products. There is an initiative under way to revise the law, which will further focus on sales practices to ensure that the clients' interests are protected, particularly from conflicts of interest.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Netherland	Yes	Jan-13	In January 2014, the Dutch Authority for Financial Markets (AFM) placed a ban on all commissions paid by a product issuer to an advisor relating to advice. The ban applies to virtually all investment, insurance (except property and casualty insurance), mortgage and protection products. The ban was triggered by high-cost insurance policies that were mis-sold to consumers. Today, clients must pay directly for individual portfolio management, investment advice and execution-only services.
New Zealand	No		The Ministry of Business Investment and Enterprise undertook a review of financial regulation in 2008, and considered banning commissions but decided not to.
Norway	Partial	3-Jan-18	Subject to MiFID II.
Poland	Partial	3-Jan-18	Subject to MiFID II.
Portugal	Partial	3-Jan-18	Subject to MiFID II.
Singapore	No		Singapore undertook a comprehensive review of retail investment industry in 2012 and ruled out placing a ban or cap on commissions.
Slovak Republic	Partial	3-Jan-18	Subject to MiFID II.
Slovenia	Partial	3-Jan-18	Subject to MiFID II.
South Africa	Yes	2017	In November 2014, the FSB put forward 55 Retail Distribution Review regulatory proposals that affect market conduct regulation. Implementation is planned in three phases, beginning in early 2017. The prohibition of product supplier commissions on investment products and insurance products is to be implemented in two phases, expected in 2017: the first phase will relate to lump sum investments and the second phase will impact recurring contribution investments. Commissions will still be permitted for recurring contribution investment (savings) products sold in the low-income sector.
Spain	Partial	3-Jan-18	Subject to MiFID II.
Sweden	No		Subject to MiFID II. Following a 2016 review, the Swedish minister for financial markets and consumer affairs recently issued a statement saying that the government will not proceed with the proposal on a ban that goes further than the MiFID II rules. Enhanced disclosure and targeted reforms will be implemented as required by MiFID II rules.
Switzerland	No		Two new pieces of regulation, the Financial Services Act and the Financial Institutions Act, are in the process of being passed. They do not ban embedded commissions, but they do require all fees and commissions to be disclosed to clients.
Turkey	No		The most recent provision of the Capital Market Law published on December 30, 2012 did not mention any ban on commission for investment advisors. Investment advisors in Turkey are required to disclose the total value of any benefit obtained by persons or institutions that prepare and/or publish the provided comments and recommendations if any, in case there is any other benefit obtained by them in favour of themselves and/or third parties other than the regular payment in return for these publish services.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

UK	Yes	Dec-12	The Retail Distribution Review (RDR) raised the minimum level of advisor qualifications, improved the transparency of charges and services and removed commission payments to advisors and platforms from product providers, effective in 2012.
US	No		Embedded commissions are permitted in the US, however they are not common, and a wide range of unbundled fee structures are available.

Case Study: UK

The Retail Distribution Review (RDR) was launched in the United Kingdom by the Financial Services Authority (FSA). RDR is a set of rules aimed at introducing more transparency and fairness in the investment industry. The most significant change was that financial advisors were no longer permitted to earn commissions from fund companies in return for selling or recommending their investment products. Instead, investors must now agree on fees with their advisors upfront. In addition, financial advisors now have to offer either "independent" or "restricted" advice and explain the difference between the two – essentially making clear whether their recommendations are limited to certain products or product providers.

The aim of RDR was to establish a resilient, effective and attractive retail investment market that consumers had confidence in and trusted. In particular, the aims of the regulator when introducing RDR included the following:

- Improving levels of professionalism among financial advisors,
- Providing consumers with greater clarity as to the nature of the advice they are receiving and the cost of that advice, and
- Changing remuneration arrangements between providers, advisors and platforms to better align with the interest of consumers.

Regulation of commission payments was mainly driven by a concern that the complex nature of retail investment products was increasing investors' reliance on investment advice and there was a concern that embedded commissions could bias the advice provided by brokers. It was asserted that such bias increases the likelihood of financial advice not being provided in the best interests of the investor and potentially leads to investors being miss-sold investment products. The FSA found that mis-selling was further made easier by investors' limited understanding of the financial products they purchased.

The ban on embedded commissions took effect on January 1, 2013. For new accounts, advisors may only be paid for their services by or on behalf of their clients. The ban on embedded commissions means that advisors must provide their customers with two sets of fees: one for the financial product, and on for the advisory services they provide. UK firms and advisors were permitted to receive trail commissions from applicable funds sold prior to the start of the RDR on December 31, 2012, up to January 1, 2016, when they were required to sever trailing-fees arrangements on grandfathered funds. These trail commission payments have been estimated to be around GB£1.5 billion per year.[93]

In addition to the ban on commissions introduced by RDR, a higher minimum level of advisors' education was introduced in December 2012, along with requirements for continuing professional development and adherence to ethical standards. This was implemented following FSA's review which found that levels of training and professionalism among advisors were relatively low compared to other professions and such poor qualifications of advisors could in turn translate into negative consumer outcomes.

[93] Collinson, 2012

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Lastly, FSA had been concerned about the clarity with which financial advisors communicate to investors the type of services they offer and the prices associated with these services. In order to address that issue, RDR has established mandatory disclosure requirements on the type of service, along with the requirement for independent advisors to cover the full range of retail investment products. Advisors must also set their own charges and communicate these clearly to customers.

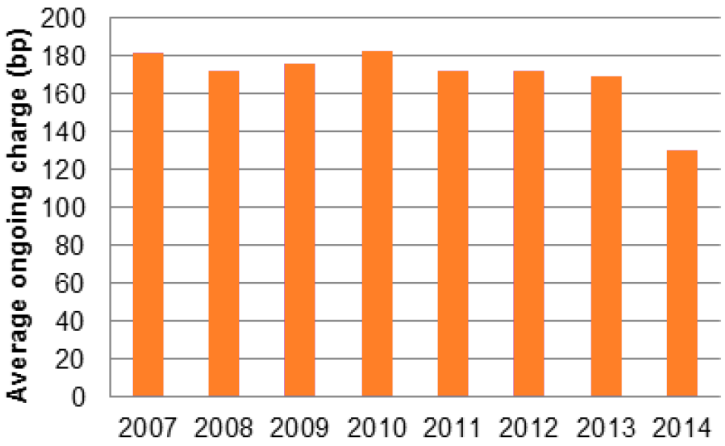
There is important context to consider when reviewing the market changes following the RDR. Trends such as technological change, mistrust in financial institutions, and growth of direct-to-consumer platforms have all influenced the market for financial services, and began prior to the RDR and continued afterwards. Additionally, a number of banks suffered mis-selling scandals that resulted in large fines and lost trust in financial institutions. These scandals caused banks such as Barclays to stop offering retail financial advice services altogether, due to concerns about adhering to regulation requiring suitability of advice for investors.[94] Another important policy change is auto-enrolment in pension funds, which is being phased in between 2012 and 2018 and reduces the assets that investors require advice to manage.

Given the significant changes that occurred around the time of the RDR, and the fact that the RDR involved many different reforms, it is not possible to isolate the effects of the ban on embedded commissions on the financial advice market. The following section outlines changes that occurred following the implementation of the RDR, but these changes cannot be interpreted as being caused by the ban on embedded commissions.

Since the RDR was implemented, there has been a noticeable decline in the sale of products which paid higher embedded commissions pre-RDR and an increase in the sale of products which paid lower pre-RDR commission. Similarly, the proportion of investment products sold from the highest charging share classes relative to lower cost share classes has declined. However, these trends had started prior to the RDR, so it is not clear that they were caused by the regulations.

A significant change in the market following the introduction of RDR was an observed fall in investment management charges of retail investment products. The fall is generally attributed to increased competition from alternative platforms (such as D2C, or direct-to-client) and a general switch to products with lower charges, such as passive funds, which typically have lower fees than actively managed funds. The following figure shows the decrease in average ongoing charges following the RDR.

Figure 27: Average Ongoing Charge for UK-Sold Active Funds, by Retail Share Class Launch Year[95]



[94] Blackmore, 2011
[95] Europe Economics, 2014

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

While these trends had begun pre-RDR, the relatively large decline in 2014 might suggest that the ban in the UK accelerated the shift to less expensive products. Notwithstanding, we note that the trend toward lower cost products is global (including in many countries where embedded commissions are not banned), as indicated previously in this Report. Thus, there is no strong support to suggest that a ban is required in order to encourage this trend. For example, in Canada, between 2005 and 2015, the asset-weighted MER of long-term funds, which includes the commission paid to financial advisors, declined from 2.14 per cent to 1.96 per cent.[96]

While investment management charges for retail investment products have continued to decline post-RDR, there is evidence that the cost of advice has increased, at least for some consumers. According to Europe Economics, given the low levels of price competition among advisors it is likely that there are incentives for advisors to increase advisory charges in large part to compensate for lost trail commissions on legacy investments. In line with this, more detailed, "holistic" ongoing advice services are now being offered in order to justify higher charges.

However, the UK has also seen the introduction of new hybrid advice models that make direct-fee advice more accessible to mass-market investors. For example, Wealth Wizards partners with employers to provide direct-fee advice on a per-issue basis, with no minimum investment. Robo-advisors such as UBS SmartWealth, with a £15,000 minimum investment, are also entering the UK market. The FCA has been supportive of new advice models.

Following the RDR, fee structure shifted and overall cost decreased. Depending on products chosen, overall cost could be substantially lower for individual investors, and costs decreased 20 per cent on average. Evidence from the FCA shows that prices for actively managed funds did not decrease, but assets shifted to lower-cost funds.[97] Again, we note that this trend has been place prior to RDR and is not unique to the UK in particular or in general to the countries that have instituted a ban on embedded commissions.

In accordance with one of the aims established by FSA, the introduction of RDR has initiated a move towards increased professionalism among advisors. This is evident as the vast majority of advisors are now fully qualified to Qualifications and Credit Framework (QCF) level 4, compared to level 3 before the implementation of the regulation, as well as an increased membership of professional bodies.

In terms of the structure of the market for investment advice, the evidence suggests that although there was some exit from the advisory market following the implementation of RDR, the number of advisors and advisory firms appears to have stabilized. Additionally, asset management has been consolidated, with fewer companies remaining in the market. According to the Financial Advice Markets Review, the number of advisors in the UK decreased almost 25 per cent between 2011 and 2014. This decrease was largely driven by retail banks, which experienced a very significant withdrawal from investment advice provision.[98] As noted above, concerns about adhering with suitability standards contributed significantly to changes in the retail banking sector. The following chart illustrates changes in the number of advisors before and after the implementation of RDR (recall that the regulation was implemented on January 1, 2013):

[96] Strategic Insight, 2017
[97] Financial Conduct Authority, 2016
[98] Fundscape, 2014

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Table 12: Number of Advisors in the UK[99]

	Summer 2012	31.12.2012	31.07.2013	31.10.2014
Financial advisors	23,787	20,453	21,684	21,496
Banks & building society advisors	6,655	4,810	4,604	3,182
Stockbrokers	1,202	2,043	2,267	1,906
Discretionary investment managers	875	1,435	1,784	1,698
Other	2,554	2,269	2,221	2,871
TOTAL	35,073	31,010	32,560	31,153

In addition to a reduction in the number of advisors, surveys show that the share of advisors who require a portfolio size of at least £100,000 has increased from 13 per cent in 2013 to 36 per cent in 2015. Transparency in fees and changes in fee structure may also have resulted in a lower willingness to pay for advice: the Citizens Advice Bureau found that only 8 per cent of investors were willing to pay more than £500 for advice, whereas typical pension advice would cost £1,350 when paying on an hourly basis.

However, it is not clear that these changes were caused by the RDR, or more specifically by the ban on embedded commissions. According to a 2009 survey, 25 per cent of advisors said they would leave the advice market pre-RDR anyway, regardless of the introduction of new regulations.[100] Moreover, contrary to ex ante concerns related to potentially adverse impact of the policy on the availability of advisors, there remains a large number of advisory firms and advisors to serve consumers. A 2014 study commissioned by the FCA did not find evidence of a shortage of advisors overall, but did not estimate supply and demand separately for mass-market investors.[101] As noted by CASS Consulting, even without RDR, the landscape for the advisory sector would have begun to change. Technological advances have been marking the creation and delivery of investment products more accessible and cheaper to a wider audience, whether guided by an advisor or not. A 2015 report by Oxera notes that, based on interviews with industry participants, adverse effects in terms of access to financial advice are not clear at this stage, and that the initial decline in the number of financial advisors could be due to the ban on embedded commissions or other factors, such as increase in the mandatory level of professional standards.

The head of the FCA has recently expressed concern[102] over an advice gap created by the RDR, but empirical reports published by the FCA to date do not support this conclusion.

There is no solid data on the decline of the number of clients using an advisor in the UK, however the general consensus is that many mass-market investors stopped using an advisor or were asked by their advisors to leave, and that investors who could benefit from advice do not have access to an advisor. This is caused by a combination of lack of supply of advisors for this market and lack of willingness to pay for advice among mass-market investors. Where a reduction in access to advice has been identified, it is not clear what caused this reduction, and due to factors discussed above, we cannot confidently attribute any changes to the ban on embedded commissions.

[99] Fundscape, 2014 and APFA, 2016
[100] CASS Consulting, 2013
[101] Towers Watson, 2014
[102] FCA, 2016b

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Case Study: Australia

Australia passed a suite of financial reforms entitled the Future of Financial Advice (FoFA) act in 2012. The reforms came into effect on June 1, 2013. As with the UK, the ban on embedded commissions was grandfathered, so it is too early to draw any definite conclusions from the Australian experience.

There were four main reforms associated with FoFA: enhanced regulatory powers, a ban on conflicted remuneration including trailer commissions, statutory best interest duty and fee disclosure to the consumer. Clients are also required to "opt-in" every two years in order to continue receiving financial advice.

Prior to the implementation of FOFA, Australia's fund compensation model was very similar to Canada, including management fees, ongoing commissions/trailer fees (front-end up to 5%, back-end load ranging from 0.5% and 1%, and no load funds), and where applicable, platform fees (up to 2%). More than half of Australian funds were classified as no-load funds, which typically had lower MERs than front-end or back-end load funds. Additionally, pre-FoFA, trailing commissions on Australian funds averaged 0.60% per annum.

The overriding principles of FoFA were "financial advice must be in the client's best interests – distortions to remuneration, which misalign the best interests of the client and the advisor, should be minimized; and in minimizing these distortions, financial advice should not be put out of reach of those who would benefit from it."[103]

In a 2014 review, the Financial Services Council was broadly supportive of the FoFA reforms, although they noted that they imposed significant compliance costs, and proposed a suite of changes to make the regulation more transparent and less costly. This review also noted that there is a significant advice gap in Australia. A 2014 survey found that while 53 per cent of Australians would want to receive comprehensive financial advice only 20 per cent currently had an advisor. A main problem seems to be the high cost of financial advice, which seems to have increased following FoFA.

A 2014 report by ASIC, a financial services regulator in Australia, surveyed dealers and found that advisor numbers and the type of advice provided did not change as a result of FoFA. However, revenue structures for advisors changed. Retail accounts moved to direct-fee, hourly fee, or a combination of the two. Licensees did not think that the reforms would help to promote affordability of financial advice.

Transparency and Disclosure

As previously noted, Canada has very strong regulation on disclosure and transparency. While reforms in Australia and the UK were designed to increase transparency, their disclosure ratings from the Morningstar Global Fund Report did not increase following their reforms, and remained poor.

Figure 28: Morningstar Global Fund Report Disclosure Ranking

Morningstar Global Report Disclosure Ranking				
	2015	2013	2011	2009
Canada	A-	B	B	A
UK	C+	C+	B	B
Australia	D+	D+	D	D

[103] Australian Government, 2014

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

In the eyes of regulators, disclosure appears to be a key ingredient in promoting fairness in financial markets. The following section outlines the reasons why countries chose not to ban embedded commissions and notes which reforms they undertook instead. Most opted for stronger disclosure rules as an alternative to banning conflicted compensation.

Countries that Contemplated and Rejected a Ban

New Zealand

New Zealand passed financial reforms called the Financial Advisors Act in 2008 in order to "promote the sound and efficient delivery of financial advisor services and to encourage public confidence in the professionalism and integrity of financial advisors." According to a report by the Ministry of Business, Innovation and Employment, prior to these reforms trust in financial advisors was low.[104] Reforms introduced professional standards for financial advisors. In order to provide certain types of financial advice, advisors must be authorized by the Financial Markets Authority. These advisors are called Authorized Financial Advisors and must be professionally certified and adhere to a code of professional conduct that specifies ethical behavior as well as skills and knowledge. These advisors must also disclose to clients how they are paid for their services, among other things.

A 2016 report by the Ministry of Business, Innovation and Employment reviewed the effects of these reforms and explained why New Zealand chose not to ban embedded commissions as a way to address conflicted remuneration. The first reason is that they did not want to risk restricting access to advice. Given that willingness to pay for advice is low, the government felt that there was a "significant risk" of reducing access to advice, particularly for small investors. The report notes that evidence from the UK[105] suggests that banning embedded commissions lowers access to financial advice.

A second concern was that such a ban addresses only one form of conflicted remuneration. A ban on embedded commissions only applies to advisors selling third-party funds, whereas institutions such as banks may pressure advisors to sell certain products using in-house channels. In fact, if embedded commissions were banned, other types of conflicted remuneration may even increase.

Given these concerns, the report instead supported policies that would promote sound financial advice rather than targeting specific forms of remuneration. The report recommends clear disclosure of fees and any potential conflicts of interest, and regulations requiring advisors to act in their clients' best interest.

Singapore

In 2012, the Monetary Authority of Singapore established a Financial Advisory Review panel to conduct a review of practices in the Financial Advisory industry. The goals of the review were to raise the quality and competence of financial advisors, to make financial advising a dedicated service, to lower distribution costs, and to promote a culture of fair dealing.

In 2013, the panel published a report of its recommendations.[106] These included a minimum academic entry requirement for financial advisors, continuing professional development, and competency and financial requirements for the leadership of FA firms. The panel also noted that misdealing with respect to investors was fairly common in Singapore, and recommended that both firms and industry associations should play a larger role in encouraging fair dealing.

This report explains why banning trailer commissions was not chosen as a policy to reduce distribution costs: "From a survey conducted by MAS, 80 per cent of the respondents indicated that they would not pay a fee for financial advice. Thus, a 'fee-only' model may result in more Singaporeans being under-advised or under-insured. It is also not clear that fees will be lower than commissions. Indeed, it is possible that consumers may end up

[104] Ministry of Business, Innovation and Employment, 2008
[105] FCA, 2016
[106] Monetary Authority of Singapore, 2013

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

paying more." The panel was concerned that a fee-based model may lead to clients losing access to financial advice, and did not have confidence that banning trailer fees would reduce costs.

Instead of banning trailer commissions, the report recommends clear fee disclosure and comparability of products in order to encourage price competition in the market for financial advice. Specifically, disclosure of trailer fees is advocated. This is already the policy in Canada, where trailer fees are disclosed in dollar terms.[107] Another recommendation is that firms adopt performance indicators for financial advisors based on metrics other than sales volume. This is in order to discourage advisors from pressuring clients into purchasing more than they need.

Switzerland

In March of 2015, changes to financial services regulation were announced in Switzerland. The Financial Services Act and the Financial Institutions Act were passed in 2016 and will come into effect in 2017. The intent of these bills was to create uniform regulations, encourage competitiveness and protect consumers. Changes introduced by these bills will include guidelines for prospectuses, training and continual professional development, conduct provisions based on the type of client (retail, professional or institutional), supervision of managers of individual client assets, and new disclosure rules. Per a press release from the Swiss Confederation[108], trailer commissions will not be banned. Instead, there will be strong disclosure rules requiring complete transparency of all remuneration and other benefits received from third parties. In addition to this disclosure requirement, a 2014 ruling from the Federal Supreme Court requires that the advisor's compensation must be easily understandable to clients.

Hong Kong

In Hong Kong, intermediaries have been required to disclose monetary and nonmonetary benefits received or receivable in relation to distribution of an investment product since 2011 as one of the key measures to enhance investor protection following the global financial crisis.

According to a November 2016 consultation paper issued by the Hong Kong Securities and Futures Commission ("SFC"), after reviewing global regulatory initiatives, the SFC determined that it would rule out banning embedded fees but would focus on enhanced disclosure and targeted reforms. Based on a market research quoted by the SFC[109], 54 per cent Hong Kong investors rely on friends and family for information about financial matters and planning, while only 29 per cent rely on financial planners. Only up to three per cent of retail fund distribution in Hong Kong was done through the independent financial advisor channel. Moreover, one of the top barriers to financial planning is that that consumers in Hong Kong feel that the fees charged for financial advice are not worth it, per the same source. The SFC concluded that the adoption of a pay-for-advice model with a complete ban on receipt of commissions by intermediaries may not seem appropriate for Hong Kong.

SFC was also concerned about the unintended consequences of eliminating commissions. According to the consultation paper, "whilst a pay-for-advice model may eliminate the inherent conflict of interest in receiving benefits from product providers in the sale of investment products to clients, it may have unintended consequences. For instance, an 'advice gap' may have emerged in jurisdictions adopting a pay-for-advice model where investors who are without the resources to pay for or unwilling to pay for advice for any reason could be left with no or very limited access to investment products."

Instead, SFC proposed a two-pronged approach: (1) governing the conduct of intermediaries when representing themselves as "independent" or as providing "independent advice"; and (2) enhancing the disclosure of monetary benefits received or receivable that are not quantifiable prior to or at the point of entering into a transaction. SFC believes it is a balanced approach more appropriate for Hong Kong's market landscape and would avoid any potential unintended consequences associated with a pay-for-advice model.

---

[107] Morningstar, 2015
[108] Swiss Confederation, 2015
[109] Financial Planning Standards Board and GfK, 2015

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Sweden

In February 2016, Finansinspektionen, the Swedish financial supervisory authority published a report on a review of the Swedish savings market. While conflict of interest was identified as a concern in embedded fee arrangements, the Swedish minister for financial markets and consumer affairs recently issued a statement in May 2016, saying that the government will not proceed with the proposal on a ban that goes further than the MiFID II rules.

The Financial Supervisory Authority stated its reasons behind its proposal and tackled the concerns voiced about a ban of commissions and its possible consequences. Some of its conclusions are as follows:

- **Major industry adjustments:** A commission ban would entail major adjustments and transition costs for the Swedish financial industry. With transparent pricing, firms providing financial advice will need to demonstrate what value they are adding whereas product providers that pay high commissions to get their products onto the market will instead have to compete on pricing and quality. FI believes this will lead to simplified advisory services and an increased range of lower-fee products and argues that the gains from a better functioning savings market will outweigh the transition costs on the long term.
- **Advice gap:** With respect to concerns that a commission ban would potentially cause firms to no longer offer advice and result in a shortage in the supply of advisory services to consumers with modest assets, FI finds no empirical proof that this would be the case. FI also notes that to argue against a ban on commissions on the basis that consumers won't be willing to pay a price which they have always been paying, but which is now clearly visible, is not a good argument. In FI's view, clear pricing creates possibilities for consumers to influence the supply of advisory services. If advice, as it looks today, is perceived to be expensive in relation to the value it provides, there is an opportunity for other types of advisory services to emerge -- services that are more cost-efficient and adapted to consumers' willingness to pay. Accordingly, FI finds that transparent pricing for advice can lead to simplified advisory services that are more adapted to consumers' needs.

According to the May 2016 statement, the Swedish government will be proposing legislation in response to EU directives, which will not ban commission-led sales of financial advice and products.

Germany

Commission-based investment advice is currently the predominant model in the German market. Funds without loads or trailing commissions exist but are difficult for investors to locate and they make up a minimal percentage of assets.[110] Through a series of reforms in 2012 and 2014, Germany has adopted rules to raise standards for advisors, enhance fee and commission disclosure, and create a separate designation for fee-based advisors. On August 1, 2014, German Federal Financial Supervisory Authority ("BaFin") adopted Fee-Based Investment Advice Act to boost transparency regarding the fees or commissions advisors receive for investment advice. BaFin, has indicated that it does not intend to ban embedded commissions and will not go beyond MiFID requirements in regulating fees. Research did not identify detailed reasoning behind the conclusion.

[110] Morningstar, 2015

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Summary of Findings

Current transparency rules in Canada are significantly stronger than in the UK and Australia both prior to their respective bans on embedded commissions and currently. Thus, given that transparency is one of the means to mitigate the risks inherent in agent-principal relationships, these risks should be significantly less acute in Canada.

There is no strong evidence from the UK or Australia that cost of advice has decreased as a result of the ban on embedded commissions. The shift to lower cost products such as ETFs following the ban is a continuation of a trend that has been evident in many countries including Canada and it is difficult to ascertain to what extent, if any, banning embedded commissions accelerated this process.

On the other hand, it is not clear whether an advice gap was created in these countries following the ban on embedded commissions. In this regard, we note that in Canada the use of embedded commissions is more wide spread and thus the likelihood of an advice gap would be more pronounced than in those countries. We further note that bans on embedded commissions in UK and Australia followed evidence of major mis-selling of investment products in those countries,[111,112,113] but that Canada has not seen mis-selling on this scale.

Other countries have contemplated a ban on embedded commissions and have rejected it, generally for the fear of an advice gap. Instead they generally opted for more disclosure as a solution to conflict of interest issues.

[111] Ferguson & Vedelago, 2013
[112] Money Marketing, 2009
[113] Hyde, 2013

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Conclusions

Based on our assessment and subject to the scope of review and limitations of this report we conclude the following:

1. Transparency, financial literacy and long term relationships between advisors and investors are the ultimate assurance for a well-functioning financial advisory market, where interests of advisors and investors are aligned.
2. Canadian investors who use advisors are generally well educated and have trust in their advisors that has developed through long term relationships.
3. Current transparency rules in Canada are at a level that creates a critical mass of informed Canadian investors which acts as an effective deterrence against the possibility of misconduct by financial advisors.
4. There is no significant evidence that embedded commissions in Canada have been leading to conflicts of interest influencing financial advisors' behaviour. A ban on embedded commissions would likely eliminate some of these influences, but would create new instances of misalignment of interests between investors and advisors via new fee schemes.
5. Banning embedded commissions in Canada would likely lead to negative consequences for the mass-market investors in the form of:
    a. Less access to financial advice;
    b. Lower savings available at retirement; and
    c. Higher cost of advice for those who would want to continue receiving financial advice.
6. Robo-advice is a viable alternative solution for some investors who would stop using an advisor but not for all.
7. Banning embedded commissions may lead to industry concentration that would create other forms of biases such as those created by greater vertical integration.
8. The estimated economic footprint of Canada's investment advisory industry amounts to around $25 billion in total output, $12 billion in total GDP, $8 billion in labour income and 116,000 full-time equivalent jobs. These figures include the direct, indirect and induced impacts on Canada's economy.
9. In the absence of embedded commissions, the potential imposition of a $100,000 minimum investment threshold for providing advice would have a significant negative impact on the economic footprint of the investment advisory industry in Canada. For example, if no new advice models were introduced, the contribution to GDP from the industry would shrink by between approximately $2.8 and $3.3 billion.
10. The move from an advisor to DIY[114] investing is expected to reduce the amount of savings available to those Canadians at retirement. On an order of magnitude basis, those who could potentially be deprived of access to financial advice following the ban on embedded commissions would accumulate on average $240,000 less in savings prior to retirement than those with access to advice.

[114] DIY investors do not use the services of a financial advisor. They may research investment products themselves and purchase them using an intermediary such as a bank or online brokerage.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Appendix A: Limitations

To conduct this assessment, PwC relied upon the completeness, accuracy, and fair presentation of all information, data, advice, opinions or representations obtained from various sources which were not audited or otherwise verified. These sources (collectively, the "Information") are listed in the Scope of Review section of this report.

The findings of this assessment are conditional upon such completeness, accuracy and fair presentation of the Information, which has not been verified independently by PwC. Accordingly, we provide no opinion, attestation or other form of assurance with respect to the results of this assessment.

This assessment has been prepared for the Investment Funds Institute of Canada (IFIC) for their exclusive use. PwC disclaims any contractual or other responsibility to other persons who may use or rely on this assessment.

Receipt of new data or facts: PwC reserves the right at its discretion to withdraw or make revisions to this assessment should we receive additional data or be made aware of facts existing at the date of the assessment that were not known to us when we prepared this assessment. The findings are as of April 2017 and PwC is under no obligation to advise any person of any change or matter brought to its attention after such date, which would affect our findings.

Our assessment must be considered in its entirety by the reader, as selecting and relying on only specific portions of the analyses or factors considered by us, without considering all factors and analyses together, could create a misleading view of the processes underlying this review and the conclusions there from. The preparation of an economic analysis is a complex process and it is not appropriate to extract partial analyses or make summary descriptions. Any attempt to do so could lead to undue emphasis on a particular factor or analysis.

Use limitations: Any use that a third party makes of this report or reliance thereon, or any decision made based on it, is the responsibility of such third party. PwC accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken, based on this report.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Appendix B: List of Sources Used

Advocis. (2012). *The Financial Advice Industry in Canada: An Economic Profile.*

APFA. (2016). *The Financial Adviser Market: In Numbers.*

Australian Government. (2014). *Corporations Amendment (Streamlining Future of Financial Advice) Regulation 2014.* Canberra: Federal Register of Legislation.

Barber, B. M., Odean, T., & Zheng, L. (2005). Out of sight, out of mind: The effects of expenses on mutual fund flows. *The Journal of Business*, 2095-2120.

Barberis , N., Shleifer, A., & Vishny, R. (1998). A model of investor sentiment. *Journal of Financial Economics*, 307-343.

Benartzi, S., & Thaler, R. H. (1995). Myopic loss aversion and the equity premium puzzle. *Quarterly Journal of Economics*, 73-92.

Benartzi, S., & Thaler, R. H. (2007). Heuristics and biases in retirement savings behavior. *The Journal of Economic Perspectives*, 81-104.

Bergstresser, D., Chalmers, J. M., & Tufano, P. (2009). Assessing the costs and benefits of brokers in the mutual fund industry. *Review of Financial Studies*, 4129-4156.

Blackmore, N. (2011, January 26). *Barclays to close advice arm*. Retrieved from Money Marketing: https://www.moneymarketing.co.uk/barclays-to-close-advice-arm/

BlackRock . (2015). *Investor Pulse Survey - What are Investors Thinking?* Retrieved from BlackRock.

Blanchett, D., & Kaplan, P. (2013). Alpha, beta, and now... gamma. *The Journal of Retirement*, 29-45.

BSCS. (2016). *Smarter Investor Study: BC Report.* Vancouver: The British Columbia Securities Commission.

Carhart, M. M. (1997). On persistence in mutual fund performance. *The Journal of Finance*, 57-82.

Carrick, R. (2016, October 7). *The 2016 robo-adviser guide: Find out which firms deserve your business*. Retrieved from The Globe and Mail.

CASS Consulting. (2013). *The impact of the RDR on the UK's market for financial advice: Challange and opportunity.*

Chalmers, J., & Reuter, J. (2012). How do retirees value life annuities? Evidence from public employees. *Review of Financial Studies*, 2601-2634.

Chalmers, J., & Reuter, J. (2013). What is the Impact of Financial Advisors on Retirement Portfolio Choices and Outcomes? *Working Paper*.

Chetty, R., Looney, A., & Kroft, K. (2009). Salience and taxation: Theory and evidence. *American Economic Review*, 1145-1177.

Cici, G., Kempf, A., & Putz, A. (2016). The valuation of hedge funds' equity positions. *Journal of Financial and Quantitative Analysis*, 1013-1037.

Citizens Advice. (2015). *The Four Advice Gaps: An Analysis of the Unmet Consumer Needs around Financial Advice and Public Financial Guidance.*

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Collie, F. (2015, May 1). *Disclosure Fuels Change*. Retrieved from Pressreader: http://www.pressreader.com/canada/investment-executive/20150501/282123520048109

Collinson, P. (2012, December 30). *FSA ban on commission-based selling sparks 'death of salesman' fears*. Retrieved from The Guardian.

Conference Board of Canada. (2014). *Boosting Retirement Readiness and the Economy Through Financial Advice.*

CSA. (2012). *CSA Discussion Paper and Request for Comment 81-407 Mutual Fund Fees.*

CSA. (2017). *CSA Consultation Paper 81-408 Consultation on the Option of Discontinuing Embedded Commissions.*

Cumming, D., Johan, S., & Zhang, Y. (2015). *A Dissection of Mutual Fund Fees, Flows, and Performance.*

Darby, M. R., & Karni, E. (1973). Free competition and the optimal amount of fraud. *The Journal of Law and Economics*, 67-88.

Del Guercio, D., & Reuter, J. (2014). Mutual fund performance and the incentive to generate alpha. *The Journal of Finance*, 1673-1704.

Dergstresser, D., Chalmers, J. M., & Tufano, P. (2009). Assessing the costs and benefits of brokers in the mutual fund industry. *Review of Financial Studies*, 4129-4156.

Deutsche Presse-Agentur. (2012, December 7). *Kliniken operieren zu häufig, weil es sich lohnt*. Retrieved from ZEIT.

Dulleck, U., Kerschbamer, R., & Sutter, M. (2011). The economics of credence goods: An experiment on the role of liability, verifiability, reputation, and competition. *American Economic Review*, 526-555.

Emons, W. (1997). Credence goods and fraudulent experts. *The RAND Journal of Economics*, 107-119.

Enriques, L., & Volpin, P. (2007). Corporate governance reforms in continental Europe. *Journal of Economic Perspectives*, 117-140.

Europe Economics. (2014). *Retail Distribution Review Post Implementation Reveiw.*

FCA. (2016). *Financial Advice Market Review: Final report.*

FCA. (2016b, July 20). *Chief Executive speaks at APM about recent work and future challenges*. Retrieved from Financial Conduct Authority: https://www.fca.org.uk/news/speeches/chief-executive-speaks-apm-about-recent-work-and-future-challenges

Ferguson, A., & Vedelago, C. (2013, June 22). *Targets, bonuses, trips - inside the CBA boiler room*. Retrieved from The Sydney Morning Herald: http://www.smh.com.au/business/banking-and-finance/targets-bonuses-trips--inside-the-cba-boiler-room-20130621-2oo9w.html

Financial Conduct Authority. (2016). *Asset Management Market Study. Interim Report.*

Financial Conduct Authority. (2016). *Asset Management Market Study. Intermin Report.*

Financial Planning Standards Board and GfK. (2015). *The Value of Financial Planning and Awareness of CFP Certification: A Global Financial Planning Survey.*

Foerster, S., Linnainmaa, J. T., Melzer, B. T., & Previtero, A. (2015). Retail financial advice: Does one size fit all? *Journal of Finance*, Forthcoming.

Fudenberg, D., & Levine, D. K. (1989). Reputation and equilibrium selection in games with a patient player. *Econometrica*, 759-778.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Fundscape. (2014). *Navigating the post-RDR landscape in the UK: Assessing the potential impact of an RDR regime on the European fund industry*.

Gaudecker, H.-M. (2015). How Does Household Portfolio Diversification Vary with Financial Literact and Financial Advice. *The Journal of Finance*, 489-507.

Gruber, J., Kim, J., & Mayzlin, D. (1999). Physician fees and procedure intensity: the case of cesarean delivery. *Journal of Health Economics*, 473-490.

Hackethal, A., Haliassos, M., & Jappelli, T. (2012). Financial advisors: A case of babysitters? *Journal of Banking & Finance*, 509-524.

Henze, B., Schuett, F., & Sluijs, J. P. (2015). Transparency in markets for experience goods: experimental evidence. *Economic Inquiry*, 640-659.

Hermansson, C., & Song, H.-S. (2016). Financial advisory services meetings and their impact on saving behavior: A difference-in-difference analysis. *Journal of Retailing and Consumer Services*, 131-139.

Ho, S. (2017, January 10). *Canadian fintech startup Wealthsimple sees major 2017 growth*. Retrieved from CNBC.

Homonoff, T. A. (2015). Can small incentives have large effects? the impact of taxes versus bonuses on disposable bag use. *Working Paper*.

Hyde, D. (2013, April 10). *"We did mis-sell, admits Lloyds: Customers flogged complex investments when a savings account would have been better,"* . Retrieved from This is Money: http://www.thisismoney.co.uk/money/investing/article-2306416/We-did-mis-sell-admits-Lloyds-Savers-sold-complicated-investments.html

IFIC. (2017). *IFIC Industry Overview, March 2017*.

IIROC. (2016). *Annual Report 2015-2016*. Toronto: IIROC.

Innovative Research Group. (2017). *Investor Readiness for Better Investing 2016-2017 Panel Study: Part 1*.

Investor Economics. (2014). Investor Economics Financial Advice Industry Statistics.

Investor Economics. (2016). Investor Economics Financial Advice Industry Statistics.

Investor Economics and Strategic Insight. (2012). *Monitoring Trends in Mutual Fund Cost of Ownership and Expense Ratios: A Canada - U.S. Perspective*.

Kiladze, T. (2013, November 25). *Canada's trouble with investment advisors*. Retrieved from The Globe and Mail.

Kocianski, S. (2016, June 9). *The Robo Advising Report: Market forecasts, key growth drivers, and how automated asset management will change the advisory industry*. Retrieved from Business Insider.

KPMG. (2011). *Value Proposition of Financial Advisory Networks - Update and Extension*.

Leuz, C., & Verrecchia, R. E. (2000). The economic consequences of increased disclosure. *Journal of Accounting Research*.

Levitt, S. D., & Syverson, C. (2008). Market distortions when agents are better informed: The value of information in real estate transactions. *The Review of Economics and Statistics*, 599-611.

Linnainmaa, J. T., Melzer, B. T., & Previtero, A. (2016). The misguided beliefs of financial advisors. *Working Paper, University of Southern California*.

Linton, O., & Tobek, O. (2016). A Dissection of Mutual Fund Fees, Flows, and Perfomance by Cumming, Johan, and Zhang: A comment. *Unpublished Manuscript*.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Macleans. (2015, November 14). *Find the perfect financial planner*. Retrieved from Macleans: http://www.macleans.ca/economy/money-economy/find-the-perfect-financial-planner/

Marsden, M., Zick, C. D., & Mayer, R. N. (2011). The value of seeking financial advice. *Journal of Family and Economic Issues*, 625-643.

MFDA Membership Statistics. (2017, March). Retrieved from MFDA: http://mfda.ca/members/membership-statistics/

MFDA Rules. (2017, March). Retrieved from MFDA: http://www.mfda.ca/regulation/rules.html

Ministry of Business, Innovation and Employment. (2008). *Review of the operation of the Financial Advisers Act 2008 and the Financial Service Providers (Registration and Dispute Resolution) Act 2008*.

Monetary Authority of Singapore. (2013). *Financial Advisory Industry Review*.

Money Marketing. (2009, April 16). *Barclays accused on single fund choice*. Retrieved from Money Marketing: https://www.moneymarketing.co.uk/barclays-accused-on-single-fund-choice/

Montmarquette, C., & Viennot-Briot, N. (2016). *The Gamma Factor and the Value of Financial Advice*. CIRANO.

Montmarquette, C., & Viennot-Briot, N. (2017). *The Gamma Factors and the Value of Financial Advice*.

Morningstar. (2015). *Global Fund Investor Experience Study June 2015*.

Moyer, L. (2015, April 24). *Putting Robo Advisers to the Test*. Retrieved from The Wall Street Journal.

Mullainathan, S., Noeth, M., & Schoar, A. (2012). The market for financial advice: An audit study. *National Bureau of Economic Research Working Paper*.

Nelson, P. (1970). Information and consumer behavior. *Journal of Political Economy*, 311-329.

OBSI. (2017). *About Us*. Retrieved from Ombudsman for Banking Services and Invesments: https://www.obsi.ca/en/about-us

OSC. (2017). *Cost disclosure, performance reporting and client statements*. Retrieved from Ontario Securities Commission: http://www.osc.gov.on.ca/en/Dealers_crm2-faq-planning-tips.htm

Park, I.-U. (2005). Cheap-talk referrals of differentiated exports in repeated relationships. *The Rand Journal of Economics*, 391.

PayScale. (2017, March). *PayScale*. Retrieved from Salary Comparison, Salary Survey, Search Wages.

Pearce, D. G., & Stacchetti, E. (1998). The interaction of implicit and explicit contracts in repeated agency. *Games and Economic Behavior*, 75-96.

Perron, B. (2016). Report on "A Dissection of Mutual Fund Fees, Flows, and Performance" by Cumming, Johan, and Zhang. *Unpublished Manuscript*.

POLLARA. (2016). *Canadian Mutual Fund Investors' Perceptions of Mutual Funds and the Mutual Fund Industry*.

Radner, R. (1985). Repeated principal-agent games with discounting. *Econometrica*, 1173-1198.

RBC Global Asset Management. (2016). *Understanding the costs of mutual fund investing*.

Sannikov, Y. (2008). A continuous-time version of the principal-agent problem. *The Review of Economic Studies*, 957-984.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Shiller, R. J. (2003). From efficient markets theory to behavioral finance. *Journal of Economic Perspectives*, 83-104.

Shiller, R. J. (2009). *The new financial order: Risk in the 21st century.* Princeton University Press.

Strategic Insight. (2012). *A Perspective on the Evolution in Structure, Investor Demand, Distribution, Pricing, and Shareholders' Total Costs in the U.S. Mutual Fund Industry.*

Strategic Insight. (2015). *Monitoring Trends in Mutual Fund Cost of Ownership and Expense Ratios: A Canada - U.S. Perspective 2015 Update.*

Strategic Insight. (2017). *Invesot Economics Insight: Investment Funds Advisory Service - Canada.*

Swiss Confederation. (2015). *Federal Council adopts dispatch on Financial Services Act and Financial Institutions Act*. Retrieved from Swiss Confederation.

Thaler, R. H. (2005). *Advances in Behavioral Finance. Vol. 2.* Princeton University Press.

The Fund Library. (2017, April). Retrieved from Canada's Mutual Fund, Stock and ETF Resource Data Centre: http://www.fundlibrary.com/

Timmermann, A. (2016). Review of "A Dissection of Mutual Fund Fees, Flows, and Performance" by Douglas Cumming, Sofia Johan, and Yeling Zhang. *Unpublished Manuscript*.

Towers Watson. (2014). *Advice Gap Analysis: Report to FCA.* London: Towers Watson.

Wolinsky, A. (1993). Competition in a market for informed experts' services. *The RAND Journal of Economics*, 380-398.

Wolinsky, A. (1995). Competition in markets for credence goods. *Journal of Institutional and Theoretical Economics*, 117-131.

Zhao, X. (2008). Conflict of interests between load fund investors and brokers and financial advisors. *Working Paper*.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Appendix C: Glossary

Brokerage: A financial institution that facilitates the purchase and sale of securities including mutual funds. Synonym of **dealer**.

Credence Goods: Goods whose value is difficult for consumers to assess.

Dealer: A financial institution that facilitates the purchase and sale of securities including mutual funds. Synonym of **brokerage**.

Deferred Sales Commission (DSC): See **load fee.**

Direct Fee: A fee paid to an advisor as a share of assets invested.

DIY Investing: DIY investors do not use the services of a financial advisor. They may research investment products themselves and purchase them using an intermediary such as a bank or online brokerage.

Embedded Commissions: Any fee paid from a fund manager to a dealer. These include trailing commissions and commissions on deferred sales charges.

High-Net-Worth: Investors with between $1 and $5 million investable assets.

Load Fee (Front Load, Back Load): A sales fee paid to an advisor upon purchase of a fund, in the case of front load, or sale of a fund, in the case of back load. Front load fees are also known as **Initial Sales Charges (ISC)**. Back load fees are also known as **Deferred Sales Commissions (DSC).**

Management Expense Ratio (MER): An ongoing fee paid to a fund manager. The MER includes management fees, administration costs, trailing commissions and HST. It is deducted from investors' returns.

Mass-affluent: investors with between $100,000 and $1 million investable assets.

Mass-market: Investors with under $100,000 investable assets.

Retrocessions: See **trailing commissions**.

Trading Expense Ratio (TER): The ratio of fees paid for executing trades to assets invested. Fees for trades are taken off of returns and are paid from the investment as they are incurred.

Trailing Commissions: Commissions paid from a fund manager to a dealer on an annual basis. These fees are included in the management expense ratio (MER) paid by investors. Also known as **trailers**, **trailer fees**, or **retrocessions**.

Ultra-high-net-worth: Investors with investable assets over $5 million.

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Appendix D: List of Acronyms

AMF: Autorité des marchés financiers

CSA: Canadian Securities Administrators

CSF: Chambre de la sécurité financière

CRM2: Client Relationship Model – 2

D2C: Direct to Consumer

DSC: Deferred Sales Charge

ETF: Exchange Traded Fund

FoFA: Future of Financial Advice

IFIC: Investment Funds Institute of Canada

IIROC: Investment Industry Regulatory Organization of Canada

MER: Management Expense Ratio

MFDA: Mutual Funds Dealers Association

MiFID II: Markets in Financial Instruments Directive - 2

OSC: Ontario Securities Commission

POS: Point of Sale (Regulation)

QCF: Qualifications and Credit Framework

RDR: Retail Distribution Review

ROR: Rate of Return

SRO: Self-Regulatory Organization

TER: Trade Expense Ratio (in Canada), or Total Expense Ratio (in some countries including the US)

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Appendix E: Reviews of Cumming et al (2015)

© 2017 PricewaterhouseCoopers LLP, an Ontario limited liability partnership. All rights reserved.

PwC refers to the Canadian member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

A Dissection of Mutual Fund Fees, Flows, and Performance by Cumming, Johan, and Zhang: A comment

Oliver Linton*and Ondrej Tobek†
University of Cambridge

December 22, 2016

Contents

1 Introduction 1
2 Related Research 2
3 Methodology 3
3.1 Regressions 4
4 Results 5
5 Problems with the study 6
5.1 Endogeneity problems with the regressions 6
5.2 Future alpha - sensitivity regressions don't have to be valid globally 7
5.3 Reverse causality 7
5.4 Some Further Econometric Issues 8
6 Conclusions 13

1 Introduction

The article addresses the question of whether investors and their advisers seek out skilled fund managers or not. Their empirical evidence suggests that this is much less likely when advisers and their dealers are paid trailing commissions, when advisers work for dealers that are affiliates of the fund manager and it is less likelier still when advisers use the deferred sales charge purchase option.

*obl20@cam.ac.uk
†ot234@cam.ac.uk

As a consequence, the results of their research suggest that investment decisions are being made, to a significant degree, based on something other than portfolio manager skill, e.g., trailing commissions. The main claim of the paper is that trailing commissions drive flows and have a negative effect on future alpha in a both economically and statistically significant way. The argument is based on an assertion that higher flow-performance relation incentivizes fund managers to achieve higher alpha because the fund manager will receive disproportionately more flows into the fund for each increase in performance. The study measures the impact of the value of advice on the risk adjusted return, the "alpha," and does not take account of other directions where the advice might yield value. The recent trend of smart beta funds would suggest that alpha alone is not a sufficient measure. We first relate their work to previous research, then we discuss their methodology and results, and finally provide our critique.

2 Related Research

The asymmetric information problem between brokers and their clients has been studied extensively in the previous literature. Bergstresser, Chalmers, and Tufano (2009) study the benefits of intermediation of funds and find that investment advisers provide no benefit at all. Quite contrary, they find that the value of their advice is negative even before accounting for fees. The funds recommended by brokers show no more skill than funds sold through direct channels. Christoffersen, Evans, and Musto (2013) look at the incentives of brokers and how this influences the investment advice they give to investors. Specifically, they focus on revenue sharing between investment fund families and brokers and how it influences the inclination of the independent adviser to prefer certain families. Brokers are regulated by a regulation agency in the US to act "in the best interest of the customer without regard to the financial or other interests of the broker, dealer or investment adviser providing the advice" and a preferential treatment of some advisers would be a breach of this rule. They conclude that the revenue sharing agreements and front load do, to some degree, influence the decision of the brokers. Chalmers and Reuter (2012) also point to a conflict of interest between brokers and their clients where brokers abuse their information advantage. Anagol, Cole and Shayak (2013) conduct a field experiment in the Indian life insurance market and find out that the agents give sub-optimal advice to their clients for their own gains. The distinction in performance between funds that are sold directly to retail customers and those that are intermediated by brokers is drawn in Del Guercio and Reuter (2014). They contend that funds that sell directly do not under-perform index funds after fees but the funds that sell their shares through brokers do significantly under-perform. The determinant of fund flows in general are studied in Sirri and Tufano (1998). Del Guercio and Tkac (2002) extend this research with a similar type of regression analysis as in the present paper. Vayanos

and Woolley (2010) study flows between investment funds and their effects on asset prices. They find that flows cause assets to comove in ways unrelated to fundamentals, affect assets with high idiosyncratic risk the most, and raise the expected returns of funds experiencing outflows.

3 Methodology

The main advantage of the study is a new proprietary database for Canada that stretches over 2003-2014 period. The data is obtained directly from the funds and comprises 66.7% of the market's AUM. It includes 43 out of 113 fund families available in Canada. The main advantages of the data are precisely measured fees and their structure and new flows to and from the funds. It is normally impossible to precisely measure the net flows from differences in AUM since a portion of inflows and outflows naturally occur on regular basis and are not related to new actions of the investors. It is also usually impossible to precisely measure the fees paid by the investors as the fee structures are very complicated and are variable from case to case. This problem is not present in their dataset because it is directly collected from the funds.

The study derives its results in two steps. First, present net flows to the funds are explained by their fee structure and previous performance (alphas). Next, the sensitivity of the flows is used to study its impact on future alphas attributed to an increased motivation of the fund managers when they are compensated by higher inflows. Alphas are estimated using Fama-French US market US dollar valued 4 factors on 12 monthly observations before the flows are observed.

There are four purchase options for funds:

- No load - no front end commission, no deferred sales charge, pays trailer fee to fund dealer.
- Deferred sales charge - investor pays redemption fee to the fund company if sold before specified period. Dealer gets trailing commission and up-front commission.
- Front end (initial sales) charge - dealer can charge front end commission upon sale and also trailer fee.
- Fee based purchase option - dealer charges fees directly to investors account.

And four types of funds:

- Stand-alone funds that cannot be purchased directly from fund manager.
- Stand-alone funds that can be purchased directly from fund manager.
- Funds of funds that cannot be purchased directly from fund manager.

- Funds of funds that can be purchased directly from fund manager.

The analysis is then structured independently for the four types of the funds with the main focus on Stand-alone funds that cannot be purchased directly from fund manager.

3.1 Regressions

The first part of the analysis is a regression relating future net flow to the past alpha and fee structure or the past fees paid. The results of Table 3 are obtained from the following panel regression they describe as

$$\begin{aligned} Flow_{t+1} &= Constant + \beta_1 * Alpha_t + \beta_2 * Alpha_t^2 + \beta_3 * PurchaseOptionDummy \\ &\quad + \beta_4 * PurchaseOptionDummy * Alpha_t + \beta_5 * controls + residuals, \end{aligned} \tag{1}$$

while the results of Table 4 (for the subset of funds that do not allow for fee based purchase options) are obtained from the regression

$$\begin{aligned} Flow_{t+1} &= Constant + \beta_1 * Alpha_t + \beta_2 * Alpha_t^2 + \beta_3 * MER_t + \beta_4 * Alpha_t * MER_t \\ &\quad + \beta_5 * Alpha_t^2 * TrailerFee_t + \beta_6 * TrailerFee_t + \beta_7 * Alpha_t * TrailerFee_t \\ &\quad + \beta_8 * Alpha_t^2 * TrailerFee_t + \beta_9 * OtherFee_t + \beta_{10} * Alpha_t * OtherFee_t \\ &\quad + \beta_{11} * controls + residuals. \end{aligned} \tag{2}$$

Here, MER is a mean expense ratio and TrailerFee is the commission that dealers of the funds receive periodically from the fund. A better notation would acknowledge the fact that $Alpha_t$, $Flow_{t+1}$, MER_t, $TrailerFee_t$, and $OtherFee_t$ vary across fund, but the parameters e.g., β_1 do not vary with fund, which is a restriction in their approach. The variable PurchaseOptionDummy is time invariant in this case. The regressions of the first type are estimated as a panel with random effects and the standard errors are clustered by FundSERV code. The regressions of the second type are estimated as a panel with FundSERV code "fixed effects". The term fixed effects seems to be as used by Peterson (2009), which is different from its use in other panel data settings, Hsiao (2003).[1]

The second part of the analysis focuses on what drives future alpha and whether it can be predicted by the past new flows in particular. This is estimated in an equation relating future alpha to the past flow-performance sensitivity

[1] There is some ambiguity in their description because they say, following the equation on p30

> *Fund fixed effects are used in Table 4 because the right hand side variables are time variant, and because the Hausman (1978) confirmed the validity of the random effects specification.*

$$Alpha_{t+1} = Constant + \beta_1 * Flow - PerformanceIntercept_t + \beta_2 * Flow - PerformanceSlope_t + residuals. \quad (3)$$

Flow-Performance Intercept is the amount of flows that the fund receives regardless of its past performance. The Flow-Performance Slope is the sensitivity of flows to the past performance.

4 Results

All the relationships that the authors expected to find are present in data. Specifically, trailer commissions and deferred sales charges are related to lower flow-performance sensitivity. Equation 1 and Equation 2 document that flow sensitivity to alpha is lower and flow intercept is higher with higher trailer commission. That means that flows are higher for funds with higher trailer commission and are less sensitive to their prior performance. The flow sensitivity is also significantly lower for funds with deferred sales charge that is discouraging the investors from withdrawal.

The main results for Equation 3 are significant at the 1% level and are also economically significant in that a 1-standard deviation increase in the flow-performance intercept is associated with a 2.22% to 3.87% decrease in future alpha, relative to monthly alpha in the data. A one standard deviation increase in flow-performance sensitivity corresponds to a 4.9% increase in future alpha on average. The authors also provide changes in alphas for funds that have changed their trailing commissions during the sample period. 2.5% of the funds increased their trailer fees and their alpha has dropped by 32.4% on average. 0.6% of the funds have increased the trailer fees and their alpha increased by 87.9% on average. The average decrease in trailer fees from 0.43 to 0.27 leads to the economically significant effect of increasing average alpha from 0.09 to 0.17.

When the results from both stages of analysis are connected together the authors can provide an estimate of the effect of trailer commissions on future alpha. The authors then claim, following this logic, that a 1-standard deviation increase in trailer fees is conservatively associated with a 1.43% decrease in future alpha (Table 5: Panel A and p. 49).

The results for alphas computed based just on 12 data points are a source of some skepticism with respect to the robustness but authors show that the conclusion holds when they are estimated

A couple of sentences later they say "*Standard errors are clustered by FundSERV Code*". There are two possible interpretations. Either they are using the same procedure as in Table 3, which is random effect/clustered standard errors, or they included firm specific dummy variables as controls in the main regression and then clustered the errors in computing their standard errors. But it is not clear.

using 3 years period (36 observations), with Sharpe ratios, and with index adjusted returns. We discuss this further below.

A plausible estimate (p 107 contains just over 200 numbers for example) is that the paper contains around 10,000 numbers distributed across the various tables, which makes it rather hard to be definitive in our discussion and we concentrate on some key methodological issues.

5 Problems with the study

5.1 Endogeneity problems with the regressions

It is hard to believe that future alpha does not depend on its past values. Indeed, if alpha wouldn't actually depend on its past values then the whole argument of the study, that investors are worse off for some fee structures, would be invalid as there would be no predictability of the fund's returns. This would in turn mean that looking at the past performance of the funds adds no information about future and investors are just chasing non-existent more skilled managers. The same conclusion would be valid to advisers in that they could not provide any useful recommendations about better performing funds since there are none to give. This puts the whole argument made in the paper on its head. It is quite likely that with the addition of past values of alphas in the Equation 3 the effect of past flows would be much lower as it is capturing some of its effects. The issue with adding the lags of alphas is that this will cause endogeneity problem that would invalidate their methodology.

An even more fundamental problem is that the sensitivity of flows to the past alpha (an estimated coefficient in the previous regression) is a function of the lag of alpha. Regressing the sensitivity on future alpha in fixed effects panel regressions then leads to endogeneity problems if there is some fixed effect related to alphas, which is highly likely and there are many good reasons for it to be so. These issues are not addressed in the paper at all. For both of the endogeneity problems described in this section, it would be needed to apply methods that are built to tackle with them such as internal instruments in a dynamic panel setting.

$$\begin{array}{lccccc} Indirect\ way: & Alpha_{t-1} & \rightarrow & Flow_t & \rightarrow & Alpha_{t+1} \\ Direct\ way: & Alpha_{t-1} & \rightarrow & \rightarrow & \rightarrow & Alpha_{t+1} \end{array}$$

The argument can be expressed as

$$\begin{aligned} Alpha_{t+1} &= Constant + \beta_1 * Flow - PerformanceIntercept_t + ... \\ &= Constant + \beta_1 * f(Alpha_t) + ..., \end{aligned}$$

where f is a transformation corresponding to a fixed effect regression coefficients in the Equation 2. It is evident that $f(Alpha_t)$ will be correlated with an error term if there are fixed effects present. Christoffersen, Evans, and Musto (2013) run similar regressions as Equation 2 but they do not infer any causality but rather just mention an association between the two variables. Frazzini and Lamont, (2008) document that by chasing better performing funds the investors lose money because the persistence of performance is short-lived. To conclude, the relation in Equation 3 is natural and is not unexpected but the causal interpretation that the authors provide is not valid in terms of their framework.

The same argument as in Equation 3 is also valid in Equation 2 as it is likely that future flows would be closely related to their past lags. Addition of these lags to the regression would again cause problems with endogeneity. The problem is less severe here than with Equation 2 as the effects of past flows can be extracted by the fixed effects and are fairly stable over a short period. The lags of inflows have been used to explain future inflows in Christoffersen, Evans, and Musto (2013). To conclude, the methodology chosen by the authors is strong in its simplicity and the results are apparently robust over specifications, but the problems of endogeneity have not been properly addressed and any causal interpretation of the results is dubious at best.

5.2 Future alpha - sensitivity regressions don't have to be valid globally

The second stage of the analysis in Equation 3 is limited in that it is not certain whether the future alpha is related to the sensitivities in the same way for all subsets of the stocks. The regressions are made globally for all funds with different fee structure together but it is quite possible that funds that charge high trailing fees to incentivize the dealers have quite different dynamics. The motivation behind this assertion is that dealers would target less sophisticated investors with these fee structures who are expected ex ante to change less frequently their choice of funds.

5.3 Reverse causality

The relation of a choice of poorly performing funds and fee structure is natural but it can be the case that the causality between the flow-performance sensitivity and future performance goes the other way around than the authors suggest. Their argument for the relationship is that managers facing higher sensitivity of the flows have higher incentive to outperform looks weak at best. It is unlikely that an unskilled portfolio manager would suddenly gain skill because he could attract more funds. The causality could be precisely the other way around in that an unskilled manager will seek an arrangement that would give him flows regardless of his performance, e.g. paying more to the advisers to incentivize them to sell their fund. The clients are facing an inherent asymmetric

information problem when they take an advice from their adviser. As a result, the geography of clients for different fee structure can be quite different. This again leads to an endogeneity problem that is not addressed in the paper. The different composition is partly evident from question 22 in their FAQ:

> *"Q22: The average asset mix of commission-based and fee-based accounts is quite different, as dictated by differences in clients who typically use these accounts. For example, an embedded fee mutual fund account at an MFDA dealer would choose from a total universe of mutual funds which is 34% in Equity Funds and 49% in Balanced Funds. A fee-based account, which would typically be at a full service IIROC dealer, would choose mutual funds from a universe which is 41% in Equity Funds and 33% in Balanced Funds."*

Looking at the problem from the perspective of portfolio managers who posses the true skill, they would have little motivation to opt for costly options of paying high fees to their dealer and would rather focus on investors that are more sophisticated and have thus higher sensitivity of their investment decisions to the relevant data (past performance). This relationship would again show in the results through higher sensitivity of future alpha to past sensitivity of flows but the causality would be different from what the authors suggest. This issue is fundamental when assessing the results of the study from a policy perspective, which was the reason behind its creation, as the problem of information asymmetry will be just shifted to a different fee structure and the consumers will not be better off if a more stringent regulation is introduced.

To conclude, there could be two equilibrium approaches the funds could adopt. The first one is using incentives for dealers to sell their fund while providing average to below average performance. The second is not paying high sums to the distribution channels and relying on their superior performance in outperforming the market to do the job instead.

5.4 Some Further Econometric Issues

Here we give some detailed discussion of some econometric issues, many of which were supposedly answered in the questions document. Our assumption is (the notation used in the paper is a bit misleading on this) that the implicit model adopted in Table 3 is

$$F_{i,t+1} = \beta_0 + \beta_1 \alpha_{it} + \beta_2 \alpha_{it}^2 + \sum_j \gamma_j D_{ji} + \sum_j \delta_j D_{ji} \alpha_{it} + \eta_{it}, \tag{4}$$

where $F_{i,t}$ is flow at time t, η_{it} is a random error term, mean zero given the observed random variables α, D, but correlated within FundSERV codes, that is,

$$\text{corr}(\eta_{it}, \eta_{js}) = \begin{cases} 1 & \text{if } t = s \text{ and } i = j \\ \sigma_\ell & \text{if } t = s \text{ and } i \neq j \text{ share the same } FundSERV code\ \ell \\ 0 & \text{else.} \end{cases}$$

There are eleven years of monthly data. The dummy variables D_{ji} are 1 if the option j is present and zero otherwise ($j = 1, 2, 3, 4$); the dummy variables are mutually exclusive and exhaustive, i.e., $D_{1i} + D_{2i} + D_{3i} + D_{4i} = 1$. In models 1-4 a single dummy variable is included, whereas in Model 5 three dummies are included, which corresponds to a saturated case since a constant is included. The model for Table 4 includes variables that vary over time, but otherwise the specification is the same, just applied to a subset of the data. The model for Table 5 reverses the direction and puts α_{it+1} on the left hand side. How the error terms in such a model arise is very mysterious and not articulated.

1. It is not clear why the authors consider Models 1-4 at all, since including one dummy at a time is subject to omitted variable bias - although the dummies are not mutually correlated, omitted dummies are surely correlated with α_{it} and α_{it}^2.

2. The regressor α_{it} is not observed and has to be replaced by the estimated value $\widehat{\alpha}_{it}$, which uses the previous 12 months data of returns. These estimated alphas (*generated regressors*) are measured with error and probably quite a lot of error given that only twelve months are used to estimate the five parameters of the Fama-French 4 factor model (many academic tests fail to find significant alphas in this model, which is precisely why it is widely used). In fact, given the global mean and standard deviation of the alphas in Table 1 one may consider the given estimates as noisy estimates of zero. In this case, the econometric estimates that they produce are biased and even biased in large samples. Note also that even if $\widehat{\alpha}_{it}$ were an unbiased estimate of α_{it}, its square $\widehat{\alpha}_{it}^2$ is not an unbiased estimate of α_{it}^2. Furthermore, the bias in alphas or their square would obviously lead to bias in other coefficients, and the direction of this bias is not easy to describe.

   (a) The robustness results based around using 3 years of data to compute the alphas do not resolve this issue: the estimation error is smaller yes, but the autocorrelation of the estimated $\widehat{\alpha}_{it}$ must be very high then because the difference between $\widehat{\alpha}_{it}$ and $\widehat{\alpha}_{it+1}$ is only two months out of 36. This regressor must be extremely persistent, and we know from Stambaugh (1999) the effect that that can have on regression coefficients.

(b) In addition, the secondary effect of generated regressors is that the standard errors should reflect this preliminary estimation, Pagan (1984). In this case the correct standard errors would be likely much larger since the estimation error in the regressor is verry big.

3. One might expect decreasing returns to scale: as the industry's size increases, every manager's ability to outperform passive benchmarks declines. Normalizing by AUM essentially imposes constant returns to scale and is unnecessarily restrictive, since AUM could be included as a regressor to control and identify returns to scale.

4. The econometric specification really is rather over simplified given that the sample size is so large, it is not surprising that one gets significant coefficients. There are around 800000 observations (Model 1-5 in Table 3) and Model 1 apparently has four estimated coefficients in the mean equation (apparently there are no additional controls). In general one would expect heterogeneous effects, Pesaran (2006). One of the most commonly used panel models in finance, the market model, is of the form $R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}$, where R_{it} and R_{mt} are returns on asset i and the market respectively. In this case the coefficient β_i varies across i. The same is true in the Fama-French regressions themselves, which is how one obtains alphas that vary with i. In the current study, the authors have some variables that vary across both firm and time for which it would be quite natural to allow for heterogeneous effects, i.e., parameters that vary across firm or time. The consequence of not doing so may be another source of bias either in the estimates or the standard errors.

5. Commenting on Table 3, p26, the authors say: "*A 1-standard deviation increase in prior alpha causes a 10% increase in future flow (based on Model 5, and this effect is most conservatively estimated at 4.2% in Model 2 and least conservatively estimated as 16.7% in Model 6) and this effect is statistically significant at the 1% level in all models*". Given our notation, the effect of changing from α to $\alpha + \sigma$ for fund i at time t on the flow in period $t+1$ ceteris paribus is

$$F(\alpha \to \alpha + \sigma) = \beta_1 \sigma + \beta_2 (2\alpha\sigma + \sigma^2) + \delta_j \sigma,$$

where purchase option j was present. The authors clarify (in A20 in the answers to questions document) how they compute this quantity, which reveals that they just compute $\beta_1 \sigma$. The quadratic term in some cases is too small to make a difference but not in Model 6 and Model 7 say of Table 3. Also, some of the interaction effects completely change the number. For example in Model 5, the coefficient on Purchase option deferred sales charge times alpha is -0.00174 and when the dummy is one this almost completely offsets the claimed effect.

6. The authors divide through by average monthly flow in the sample to get to these numbers like 16.7% (Model 6, Table 3), which is misleading. In fact the average monthly flow in the sample is -0.0187 not 0.0187, and so they are actually dividing by the absolute value of this. The standard deviation of the average monthly flow is in fact 0.0864 from Table 1, which suggests that they are dividing through by something that is not significantly different from zero. Indeed, one would expect that in the long run average monthly flow across all firms should be exactly zero. So why the ratio they have chosen is of particular economic significance is not clear.

7. Furthermore, the substantial variation of the effect from between 4.2% to 16.7% calls into question the statistical significance of the find. There is a relationship between the variability of such effects across mildly different specifications and the variability of the effect that would occur across hypothetically drawn samples in the same specification. Either this is bias, in which case one would worry about bias from elsewhere, or it is just variability in which case it should be similar to the sampling variation. These issues are even more pronounced with table 4.

8. As already remarked, the specification is purely static, so that any effects are supposedly only transmitted over one month whereas one might want to distinguish between short run and long run effects. A lot of economic theory only predicts relationships about long run equilibrium effects. Why not put lagged flow in the specification, like some other authors?

9. In (1) the authors include "Controls" but it seems that there are actually no additional variables in Table 3. One would have thought that there are a host of observable time series variables that could be used to predict aggregate flow and hence individual flow. For example market returns, industrial production, terms structure variables, junk spread etc. Given the homogeneous coefficient structure the authors have set on it would be straightforward to include this in the model. Indeed, one could also include the cross sectional average of flow at each point in time, following the logic of Pesaran (2006). Year dummies or even dummies for every time period would seem to be an alternative. Other authors have included lagged values of flows in the panel regressions. The authors repeatedly argue that their results are robust to different window lengths or specifications, but they do not submit their model to a rigorous testing by including obvious observable determinants of fund flows and testing whether their coefficients survive this omitted variable challenge.

10. In Table 3, the R^2 are indeed very small. For comparison if one tried to predict daily S&P500 returns by their first lagged value one might get an R^2 of 0.0009, which seems to be somewhat

larger than many of the reported panel regression R^2 here. The authors argue in Footnote 19 that "*It is quite normal for R^2 to be low in a panel setting because the same variables are used to explain the differences in outcomes for different FundSERV codes, and not only the same FundSERV code at different points in time*". But in all their regressions there are variables that vary across both funds and time. There is some argument that the R^2 is in and of itself not important so long as the model is correctly specified and the coefficients are statistically significant. However, it surely gives one pause to thought when ones model of a phenomenon explains so little of the observed variation. What is explaining the remaining 99.91% of the variation? The elephant in the room could completely squash the claimed effects, and it is not appropriate to be so confident on ones findings in this case. The R^2 do increase in Table 4 because more variables are included. Del Guercio and Reuter (2014, Table II) shows substantially higher R^2 (0.08) for their panel regressions with 122,000 observations.

11. The constant value in the regressions of Table 3 is always negative and significant. This says that when all the observed right hand side variables are zero, flow is negative.

12. It is not clear why on page 26 the authors say that flow is convex or not. In models 1-5 the quadratic parameter is not significant. In models 6-7 the parameter is significant but the t-stats are more like 4 than 10, which when the sample size is 800,000 is not particularly impressive (in the hunt for the Higgs boson, the evidentiary standard was set at 5). The claims made in the paper are very strong and the fact that this may be used for guiding policy suggests one should reserve a higher evidentiary standard than 2.5σ.

13. The regressions for Table 3 and Table 4 have the same left hand side variable (from different samples) and some common variables on the right hand side (constant, α, and α^2) but are otherwise non-nested. The estimated coefficients on α seem to be quite different from Table 3 to Table 4, and the t-stats also are quite different. The authors are implying that this flow performance relationship is something real and invariant after controls are applied, but this does not seem to be the case.

14. The standard errors are clustered by FundSERV code but this is still implicitly assuming that the effects do not vary over time (no heterosekdasticity). Apparently there are 14357 groups in Models 1-5, Table 3, which suggests that in constructing the standard errors the authors have estimated parameters σ_ℓ, $\ell = 1, \ldots, 14357$ to construct their standard errors. This is a lot of parameters each with around 50 observations per parameter. By contrast, they only estimate four parameters for the main effect of interest.

15. Figure 5 shows the robustness against the choice of sample by doing a rolling window analysis. The authors argue that this is consistent with the earlier results. However, the period to period variation of the marginal effects is extreme, from 45% to 5% over a period of two years in the Direct purchase, stand alone funds category, and from 0 to around 23% for the indirect purchase, stand alone firms. Figure 7 is even more variable. This just shows that whatever effects the authors are claiming to have found they are not really well identified, and vary substantially over time.

16. The regression (3) suffers even more from the issues discussed above, since both sides of the regression are generated from some previous procedure, yet the standard errors are constructed as if these variables were observed directly. How to take account of this pre-estimation was all worked out in the 1980s so there is no excuse to not deal with this issue properly.

17. The definition of the flow perfomance intercept and flow performance slope is not given in the main document and in the FAQ document, they were asked

Q19: This paper's description of the creation of "Flow Intercept" and "Flow Slope" are not very clear. Can the researchers elaborate on the construction of the flow intercept and slope intercept variables, and how the conclusions provided on page 59 are reached based on these constructions?

Their reply was less than revealing.

> *A19: We invite you to read the methodology section starting on page 4 which provides a good explanation of the flow-performance intercept and flow-performance slope. The conclusions follow directly from the empirical methods. Note that flow-performance intercept and flow-performance slope are well accepted terms in the literature and widely used in dozens of prior empirical studies on mutual fund flow and performance*

They don't give any references, and perhaps there are none that use their specification exactly, so we should have been given the formula here. They do say in Table 5 that: *flow intercept refers to level of flow in a given month irrespective of past alpha*, which then makes you wonder why in Figure 2 the horizontal axis for the intercept panel is α.

6 Conclusions

The paper has worked with an extremely large and rich dataset and produced interesting results. The main concern is that the conclusions they derive are simply too strong to be justified, especially if they were to be the basis for legislation or policy. Although they claim their many results are robust

to various alternative implementations, the results indicate that there is some fragility in the results across time period and in other dimensions. The economic magnitude of the effects they claim is also open to different interpretations. The statistical significance is also questionable given the limited static specifications they have focussed on and the fact they ignored the generated regressor issue and the endogeneity issue. There are numerous econometric issues with their methodology that have not been answered. Furthermore, the causal interpretation that the authors are pushing is simply not defensible. At most they can claim some weak association in the data they have used with the limited specifications they report. There is such a clear endogeneity problem embedded in the issue and they have not shown any clear strategy for separating out a causal effect unless lagging variables by one period is supposed to be credible.[2] Without a clearly articulated structural model it is hard to separate out the various effects and their interpretation.

References

[1] Anagol, S., A., S.A. Cole, and S. Sarkar, Shayak (2013). Understanding the advice of commissions-motivated agents: Evidence from the Indian life insurance market. Harvard Business School Finance Working Paper,12-055.

[2] Bergstresser, D., J.M.R. Chalmers, and P. Tufano (2009). Assessing the Costs and Benefits of Brokers in the Mutual Fund Industry. Review of Financial Studies 22, 10, 4129-4156.

[3] Chalmers, J. and J. Reuter (2012). Is Conflicted Investment Advice Better than No Advice? National Bureau of Economic Research,

[4] Christoffersen, S.E.K., R. Evans, and D.K. Musto (2013). What do consumers' fund flows maximize? Evidence from their brokers' incentives, The Journal of Finance, 68, 1, 201–235

[5] Del Guercio, D. and P.A. Tkac (2002) The determinants of the flow of funds of managed portfolios: Mutual funds vs. pension funds, Journal of Financial and Quantitative Analysis, 37, 04, 523–557.

[6] Del Guercio, D. and J. Reuter (2014). Mutual fund performance and the incentive to generate alpha, The Journal of Finance, 69, 4, 1673–1704,

[7] Frazzini, A. and O.A. Lamont (2008) Dumb money: Mutual fund flows and the cross-section of stock returns. Journal of Financial Economics, 88, 2, 299–322

[2] Usually some kind of natural experiment is invoked or at least differences in differences (matching methods) that control for common trends. This is easy to do in the current context, and is widely practiced in empirical finance.

[8] Hsiao, C. (2003). Analysis of Panel Data, 2nd edition. Econometric Society Monograph

[9] Pagan, A. (1984). Econometric Issues in the Analysis of Regressions with Generated Regressors. International Economic Review, 25(1), 221-247. doi:10.2307/2648877

[10] Pesaran, M. H. (2006). Estimation and inference in large heterogeneous panels with a multifactor error structure. *Econometrica* **74** 967-1012.

[11] Petersen, M.A. (2009). Estimating Standard Errors in Finance Panel Data Sets: Comparing Approaches. Rev. Financ. Stud. 22 (1): 435-480.

[12] Sirri, E.R. and P. Tufano (1998). Costly search and mutual fund flows. The journal of finance, 53, 5, 1589–1622.

[13] Stambaugh, R.F. (1999). Predictive regressions. Journal of Financial Economics 54 (1999) 375-421

[14] Vayanos, D. and P. Woolley (2010). Fund Flows and Asset Prices: A Baseline Model. LSE

Report on "A Dissection of Mutual Fund Fees, Flows, and Performance" by Cumming, Johan, and Zhang

Benoit Perron

Département de sciences économiques, Université de Montréal

CIREQ, CIRANO

Following a request from the Canadian Securities Administrators (CSA), this work builds an extensive data set of mutual fund flows and performance. It then analyzes this newly created data set and claims to show that flows into funds that are sold on a fee basis are more responsive to performance than funds that that are sold with commissions. It then shows that funds whose flows are more sensitive to performance have better future performance.

There are many dubious methodological choices made by the authors, but overall, the quality of the econometric work is much better than previous work by Cumming that I have analyzed. For example, he works with relative flows into funds by dividing net flows by past asset size. This alleviates many econometric issues that would arise in working with the level of flows such as trends and heterogeneity in the size of funds (large funds would get a preponderance of weight in the analysis). There also many robustness check sand subsample analyses that make the results more convincing. That being said, there are issues and concerns that will be raised in the data and econometric sections below.

The more serious criticisms in my mind is the interpretation of the results. The work does not seem to answer at all the question of whether fee-based or commission-based remuneration is better for individual investors. It is not clear at all what objective investors are assumed to be trying to achieve. The report shows that funds that attract investors that make their decisions based on past performance have better future performance. And it turns out that fee-based funds attract more such investors. Is that because of poor advising and neglecting that past returns are not a good indication of future returns? I also find the logic quite circular: in the first step, flows are related to past alpha, and in the second step, alpha depends on past sensitivity to performance (which itself depends on past flows and past alpha).

The paper finds that funds sold through affiliated dealers perform worse. Lortie claims that one consequence of the change in remuneration rules is that more funds are sold through affiliated dealers, so this finding is an argument for the status quo.

I find the use of alpha of a fund as a measure of performance of a fund to be unsatisfactory, in particular for index funds. At one extreme, if a fund tracks the market index perfectly, its alpha will be 0 in each period *by construction*, and no inference could be made about the relation between performance and net inflows.

I divide my technical comments into two categories. The first one discusses issues with the data, while the second discusses various issues in econometric methodology. These are listed as dubious choices that have been made by the authors. Without access to the data, it is hard to know in most instances what impact different choices would have on the results.

1- Data

The authors have assembled what seems to be an impressive data base of information on Canadian mutual funds. The unit of observation is a FundSERV code which is distinct for each fund and for each purchase option. For example, if the same fund can be purchased either as front-load or back-load, it would generate two separate codes. The data is monthly, and the sample period is January 2003 to October 2014.

While the authors claim (correctly) that their data base is very extensive, it covers only an estimated 66.7% of assets under management for stand-alone funds and 51.5% of assets under management for funds-of-funds. There is no information on the missing data and whether sample selection is a problem. Similarly, the reported coverage is an average over the sample period and probably varies each month with better coverage over more recent episodes.

In fact, there are a lot of missing observations. The authors take the view that these missing data points are random and not related to any variable, whereas one would think that underperforming funds and/or funds attracting little new inflows would be more likely to disappear or be merged with other funds. To get a sense of the number of missing observations, there are 22,077 distinct FundSERV codes in the data set and the time span is 142 months for a potential of 3,134,934 observations. The largest number of observations in any of the tables is 1,209,285, barely a third of the possible observations. There is no information given at all about these missing data.

The dependent variable is computed after removing some flows such as pre-authorized inflows, systematic withdrawal plans, and switches in and out. These flows would be responsive to past performance but maybe more sluggishly. Maybe that is the argument for removing these items, but that is not mentioned. Presumably, these arrangements are not distributed evenly over the funds, and their removal has an effect on the results.

There is no information available on the asset classes covered by the data. It is possible that some of the estimated effects come from changes in the composition of the mutual funds covered in the data base. For that reason, I find the whole Table 2, which compares the means of various variables among two samples, useless. It is also not clear how the statistics were constructed and whether the two populations were supposed to be independent.

2- Econometric issues

Simultaneity / Endogeneity

What is really being estimated is a market equilibrium where the net quantity of a fund bought depends on its characteristics, its past performance and its price. The price variables are taken as given and exogenous in the analysis, which is the same as assuming that the supply curve for a given fund is perfectly elastic (horizontal). The estimated relation is then interpreted as a demand curve for mutual funds with a given past performance (as measured by alpha) after controlling for other characteristics.

One would think that the supply curve for mutual funds is not perfectly elastic and that it becomes more expensive to supply a larger fund with a given performance. In other words, even if a fund gets larger, it is assumed that the fund company will not change its price structure to limit inflows or to reflect that it becomes harder to sustain the given performance.

Therefore, the exercises that consist of looking at the effect of a change in prices on quantities as done in Figure 1 are only meaningful under this assumption that the supply curve is horizontal. Otherwise, they do not mean much because changes in fees are not exogenous. This Figure 1, which is meant to be illustrative, is an event study where the performance (as measured by alpha) before and after a supposedly exogenous change in trailer fees. Since we are not told how alpha is calculated, it hard to make general statements, but the apparent reduction in performance is only due to changes that occur at least 12 months after the change in fees. It is hard to see anything before that, and it is hard to blame the change in fees for changes that happen more than a year later without controlling for anything. The right-hand panel of Figure 1 also reveals that only a few funds seem to make a large contribution since the median behaves quite differently from the mean. And note that only .6% of funds are included in this Figure.

Generated regressors

The main regressions consist of relating the net flows into a fund to its characteristics and its past performance. Its past performance is measure by alpha or the intercept of a regression of the fund returns on the 4 Fama-French North American factors. There is no allowance for different risk factors for funds in different asset classes (for example bond funds and international equity). The estimated intercept from this regression is the alpha for the fund. While it is not explicit, these regressions are estimated over rolling windows (possibly 12 months as mentioned on pp. 54).

These estimated intercepts are, in a second step, later included as regressors in the main equations of net flows. Their coefficient becomes the object of interest (the performance slope) with a higher slope meaning that the flows into a fund are more sensitive to past performance. This is interpreted as giving incentive to fund managers generate higher returns (after controlling for the risk factors).

Including an estimated regressor creates econometric problem. A mismeasured regressor makes the OLS estimator biased and inconsistent. This measurement error will not disappear, even asymptotically, because alpha is estimated over a fixed window size. It is thus not clear

how one can interpret the performance slope and intercepts that are the main objects of interest.

However, measurement error will bias the coefficient towards 0 and make the variable appear less significant. Thus, findings of significant coefficients associated with mismeasured regressors are noteworthy. It must also be noted that the problems associated with even a single mismesaured regressor transmit to all the other estimated coefficients if there is a correlation among regressors.

The second set of results, relating alpha to past flow sensitivity, suffers from the same problem as the flow sensitivities are also estimated.

Heterogeneity

The authors exploit the panel structure and control for unobserved heterogeneity by allowing an individual effect for each FundSERV. They also cluster the standard errors by FundSERV, another good point. The individual effect is either of the fixed or random effect form. Random effects are preferred on efficiency grounds and because they allow for estimation of coefficients on variables that are constant in time, but fixed effects are valid under more general scenarios since they do not require the regressors to be uncorrelated with the individual effect. The authors use a random effects specification in the first part of the paper when looking at the effect of alpha on fund flows because they are interested in coefficients on variables that do not vary over time (like the effect of the type of purchase option). A specification (Hausman) test should be reported to validate the choice.

For Table 4, because the included regressors are all varying over time, a fixed effects specification is selected. I suspect that the sentence on p. 41 on the results of the Hausman test is incorrect, and that the test invalidates the random effects model. Yet, one must wonder how much variation is present in some of the regressors such as trailer and other types of fees to precisely identify the effects. The authors report that there are fee changes in 8.52% of the months only.

Many fund characteristics are available and have not been used in the analysis, such as age, asset class, whether it is an index fund, or whether it is distributed through discount brokerage. It would be preferable to use these to try to reduce the relative importance of the individual effects.

Winsorizing

Outliers (large positive or negative returns) can have a large impact on econometric results. Given that the sample includes the financial crisis, mane large negative returns must be present in the sample that would dominate the analysis. Authors often try to limit the importance of the phenomenon using different methods, for example by removing outliers, smoothing (taking moving averages) or winsorizing which is the method used in the current paper. This consists of taking all returns beyond a certain threshold and replacing it by that threshold. In the current paper, I was quite concerned when the authors mention that they use a threshold of 1%. I thought that they took all monthly returns that are larger than 1% and smaller than -1% and replaced then by ±1%. However, in Figure 4, the authors clearly state that they winsorize at 1%

and 99% which must mean that returns beyond the 1% and 99% quantile are replaced by the appropriate quantile. This is more appropriate, but it still says that 2% of the returns because there are probably not enough time series observations for each fund) or using the overall distribution obtained by pooling all observations together.

Serial correlation

It is known that hedge fund returns exhibit serial correlation and there is evidence that mutual funds that hold a large fraction of illiquid long-term assets may also have some serial correlation. Some diagnostics on this would be appreciated as it would invalidate inference.

Collinearity/ identification

In many instances, the authors mention collinearity problems (page 37, 52, and 61). This is not surprising as one would think that identification is difficult when most data falls into 2 of the four purchasing options. Only 8.4% of the data falls into the no-fee category.

Footnote 24 suggests that adding past alpha to the second set of regressions creates collinearity. I have no idea how to interpret this.

Review of "A Dissection of Mutual Fund Fees, Flows, and Performance" by Douglas Cumming, Sofia Johan, and Yeling Zhang

Allan Timmermann

December 20, 2016

Whenever retail investors hire an intermediary to assist with their investment decisions, the potential for conflicts of interest arises: Investors want to receive the best service and the highest possible returns, net of fees, while intermediaries and fund managers want to earn high fees and grow their assets under management.[1] Given the existence of a vast array of discount and full-service brokers–along with index funds and actively managed funds–it is important to understand which factors determine the quality of the match between investors and funds and the scope for conflicts of interest.

It is natural to expect that the scope for conflicts of interest is largest among funds catering to the least sophisticated investors who monitor fund performance less than their more sophisticated counterparts. If investor sophistication were observable, we could therefore simply compare the investment performance (and fees paid) for funds catering to investors of varying degrees of sophistication. Unfortunately, investor sophistication is unobserved and the key challenge in the literature is to find instruments or proxies that correlate strongly with investor sophistication.

One such proxy for investor sophistication is whether a fund is sold directly to investors by the fund management company or whether it is sold via an intermediary. The notion is that more sophisticated investors cut the intermediary and are able to invest directly while, conversely, less sophisticated investors rely on brokers for their investment decisions.

The report by Cumming, Johan and Zhang (the "Cumming report") also distinguishes between funds that cannot be bought directly from the fund management company and funds that can be bought directly. However, in addition, the report uses fund purchase options as a way to proxy for fund characteris-

[1] Assuming that mutual fund families try to maximize the fee-weighted assets under management, Del Guercio and Reuter (2014) argue that they have a weaker incentive to generate strong investment performance for the mutual funds sold to unsophisticated investors, i.e., the funds sold via brokers/intermediaries. Rather, fund families have an incentive to allocate their resources towards improving performance for the funds that exhibit the greatest flow-performance sensitivity, i.e., directly sold funds.

tics that may attract less sophisticated investors and thus deepen the scope for conflicts of interest between investors and intermediaries.

1 Existing Literature

A large body of research in empirical finance finds that, on average across time and across funds, actively managed US mutual funds underperform a set of passive benchmarks on a net of fees basis.[2] Given the vast sums of money at stake in the managed fund business, it is natural to ask why retail investors do not simply invest in passively managed funds. One possible explanation is the service and investment advise–beyond merely executing trades–that brokers and other intermediaries can provide.

A number of studies have analyzed and quantified the importance of conflicts of interest between investors and intermediaries. Del Guercio and Reuter (2014) hypothesize that the retail market for mutual funds is segmented according to investor sophistication. One segment of this market contains less-unsophisticated investors who buy funds through intermediaries that typically bundle portfolio management with financial advice and other services. Investment performance is just one consideration for less-sophisticated investors and may not even be the most important determinant of their investment decision. This means that less-sophisticated investors are not as responsive to funds' risk-adjusted (alpha) performance as more sophisticated (self-directed) investors are. By implication, the brokers/managers of funds dominated by less sophisticated investors do not have as strong economic incentives to generate high investment performance as managers of funds dominated by more sophisticated investors.

The lack of sensitivity to risk-adjusted performance among less-sophisticated retail investors need not be a sign of irrationality provided that the quality of the financial services they receive from their investment advisor makes up for any inferior investment performance. Whether this is the case will depend on the magnitude of any underperformance reported for the funds held by the least sophisticated investors.

Empirically, Del Guercio and Reuter (2014) find that the flows of directly sold funds are significantly positively related to past risk-adjusted returns. In contrast, they find no significant relation between flows and past risk-adjusted performance among broker-sold funds. Instead, Del Guercio and Reuter find a significantly positive relation between flows and past raw returns for broker-sold funds. Since one way to generate higher raw returns is by loading more on risk factors (i.e., by increasing betas), this finding suggest that broker-sold funds have more of an incentive to generate returns by selecting stocks with high betas on risk factors earning positive risk premia. Conversely, the managers of direct-sold funds have a stronger incentive to generate high returns through their risk-adjusted returns.

Bergstresser, Chalmers, and Tufano (2009) find lower risk-adjusted returns for funds that are sold via brokers relative to directly sold funds. They interpret

[2] See, e.g., Gruber (1996), French (2008), and Fama and French (2010).

this as evidence of material conflicts of interest between brokers and investors.

Christoffersen, Evans and Musto (2013) investigate whether it makes a difference if brokers are compensated one-off, e.g., through a share in the initial load, or on a recurring basis linked to funds' investment performance, e.g., through revenue sharing. They find that new investments are positively correlated with the load paid to the broker, while future performance is negatively correlated with broker payments from loads. Conversely, revenue sharing is not significantly related to future investment performance although it does seem to drive initial investments.

These studies are clear about which type of fund (direct or broker-sold) or investment arrangement attracts different types of investors who are more or less sophisticated as reflected in how sensitive they are to prior investment performance. In turn, differences across funds in flow-performance sensitivity are related to the scope for conflicts of interest between investors and intermediaries.

2 Purchase options and hypothesis development

The Cumming report analyses the relation between flows and performance for different purchase options. There are many types of fees and purchase options available in the Canadian mutual fund industry. To explore how the flow-performance sensitivity is affected by different types of purchase options, the Cumming report includes interaction terms between dummies for purchase options and past risk-adjusted performance in a set of flow-performance regressions.

2.1 Purchase options

The report focuses on four options for investors to purchase shares in Canadian mutual funds:

1. **No load**: Under this option, the investor pays no front end or back-end sales charges but the option includes a trailer fee that is paid to the fund dealer (6% of the sample observations)

2. **Deferred sales charge**: Under this option, the investor pays a fee in case of early redemption, i.e., redemption prior to a minimum holding period. In addition, the fund company pays the dealer an up-front commission and a trailer fee. (46% of the sample)

3. **Front end charge**: This option involves an initial sales charge in addition to a trailer fee. (38% of the sample)

4. **Fee based option**: This option involves no front-end or deferred sales charges and does not have trailer fees for the dealer. Dealer fees are instead charged directly to the investor's account. (8% of the sample)

Some mutual funds can be purchased directly from the fund company while others can only be bought through an intermediary. The decision to buy directly from the fund company has been used as a proxy for investor sophistication and linked to the potential for conflicts of interest by authors such as Del Guercio and Reuter (2014). The hypothesis is that the potential for conflicts of interest between fund managers and retail investors is greater when investors are unsophisticated and pay little attention to risk-adjusted investment performance. Importantly, investors can be expected to self-select into the two categories based on their level of sophistication with the most sophisticated investors purchasing funds directly, while less sophisticated investors purchase with the help of an investment advisor.

2.2 Hypothesis development

The Cumming report explores a wide variety of fee structures and purchase options. However, it offers no explicit formulation of hypotheses for ranking the different purchase options and fee structures by investor sophistication and, in turn, relating them to dealers and fund managers' incentives.

This point is important because, in trading off between front- or back-end loads versus regularly occurring trailer fees of different magnitudes, it is not always clear which type of purchase option a sophisticated investor would prefer. For investors with a short holding period, annual trailer fees might be more attractive than, say, a large redemption or front end charge. Conversely, for long-term buy-and-hold investors, smaller trailer fees may be preferable even in the presence of other charges. It is not clear to what extent the different purchase options can be used as proxies (instruments) for investor sophistication.

It is, therefore, desirable to develop a clear set of testable hypotheses for how different purchase options attract different clienteles, i.e., investors with different degrees of sophistication or, alternatively, different flow-performance sensitivities. In particular, it would sharpen the analysis to rank the four purchase options according to whether they are more or less likely to attract investor types with different levels of sophistication and different degrees of sensitivity to prior investment performance.

At present, the report does not develop such rankings or hypotheses. This makes it difficult to interpret the empirical evidence since there are eight types of purchase options, namely four options for directly-purchased funds and four options for dealer-sold funds.

Moreover, it is not clear how to relate the results reported for stand-alone funds versus those for fund-of-funds. To what extent do these types of funds attract investors with different levels of sophistication? In turn, are there notable differences in the potential for conflict of interest between investors and intermediaries for these funds?

3 Data and summary statistics

3.1 Data

The Cumming report's analysis is based on a unique (proprietary) data set comprising 43 fund families (out of a total of 113 in existence). Assets under management amount to $746 billion which covers two thirds of the overall Canadian market of $1.1 trillion in AUM.

FundSERV codes are used to identify each unique combination of fund series and purchase option. In total there are 22,077 FundSERV codes and just over one million observations over the twelve-year sample period, 2003-2014.

The data set forms a panel as it covers both cross-sectional and time-series information. The data set is very rich in that it covers multiple purchase options and funds purchased either directly or through an intermediary.

3.2 Summary statistics

Summary statistics for flows, risk-adjusted performance and the various purchase options are provided in Table 1. It can be seen that the mean value of net flows during the 12-year sample was negative. I suspect that part of this is related to the global financial crisis in 2008-09 but it raises questions about how representative the historical sample period is. This is less of a concern, of course, to the extent that the effects are identified off cross-sectional differences among funds.

Two pieces of information that are missing from the analysis in Table 1 are statistics on funds' (raw) returns along with statistics on funds' performance net of fees. Raw returns are important because, unlike risk-adjusted returns, they are not affected by estimation error.

Returns net of fees are what investors should ultimately care about and so it is important to consider these to fully understand the scope for (and net effect of) conflicts of interest between investors and fund managers and dealers. Net returns are also considered by other studies. For example, Del Guercio and Reuters (2014) find that while direct-sold actively managed mutual funds do not significantly underperform passively managed funds on a net of fees basis, broker-sold actively managed funds underperform index funds by 110-130 basis points per annum net of fees. This suggests that all underperformance among actively managed funds originates from broker-sold funds and indicates a conflict of interest between brokers and unsophisticated investors.

In addition to raw returns and performance net of fees, the report should break down the statistics by the funds' (main) asset class and/or investment style. These statistics can help provide important clues as to the flows and performance for different types of funds and across different segments of the market.

4 Estimation of risk-adjusted returns

The Cumming report uses panel regressions to estimate how the relation between flows and past risk-adjusted performance is affected by funds' purchase options and fees. In these flow regressions, a high intercept is interpreted as evidence that flows are insensitive to past performance. In contrast, a high coefficient on past risk-adjusted performance (alpha), i.e., a high flow-performance slope, is interpreted as evidence that flows are highly sensitive to past risk-adjusted performance, consistent with a strong incentive for fund managers to perform well and less scope for conflicts of interest between fund managers and investors.

How funds' alphas are estimated is key to this analysis. The Cumming report measures risk-adjusted performance (alpha) using a conventional four-factor Fama-French model, i.e.,

$$R_{it} = \alpha_i + \beta_{1i} R_{mt} + \beta_{2i} SMB_t + \beta_{3i} HML_t + \beta_{4i} MOM_t + \varepsilon_{it}, \qquad (1)$$

where R_{it} is the gross return on fund i in month t. R_{mt}, SMB_t, HML, and MOM_t are the North-American market excess return, size, value/growth and momentum risk factors, data on which are obtained from Kenneth French's data library. The same set of risk factors appear to be used regardless of the funds' investment objectives or their focus on different asset classes. Risk-adjusted performance is estimated using a 12-month rolling regression of (1) which yields a series of fund-alpha estimates, $\hat{\alpha}_{it}$, $t \geq 11$.

I have a number of concerns with the report's estimation approach related to the (i) choice of the length of the estimation window; (ii) choice of risk factors; and (iii) investments in non-Canadian assets.

4.1 Choice of estimation window

The rolling estimation window comprising 12 monthly observations is very short. One year of monthly observations does not offer a reliable sample on which to base estimates of fund performance. Moreover, estimating five mean parameters, including the critical value of α_i, from a sample of 12 monthly observations is likely to produce very noisy alpha estimates.

The Cumming report does not offer any compelling reasons why such a short estimation window is used. In particular, it does not offer empirical evidence that Canadian funds shift their factor loadings more frequently than, say, US funds do, which would appear to be a reason for using such a short estimation window, besides the desire to get a longer evaluation sample on which to run the flow-performance regressions.

The alpha estimates play a key role in the flow-performance analysis. Moreover, part of the identification of the effect of prior risk-adjusted performance (alpha) on flows comes from time-variation in the alpha estimates. Using a very noisy and potentially unreliable estimate of alpha will make it more difficult to accurately estimate the flow-performance relationship.

Note also that it is common practice in the finance literature to use a somewhat longer rolling window of monthly return data to estimate fund alphas. A common choice is to use 24, 36 or 60 months of returns data. These longer estimation windows retain the ability to capture time-variation in factor loadings (β) and evolution in skill (α).

In fairness to the Cumming report, the authors conduct a robustness analysis using a three-year estimation window. Table III.3 suggests that the main results on the flow-performance relation appear to go through with the longer estimation window. While this finding is reassuring, it is notable that the estimated slope coefficients on the lagged alpha are substantially larger when using the three-year alpha estimates (e.g., 0.00604 for Model 1, Table III.3, Panel A versus 0.00148 for the same model in Table 3). It is not clear why the slope coefficient should be this much higher for the three-year alphas than for the one-year alphas and it would be valuable to compare in more detail the magnitudes of the estimates in the flow regressions based on 12-month and 36-month rolling windows.

4.1.1 Index-adjusted returns

As a simple way to handle estimation error in the performance estimates, Online Appendix IV of the Cumming report uses fund gross returns net of the S&P/TSX composite return to measure performance.

Comparing the results in Table 3 to those reported in Appendix Table IV.3, it appears that some of the flow-performance estimates can be quite sensitive to how fund performance is being measured. For example, for funds that cannot be purchased directly, the 12-month alpha estimates in Table 3 show no evidence of convexity. In contrast, among the same set of funds, Table IV.3 shows a significant convex relation between index-adjusted returns and subsequent flows. Moreover, the sign of the coefficient of the interaction term between the lagged performance and the purchase option deferred sales charge switches from negative and significant in Table 3 to positive and significant in Table IV.3.

This simple index-adjusted approach to measuring fund performance imposes a beta of unity on the funds' exposure to the S&P/TSX composite portfolio– an assumption that is unlikely to be accurate for many funds, especially funds focusing on fixed income.

An alternative way to compute risk-adjusted returns would be to identify funds with similar exposures to different styles. Having identified such funds, a risk-adjusted return can then be obtained by subtracting the peer-group matched average of such funds' returns from the original fund's return. This is a more non-parametric approach that only uses beta estimates in order to construct the peer-group average and so is likely to be more robust to estimation error than the current approach to obtaining alpha estimates.

4.2 Choice of risk factors

A second issue is that the report uses the same four risk factors to analyze the performance of funds invested in very different asset classes, including equities and fixed income. In my view this is inappropriate. For example, the performance of fixed income funds is likely to depend on their exposure to bond-specific risk factors such as level, slope and curvature factors for government bonds and default risk factors for corporate bonds.

Moreover, using different risk factors to measure the performance of funds invested in different asset classes is common practice. For example, in a recent paper on measuring the performance of actively managed bond funds, Ferson et al. (2014) consider factors capturing the term structure of interest rate (through a level, slope, and curvature factor) credit, liquidity and mortgage spreads, an exchange rate factor, and two equity risk factors. They find that many bond funds have significant exposures to these risk factors, and that their loadings vary a great deal across bond funds with different investment styles.

Related to this, the report would benefit from a detailed analysis of how the factor loadings differ across equity versus bond funds and also whether the inclusion of bond risk factors such as those listed above affect the results. Critically, it is important to study how the distribution of alpha estimates differ across funds specializing in different asset classes. For example, the report finds an average four-factor alpha of 0.25% per annum for stand-alone funds. How does this estimate vary across stock and bond funds and is the distribution of alpha estimates properly centered for funds pursuing different investment objectives, e.g., bond versus stock funds? Because of the importance to the Cumming report of the alpha estimates, these are critical questions to address before conclusively interpreting the flow-performance regressions.

In the presence of an alpha regression model that is likely to be misspecified for at least some of the funds, it is not clear what the alpha estimates capture. Misspecified alpha estimates do not necessarily capture the skill of the fund manager and so a positive relation between (misspecified) alpha estimates and future flows need not be a sign of investor sophistication. Rather, if bond funds in some period experience high returns and see subsequent high inflows, this could simply be because interest rates came down, benefitting most bond funds. In the absence of controls for bond-fund specific risk factors, this effect is unlikely to be captured by the current set of (equity-focused) risk factors and would come across as "skill", i.e., alpha. Is it possible that the current set of results, in part, capture future inflows into non-equity asset classes after these asset classes outperformed stocks, particularly during the global financial crisis?

To address these points, the report should undertake a detailed analysis of the distribution of alphas using separate regressions of the flow-performance relation for funds with different investment objectives and different emphasis on asset classes such as stocks and bonds.

4.3 Investments in non-Canadian assets

A third issue is that funds are likely to differ in whether they predominantly invest in Canadian versus US stocks. To explore this issue, the Cumming report could include separate Canadian and US market risk factors and, perhaps, also use separate US and Canadian size, value, and momentum factors. To the extent that the US and Canadian investment markets are not fully integrated, the results could well change.

Whether-and by how much–individual funds are exposed to foreign currency risk could also matter to the results. This point could be explored by including a currency risk factor (e.g., the strength of the US versus Canadian dollar). Exposure to a commodity risk factor is another point that could be considered.

4.4 Net flows and alpha estimates

Table 2 provides summary statistics on net flows and alphas. Among the funds that cannot be bought directly from a fund company, the report finds evidence (Panel A) of higher average flows into funds that have a higher trading expense ratio, a higher maximum initial trailer, and higher deferred sales charges. Such effects appear to be absent for funds that can be purchased directly (Panel B).

Interestingly, there is also evidence that funds that cannot be bought directly and that were sold with the no-load purchase option produce significantly higher alphas (on the order of 0.4%) than other indirectly-sold funds. Again, no similar effect is identified for the directly sold funds.

Comparing the alphas for funds that cannot be purchased directly from the fund manager (Panel A) to the alphas for funds that can be purchased directly (Panel B), the average alpha appears to be higher in the former group. Although this comparison does not control for other differences among the funds, this is nevertheless a surprising finding which seems to run counter to the notion that indirectly purchased funds are bought by less sophisticated investors with less of an ability to monitor risk-adjusted performance.

4.5 The effect of permanent shifts in trailer fees

Section 3.3 in the Cumming report explores the effect on risk-adjusted performance of a permanent change in trailer fees. Comparing the risk-adjusted returns for the set of affected funds prior to a rise in the trailer fee (using a six-month window) to their performance after the change (using a 24-month window), the report estimates that, on average, the alphas for these funds dropped from 0.45 to 0.30, i.e., by 15 basis points per year–a drop of one-third. The results of this analysis are shown in Figure 1.

It is not clear why the report uses a six-month pre-change estimation window but a 24-month post-change window. What considerations brought the authors to choose these values? Also, assuming that the report continues to estimate alphas using a twelve-month trailing window, the first 11 alpha estimates after the fee change will use data from the period prior to the change date. This will

presumably contaminate the post-change alpha estimates. Moreover, it leads to serial dependence between the pre- and post-break alpha estimates which will affect the t-statistic reported in the bottom part of Figure 1. The report would benefit from explaining how these effects are addressed.

5 Flow-performance regressions

Having estimated alphas as a measure of the funds' risk-adjusted performance, the Cumming report next turns to the relation between flows and performance. Specifically, the report uses panel regressions to quantify the flow-performance relation while controlling for the effect of a variety of covariates. The regression specifications take the form

$$Flow_{it+1} = c_i + \beta_1 \hat{\alpha}_{it} + \beta_2 \hat{\alpha}_{it}^2 + \beta_3 DPur_{it} + \beta_4 DPur_{it}\hat{\alpha}_{it} + \beta_5 Controls_{it} + \varepsilon_{it}, \tag{2}$$

where $DPur_{it}$ is a zero-one purchase option dummy. $Flow_{it+1}$ is the total monthly (net) flow, i.e., inflows minus outflows, scaled by initial assets under management.

Table 3 reports results from estimating the model in (2). Among funds that cannot be purchased directly from the fund company, funds with deferred sales charges experienced lower inflows than funds without such charges. Panel A also shows that higher past performance (a higher value of $\hat{\alpha}_{it}$) is associated with higher future flows: Increasing the alpha estimate by one standard deviation leads to a roughly 10% increase in future inflows (β_1) for funds that cannot be purchased directly. However, the magnitude of this estimate, albeit highly statistically significant, varies considerably across different models, ranging from 4.2% to 16.7%. Moreover, it is calculated off a low base as the average monthly flow during the sample is low. In absolute terms, the effect seems to be small. The results in the report would be clearer if they discussed the absolute magnitude of the estimated effects.

The effect of alpha on future flows is stronger for funds that can be purchased directly (models 6 and 7), consistent with stronger performance sensitivity among funds that are likely to attract the most sophisticated investors.

A concern with the specification in (2) is that the flow-performance relation is estimated using one-month flows which is a very short period. It is not clear how much of the flow-performance effect carries over to subsequent months. It is important to explore if alphas estimated over a very short period (12 months) have predictive power over flows over a longer period such as one year. Results along these lines would allow the reader to tell the difference between investors displaying return-chasing behavior versus alternative explanations of the findings.

5.1 Convexity of the flow-performance relation

The performance-flow relation in equation (2) appears to be convex (i.e., β_2 is significantly positive in (2)) for the funds that can be purchased directly from

the fund company. Conversely, there is no significant evidence of convexity for the funds that cannot be purchased directly from the fund company.

It would be interesting to see if the convexity in the fund-performance relation holds among both stock and bond funds that can be purchased directly. For example, in a recent paper, Goldstein, Jiang and Ng (2016) find that flows into equity funds are convex in past performance–with greater sensitivity to past outperformance than to past underperformance. In contrast, flows to corporate bond funds exhibit *concavity* with greater sensitivity to prior underperformance than to prior outperformance.

5.2 Role of past flows and returns

Unlike some prior studies, the Cumming report does not include lagged flows among the list of covariates. For example, Del Guercio and Reuter (2014) use the regression specification

$$Flow_{it+1} = \beta_1 Flow_{it} + \beta_2 \hat{\alpha}_{it} + \beta_3 r_{it} + \beta_4 Controls_i + \varepsilon_{it}. \tag{3}$$

I think the Cumming report could benefit from exploring the effect of including lagged flows in (2). Including lagged flows could soak up some of the unobserved cross-sectional heterogeneity that affects fund flows and so might lead to more robust results. It would also provide insights into the dynamics of how past performance affects flows over time.

Throughout the analysis the Cumming report uses past alpha to measure risk-adjusted performance. This choice is in line with other studies in the finance literature. However, it would be valuable to also present results that use simple returns, r_{it}, instead of alpha estimates in the flow-performance regressions. There are two reasons for this. First, including r_{it} in the flow-performance regression and comparing the estimates of the β_2 and β_3 coefficients might reveal whether investors base their flow decisions on risk-adjusted performance (high β_2) or on raw return performance (high β_3). One would expect to find a higher β_2 among the more sophisticated investors and a higher value of β_3 among the less sophisticated investors.

Second, it is a challenge to accurately estimate alphas, whereas returns (perhaps measured relative to a simple asset-class specific benchmark) are simpler to measure. Third, while investors should be concerned with risk-adjusted returns if they are adding a mutual fund to a larger, diversified portfolio, for those investors who are concentrating all of their financial investments in a single fund, using total returns could be more appropriate. For these investors, the fee charged by the fund to provide exposure to different risk factors is important.

5.3 Results for funds that exclude fee-based purchase

Turning to the subset of funds that rule out fee-based purchase options, the report estimates the following flow-performance model

$$
\begin{aligned}
Flow_{it+1} &= c_i + \beta_1 \hat{\alpha}_{it} + \beta_2 \hat{\alpha}_{it}^2 + \beta_3 MER_{it} + \beta_4 MER_{it}\hat{\alpha}_{it} + \\
&\quad \beta_5 \hat{\alpha}_{it}^2 MER_{it} + \beta_6 TrailerFee_{it} + \beta_7 \hat{\alpha}_{it} TrailerFee_{it} + \\
&\quad \beta_8 \hat{\alpha}_{it}^2 TrailerFee_{it} + \beta_9 OtherFees_{it} + \beta_{10} \hat{\alpha}_{it} OtherFees_{it} \\
&\quad + \beta_{11} Controls_{it} + \varepsilon_{it}. \qquad (4)
\end{aligned}
$$

For funds that cannot be purchased directly, a higher value of the lagged alpha is associated with a positive increase in flows although the effect is small and not always statistically significant (Table 4, Panel A). Among these funds there is also some evidence of convexity in the performance-flow relationship, as captured by the β_2 coefficient. In total, the report finds that a one standard deviation increase in past alpha is associated with an increase in next-month flows of nearly 19%, measured relative to the average monthly flow.

Scaling the coefficient estimates in this manner is not the best way to report the results in my view. For example, as is clear from Table 4, Panel A, model 6, the calculation of the effect of a one standard deviation increase in trailer fees (1.283) times the coefficient estimate for the trailer fee (0.00208) and the average alpha (0.243) is only 0.0006. This is a small effect in economic terms even though it represents 15.4% of the alpha effect for the same model without an interaction term (0.0042). Since the alpha estimate is already surrounded by considerable uncertainty and is not even statistically significant at the 5% level, scaling the estimated effect of an increase in trailer fees by a small and uncertain number only adds uncertainty to how the results are reported.

5.4 Generated regressor bias in estimated effect of alpha

The measure of funds' risk-adjusted performance, α_i, that is used in the Cumming report is unobservable and so must be estimated. This introduces estimation error and creates a so-called generated regressor problem which can bias the estimate of the flow-performance slope in (2). Moreover, the error from estimating α_i at some point, e.g. $t = 2012:12$, will be highly (serially) correlated with the error in estimates of α_i in neighboring months, e.g. for $t = 2012:11$. 12-month rolling-window estimates of alpha for two neighboring months have an overlap of 11 months and so the estimation error in $\hat{\alpha}_{it}$ will be highly persistent. Put differently: even if α_i is truly zero, 12-month rolling window estimates of α_i will be highly persistent.

Such persistence could potentially lead future flows to become spuriously correlated with lagged alpha estimates due to co-persistence in the dependent (flows) and independent (12-month rolling alpha estimate) variable. Moreover, this issue will be further exacerbated when using a 36-month rolling estimation window which leads to even greater persistence in the estimation error of α_i.

The analysis in Hjalmarsson (2004) suggests that persistent regressors do not cause problems for inference in panel data estimation when they are exogenous. The exogeneity condition is unlikely to hold in the context of the current analysis, however, as past flows and past alphas are likely to be correlated.

Hjalmarsson's analysis suggests that, in panel regressions with fixed effects, the coefficient estimates of highly persistent regressors can be biased. The report would benefit from discussing the extent to which these estimation issues should be of concern.

5.5 Purchase option dummies

The panel regression analysis is performed using purchase option dummies in regressions such as (2). This approach allows the Cumming report to focus on how different purchase options affect the flow intercept (estimated through β_3) and the flow-performance slope (estimated through β_4). For example, the flow-performance sensitivity for a particular purchase option, measured relative to the equivalent sensitivity without this option, is $(\beta_1 + \beta_4)$. Negative estimates of β_4 therefore suggest less sensitivity of flows with respect to prior alpha performance and, hence, a weaker incentive for the fund manager to generate high risk-adjusted performance.

Negative estimates of β_4 are therefore interpreted as evidence that flows are not as sensitive to prior performance for funds purchased under a particular option. However, it should be recalled that the total effect on flows from different purchase options get scaled by the alpha estimate $\hat{\alpha}_{it}$ and thus is equal to $(\beta_1 + \beta_4)\hat{\alpha}_{it}$. If the average alpha estimate, $\hat{\alpha}_{it}$, is not the same for funds that can be purchased directly from the fund management company versus funds that can be purchased in this manner, it becomes less straightforward to interpret the results.

6 Future performance regressions

The Cumming report finds that the flow-performance relation is flatter for funds sold with purchase options that appeal most to less sophisticated investors.

To explore whether funds with higher flow-past performance sensitivity produce better *future* risk-adjusted investment performance, the Cumming report estimates regressions of the form

$$\hat{\alpha}_{it+1} = c + \beta_1 FPintercept_{it-11} + \beta_2 FPslope_{it-11} + \varepsilon_{it+1}, \tag{5}$$

where $FPintercept_{it-11}$ and $FPslope_{it-11}$ are estimates of the flow-performance intercept and flow-performance slope for fund i based on data available at time $t-11$. To avoid overlaps with how the dependent variable, $\hat{\alpha}_{it+1}$, is constructed the authors lag the covariates on the right side of (5) by 12 months.

The mechanism explored in (5) is that purchase options affect the flow-performance intercept and flow-performance slope which, in turn, affect the future alpha if β_1 and β_2 are different from zero.

Empirically, for funds that cannot be directly purchased from the fund company, the Cumming report finds (Table 5, Panel A) a negative estimate of β_1, indicating that a higher flow-performance intercept is associated with a lower

future alpha. The report writes "The economic significance is such that a 1-standard deviation increase in the flow-performance intercept is associated with a 2.22% (Model 3) to 3.87% (Model 1) decrease in future alpha, *relative to the average monthly alpha in the data*." (my emphasis). This result suggests lower future alpha performance for funds populated by investors whose flows are not very sensitive to prior risk-adjusted performance.

If I understand the above statement correctly, the effect of changing the flow-performance standard intercept by one deviation is to reduce the future alpha by a proportionality factor (1-0.022) (Model 3) or (1-0.0387) (Model 1). Since alphas are already quite small (see Table 1), this would appear to represent a very small economic effect.

Moreover, the explanatory power of the alpha regression in (5) is very low so it seems that only a very small part of the variation in alphas can be explained by differences in the intercept and slope of the flow-performance relation. It would have been natural to include the properly lagged alpha estimate, $\hat{\alpha}_{it-11}$, in the regression. If nothing else, this would soak up more of the variation in $\hat{\alpha}_{it+1}$ and so could lead to more precise parameter estimates in (5).

Again, it would be interesting to see results for alpha estimates computed net-of-fees. In the absence of such results it is hard to say anything conclusive about potential conflicts of interest for funds that can be purchased directly. Suppose, for example, that funds populated with more attentive and sophisticated investors generate higher (gross) alphas, but also charge higher fees so that, net of fees, the performance is no higher for these funds than for others. This would change the interpretation of the results.

For funds that can be purchased directly, the report finds a positive association between the flow-performance intercept and future alpha. It is not clear to me that it follows from this evidence that there is a lack of conflict of interest for these funds (page 50). The positive coefficient on the flow-performance intercept (β_1) would seem to imply that funds with particularly large outflows regardless of performance (large negative value of $FPintercept$) go on to produce negative alphas. The report argues that "This evidence means that when investing directly, investors are sensitive to fees: when a fund charges more, investors are less likely to invest and invest less." But why should such outflows correlate with future alpha performance?

Turning to the effect of the flow-performance slope on future alpha, the Cumming report finds a highly positively estimate of β_2 regardless of whether the funds can or cannot be purchased directly (Table 5, Panel A). This is as expected if a higher flow-performance sensitivity gives funds a stronger incentive to produce good investment performance. For funds that cannot be purchased directly, the report estimates that a one-standard deviation increase in the flow-performance slope leads to a 5% increase in the future alpha. Assuming that this is again measured relative to the average alpha, the effect does not appear to be very large in economic terms. A qualitatively similar finding is reported for funds that can be purchased directly, i.e., a higher flow-performance slope is associated with a higher future alpha estimate. However, the estimates of β_2 in (5) are notably smaller in magnitude for funds that can be directly purchased

compared to funds that cannot be purchased directly. This holds for both stand-alone funds (Table 5, Panel A) and for fund-of-funds (Panel B), and is even more pronounced for the latter.

6.1 Omitted variables

The specification in (5) is very simple. One concern is that it does not include other fund characteristics that have been associated with future risk-adjusted performance such as fund size, fund family size, fund age, or fund flows–all traits found to be significantly correlated with risk-adjusted performance by Ferreira et al. (2013).

Omitting such variables could mean that the regression suffers from omitted variable bias, making the results difficult to interpret. Indeed, including affiliated dealer inflows-outflows, as the authors do in Table 6, reduces the coefficient on the flow slope in model 5 from 2.935 to 1.562 and from 1.367 to 0.169 in model 6. The authors argue that this variable is a proxy for the magnitude of the conflict of interest between investors and managers, but the results also indicate that the estimates in Table 5 can be sensitive to the inclusion of other variables and so should be interpreted with caution.

7 Summary

The analysis in the Cumming report could benefit from pursuing a number of points laid out in the above analysis. Specifically,

- A key hypothesis of the report is that for funds with those purchase options that attract the least sophisticated investors, the less sensitive flows are to risk-adjusted performance, and the higher the scope for conflicts. If this is the case, the report would benefit from presenting more evidence that there is a close mapping between investor sophistication and specific purchase options. Can the different purchase options be ranked according to the total cost charged to the investor, or is there too much heterogeneity within each purchase option to make such a comparison possible across different purchase options?

- Since the report is concerned with the potential welfare implications arising from conflicts of interest between retail investors and the intermediaries handling their money, it is important to present calculations showing estimates of the economic effects of different purchase options. Specifically, what is the estimated reduction in investment performance associated with higher trailer fees or various charges in basis points per year? How large are the effects both gross and net of fees? Moreover, aggregating the estimates across all funds invested in different purchase options will faciliate an estimate of the total (aggregate) effect.

- The report uses a simple measure of investment performance–risk-adjusted return, or alpha–that is subject to estimation error. A number of robustness tests should be conducted to address weaknesses in the estimation of alphas, particularly the extent to which the present estimation procedure accurately captures risk for funds focusing on asset classes other than (North American) stocks.

References

Chen, Y., Ferson, W.E., and H. Peters, 2010, Measuring the timing ability and performance of bond mutual funds. Journal of Financial Economics 98, 72-89.

Fama, E.F. and K.R. French, 2010, Luck versus skill in the cross-section of mutual fund returns. Journal of Finance 65, 1915-1947.

Ferreira, M.A., A. Keswani, A.F. Miguel, and S.B. Ramos, 2013, The determinants of mutual fund performance: A cross-country study. Review of Finance 17, 483-525.

French, K.R., 2008, The cost of active investing. Journal of Finance 63, 1537-1573.

Goldstein, I., Jiang and Ng, 2016, Investor flows and fragility in corporate bond funds. Unpublished manuscript, Wharton School.

Gruber M.J., 1996, Another puzzle: The growth in actively managed mutual funds. Journal of Finance 51, 783-810.

Hjalmarsson, E., 2004, Predictive regressions with panel data. Unpublished manuscript, Yale University.

The Investment Funds
Institute of Canda
11 King Street West, 4th Floor
Toronto, ON M5H 4C7

IFIC.CA