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#### Econometric Models on the Value of Advice of a Financial Advisor

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### Econometric Models on the Value of Advice of a Financial Advisor<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> For a complementary power point presentation: <u>http://www.cirano.qc.ca/pdf/publication/2012RP-</u> <u>17\_Presentation\_Value of Advice.pdf</u>

#### Introduction

Financial institutions frequently describe and advertise the benefits of having a financial advisor. Industry participants routinely claim that advice contributes by, among other things, improving savings and investment behaviours, selecting appropriate financial products, improving the tax efficiency of savings, optimising asset mix for personal circumstances and risk tolerance, and ultimately increasing financial confidence and peace of mind. While these benefits may bevalid, are the effects of advice observable and measurable? Is financial advice worth the cost?

Public opinion surveys commissioned by the financial services industry consistently observe that those who seek advice are also those who are financially better off:

- Advised investors accumulate substantially more financial assets than their non-advised counterparts regardless of age and income (Rice, 2008; Cicero Consulting, 2010; IFIC, 2010; ING, 2010; Pollara, 2011);<sup>2</sup>
- Advised investors begin to seek advice when they have relatively little in the way of financial assets (IFIC 2011);<sup>3</sup>
- Advised investors judge their investment knowledge as better and improved (IFIC 2010; ING, 2010);
- Advised investors exhibit the behaviors that leave them better prepared for retirement (ING, 2010; FSPC, 2010; Baker, 2011);<sup>4</sup>
- The advised population is satisfied with advice and perceive it to be valuable (Advisor Impact, 2009; Hung et al, 2010; Pollara 2011)<sup>5</sup>;
- Advised individuals portray a higher level of financial confidence and peace of mind (Rice, 2008; Harris Interactive, 2008; IFIC, 2010; ING, 2010; Cicero Consulting, 2010; Sun Life, 2011).<sup>6</sup>

<sup>&</sup>lt;sup>2</sup> M. Rice. (2008), Value of Advice, Financial Planning Association; Cicero Consulting (2010), The Future of Retirement; Investment Funds Institute of Canada (2010), The Value of Advice; ING (2010), Working with an Advisor: Improved Retirement Savings, Financial Knowledge and Retirement Confidence; Pollara (2011), Canadian Investors' Perceptions of Mutual Funds and The Mutual Fund Industry.

<sup>&</sup>lt;sup>3</sup> Investment Funds Institute of Canada (2011), The Value of Advice.

<sup>&</sup>lt;sup>4</sup> Financial Planning Standards Council (2010), The Value of Financial Planning; M. Baker (2011), Advice Plays a Large Role in Retirement Readiness, Brightwork Partners.

<sup>&</sup>lt;sup>5</sup> Advisor Impact (2009), 50,000 Clients Can't Be Wrong: Advisor Impact Client Index; A. Hung and J. Yoong (2010), Asking for Help: Survey and Experimental Evidence on Financial Advice and Behavior Change, Working paper, RAND Corporation.

Not surprisingly, the impact, or value, of advice has drawn considerable public attention. Positive industry claims are met with public skepticism, particularly when the markets show great volatility or downward results. By its nature, advice would seem to be a complex set of interrelated processes. Likewise, the type and volume of reliable data required to measure the various values or impacts of advice is difficult to obtain. This is reflected in the academic literature, which is relatively scarce in relation to the net worth of advised investors, observed differences in portfolio composition and the cost, risk and consequences of advice.

Fischer and Gerhardt (2007) identified investor mistakes made in the six principal phases of the investment decision process, identified as: 1) assess personal balance sheet; 2) assess risk aversion and investment horizon, 3) determine optimal asset allocation to asset classes, 4) select securities, 5) perform transactions, and 6) monitor wealth.<sup>7</sup> Advice is introduced as the mitigating factor while taking into account the intensity, efficiency, and quality of financial advice. Advice is found to improve the investment process in each of the identified phases of decision-making, including avoiding home bias in the asset allocation phase, or avoiding single stock picking in the security selection phase. In another study comparing 597 investors before and after regular investment advice is received, Gerhardt and Hackethal (2009) concluded that there are positive effects, including less speculative trading and more diversified portfolios.<sup>8</sup> Similar results were found by Bluethgen, Gintschel, Hackethal and Mueller (2008) using a large German data bank.<sup>9</sup>

Other studies depict advice as a form of coaching that adds discipline and rationality to investment decisions. Among other findings, Bluethgen et al (2008) suggests that that financial advice adds discipline to asset allocation and enhances international portfolio diversification. In a natural experiment setting, combining the introduction of a withholding tax in Germany, Horn, Meyer and Hackethal (2009) found that advice significantly lowers the probability of investing in tax-disadvantaged vehicles.<sup>10</sup> Through regression

 <sup>&</sup>lt;sup>6</sup> Harris Interactive (2008), Value of Financial Planning Study; Sun Life (2011), Canadian Unretirement Index, Ipsos Reid.
 <sup>7</sup> R. Fischer and R. Gerhardt (2007), Investment Mistakes of Individual Investors and the Impact of Financial Advice,

European Business School.

 <sup>&</sup>lt;sup>8</sup> R. Gerhardt and A. Hackethal (2009), The Influence of Financial Advisors on Household Portfolios: A Study on Private Investors Switching to Financial Advice. Goethe University Frankfurt - Department of Finance, Working paper.
 <sup>9</sup> R. Bluethgen, A. Gintschel, A. Hackethal and A. Mueller (2008), Financial Advice and Individual Investors' Portfolios, Working

paper, European Business School.

<sup>&</sup>lt;sup>10</sup> L. Horn, S. Meyer and A. Hackethal (2009), Smart Investing and the Role of Financial Advice – Evidence from a Natural Experiment Using Data Around a Tax law Change, Goethe University, Frankfurt.

analyses on a comprehensive multi-decade dataset, Maymin and Fisher (2011) tested and confirmed that advisors help investors stay disciplined in the face of market volatility. The analyses found that interactions with financial advisors intensify in volatile markets, as investors are re-educated and dissuaded from excessive trading.<sup>11</sup>

Contradictory results have also been observed. Financial advice may not improve investment returns (Kramer, 2009; A. Hackethal, M. Haliassos and T. Jappelli, 2009; Y. Karabulut, 2010) and may have little or no bearing on investor outcomes (Bergstresser et al, 2006; Hackethal et al, 2009; Niebling, 2011) and to the extent there is a correlation, it is either spurious or the result of good client selection on the part of advisors.<sup>12</sup> Hackethal et al (2009), using German survey data, found that advised accounts from both independent financial advisors and banker financial advisors earned lower returns than those run by similar investors without advisor input. Willis (2009), Gale and Levine (2010) and others have observed that current research does not demonstrate a causal effect from financial education to higher financial literacy or to better financial behaviour, therefore improving financial outcomes.<sup>13</sup> Thesefindings are due, in part, to biases and other non-rational influences on financial decisions, and to research design issues.

The context surrounding advice is also relevant. Bluethgen et al (2008) identified older, wealthier, risk averse, and female investors as more inclined to seek advice. Their regression models provide evidence that financial advice adds discipline to asset allocation and enhances international portfolio diversification. Hung and Yoong (2010), using survey data of the Rand American Life Panel and experimental evidence, found that compulsory programs of financial counselling had no impact, whereas individuals who actively solicited advice performed better.<sup>14</sup> Several other studies allude to the moral hazard risks faced by

<sup>&</sup>lt;sup>11</sup> P. Z. Maymin and G.S. Fisher (2011), Preventing Emotional Investing: An Added Value of an Investment Advisor, NYU-Polytechnic Institute.

<sup>&</sup>lt;sup>12</sup> M. Kramer (2009), Investment Advice and Individual Investor Portfolio Performance, University of Groningen, The Netherlands; A. Hackethal et al, M. Haliassos and T. Jappelli (2009), Financial Advisors: A case of Babysitters? Goethe University, Frankfurt; Y. Karabulut (2010), Financial Advice: An Improvement for Worse? Goethe University, Frankfurt; D. Bergstresser, J. M. R, Chalmers and P. Tufano, (2006), Assessing the Costs and Benefits of Brokers in the Mutual Fund Industry, Centre for Financial Research (CFR) - University of Cologne; F. Niebling (2011), Do Advisors Help Investors to Make Better Investments, Goethe University, Frankfurt.

<sup>&</sup>lt;sup>13</sup> L. E. Willis (2009), "Evidence and Ideology in Assessing the Effectiveness of Financial Literacy Education." San Diego Law Review,: 46(2), 415–58; W.G. Gale and R. Levine (2010), Financial Literacy: What Works? How Could It Be More Effective?, Paper presented at the First Annual Conference of the Financial Literacy Research Consortium, Washington DC.

<sup>&</sup>lt;sup>14</sup> A. Hung and J. Yoong (2010); Asking for Help: Survey and Experimental Evidence on Financial Advice and Behavioral Change, Working paper, RAND Corporation.

individual investors who may be financially naïve or perhaps illiterate when receiving advice from salesincentivized advisors.<sup>15</sup>

As seen from the scientific literature and numerous industry studies, the value of financial advice takes different forms from increased financial assets to more subjective indicators such as the feeling of being better prepared for retirement, reduced uncertainty, and increased confidence in being able to take the right financial decisions. By any account, financial advice covers a wide and complex array of activities. To paraphrase Oscar Wilde: "we know the price of everything and the value of nothing." Financial advice covers at a price, so it stands to reason that advised investors will expect better portfolio performance over time. Is this the case? How does the improvement in performance take place?

By far, the most common way of measuring the impact of advice is by measuring the value added to initial assets; however the observed results in the literature are ambiguous on this point. The challenge is two-fold. First, if financial markets are efficient, differences in performance are largely due to chance. Second, not enough is known about the behaviour of a fixedgroup of individuals over time. Were the data available, the performance of advised investors could be compared with the comparable unadvised investor across a variety of environments. Additionally, if the panel were sufficiently large, the many counterfactual variables affecting the financial portfolio could also be controlled in order to define the comparable investor. However, longitudinal panel data take time to collect and are costly.<sup>16</sup>

In the absence of a sufficiently large and comprehensive set of panel or experimental data, this study relies on a pair of detailed surveys conducted on a single, large set of working-age Canadian households approximately six months apart in December 2010 and June 2011.<sup>17</sup> The total sample size is 3,610

<sup>&</sup>lt;sup>15</sup> C. Jansen, R, Fisher and A Hackethal (2008), The Influence of Financial Advice on the Asset Allocation of Individual Investors, European Business School.; R. Inderst and M. Ottaviani (2009). "Misselling Through Agents", *The American Economic Review* 99:3, 883–908; J. Yoong and A. Hung (2009), Self-Dealing and Compensation for Financial Advisors, RAND Corporation; R. Calcagno and C. Monticone (2009), Knowing Finance or Knowing Those who Know It? The Interrelation Between Financial Literacy and Investment Choices, University of Amsterdam.

<sup>&</sup>lt;sup>16</sup> A much less costly but very powerful alternative to a panel data is to use laboratory experiments. It is relatively simple to design an experiment where advice is made available to participants at a cost and uncertainty is introduced in the outcomes. Up and downward market conditions may be introduced as can controls to the attitudes towards risk of participants, their present bias for immediate consumption, their preference for saving and investing etc.

<sup>&</sup>lt;sup>17</sup> In December 2010, Ipsos Reid was commissioned by Power Financial Corporation to conduct an Internet-based survey on the financial situation of Canadian households. A total of 18,333 working-age households participated in the survey, of which 10,505 were retained after adjustments were made for out-of-scope and incomplete answers. Sponsored by Power Financial, CIRANO designed a follow-up survey focused on assessing the value of advice. Conducted in June 2011, the second survey

respondents who are the primary financial decision-makers or are involved in the household's financial decision-making. All participants were between the ages of 25 and 65and had at least \$1,000 in financial assets and a household income of less than \$250,000. The surveys captured a significant amount of information and detail about the participants' financial situations, socio-economic circumstances, financial literacy, behavioural tendencies, financial objectives, savings rates, and type and tenure of advice, as well as their perceptions and satisfaction about their situation and financial advisors. The survey questions are included in Appendix B of this paper and the construction of the variables used in this paper are included in Appendix C.

The participants in the surveys can be grouped into three categories: 1,785 participants (49.4% of the total) have a financial advisor, while 1,825 respondents do not have a financial advisor and can be divided in two sub-categories: 1,598 (44.3%) are passive non-advised participants and 227 (6.3%) are active non-advised participants or "traders" and .<sup>18</sup> While the initial and the follow-up surveys used for our study are unique, exhaustive and very rich in information, they should be viewed as more of a snapshot of the participants' current situation than as a set of panel data. Thus, the ability to directly test the importance of advice in reducing losses in a negative market, and increasing the value of the portfolio in a positive environment, is severely restricted.

This paper addresses two questions. In Part I, the determinants of having financial advice is considered. In Part II, the value of advice is assessed in the following manner. First, the economic impact of having an advisor is measured and the sources of economic value from advice are assessed (II.1). Second, participants' self-reported perceptions of their readiness for retirement (II.2), their level of trust in financial advice (II.3), satisfaction with financial advice, (II.4) confidence in financial advice (II.5), and calmness in the face of market fluctuations (II.6) associated with financial advisors are considered. In the absence of determinate, differentiated financial results, positive perceptions of, and satisfaction with financial advice are indications that the household would be positively inclined to engage or retain a financial advisor.

was addressed to the 10,505 respondents of the original survey. A total of 4,978 observations were collected, of which 3,610 were retained after adjustments for out-of-scope, incomplete, and inconsistent answers. CIRANO administers both survey datasets.

<sup>&</sup>lt;sup>18</sup> The 227 traders are non-advised respondents answering "I do my own financial planning" to Question 28 ("What sources of financial advice do you rely on...") and "I am capable of doing my own finances" to Question 42 ("What reasons would lead your household to consider not using a financial advisor?") in the June 2011 re-survey.

The particular focus of this study is to provide statistical tests on the value of a financial advisor. Numerous econometrics models and specifications are considered in answering the questions raised above. The models address issues associated with the direction of causality, selection bias and endogeneity in the examination of whether other confounding factors might explain observed results.

The econometric results show that on average, participants retaining the service of a financial advisor for more than 15 years have about 173% more financial assets (in other words, 2.73x the level of assets) than non-advised respondents, *ceteris paribus* (or said another way, 2.73times the level of assets of "comparable" non-advised respondents). The impact of advice on financial assets (cash, GICs, term deposits, stocks, bonds, ETFs, investment funds and other investment vehicles) increases with the tenure of advice. The difference in financial assets is explained most significantly by higher household savings rates and greater allocation into non-cash investments. The presence of a financial advisor increases the confidence of having enough money to retire comfortably. Those who have advice are more likely to trust financial advisors, associate satisfaction with financial advisors, and have confidence in financial advisors.

#### Part I: Having a financial advisor

#### I.1 - The determinants of having a financial advisor

Do better-educated people choose to retain the service of a financial advisor? What role does household income play in that decision? Is age an important factor? What level of assets do people believe is needed to hire a financial advisor?

Equation (1) reflects the utility of a participant *i* to have an advisor; x is a set of explanatory variables.

$$U_i^* = x_i \delta + \eta_i \quad . \tag{1}$$

 $U_i^*$  is a latent (ordinal) non-observable variable.

If this utility is positive, then:

$$U_i^* = x_i \delta + \eta_i > 0$$
 leading to  $\eta > -x_i \delta$ .

 $\eta_i$  is the error term of a standardized normal function. The probability of  $\eta > -x_i \delta$  is  $\int_{-x_i}^{\infty} \frac{1}{\sqrt{2\pi}} \exp\left(-\frac{1}{2}x^2\right) ds$ . In this case, the decision is to retain the services of a financial advisor, *FA*.

Thus, FA = 1 if the participant *i* considers a positive utility of retaining an advisor, and 0 otherwise. The corresponding element of FA = 0 of the likelihood function of this probit model is simply:

$$1 - \int_{-x_i \delta}^{\infty} \frac{1}{\sqrt{2\pi}} \exp\left(-\frac{1}{2}x^2\right) ds$$
.<sup>19</sup> This model explains the probability of having an advisor with respect to

the explanatory variables x.

This analysis identifies those people who are likely to seek advice and those who need to be convinced. It is also a key equation for other models in the study. We consider two samples. The first uses the full 3,610 observation sample and is concerned with advised and non-advised respondents. The second considers the probability of being a "trader" (ie active, non-advised investors) among the 1,825 sample of non-advised respondents.

<sup>&</sup>lt;sup>19</sup> Many textbooks explain the likelihood function of the probit and its estimation procedure.

The value of financial assets needed, or believed to be needed, to hire a financial advisor is an important and significant control variable. As shown in Figure I1, advised households generally start their advice relationships with only modest levels of financial assets (the median initial investments is \$11,000) while non-advised households believe they need more to seek advice.<sup>20</sup> Within the non-advised sample, nearly half (44%) believe they need \$50,000 or more to seek advice. There is however another, specific group of non-advised households, represented by non-advised but active households ("traders").<sup>21</sup> These households self-manage their investments, identify themselves as the main source of advice and are without an advisor because they are capable of managing their own investments. Relatively speaking, they exhibit greater levels of education, income and financial literacy. Nearly two-thirds of traders believe that they need \$100,000 or more to seek advice.<sup>22</sup>



Figure I.1: Distribution of Value of Assets that would Prompt Household to Seek Financial Advice

<sup>&</sup>lt;sup>20</sup> The IFIC Value of Advice Report, 2011 confirms the point that most investors first begin to work with an advisor when they have only modest amounts of savings. The IFIC cites in particular a study by Pollara (2011), *Canadian Investors' Perceptions of Mutual Funds and the Mutual Fund Industry*. Pollara is a Canadian firm specialized in public opinion and marketing.
<sup>21</sup> Note that we cannot include a dummy variable "trader" in the first three regressions as it becomes a perfectly predictable variable since all traders have no financial advisor.

<sup>&</sup>lt;sup>22</sup> Some mention "millions of dollars" as if to stress their point that they do not need a financial advisor.

The determinants of the probability of having an advisor and being a trader are presented in Table I.1. Without surprise, in Table I1, we observe that the higher the value of "Assets Needed", the lower the probability to have a financial advisor and the higher the probability that one is a trader.

SAMPLE	Financial Advisor	Traders in the Non- advised Sample
Assets Needed	-1.62e-06*** (2.38e-07)	2.15e-08** (8.54e-09)
Household's annual income before taxes		, ,
Income before taxes <35000	Ref.	Ref.
35000<= income before taxes <60000	0.096	0.028
	(0.080)	(0.159)
60000<= income before taxes <90000	0.219**	0.102
	(0.089)	(0.172)
Income before taxes >=90000	0.416***	0.070
	(0.098)	(0.187)
Savings:	()	
savings=0	Ref.	Ref.
nnus=0 & savings==3000	0 255***	0 500***
Suvingo, o a Suvingo ( 0000	(0.072)	(0 155)
savings>3000 & savings<=10000	(0.072)	0.100)
Savings-5000 & Savings10000	(0.072)	(0.154)
	(0.073)	(0.134)
savings>10000	(0.088)	0.950
	(0.088)	(0.175)
Sources of income:	R (	Б (
Government transfers, investment income and other income	Ref.	Ref.
Wages and salaries	0.060	-0.534**
5	(0.123)	(0.208)
Self-employment income	0.166	0.229
	(0.138)	(0.224)
Working full time	-0.082	-0 190
	(0.077)	(0 140)
Fully retired	0 179	0.317
	(0 157)	(0.289)
Workplace pension	0.050	0.124
	(0.048)	(0,000)
Characteristics	(0.040)	(0.030)
Minimum living poods at ratiroment:	Pof	Dof
loss than 40%	Rei.	Rei.
LESS (IId11 40 %		
40%	0 110	0 0 0 0
70 /0		-0.009
500/	(000.0)	(0.140)
JU %	0.002	-0.309
	(0.070)	(0.126)

#### Table I.1: The Determinants of Having a Financial Advisor and Being a Trader (Probit models)

60%	0.059	-0.349**
70%	(0.077) 0.083	(0.147) -0 284*
	(0.083)	(0.152)
More than 80%	-0.072	-0.598***
Never save for retirement	(0.084) -0 578***	(0.165) -0.704***
	(0.095)	(0.198)
Risk averse	0.022	-0.157
Draferance for immediate consumption	(0.062)	(0.109)
Preference for immediate consumption	-0.065	-0.115 (0.117)
Preference for investing	-0.049	0.072
	(0.069)	(0.125)
Financial literacy	0.103**	0.303***
Malo	(0.049)	(U.U94) 0 342***
IVIAIC	(0.049)	(0.091)
Post-secondary diploma	0.112**	0.070
	(0.052)	(0.097)
Age:		
Age<45	Ref.	Ref.
15<= 200<51	0 20/***	0 158
+0 ·- uyu ·0+	(0.055)	(0.106)
54<=age<65	0.535***	0.255**
·	(0.061)	(0.112)
Number of income comments and 40 cm alder in the base of alder		
Number of income earners aged 18 or older in the household:	Rof	Rof
Number of income earners aged 18 or older in the household: One income earner	Ref.	Ref.
Number of income earners aged 18 or older in the household: One income earner Two income earners	Ref. -0.141**	Ref. -0.281**
Number of income earners aged 18 or older in the household: One income earner Two income earners	Ref. -0.141** (0.068)	Ref. -0.281** (0.124)
Number of income earners aged 18 or older in the household: One income earner Two income earners Three or more income earners	Ref. -0.141** (0.068) -0.218**	Ref. -0.281** (0.124) -0.5597**
Number of income earners aged 18 or older in the household: One income earner Two income earners Three or more income earners	Ref. -0.141** (0.068) -0.218** (0.093)	Ref. -0.281** (0.124) -0.559*** (0.182)
Number of income earners aged 18 or older in the household:         One income earner         Two income earners         Three or more income earners         Marital status:         Other family type	Ref. -0.141** (0.068) -0.218** (0.093) Ref	Ref. -0.281** (0.124) -0.559*** (0.182) Ref
Number of income earners aged 18 or older in the household: One income earner Two income earners Three or more income earners Marital status: Other family type	Ref. -0.141** (0.068) -0.218** (0.093) Ref.	Ref. -0.281** (0.124) -0.559*** (0.182) Ref.
Number of income earners aged 18 or older in the household:         One income earner         Two income earners         Three or more income earners         Marital status:         Other family type         Single individual household	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040
Number of income earners aged 18 or older in the household: One income earner Two income earners Three or more income earners Marital status: Other family type Single individual household	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113)	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195)
Number of income earners aged 18 or older in the household: One income earnerTwo income earnersThree or more income earnersMarital status: Other family typeSingle individual householdCouple with children	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113) 0.115	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195) 0.054
Number of income earners aged 18 or older in the household: One income earner Two income earners Three or more income earners Marital status: Other family type Single individual household Couple with children	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113) 0.115 (0.096) 0.260***	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195) 0.054 (0.177) 0.258
Number of income earnersaged 18 or older in the household: One income earnerTwo income earnersThree or more income earnersMarital status: Other family typeSingle individual householdCouple with childrenCouple with no children	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113) 0.115 (0.096) 0.260*** (0.092)	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195) 0.054 (0.177) 0.258 (0.169)
Number of income earner       aged 18 or older in the household:         One income earner       Two income earners         Three or more income earners       Marital status:         Other family type       Single individual household         Couple with children       Couple with no children         Single parent family       Single parent family	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113) 0.115 (0.096) 0.260*** (0.092) 0.215	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195) 0.054 (0.177) 0.258 (0.169) -0.097
Number of income earnersaged 18 or older in the household: One income earnersTwo income earnersThree or more income earnersMarital status: Other family typeSingle individual householdCouple with childrenCouple with no childrenSingle parent family	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113) 0.115 (0.096) 0.260*** (0.092) 0.215 (0.132)	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195) 0.054 (0.177) 0.258 (0.169) -0.097 (0.258)
Number of income earner         One income earner         Two income earners         Three or more income earners         Marital status:         Other family type         Single individual household         Couple with children         Couple with no children         Single parent family         Regions:	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113) 0.115 (0.096) 0.260*** (0.092) 0.215 (0.132)	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195) 0.054 (0.177) 0.258 (0.169) -0.097 (0.258)
Number of income earner       3ged 18 or older in the household:         One income earners       7wo income earners         Three or more income earners       3ged 18 status:         Other family type       3ingle individual household         Couple with children       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children         Single parent family       3ged 18 couple with no children <td< td=""><td>Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113) 0.115 (0.096) 0.260*** (0.092) 0.215 (0.132) Ref.</td><td>Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195) 0.054 (0.177) 0.258 (0.169) -0.097 (0.258) Ref.</td></td<>	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113) 0.115 (0.096) 0.260*** (0.092) 0.215 (0.132) Ref.	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195) 0.054 (0.177) 0.258 (0.169) -0.097 (0.258) Ref.
Number of income earner         One income earner         Two income earners         Three or more income earners         Marital status:         Other family type         Single individual household         Couple with children         Single parent family         Regions:         Atlantic         Ouebec	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113) 0.115 (0.096) 0.260*** (0.092) 0.215 (0.132) Ref. 0.056	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195) 0.054 (0.177) 0.258 (0.169) -0.097 (0.258) Ref. -0 169
Number of income earner   One income earner   Two income earners   Three or more income earners   Marital status: Other family type   Single individual household   Couple with children   Couple with no children   Single parent family   Regions: Atlantic   Quebec	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113) 0.115 (0.096) 0.260*** (0.092) 0.215 (0.132) Ref. 0.056 (0.102)	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195) 0.054 (0.177) 0.258 (0.169) -0.097 (0.258) Ref. -0.169 (0.207)
Number of income earner         One income earner         Two income earners         Three or more income earners         Marital status:         Other family type         Single individual household         Couple with children         Couple with no children         Single parent family         Quebec         Ontario	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113) 0.115 (0.096) 0.260*** (0.092) 0.215 (0.132) Ref. 0.056 (0.102) 0.052	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195) 0.054 (0.177) 0.258 (0.169) -0.097 (0.258) Ref. -0.169 (0.207) 0.158
Number of income earners   One income earners   Two income earners   Three or more income earners   Marital status:   Other family type   Single individual household   Couple with children   Couple with no children   Single parent family   Regions:   Atlantic   Quebec   Ontario	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113) 0.115 (0.096) 0.260*** (0.092) 0.215 (0.132) Ref. 0.056 (0.102) 0.052 (0.099)	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195) 0.054 (0.177) 0.258 (0.169) -0.097 (0.258) Ref. -0.169 (0.207) 0.158 (0.192)
Number of income earner         One income earner         Two income earners         Three or more income earners         Marital status:         Other family type         Single individual household         Couple with children         Couple with no children         Single parent family         Quebec         Ontario         Manitoba, Saskatchewan	Ref. -0.141** (0.068) -0.218** (0.093) Ref. -0.018 (0.113) 0.115 (0.096) 0.260*** (0.092) 0.215 (0.132) Ref. 0.056 (0.102) 0.052 (0.099) -0.006	Ref. -0.281** (0.124) -0.559*** (0.182) Ref. -0.040 (0.195) 0.054 (0.177) 0.258 (0.169) -0.097 (0.258) Ref. -0.169 (0.207) 0.158 (0.192) -0.401

Alberta	0.009	-0.124
British Columbia	(0.116) 0.090 (0.110)	(0.223) -0.011 (0.211)
Constant	-0.893*** (0.207)	-1.349*** (0.363)
Observations	3610	1825
II_0	-2502.040	-685.413
LI	-2147.675	-554.825
chi2	434.445	211.901
Prob < chi <sup>2</sup>	0.000	0.000
Pseudo R2	0.142	0.191

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

As expected, the important factors that positively affect the probability of having a financial advisor are income level, the capacity of the household to save, and the age of the respondent. Respondents who are more financially literate or have a post-secondary diploma are more likely to retain the service of a financial advisor. Households who declare that they will never save for retirement are less likely to have a financial advisor, even when we control for income and savings. The second regression demonstrates that traders form a specific group among the sample of non-advised respondents. They believe that a very high level of assets is needed to hire a financial advisor and they have greater rates of savings. Their source of income is less likely to be from wages and salaries and they are more likely financially literate and male. Finally, they are older than the other non-advised respondents.

Note that the level of assets was not introduced as a determinant of having or not having a financial advisor. It could be argued that the level of respondents' assets is a factor in the choice to seek advice. A number of reasons factor into the exclusion of asset levels. First, it is very likely that the respondents' income and savings are correlated with the respondents' level of assets. Second, experts in the field suggest that financial advisors do not need to know the level of assets of potential clients to approach them. Finally, the specification used simplifies the econometrics models used to evaluate the benefits of having a financial advisor.

#### Part II: The value of advice

#### II.1 - Assessing the impact of a financial advisor on the value of assets

One critical objective of a financial advisor is to increase the value of his clients' assets. Is it the case? This section addresses this question within the limits of the surveys at hand. Table II.1.1 presents the median, mean and standard deviation of the value of financial assets for the three categories of respondents.<sup>23</sup> The median and mean values are different with respect to the non-advised respondents. The dispersions around the means are large across respondents, particularly for the traders. The median value of the financial assets of the advised respondents is 4.2 times the median value of all the non-advised respondents. In Figure II.1.1, we illustrate the differences in the median value of assets for the different categories of respondents by income and age. Passive non-advised respondents clearly have lower financial assets.

		Non-Ad	dvised
	Advised		Traders
Observations	1,785	1,825	227
Median (\$)	101,000	24,000	110,000
Mean (\$)	193,772	93,384	256,766
Standard Deviation	281,874	264,005	469,216

#### Table II.1.1: Descriptive Statistics on the Value of Financial Assets by Categories of Respondents

<sup>1</sup> Includes passive non-advised and traders

<sup>&</sup>lt;sup>23</sup> As mentioned earlier, only respondents declaring a positive financial assets of more than \$1,000 were retained in the study. Financial assets include cash, GICs, term deposits, stocks, bonds, ETFs, investment funds and other investment vehicles.

#### Figure II.1.1: Median Value of Financial Assets of the Different Categories of Respondents by Income and Age



Consider a linear sequential model, equation (2):

$$\ln A_{i} = y_{i}\theta + \alpha_{0}FA_{i} + \alpha_{1}FA^{*} 4to \, 6years + \alpha_{2}FA^{*} 7to 14years + \alpha_{3}FA^{*} 15 years or more + \varepsilon_{i}$$
(2)

In equation (2), the effect of the financial advisor, FA, on the level of assets (expressed in logarithm terms), In A, is also influenced by the length of time one has had a financial advisor. Positive and statistically significant parameter estimates for the  $\alpha$  coefficients will suggest that a financial advisor adds to the financial assets of participants, taking into account the length of time that one is associated with a financial advisor. <sup>*y*</sup> is a set of other explanatory variables and  $\varepsilon$  is the error term.

In this specification, the choice of having an advisor, FA, is endogenous and is therefore instrumented using the parameter estimates of equation (1) above. Substituting the predicted value for FA, the linear least squares estimation results of equation (2) are reported in Table II.1.2.

SAMPLE	Financial Advisor	Traders in Non- Advised
The household has a financial advisor or is a trader (IV)	-0.123	0.834***
	(0.076)	(0.215)
<b>Type of Advisor X Tenure</b> Type Advisor X Less than 4 years (& Bad prediction)	Ref.	
Financial Advisor X 4 to 6 years	0.456***	
Financial Advisor X 7 to 14 years	(0.092) 0.687***	
Financial Advisor X 15 or more years	(0.074) 1.006***	
	(0.078)	
Income before taxes <35000	Ref.	Ref.
35000<= income before taxes <60000	0.482***	0.453***
60000<= income before taxes <90000	(0.089) 1.081***	(0.111) 1.201***
Income before taxes >=90000	(0.097) 1.682***	(0.124) 1.821***
	(0.106)	(0.141)
Government transfers, investment income and other income	Ref.	Ref.
Wages and salaries	-0.040	-0.011
Self-employment income	(0.143) 0.258 (2.164)	(0.192) 0.199
Working full-time	(0.161) -0.059 (0.205)	(0.222) -0.004
Fully retired	(0.085) 0.387*** (2.142)	(0.118) 0.495*
Workplace pension	(0.149) -0.026	(0.255) -0.005
Characteristics:	(0.051)	(0.078)
Minimum living needs at retirement: Less than 40%	Ref.	Ref.
40%	-0.036	-0.023
50%	(0.085) -0.066	(0.132) 0.005
60%	(0.074) -0.196**	(0.109) -0.169
70%	(0.082) -0.160*	(0.123) 0.004
More than 80%	(0.084) -0.388***	(0.126) -0.318**

## Table II1.2: Determinants of the (logarithm) Value of Assets (Instrumented linear least squares)

Never save for retirement	(0.093) -0 926***	(0.128) -0.758***
	(0.104)	(0.116)
Risk averse	-0.154**	-0.204**
	(0.063)	(0.097)
Preference for immediate consumption	-0.082	-0.098
	(0.064)	(0.098)
Preference for investing	0.181**	0.233**
	(0.071)	(0.110)
Financial literacy	0.288***	0.345** <sup>*</sup>
	(0.052)	(0.077)
Male	0.196***	0.241***
	(0.051)	(0.075)
Post-secondary diploma	0.047	0.085
	(0.057)	(0.081)
Age:		
Age<45	Ref.	Ref.
45<= age<54	0.586***	0.584***
	(0.062)	(0.086)
54<=age<65	0.950***	0.838***
	(0.071)	(0.097)
Number of income earners aged 18 or older in the household:	- <i>i</i>	- <i>(</i>
One income earner	Ref.	Ret.
Ture income company	0.046***	0 155
i wo income earners	-0.210	-0.155
Three or more income corners	(0.071)	(0.100)
	-0.379	-0.043
Marital status:	(0.037)	(0.143)
Other family type	Ref	Ref
	noi.	noi.
Single individual household	0.057	0.114
	(0.121)	(0.160)
Couple with children	0.066	0.171
	(0.104)	(0.135)
Couple with no children	-0.027	0.002
	(0.098)	(0.129)
Single parent family	-0.220*	0.109
	(0.132)	(0.171)
The industry sector:		( )
Other industries	Ref.	Ref.
Goods-producing industries	0.109	0.045
	(0.093)	(0.130)
Service-producing industries	0.158*	0.150
	(0.082)	(0.114)
Public administration	-0.080	-0.100
	(0.102)	(0.150)
Regions:	- /	- /
Atlantic	Ref.	Ret.
Quebee	0.020	0 400
<b>MIGDEC</b>	0.030	U. 1UZ
Ontaria	(U.11U) 0.005***	(0.159)
Untano	0.295	0.333**

	(0.107)	(0.156)
Manitoba, Saskatchewan	0.214*	0.252
	(0.127)	(0.192)
Alberta	0.424***	0.543***
	(0.124)	(0.180)
British Columbia	0.395***	0.403**
	(0.119)	(0.172)
Constant	8.947***	8.373***
	(0.233)	(0.316)
Observations	3610	1825
II_0	-7201.752	-3643.785
LI	-6301.139	-3285.627
R-squared	0.393	0.325
Adj R-squared	0.386	0.311

Robust standard errors in parentheses\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Controlling for multiple factors, the results of Table II1.2 indicate that the presence of a financial advisor increases the size of the assets, but only after four years.<sup>24</sup> Specifically, for identical individuals, those who have had a financial advisor for at least four to six years will have almost 58% more financial assets than those who do not have a financial advisor.<sup>25</sup> Similarly, a respondent associated with a financial advisor for seven to 14 years will have 99% more assets. Those with 15 years or more will have 173% more assets than if they did not have a financial advisor (2.73x the assets of the equivalent non-advised respondents).<sup>26</sup> In the sample of the non-advised, controlling for many explanatory variables, those categorized as traders have 2.30x the assets of comparable passive, non-advised respondents.

<sup>25</sup> From the estimated coefficients of equation (3), we predict the *In* of assets of an individual with a financial advisor for at least

4 to 6 years, that is FA = 1 and  $FA^*$ advisor for 4 to 6 years = 1 with the following equation :  $\ln A_i = y_i \theta + \alpha_0 + \alpha_1$ Without a financial advisor, FA = 0:

 $\ln A_j = y_i \theta.$ 

 $\ln A_i - \ln A_j = \alpha_0 + \alpha_1$ 

Rising to the exponential on both sides:  $A_i / A_i = \exp(\alpha_0 + \alpha_1)$ .

<sup>&</sup>lt;sup>24</sup>In support of our sequential model, Lusardi and Michell (2007) using two cohorts of the US Health and Retirement Study have shown that deliberate financial planning affects wealth and that wealth does not affect planning. See A, Lusardi and O.S. Michell (2007), "Baby Boomer retirement study: The roles of planning, financial literacy, and housing wealth", *Journal of Monetary Economics*, 54, 205-224.

The difference in the *In* of assets for the same individual or an identical individual in all aspects (same income, age...) except for the presence of a financial advisor is:

Neglecting  $\alpha_0$  which is non-significantly different from zero at the 5 % level of confidence, with  $\alpha_1 = 0.456$  the expected ratio of assets is equal to 1.58.

<sup>&</sup>lt;sup>26</sup> This is reasonable knowing that the average value of assets for the advised respondents is \$205 500 versus \$93 400 for the average dollars assets for the non-advised respondents.

Across all samples, many other variables have coefficient estimates that have positive, statistically significant effects on the logarithm of the value of assets. Notable variables include: those with income levels above \$35,000, those older than 45 years of age, those who are fully retired, those with a preference for investing, those with financial literacy, and those who male. Participants from Alberta, Ontario and British Columbia have more assets that those in the rest of Canada. Respondents declaring that they will never save for retirement and who are risk averse have lower assets, asdo households with three or more income earners.

What could explain a 173% increase in the financial assets of long-tenured advised participants in the survey over comparable non-advised participants assuming the same level of initial assets?<sup>27</sup> In recent U.S. research, the accounts of workers who received some form of financial help, or advice, in defined contribution plans were compared with those who received no financial advice in the period from 2006 to 2010.<sup>28</sup> Advised savers received median returns that were approximately 3% higher than non-advised participants. If the markets are efficient, it is indeed difficult to earn more than a 3% rate of return due to better stock picking. Figure II1.2 plots the results from a 3% annual rate of return of a dollar investment compounded over time. The cumulative return falls well short of the 173% incremental return estimated in the current study. To achieve 173%, an annual interest rate of 7% would need to be compounded over 15 years. At a rate of 3%, it would take 34 years to achieve this result. This suggests that the impact of advice must arise from factors other than better stock picking, such as increased rates of savings, better portfolio diversification, and/or greater tax efficiency.

<sup>&</sup>lt;sup>27</sup> If we exclude the traders among the non-advised households, this percentage will be higher as one can anticipate with the last column of Table II1.

<sup>&</sup>lt;sup>28</sup>Aon Hewitt and Financial Engines, *Help in Defined Contribution Plans: 2006 Through 2010,* September 2011, p9.





How can one explain the much higher level of assets of the long-tenured advised households as compared to non-advised households? The savings rate, the ratio of non-cash over total investments, and the ratio of RRSP investments over total investments have been considered. Figure II1.3 outlines the observed saving discipline and asset allocation of respondents. Apparently, significant differences exist between passive non-advised respondents and advised respondents in terms of their savings rates and their allocation of assets into non-cash investments.



## Figure II1.3: Savings Discipline and Asset Allocation (mean values)

The determinants of these ratios are investigated with Tobit type 2 regressions and the results are presented in the first six columns of Table II1.2.<sup>29</sup> For each ratio, the probit concerns the probability of a positive ratio. The regression concerns the determinants of the value of each ratio conditional on a positive ratio. In all regressions, along with other explanatory variables serving as controlled variables, the variables of interest are the presence of advisors and traders. These latter variables are instrumented from Table I.1.

<sup>&</sup>lt;sup>29</sup> Tobit model involved censored variables. For all ratios, we have an important mass point of observations at zero.

# Table II1.3: The Determinants of the Savings Rate, Non-cash to Total Investment Ratio, RRSP to Total Investment Ratio and the logarithm of Financial Assets (Tobit type 2 models and instrumented least squares)

	Savings Rate		Non-cash Total		RRSP - Total Investments		Assets
VARIABLE	Probit	Regression	Probit	Regression	Probit	Regression	Regression
Savings rate (P)							5.678*** (0.768)
Non-cash – total investment (P)							6.240***
The RRSP total investment (P)							-0.238 (0.455)
The household has a Financial Advisor							( )
The household has no Financial Advisor (IV)	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	
The household has a Financial Advisor (IV)	1.421*** (0.082)	0.059*** (0.013)	0.211*** (0.066)	0.026 (0.023)	0.319*** (0.072)	0.028 (0.026)	
The household has a trader (IV)	6.710* <sup>**</sup> (1.347)	0.023 (0.046)	5.973* <sup>**</sup> (0.474)	0.350*** (0.104)	6.519* <sup>**</sup> (1.267)	`0.163 <sup>´</sup> (0.159)	
Household's annual income before taxes		. ,	. ,	. ,	. ,		
Income before taxes <35000	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	
35000<= income before taxes <60000	0.343***	-0.013	0.257***	0.092**	0.315***	0.125***	
60000<= income before taxes <90000	0.689***	-0.020*	0.562***	0.146**	0.702***	0.171***	
Income before taxes >=90000	0.872***	-0.011 (0.013)	0.767***	0.213***	0.904*** (0.102)	0.204***	
Sources of income:	()	(0.0.0)	(0.000)	()	(••••=)	(0.0.0)	
Government transfers, investment income and other income	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	

Wages and salaries	0.477***	-0.014	0.105	-0.003	0.183	0.008
	(0.132)	(0.016)	(0.131)	(0.042)	(0.131)	(0.044)
Self-employment income	0.363**	0.008	0.136	0.017	-0.056	-0.076*
	(0.154)	(0.017)	(0.149)	(0.047)	(0.147)	(0.045)
Working full time	0.155*	-0.012	0.020	0.006	0.094	0.025
	(0.090)	(0.007)	(0.080)	(0.022)	(0.083)	(0.023)
Fully retired	-0.460**	-0.018	0.049	-0.030	0.227	0.012
	(0.206)	(0.016)	(0.197)	(0.049)	(0.212)	(0.045)
Characteristics:						
Minimum living needs at retirement:						
Less than 40%	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
	0.004	0.000	0.000	0.000	0.000	0 00 4**
workplace pension	-0.024	0.000	0.032	0.000	-0.088	-0.034
400/	(0.063)	(0.004)	(0.053)	(0.014)	(0.058)	(0.014)
40%	0.070	-0.027***				
500/	(0.112)	(0.007)				
50%	-0.029	-0.023^^^				
	(0.093)	(0.006)				
60%	0.037	-0.033***				
	(0.103)	(0.007)				
70%	0.011	-0.035***				
	(0.109)	(0.008)				
More than 80%	-0.018	-0.027***				
	(0.099)	(0.007)				
Never save for retirement	-0.167*	-0.015	-0.620***	-0.142**	-0.762***	-0.117
	(0.095)	(0.009)	(0.089)	(0.069)	(0.092)	(0.076)
Risk averse	-0.033	-0.005	-0.170**	-0.053***	-0.106	-0.016
	(0.086)	(0.005)	(0.072)	(0.020)	(0.079)	(0.017)
Preference for receiving cash today	-0.202**	0.003	-0.134*	-0.034*	-0.026	-0.006
	(0.084)	(0.005)	(0.070)	(0.019)	(0.074)	(0.017)
Preference for investing	-0.048	0.023***	-0.021	-0.036*	0.018	-0.033*
-	(0.097)	(0.006)	(0.080)	(0.019)	(0.085)	(0.019)
Financial literacy	0.043	Ò.009**	0.299***	0.059**	Ò.140* <sup>*</sup>	-0.004
	(0.062)	(0.004)	(0.054)	(0.026)	(0.058)	(0.016)
Male	`0.048 <sup>´</sup>	0.011***	0.086	Ò.033* <sup>*</sup>	`0.063 <sup>´</sup>	Ò.030**́
	(0.063)	(0.004)	(0.054)	(0.016)	(0.058)	(0.014)

Post-secondary diploma	-0.033 (0.066)	0.001 (0.004)	0.036 (0.057)	0.006 (0.016)	0.079 (0.061)	-0.009 (0.016)
Age:						
Age<45	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
45<= age<54	-0.240*** (0.075)	-0.016*** (0.005)	0.187*** (0.064)	0.089***	0.127*	0.087*** (0.017)
54<=age<65	-0.407***	-0.009	0.181**	0.095***	0.254***	0.083***
Number of income earners aged 18 or older in the household:	(0.007)	(0.007)	(0.070)	(0.022)	(0.070)	(0.022)
One income earner	Ref.	Ref.				
Two income earners	0.175** (0.088)	-0.005 (0.006)				
Three or more income earners	0.161 (0.129)	-0.009 (0.008)				
Marital status:						
Other family type	Ref.	Ref.				
Single individual household	0.198 (0.132)	0.004 (0.010)				
Couple with children	-0.052́ (0.118)	-0.007 (0.009)				
Couple with no children	-0.456* <sup>**</sup> (0.113)	-0.028*** (0.009)				
Single parent family	0.021 (0.154)	-0.029*** (0.011)	-0.045 (0.103)	0.016 (0.031)	-0.045 (0.109)	0.020 (0.031)
<b>The industry sector:</b> Other industries	()		()	()	()	()
Goods-producing industries						
Service-producing industries						

Public administration

Regions:	D.(				D.(		
Atlantic	Ref.	Ret.	Ref.	Ref.	Ret.	Ref.	
Quebec	-0.077	0.002	-0.227**	-0.076**	0.088	-0.011	
	(0.131)	(0.008)	(0.116)	(0.035)	(0.116)	(0.029)	
Ontario	0.050	0.014*	-0.155	-0.037	0.040	-0.055**	
	(0.129)	(0.008)	(0.112)	(0.031)	(0.112)	(0.028)	
Manitoba, Saskatchewan	0.348**	0.008	-0.038	-0.029	0.245*	-0.080**	
	(0.167)	(0.009)	(0.140)	(0.035)	(0.146)	(0.037)	
Alberta	0.021	0.029***	-0.024	-0.068**	0.130	-0.100***	
	(0.152)	(0.009)	(0.133)	(0.034)	(0.136)	(0.033)	
British Columbia	-0.058	0.013	-0.067	-0.029	0.138	-0.050	
Quartert	(0.142)	(0.009)	(0.124)	(0.033)	(0.126)	(0.032)	0 005***
Constant	-0.202	0.133***	0.181	0.443***	-0.069	0.414***	0.005
	(0.254)	(0.033)	(0.196)	(0.143)	(0.198)	(0.152)	(0.125)
Observations	3610		3610		3610		3610
Censored obs	625		811		638		
Uncensored obs	2985		2799		2972		
Rho	0.176		1.000		1.000		
Sigma	0.101		0.406		0.371		
Lambda	0.018		0.406**		0.371**		
R-squared							0.323

Standard errors in parentheses are obtained by a jackknife procedure for the probits. They are robust standard errors in the regressions. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 P; The predicted savings rate, non-cash to total investment ratio and

RRSP to total investment ratio. We have calculated the expected value pf the dependent variable  $(y_j^*)$ , where that value us taken to be 0 when it is expected to be unobserved;

 $y_{j}^{*} = \Pr(y_{j}observed)E(y_{j}|y_{j}observed)$ . The assumption of 0 is valid for cases where nonselection implies nonparticipation.

The financial advisor instrumented variable is associated with a greater probability of a positive savings rate, and also increases the value of the savings rate when positive. Traders show a greater probability of positive savings. The probability of a positive ratio of non-cash investments over total investments increases with the advisor and the trader instrumented variables. The value of this ratio increases for the traders only. The probability of a positive allocation of assets to RRSP increases with financial advice and for traders. Given the influence of financial advice on these ratios, the next step is to determine whether predicted (instrumented) values of these ratios help to explain the level of assets. The semi logarithmic regression reported in the final column of Table II1.2 indicates positive and statistically significant elasticity estimates for the savings rate and non-cash total investments ratio. Thus, a one percentage point increase in the savings rate and non-cash total investments ratio increases the level of assets by 5.7 % and 6.2 % respectively.<sup>30</sup> A statistically significant effect was not found for the RRSP to total investment ratio.<sup>31</sup>

From the results of Table II1.2, the effect of having a financial advisor on the level of financial assets can be isolated through the predicted values of those ratios. First, consider the savings rate variable. The effect of having a financial advisor on the expected predicted savings rate can be computed. If *P* is defined as the probability of a positive savings rate, then the expected value of the savings rate *SR* is given by: E(SR) = P(SR > 0) + (1-P)0 = P(SR > 0), as the savings rate is either positive or zero. Taken at mean values, differentiating (in a discrete form) this last equation with respect to the variable financial advisor, *FA*, yields equation (3):

$$\frac{\Delta E(SR)}{\Delta FA} = \frac{\Delta P}{\Delta FA} \left(\overline{S > 0}\right) + \overline{P} \frac{\Delta \left(SR > 0\right)}{\Delta FA}.$$
(3)

Where,

 $\frac{\Delta P}{\Delta FA}$  is the marginal effect of having a financial advisor on the probability of a positive savings rate,

<sup>&</sup>lt;sup>30</sup> This is the most parsimonious regression. The ratios are insignificant when we include 38 controlled variables most likely due to collinearity. Note that in this case the Adjusted R-squared moves from 0.328 to 0.360. A regression without the ratios but with the controlled variables yields an Adjusted R-squared of 0.358.

<sup>&</sup>lt;sup>31</sup> This result may be an avenue for further research. The lack of statistical significance where it would have been expected is an interesting result that may have arisen because of any number of factors, including limitations in data quality, already extensive use of RRSPs by all respondents, or the annual limit on RRSPs, which is capped at 18% of earned income for the preceding year, up to an annual maximum of \$22,970.

 $\left(\overline{S>0}\right)$  is

is the mean savings rate of all respondents,

 $\overline{P}$  is the mean probability of a positive savings rate among all respondents, and

 $\frac{\Delta(SR>0)}{\Delta FA}$  is the effect of having a financial advisor on the value of a positive savings rate (table II1.2).

From the probit regression, the marginal effect of having a financial advisor on the probability of a positive savings rate is estimated to be 26 percentage points. Specifically, a respondent having a financial advisor increases the probability of having a positive savings rate by 26 percentage points, relative to a "comparable" non-advised respondent. From the results in table II1.2, the effect of having a financial advisor on the value of a positive savings rate is 5.9 percentage points.<sup>32</sup>. Thus a respondent with a financial advisor and a positive savings rate will have a savings rate that is 5.9 percentage points higher than an otherwise "comparable" non-advised respondent. Solving equation (3) with *S* and P taken at their mean value of 0.116 and 0.827 respectively, shows that the effect of having a financial advisor on the expected savings rate: (0.26 \* 0.116) + (0.827 \* 0.059) = 0.079. This is an important effect.<sup>33</sup> Repeating the exercise for the expected non-cash ratio and the expected RRSP ratio indicates that having a financial advisor increases the values of these ratios by 4.3 and 4.8 percentage points respectively.<sup>34</sup>

From these numbers and using statistically significant coefficient estimates (See the final column of Table II1.2), one can infer that for two identical individuals, the one with a financial advisor will have 106% more financial assets, or 2.06x the level of financial assets of the non-advised respondent.<sup>35</sup> This value is comparable to what was obtained previously.

<sup>&</sup>lt;sup>32</sup> This is taken directly from the regression of the second column of table II1,2. For a probit model to obtain the marginal effect of a variable *x*, one must differentiate  $\int_{-x}^{\infty} \frac{1}{\sqrt{2\pi}} \exp\left(-\frac{1}{2}x^2\right) ds$  with respect to *x*.

<sup>&</sup>lt;sup>33</sup> The savings rate is a robust result and is consistent with the statistically positive coefficient estimate for the variable preference for investing in the regression for the logarithm of assets of Table II1.2.

<sup>&</sup>lt;sup>34</sup> Only the statistically coefficient estimates different from zero are considered.

<sup>&</sup>lt;sup>35</sup> For identical individuals *i* with a financial advisor and individual *j* without, the difference in the logarithms of assets is a function of the incremental values of the saving and non-cash ratios due to having a financial advisor (the non-statistically coefficient estimate on the RRSP ratio is not considered). Thus:

 $<sup>\</sup>ln A_{i} - \ln A_{j} = \ln \left(\frac{A_{i}}{A_{j}}\right) = 5.678 * 0.08 + 6.240 * 0.0428 = 0.723.$  Raising to the exponential on both sides:  $\frac{A_{i}}{A_{j}} = 2.06.$ 

#### **II2 - Readiness for retirement**

Does having an advisor contribute to the belief that one will be financially prepared for retirement?  $U_i^* = z_i \delta + \beta F A_i + v_i$ Consider equation (3):

(3)

 $U_i^*$  in equation (3) represents the feeling of being financially prepared for retirement. It is not directly observable: but each participant reports whether he or she feels confident about having enough money to retire comfortably.<sup>36</sup> Thus, the corresponding observable variable for the latent utility variable  $U_i^*$  is R = 1 if the respondent considers that he or she is confident (scale 6-10) and 0 otherwise. Following equation (3), the probability of believing that one is financially ready for retirement is a function of the presence of a financial advisor and exogenous variables.

Again, the financial advisor variable cannot be considered as independent of the error term  $v_i$ . Equations (1) and (3) are estimated simultaneously using a model of simultaneous probits.<sup>37</sup> For each sample, the first column of Table II2.1 reports the determinants of being confident with retirement and the second column the determinants of having a financial advisor or being a trader. Note that 56.4% of respondents who have a financial advisor felt confident that they would have enough money to retire comfortably. For the non-advised respondents, 40.8% felt the same way. Once again, the traders are a special case, with 71.4% feeling confident that they will have enough money to retire comfortably.

<sup>&</sup>lt;sup>36</sup> Question 16 in the December 2010 survey ("To what extent do you agree or disagree with the following statement: 'I am confident that I will have enough money to retire comfortably?")

<sup>&</sup>lt;sup>37</sup> There are four terms of the corresponding likelihood function: *Pr* (having an advisor and ready for retirement), *Pr* (having an advisor and not ready for retirement), *Pr* (not having an advisor and not ready for retirement). *Pr* (not having an advisor and not ready for retirement). Going back to a previous discussion on including financial assets (*In* of asset) in the determinants of having a financial advisor (equation 1), this will add a third equation in the model (from equation (2), therefore complicating significantly the estimation procedure and the identification process.

## Table II2.1: Readiness for Retirement (Simultaneous probits models)

SANPLE and VARIABLE	Retirement	Financial Advisor	Retirement	Traders in Non- Advised
Assets Needed		-1.28e- 06***		1.69e-08**
The household has a financial advisor or is a trader	1.091*** (0.216) 0.111*	(2.82e-07)	1.902*** (0.133)	(7.19e-09)
Financial auvisor for at least to years	(0.057)			
Household's annual income before taxes Income before taxes <35000	Ref.	Ref.	Ref.	Ref.
35000<= income before taxes <60000	0.262***	0.047	0.277***	0.029
60000<= income before taxes <90000	0.494***	0.112	0.502***	0.040
Income before taxes >=90000	0.651***	0.230**	0.695***	-0.051
Savings: savings=0	(0.100)	Ref.	(0.110)	Ref.
savings>0 & savings<=3000		0.312***		0.548***
savings>3000 & savings<=10000		(0.000) 0.631***		(0.145) 0.933*** (0.142)
savings>10000		0.934***		(0.142) 1.162*** (0.163)
Sources of income:		(0.000)		(0.103)
Government transfers, investment income and other income	Ref.	Ref.	Ref.	Ref.
Wages and salaries	0.066	0.041	0.303*	-0.530***
Self-employment income	0.184	0.120)	0.158	0.158
Working full time	-0.182**	-0.067	-0.187*	-0.138
Fully retired	0.276*	0.163	-0.274	0.289
Workplace pension	0.187***	0.042	0.316***	0.053
Characteristics: Minimum living needs at retirement: Less than 30%	(0.000)	Ref.	(0.070)	Ref.
40%		0.129*		-0.079
50%		(0.074) 0.036		(0.132) -0.287**

60%		(0.065) 0.017		(0.118) -0.364***
		(0.071)		(0.136)
70%		0.006		-0.324**
More than 80%		-0.193**		-0.625***
Never save for retirement	-0.264**	-0.516***	-0.275**	-0.735***
Risk averse	-0.081	0.020	-0.058	-0.186*
Preference for immediate consumption	-0.010	-0.075	(0.087) -0.126	(0.104) -0.098
Preference for investing	(0.060)	-0.053	(0.085) -0.067 (0.007)	0.089
Financial literacy	0.078	(0.068) 0.082*	-0.023	0.322***
Male	(0.048) 0.095** (0.046)	(0.049) -0.052 (0.040)	(0.060) 0.019	0.300***
Post-secondary diploma	-0.004	(0.049) 0.085* (0.051)	(0.000) 0.123*	0.009
Age: Age<45	(0.050) Ref.	(0.031) Ref.	(0.070) Ref.	(0.094) Ref.
45<= age<54	-0.254***	0.281***	-0.297***	0.171*
54<=age<65	(0.054) -0.338*** (0.066)	(0.054) 0.499*** (0.062)	(0.073) -0.141* (0.082)	(0.100) 0.241**
Number of income earners aged 18 or older in the household: One income earner	(0.000)	(0.002) Ref.	(0.063)	(0.100) Ref.
Two income earners		-0.178***		-0.315***
Three or more income earners		(0.062) -0.204** (0.087)		(0.113) -0.564*** (0.169)
Marital status: Other family type		Ref.		Ref.
Single individual household		0.002		0.071
Couple with children		(0.102) 0.158*		(0.181) 0.165
Couple with no children		(0.088) 0.294***		(0.161) 0.367**
Single parent family		(0.084) 0.152		(0.156) -0.103
The industry sector: Other industries	Ref.	(0.123)	Ref.	(0.239)
Goods-producing industries	0.022		-0.149	
Service-producing industries	(0.075) 0.002		(0.107) -0.136	
Public administration	(0.065) 0.224** (0.108)		(0.093) 0.273* (0.156)	

Regions: Atlantic	Ref.	Ref.	Ref.	Ref.
Quebec	-0.090 (0.096)	0.062	-0.027 (0.134)	-0.185 (0.194)
Ontario	-0.150	0.042	-0.059	0.096
Manitoba, Saskatchewan	0.022	-0.017	0.099	-0.377
Alberta	-0.108	-0.030	-0.056	-0.153
British Columbia	-0.143	0.088	-0.043	-0.056
Number of people working in the income earner's organization 1	(0.104) Ref.	(0.100)	(0.143) Ref.	(0.200)
2-9	-0.018		0.102	
10-49	-0.107		0.016	
50-199	-0.090		-0.019	
200-499	0.054		-0.056	
500-1,999	-0.005		0.096	
2,000-9,999	0.066		0.176	
10,000 or more	0.178*		0.274*	
Constant	-0.816*** (0.178)	-0.859*** (0.200)	-0.877*** (0.241)	-1.342*** (0.348)
Observations	3610		1825	
II_C	-4352.341		-1597.904	
chi2	1684 997		919 221	
$Prob < chi^2$	0.000		0.000	
Rho	-0.639		-0.762	

Robust standard errors in parentheses

\*\* p<0.01, \*\* p<0.05, \* p<0.1

Robust athrho: -0.757\*\*\* and -1.002\*\*\*respectively

Having a financial advisor significantly increases the person's level of confidence that he or she will have enough money to retire comfortably. Controlling for all of the other explanatory variables, the probability that an advised respondent feels confident about their financial security in retirement is more than 13 percentage points higher than a similarly situated non-advised respondent.<sup>38</sup> This is consistent with the

<sup>&</sup>lt;sup>38</sup> Technically the marginal effect for each individual is first computed and then the mean of these marginal effects is the value reported in the text. Since the samples have not the same individuals and that simultaneous probits model is nonlinear, the results cannot be compared between the different samples.

result that long-tenured advised respondents achieve greater savings. Within the non-advised group, traders feel relatively more confident to face retirement, with the marginal effect estimated to be approximately four percentage points.

The feeling of readiness for retirement is higher for high-income respondents, those with a workplace pension, those working in public administration, and males. In contrast, respondents declaring that they would never save for retirement and those who are older were less likely to feel confident that they willhave enough money to retire comfortably. Note that the determinants of the probability of having an advisor or being a trader are similar to those reported in Table I1.

The above results can be compared with numerical estimates of "actual" retirement readiness, or expected post-retirement standard of living, based on respondents' actual financial situation, current trajectory for income and savings, and assumptions about their retirement age, investment returns, post-retirement consumption and life expectancy. One framework that describes this concept is the Retirement Readiness Index (RRI) methodology developed by McKinsey & Company, which estimates post-retirement standard of living to peak working life standard of living.<sup>39</sup> A higher index implies an expected better standard of living in retirement. Applying this methodology to the sample population in this study yields a mean index value of 94 (i.e., that the mean respondent is estimated to maintain 94% of peak working age standard of living in retirement) and a range from 25 to 300.

The results of Table II2.2 confirm that having a financial advisor, particularly for the long tenured advised respondents, improves this index by 7.5 points. In the non-advised sample, the index is greatly impacted by the traders. The index is influenced positively by the financial literacy, being male and having a workplace pension. Finally, respondents from Ontario, Alberta and British Columbia tend to fare better than the rest of Canada. The higher the income levels, the lower the index, as shown by the statistically

<sup>&</sup>lt;sup>39</sup> "Restoring Americans' Retirement Security: a shared responsibility." McKinsey & Company, 2009. The methodology is described in the 2012 McKinsey paper "Are Canadians Ready for Retirement?" as follows:

<sup>&</sup>quot;McKinsey's Retirement Readiness Index (RRI) is a measure of a household's retirement preparedness, defined as the standard of living a household will be able to afford in retirement relative to its peak working life standard of living. The RRI takes into account all four pillars of retirement including [Old Age Security/Guaranteed Income Supplement, Canada Pension Plan/Quebec Pension Plan, Workplace/Registered savings, unregistered savings, as well as] all financial assets held by households, but excludes their home equity or assets tied up in privately owned businesses."

significant coefficients. Full-time workers, older respondents, and risk-averse respondents have a lower index, as do those who plan to "never save for retirement".

SAMPLE	Financial Advisor	Traders in Non- Advised
The household has a financial advisor or is a trader (IV)	4.208*	39.250**
Financial advisor for at least 10 years	(2.533) 7.461** (2.920)	(15.613)
Household's annual income before taxes	(2.520)	
Income before taxes <35000	Ret.	Ref.
35000<= income before taxes <60000	-21.621*** (3.126)	-23.339*** (3.729)
60000<= income before taxes <90000	-22.248 <sup>***</sup> (3.518)	-23.759 <sup>***</sup> (4.443)
Income before taxes >=90000	-30.859*** (3.559)	-30.589***
Sources of income: Government transfers, investment income and other income	Ref.	Ref.
Wages and salaries	-6.124	-5.465
Self-employment income	(5.626) 5.411 (6.414)	-2.093
Working full-time	(0.414) -7.429** (2.077)	-0.205
Fully retired	(3.277) -0.717 (2.552)	(4.076) -2.289
Workplace pension	(6.562) 5.463**	(9.881) 4.093
Never save for retirement	(2.370) -12.957***	(3.426) -12.366***
Risk averse	(3.320) -7.302**	(3.673) -2.500
Preference for immediate consumption	(3.009) -1.749	(4.115) -2.746
Preference for investing	(2.844) 1.920	(3.869) 0.561
Financial literacy	(3.188) 8.306*** (2.202)	(4.568) 9.241*** (2.046)
Male	(2.202) 7.016*** (2.102)	(3.046) 6.773** (2.040)
Post-secondary diploma	(2.103) 5.908*** (2.199)	(2.940) 1.668 (3.020)
Age: Age<45	Ref.	Ref.

## Table II2.2: Retirement Readiness Index (Instrumented linear least squares)

45<= age<54	-9.169*** (2.550)	-4.125 (3.280)
54<=age<65	-16.836*** (2.611)	-11.797*** (3.486)
The industry sector: Other industries	Ref.	Ref.
Goods-producing industries	7.856**	-0.879
Service-producing industries	(3.437) 7.688*** (2.055)	(4.478) 3.581
Public administration	(2.955) 6.612 (5.677)	(3.844) 8.928 (7.650)
Regions: Atlantic	(3.677) Ref.	(7.059) Ref.
Quebec	-2.484	-2.274
Ontario	(4.233) 8.327** (4.180)	(5.388) 10.132* (5.476)
Manitoba, Saskatchewan	4.079	5.573
Alberta	(5.180) 15.600*** (5.100)	(6.869) 17.195** (6.945)
British Columbia	(5.126) 12.409*** (4.353)	(6.815) 4.594 (5.074)
Number of people working in the income-earner's organization	(4.737)	(5.974)
	Ker.	Ref.
2-9	-1.671	1.707
10-49	-3.670	-7.514
50-199	(4.810) -2.058	(5.982) -2.425
200-499	(4.925) 0.710	(6.274) -1.912
500-1999	(5.315) 2.464	(6.655) 14.099*
2000-9999	(5.548)	(7.731)
4000	(5.235)	(7.048)
10000 or more	7.949 (5.524)	5.506 (7.359)
Constant	128.046*** (8.308)	122.237*** (10.446)
Observations	3610	1825
II_0	-20020.340	-10083.930
LI .	-19896.967	-10012.492
R-squared Adj R-squared	0.066	0.075 0.058

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### ll3 - Trust

Notions of trust and trustworthiness can be said to be important measures of the value of a financial advisor. To express trust in an advisor is arguably one means of indicating that their advice is valued. All respondents answered the following questions: "Do you trust financial advisors?" (Question 5 of the first survey) and "Do you associate 'Trustworthy or trusted' with the term 'Financial Advisor'?" (Question 29 of the follow-up survey). A total of 49.5 % of the respondents indicate that they have a financial advisor. Differences in the proportions of respondents trusting a financial advisor for advised and non-advised samples can be clearly seen in Figure II3.



Figure II3: Proportions of Respondents Trusting a Financial Advisor by Survey

Since all participants are asked the same questions, the issue of whether having a financial advisor has a direct influence on trusting a financial advisor can be assessed with a two-equation model similar to the simultaneous probits model used for the readiness for retirement analysis (Section II2). An insignificant or significantly negative coefficient on the *FA* variable in the trust equation would suggest a lack of trust in financial advisor. The results of the simultaneous probits models for the initial survey question on trust ("Do you trust financial advisors?") are reported in Table II3.1. The first column reports the determinants of trust and the second column the determinants of having a financial advisor.
SAMPLE and VARIABLE	Trust	Financial Advisor
Assets Needed		-1.51e-06*** (2.36e-07)
The household has a financial advisor	1.540***	, , , , , , , , , , , , , , , , , , ,
Household's annual income before taxes Income before taxes <35000	Ref.	Ref.
35000<= income before taxes <60000	-0.136	0.124
60000<= income before taxes <90000	(0.091) -0.075 (0.003)	(0.093) 0.167 (0.102)
Income before taxes >=90000	-0.166* (0.096)	(0.102) 0.372*** (0.112)
Savings: savings=0	(0.000)	Ref.
savings>0 & savings<=3000		0.215***
savings>3000 & savings<=10000		(0.080) 0.464*** (0.080)
savings>10000		0.675***
Sources of income: Government transfers, investment income and other income	Ref.	Ref.
Wages and salaries	0.064	-0.020
Self-employment income	(0.138) 0.048 (0.154)	(0.142) 0.144 (0.160)
Working full time	0.076	-0.102
Fully retired	0.270	0.162
Workplace pension	-0.002	0.064
<b>Characteristics:</b> Minimum living needs at retirement: Less than 40%	(0.000)	Ref.
40%		0.075
50%		(0.086) 0.104
60%		(0.077) 0.097
70%		(0.085) 0.133
More than 80%		(0.091) -0.009

# Table II3.1: Determinants of Trust (from the initial survey) (Simultaneous probits models)

No. of the Control of the second	0.000***	(0.093)
Never save for retirement	-0.299**** (0.108)	-0.523*** (0.107)
Risk averse	-0.106	0.045
	(0.068)	(0.069)
Preference for immediate consumption	0.018	-0.074
	(0.070)	(0.069)
Preference for investing	0.027	-0.012
Financial literacy	(0.078)	(0.077)
Financial ineracy	-0.008	0.100
Male	-0.016	-0 116**
	(0.055)	(0.055)
Post-secondary diploma	-0.066	0.113*
	(0.059)	(0.059)
Age:		
Age<45	Ref.	Ref.
15 200551	0.210***	0 205***
-5 aye -5-	(0.064)	(0.062)
54<=age<65	-0.235***	0.493***
	(0.069)	(0.069)
Number of income earners aged 18 or older in the household:		, , , , , , , , , , , , , , , , , , ,
One income earner		Ref.
		<u>۸ ۱01**</u>
I wo income earners		-0.101
Three or more income earners		-0 263**
		(0.103)
Marital status:		( )
Other family type		Ref.
		0.000
Single Individual nousenola		-0.038 (0.127)
Couple with children		0.081
		(0.107)
Couple with no children		0.199**
		(0.102)
Single parent family		0.124
The industry sector.		(0.150)
The Industry sector:	Dof	
Goods-producing industries	-0.023	
<b>5</b>	(0.096)	
Service-producing industries	-0.041	
	(0.084)	
Public administration	-0.129	
Regions:	(0.106)	
Atlantic	Ref	Ref
Quebec	-0.458***	-0.032
	(0.131)	(0.122)
Ontario	-0.473***	0.055

	(0.127)	(0.118)
Manitoba, Saskatchewan	-0.387**	-0.061
	(0.151)	(0.139)
Alberta	-0.578***	-0.005
	(0.145)	(0.138)
British Columbia	-0.529***	0.096
	(0.139)	(0.131)
Constant	0.366*	-0.506**
	(0.220)	(0.240)
Observations	2866	
II_c	-3285.213	
I	-3274.188	
chi2	838.840	
Prob < chi^2	0.000	
rho	-0.442	
Robust standard errors in parentheses		

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Robust athrho : -0.475\*\*\*

The results of the simultaneous probits models for the follow-up survey question on trust ("Do you associate 'Trustworthy or trusted' with the term 'Financial Advisor'?" ) are reported in Table II3.1a. The first column reports the determinants of trust and the second column the determinants of having a financial advisor.

SAMPLE and VARIABLE	Trust	Financial Advisor	
Asset Needed		-1.60e-06***	
The household has a financial advisor	1.343***	(2.35e-07)	
Household's annual income before taxes	(0. 143) Ref	Ref	
35000<= income before taxes <60000	-0 121	0.095	
60000<= income before taxes <90000	(0.082) -0.072	(0.080) 0.215**	
Income before taxes >=90000	(0.085) -0.154*	(0.088) 0.407***	
Savings:	(0.090)	(0.097)	
savings=0		Ref.	
savings>0 & savings<=3000		0.248*** (0.072)	
savings>3000 & savings<=10000		0.437***	

## Table II3.1a: Determinants of Trust (from the follow-up survey) (Simultaneous probits models)

savings>10000		(0.073) 0.670*** (0.088)
Sources of income: Government transfers, investment income and other income	Ref.	Ref.
Wages and salaries	0.088	0.064
Self-employment income	0.103	(0.121) 0.175
Working full time	0.023	(0.136) -0.082
Fully retired	(0.075) -0.017	(0.077) 0.181
Workplace pension	(0.158) -0.014 (0.049)	(0.157) 0.051 (0.048)
Characteristics: Minimum living needs at retirement: Less than 40%		Ref.
40%		0.112
50%		(0.079) 0.084
60%		(0.069) 0.053
70%		(0.076) 0.080
More than 80%		(0.082) -0.071
Never save for retirement	-0.034	(0.083) -0.577***
Risk averse	(0.104) -0.175***	(0.095) 0.021
Preference for immediate consumption	(0.063) 0.058	(0.062) -0.086
Preference for investing	(0.063) 0.098	(0.061) -0.053
Financial literacy	(0.070) -0.083*	(0.068) 0.107**
Male	(0.050) -0.078	(0.049) -0.033
Post-secondary diploma	(0.050) -0.072 (0.053)	(0.049) 0.111** (0.052)
<b>Age:</b> Age<45	(0.033) Ref.	(0.032) Ref.
45<= age<54	0.039	0.291***
54<=age<65	(0.060) 0.306*** (0.068)	(0.055) 0.534*** (0.061)
Number of income earners aged 18 or older in the household: One income earner	(0.000)	(0.061) Ref.
Two income earners		-0.131*

Three or more income earners		(0.067) -0.202** (0.092)
Marital status: Other family type		Ref.
Single individual household		-0.018
Couple with children		0.108
Couple with no children		(0.095) 0.257***
Single parent family		0.206
The industry sector: Other industries	Ref.	(0.130)
Goods-producing industries	0.011	
Service-producing industries	(0.085) 0.044	
Public administration	(0.074) -0.016	
Regions: Atlantic	(0.096) Ref.	Ref.
Quebec	-0.577***	0.057
Ontario	(0.103) -0.337***	(0.102) 0.051
Manitoba, Saskatchewan	(0.098) -0.216*	(0.098) -0.005
Alberta	(0.122) -0.359***	(0.120) 0.007
British Columbia	(0.116) -0.297***	(0.116) 0.089
Constant	(0.108) -0.681*** (0.190)	(0.110) -0.892*** (0.206)
Observations II_c II	3610 -4159.615 -4155.588	
cniz Prob < chi^2 rho	0.000 -0.287	

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Robust athrho : -0.295\*\*\*

For both "trust" questions, it is clear that having a financial advisor increases the feeling of trust towards a financial advisor. Controlling for all the other explanatory variables, a respondent with a financial advisor is 28% more likely to trust a financial advisor than a similar non-advised respondent. The corresponding marginal effect for the second trust question is 32 percentage points over a similar but non-advised

respondent. In both cases, very high income respondents and those who declare that they will never save for retirement both express lower trust towards financial advisors. Participants from the Atlantic region are more likely to trust financial advisors than the other regions in Canada. There are some notable differences between the surveys however. Trust decreases with age based on data in the first survey but the follow-up survey suggests that trust increases for the oldest respondents. Similarly, risk-averse participants express lower trust in the follow-up survey but this variable is insignificant in the initial survey.

Again, the determinants of the probability of having an advisor are similar to those reported in Table I1.

#### II4 - Satisfaction

The concept of satisfaction has been intensively studied in the literature with respect to labor, health and life in general. Applied in the context of this study, satisfaction with one's financial advisor can be interpreted as an indicated willingness to continue with the services of a financial advisor. In other words, being satisfied means that the same decision or choice would likely be repeated. All respondents were given a list of adjectives and asked "which of the following words do you associate with the term 'financial advisor'?" (question 29 of the follow-up survey). Among the choices was the word 'satisfying'. Similar to the previous analyses on the impact of advice on perceived retirement readiness and trust in financial advisor'.

The proportion of respondents who associate 'satisfying' with 'financial advisor' is relatively low at 6.8% of the sample. The word however is selected more frequently by advised respondents (10.8%) than by non-advised (2.9%). The results of Table II4 show that having a financial advisor is by far one of the most important and statistically significant variables for respondents to associate 'satisfying' with the term "financial advisor". Having a financial advisor increases the probability of associating 'Satisfying' with the term 'Financial Advisor' by 2.3 percentage points, as compared to similar respondents who do not have a financial advisor. Respondents with high income are less likely to associate the term 'satisfying' with a financial advisor.

SAMPLE and VARIABLE	Satisfaction	Financial Advisor
Asset Needed		-1.59e-06*** (2.33e-07)
The household has a financial advisor	1.459***	
Household's annual income before taxes Income before taxes <35000	(0.210) Ref.	Ref.
35000<= income before taxes <60000	-0.072	0.080
60000<= income before taxes <90000	(0.110) -0.211* (0.119)	(0.080) 0.190** (0.088)
Income before taxes >=90000	-0.312** (0.128)	0.378*** (0.097)
Savings: savings=0		Ref.
savings>0 & savings<=3000		0.280***
savings>3000 & savings<=10000		(0.071) 0.460*** (0.070)
savings>10000		0.721*** (0.086)
Sources of income: Government transfers, investment income and other income	Ref.	Ref.
Wages and salaries	-0.039	0.047
Self-employment income	(0.165) 0.004	0.121) 0.153
Working full time	(0.183) 0.123 (0.108)	(0.136) -0.086 (0.076)
Fully retired	0.395**	0.167
Workplace pension	(0.194) -0.016 (0.069)	(0.159) 0.051 (0.048)
<b>Characteristics:</b> Minimum living needs at retirement: Less than 40%	(0.009)	(0.048) Ref.
40%		0.098
50%		(0.078) 0.081 (0.068)
60%		0.027
70%		0.085 (0.082)

## Table II4: Satisfaction (with the full sample) (Simultaneous probits models)

More than 80%		-0.088
Never save for retirement	0.200	-0.567***
Risk averse	-0.176**	0.022
Preference for immediate consumption	(0.084) 0.140	-0.090
Preference for investing	(0.088) 0.263***	-0.052
Financial literacy	(0.096) -0.134**	(0.068) 0.105**
Male	(0.068) 0.085	(0.049) -0.039
Post-secondary diploma	(0.069) -0.158** (0.071)	(0.049) 0.111** (0.052)
Age: Age<45	Ref.	Ref.
45<= age<54	0.075	0.296***
54<=age<65	(0.085) 0.013	(0.055) 0.533*** (0.061)
Number of income earners aged 18 or older in the household: One income earner	(0.090)	(0.061) Ref.
Two income earners		-0.126*
Three or more income earners		(0.065) -0.200** (0.091)
Marital status: Other family type		Ref.
Single individual household		-0.043
Couple with children		0.102
Couple with no children		0.246***
Single parent family		0.183
The industry sector: Other industries	Ref.	(0.150)
Goods-producing industries	0.042	
Service-producing industries	(0.114) -0.080	
Public administration	(0.100) -0.030 (0.131)	
Regions: Atlantic	Ref.	Ref.
Quebec	0.053 (0.139)	0.057 (0.102)

Ontario	-0.228*	0.052
Manitoba, Saskatchewan	-0.112	-0.007
Alberta	(0.166) -0 137	(0.120) 0.013
	(0.159)	(0.116)
British Columbia	-0.099 (0.148)	0.090 (0.110)
Constant	-1.866***	-0.856***
	(0.249)	(0.206)
Observations	3610	
II_0	-2972.488	
LI	-2966.821	
chi2	700.068	
Prob < chi <sup>2</sup>	0.000	
Rho	-0.529	
Pohust standard errors in parentheses		

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Robust athrho : -0.588\*\*\*

Satisfaction with financial advice is also measured in terms of level of satisfaction in specific areas of advice with the question: "Thinking about your primary financial advisor, how would you rate your household's level of satisfaction with the following items" (Question 32 of the follow-up survey) and the following dimensions:

- Value for money / cost
- Product offering
- Service offering (e.g. financial planning, tax advice, insurance advice, asset allocation)
- Knowledge level
- Financial outcome/performance
- Personal attention and understanding of my situation
- Accessibility
- Independence (I have the feeling that he is working for me and not for a firm)

This question was answered only by those who reported having a financial advisor. In constraining the sample to those who have a financial advisor, the determinants of satisfaction in having an advisor for all the above measures were obtained with respect to several explanatory variables such as gender, age, education, income, etc. A bivariate probit model with selection bias was constructed to account for the probability of having a financial advisor and the conditional probability of being satisfied with one's financial advisor.

The levels of satisfaction for those specific measures are stable and very high, ranging from 74.7 % (value for money / cost) up to 86.3 % (knowledge level). This explains why there are few variables that are statistically significant (see Table A2 in Appendix A). However, high-income respondents are less likely to be satisfied with their financial advisor in the dimensions of product offering, knowledge level, financial outcome and personal attention. In most cases, respondents from British Columbia are less satisfied than those in the other regions.

#### II5 – Feeling of confidence

All respondents were given a list of adjectives and asked: "Which of the following words do you associate with the term 'financial advisor'?" (Question 29 of the follow-up survey). Among the choices were words that could be clearly identified as negative, and others that could be clearly identified as positive.<sup>40</sup> Two measures of confidence were computed: a high level and a low level of confidence from a general scale of 0 (the lowest) to 1 (the highest). A respondent with high confidence in financial advisors was defined as having a score of 0.8 to 1.0, thus associating a high proportion of positive words with the term 'financial advisor'. By contrast, a respondent with a score in the 0.0 to 0.2 range was defined as having a low level of confidence in financial advisors.

In Figure II5, we observe important differences in the proportions of the advised and non-advised respondents who expressed high and low levels of confidence in financial advisors.

<sup>&</sup>lt;sup>40</sup> **Positive:** Professional, Competent, Trustworthy, Dependable, Honest, Friendly, Smart, Important, Caring, Solid, Satisfying. **Negative:** Salesman, Questionable, Confusing, Detached, Disappointing, Ego, Dull, Unnecessary.



#### Figure II5: Proportion of Respondents Showing High and Low Confidence Levels with Respect to a Financial Advisor

Similar to the test conducted previously on the satisfaction measure, a simultaneous probits model was used to measure whether having a financial advisor influences the probability that the respondent will report a higher level of confidence. Respondents with a high score were assigned the value 1, and those with a low score the value 0 in the "high confidence in financial advisor" regression. A similar treatment was applied to the "low confidence in financial advisor" regression, where the presence of a financial advisor would have been expected to reduce the probability of reporting a low level of confidence.

The econometric results of Tables II5.1 and II5.2 indicate without any doubt that respondents who have a financial advisor show a higher (lower) probability of a high (low) confidence towards financial advisors. The associated marginal effect is 19.4 percentage points for those with high levels of confidence in financial advisors. For those with low levels of confidence in financial advisors, the associated marginal effect is -22.6 percentage points. As with the 'satisfaction' measure, high-income respondents are less (more) likely to show high (low) confidence towards a financial advisor. The same is observed for risk-averse and male participants. Respondents who are financially literate have a lower probability of belonging to the "high confidence in financial advisor" category and those with a preference for investing, with post-secondary diploma and between the ages 45-54 have a higher probability of having lower levels of confidence in financial advisors.

## Table II5.1: Index of High Confidence (Simultaneous probits models)

SAMPLE and VARIABLE	High Confidence	Financial Advisor
Asset Needed		-1.61e-06*** (2.29e-07)
The household has a financial advisor	1.651***	
Household's annual income before taxes Income before taxes <35000	(0.113) Ref.	Ref.
35000<= income before taxes <60000	-0.134*	0.102
60000<= income before taxes <90000	(0.075) -0.202** (0.080)	(0.080) 0.217** (0.080)
Income before taxes >=90000	-0.302*** (0.083)	(0.069) 0.409*** (0.097)
Savings: savings=0	(0.000)	Ref.
savings>0 & savings<=3000		0.244***
savings>3000 & savings<=10000		(0.070) 0.425*** (0.072)
savings>10000		0.652***
Sources of income: Government transfers, investment income and other income	Ref.	(0.007) Ref.
Wages and salaries	0.007	0.075
Self-employment income	(0.121) 0.030 (0.125)	(0.125) 0.176
Working full time	0.135) 0.115*	(0.140) -0.089 (0.076)
Fully retired	0.141	0.158
Workplace pension	(0.134) -0.047 (0.047)	0.156)
<b>Characteristics:</b> Minimum living needs at retirement: Less than 40%	(0.047)	(0.048) Ref.
40%		0.102
50%		(0.077) 0.102
60%		(0.068) 0.066
70%		(0.074) 0.104
More than 80%		(0.081) -0.075

Never save for retirement	0.043	(0.081) -0.570***
Risk averse	(0.092) -0.188***	(0.095) 0.019
Professore for immediate concumption	(0.061)	(0.062)
	(0.059)	-0.066 (0.061)
Preference for investing	-0.042	-0.047
Financial literacy	-0.140***	(0.008) 0.107**
Male	(0.048) -0.103**	(0.049) -0.033
	(0.047)	(0.049)
Post-secondary diploma	-0.067 (0.050)	0.112** (0.052)
Age: Age<45	Ref.	Ref.
45<= age<54	-0.048	0.286***
54<=20265	(0.056)	(0.055) 0.534***
04 - age - 00	(0.063)	(0.061)
Number of income earners aged 18 or older in the household: One income earner		Ref.
Two income earners		-0.123*
Three or more income earners		(0.065) -0.167* (0.001)
Marital status: Other family type		(0.091) Ref.
Single individual household		-0.026
Couple with children		0.106
Couple with no children		(0.092) 0.257***
Single parent family		(0.088) 0.244* (0.426)
The industry sector: Other industries	Ref.	(0.120)
Goods-producing industries	-0.014	
Service-producing industries	(0.080) -0.057 (0.000)	
Public administration	(0.069) 0.017 (0.000)	
Regions: Atlantic	(0.090) Ref.	Ref.
Quebec	-0.199**	0.062
Ontario	-0.341***	0.057

	(0.096)	(0.098)
Manitoba, Saskatchewan	-0.170	-0.000
	(0.118)	(0.120)
Alberta	-0.313***	0.012
	(0.112)	(0.116)
British Columbia	-0.306***	0.093
	(0.106)	(0.109)
Constant	-0.035	-Ò.908***
	(0.182)	(0.206)
Observations	3610	
	-4337.158	
LI	-4325.562	
chi2	1085.246	
Prob < chi^2	0.000	
Rho	-0.448	

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Robust athrho : -0.482\*\*\*

Table II5.2: Index of Low Confidence (Simultaneous probits models)

SAMPLE and VARIABLE	Low Confidence	Financial Advisor
Asset Needed		-1.59e-06*** (2 22e-07)
The household has a financial advisor	-1.788*** (0.106)	(2.220 01)
Household's annual income before taxes Income before taxes <35000	Ref.	Ref.
35000<= income before taxes <60000	0.193**	0.093
60000<= income before taxes <90000	0.236***	0.201**
Income before taxes >=90000	0.430***	0.387***
Savings: savings=0	(0.000)	Ref.
savings>0 & savings<=3000		0.234***
savings>3000 & savings<=10000		(0.070) 0.430*** (0.070)
savings>10000		0.647***
Sources of income: Government transfers, investment income and other income	Ref.	Ref.
Wages and salaries	-0.059 (0.135)	0.067
Self-employment income	0.025	0.177

Working full time	(0.147) -0.003	(0.141) -0.072
Fully retired	(0.078) -0.027	(0.077) 0.188
Workplace pension	(0.176) 0.058	(0.159) 0.052
<b>Characteristics:</b> Minimum living needs at retirement: Less than 40%	(0.051)	(0.047) Ref.
40%		0.103
50%		(0.078) 0.087
60%		(0.067) 0.052
70%		(0.074) 0.087
More than 80%		(0.080)
Never save for retirement	0.087	-0.574***
Risk averse	(0.095) 0.146** (0.067)	(0.094) 0.026
Preference for immediate consumption	0.058	(0.062) -0.085
Preference for investing	(0.065) 0.155** (0.072)	(0.061) -0.049
Financial literacy	0.043	(0.068) 0.110**
Male	(0.052) 0.189*** (0.052)	(0.049) -0.034
Post-secondary diploma	(0.052) 0.136** (0.055)	(0.049) 0.113** (0.052)
Age: Age<45	Ref.	Ref.
45<= age<54	0.168***	0.284***
54<=age<65	(0.060) 0.152**	(0.055) 0.525***
Number of income earners aged 18 or older in the household: One income earner	(0.067)	(0.061) Ref.
Two income earners		-0.114*
Three or more income earners		(0.066) -0.155* (0.004)
Marital status: Other family type		(0.091) Ref.
Single individual household		-0.025
Couple with children		(0.108) 0.123

Couple with no children		(0.092) 0.265*** (0.088)
Single parent family		0.221*
The industry sector: Other industries	Ref.	(0.120)
Goods-producing industries	0.148*	
Service-producing industries	(0.088) 0.158** (0.077)	
Public administration	0.080	
Regions: Atlantic	Ref.	Ref.
Quebec	0.204*	0.068
Ontario	(0.109) 0.303*** (0.106)	(0.102) 0.061 (0.099)
Manitoba, Saskatchewan	0.184	0.008
Alberta	(0.130) 0.302** (0.123)	(0.120) 0.018 (0.117)
British Columbia	0.247**	0.100
Constant	(0.118) -0.984*** (0.203)	(0.110) -0.914*** (0.208)
Observations	3610 -3898 511	
11	-3880.829	
chi2	1240.501	
Prob < chi <sup>2</sup>	0.000	
rho	0.509	

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Robust athrho : 0.562\*\*\*

#### **II6 -Sense of Calmness**

Calmness, particularly in a volatile market environment, is a sentiment of interest for the study of the impact of financial advice. All respondents answered the following question "When the market fluctuates up and down (and your investments do too), what is your household's initial reaction likely to be?" (Question 21 of the follow-up survey) with four choices, 'remain calm', 'worry a little', 'worry a lot' and 'I don't know'. As shown in Table II6.1, half of the respondents remain relatively calm when markets fluctuate. There are small differences among advised and no-advised respondents but there is an important difference between traders and non-traders in the non-advised sample.

		Total Sample		Non-Ad	dvised
	Total Sample	Advised	Non-Advised	Passive	Traders
% Sample	100.0%	53.1%	46.9%	85.8%	14.2%
% Feeling Serene	52.1%	53.2%	50.9%	47.9%	68.7%

#### Table II6.1: Proportion of Respondents Feeling Calm when Markets Fluctuate

Corresponding to the utility of remaining calm in the face of market volatility, an observed 'calmness' variable was constructed such that it equaled 1 if the respondent declared themselves to remain calm and 0 otherwise. Respondents who answered "don't know" were removed from the analysis. Since the question was addressed to all respondents, the customary simultaneous probits model was used to measure the probability of having a financial advisor and the probability of feeling calm while facing market fluctuations, with the opportunity to test whether having a financial advisor or being a trader improves this feeling. As shown in Table II6.2, having a financial advisor does not increase the probability of remaining calm during market fluctuations. Higher income respondents and males exhibit greater levels of calmness. Risk-averse respondents are less likely to be calm in face of market fluctuations.

SAMPLE and VARIABLE	Sense of Calmness	Financial Advisor	Sense of Calmness	Traders in Non-Advised
Asset Needed		-1.62e-06*** (2.43e-07)		2.32e-08*** (8.44e-09)
The household has a financial advisor or is a trader	-0.156 (0.188)	( )	1.041*** (0.348)	()
Household's annual income before taxes Income before taxes <35000	Ref.	Ref.	Ref.	Ref.
35000<= income before taxes <60000	0.137*	0.071	0.228**	-0.090
60000<= income before taxes <90000	0.185**	0.179*	0.162	-0.043
Income before taxes >=90000	0.209**	0.390***	0.222*	-0.008
Savings: savings=0	(0.000)	Ref.	(***==)	Ref.
savings>0 & savings<=3000		0.164**		0.492***
savings>3000 & savings<=10000		(0.079) 0.351***		(0.165) 0.811***

## Table II6.2: Sense of Calmness(Simultaneous probits models)

savings>10000		(0.085) 0.578*** (0.096)		(0.166) 0.882*** (0.196)
Sources of income: Government transfers, investment income and other income	Ref.	Ref.	Ref.	Ref.
Wages and salaries	0.153	0.119	0.168	-0.592***
Self-employment income	0.339**	0.207	0.251	0.180
Working full time	-0.058	-0.089	-0.113	-0.177
Fully retired	0.059	0.161	-0.294	0.303
Workplace pension	(0.164) 0.077 (0.049)	(0.165) 0.049 (0.050)	(0.256) 0.094 (0.072)	(0.296) 0.143 (0.093)
Characteristics: Minimum living needs at retirement: Less than 40%	<b>`</b> ,	Ref.	( )	Ref.
40%		0.084		-0.106
50%		0.050		-0.302**
60%		0.072		-0.350**
70%		0.088		-0.349**
More than 80%		-0.041		-0.577***
Never save for retirement	-0.057	-0.506***	0.082	-0.550***
Risk averse	-0.246***	0.049	-0.146	-0.140
Preference for immediate consumption	-0.131**	-0.091	-0.123	-0.053
Preference for investing	-0.011	-0.057	-0.051	0.135
Financial literacy	0.029	0.062	-0.051	0.295***
Male	0.401***	-0.066	0.372***	0.367***
Post-secondary diploma	0.042	0.087	-0.002	0.073
<b>Age:</b> Age<45	(0.034) Ref.	(0.000) Ref.	Ref.	Ref.
45<= age<54	-0.038	0.309***	-0.078	0.157
54<=age<65	-0.044	0.531***	-0.093	0.225*
Number of income earners aged 18 or older in the household: One income earner	(0.000)	Ref.	(0.000)	Ref.

Two income earners		-0.125* (0.072)		-0.244* (0.130)
Three or more income earners		-0.201** (0.102)		-0.505*** (0.191)
Marital status: Other family type		Ref.		Ref.
Single individual household		-0.005		-0.006
Couple with children		(0.121) 0.105 (0.102)		(0.207) 0.055 (0.191)
Couple with no children		0.245** (0.099)		0.303
Single parent family		0.181 (0.142)		-0.067 (0.272)
The industry sector: Other industries	Ref.	( )	Ref.	, , ,
Goods-producing industries	-0.050		-0.014	
Service-producing industries	0.049		0.070	
Public administration	0.040 (0.097)		0.175 (0.138)	
Regions: Atlantic	Ref.	Ref.	Ref.	Ref.
Quebec	0.030	0.017	0.077	-0.141
Ontario	-0.098	0.019	-0.167	0.158
Manitoba, Saskatchewan	-0.060 (0.124)	-0.070 (0.126)	-0.064 (0.181)	-0.466* (0.276)
Alberta	-0.038́ (0.118)	-0.053́ (0.123)	-0.132 (0.171)	-0.133 (0.232)
British Columbia	-0.017 (0.113)	0.021 (0.116)	0.011 (0.162)	0.008 (0.219)
Number of time consult with financial advisor: One or more times a month	Ref.		Ref.	
Once a quarter or semester	-0.002 (0.075)		-0.052 (0.133)	
One or more times a year	-0.058́ (0.072)		-0.074 (0.111)	
Constant	-0.111 (0.207)	-0.691*** (0.222)	-0.288 (0.288)	-1.291*** (0.389)
Observations	3247		1524	
II_U II	-4125.874 -4125.202		-1515./14 -1513 841	
" chi2	487.642		377.331	
Prob < chi^2	0.000		0.000	
rho	0.111		-0.397	

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Robust at rho: 0.112 and -0.420\* respectively

Note that being a trader in the non-advised sample is associated with a higher probability of calmness with a differential of 2.7 percentage points over the passive non-advised respondents.

#### Conclusion

As expected, important factors that positively affect the probability of having a financial advisor are income, the capacity of the household to save, and the age of the respondent. Among the non-advised population, there are traders that have, in many respects, a profile similar to the advised population.

An econometric model suggests a positive relationship between having a financial advisor for at least four years and the level of financial assets relative to the equivalent non-advised respondent. Compared to a similar long-tenured (15 years or more) advised participant in the survey, the non-advised has 2.73 times less financial assets. This amount is too large to be explained simply by better stock picking. One highly plausible explanation of this finding comes from the greater savings that is associated with having a financial advisor and other appropriate advice.

Robust econometric results were found with the subjective measures of the value of advice. Relative to comparable respondents who do not have a financial advisor, advised respondents feel significantly more confident that they have enough money to retire comfortably. Those who have a financial advisor have more trust in the financial advisor profession, and more highly associate the term "financial advisor" with satisfaction and confidence. However, they are not necessarily calmer during market fluctuations. In short, it would seem that once a person is convinced to retain the service of a financial advisor, there is a strong probability that he or she will be happy with that situation on numerous accounts.

## Appendix A

VARIABLES	Value for Money	Financial Advisor
Number of year household used a financial advisor Less than 6 years	Ref.	
7 to 14 years	0.027	
15 or more years	(0.068) 0.032 (0.077)	
Household's annual income before taxes Income before taxes <35000	Ref.	Ref.
35000<= income before taxes <60000	-0.209*	0.082
60000<= income before taxes <90000	(0.115) -0.123	(0.079) 0.179**
Income before taxes >=90000	(0.126) -0.143 (0.145)	(0.086) 0.335*** (0.096)
Savings: savings=0	(0110)	Ref.
savings>0 & savings<=3000		0.260***
savings>3000 & savings<=10000		0.420***
savings>10000		(0.075) 0.563*** (0.082)
Sources of income: Government transfers, investment income and other income	Ref.	(0.083) Ref.
Wages and salaries	-0.088	0.025
Self-employment income	(0.184) -0.073	(0.119) 0.032
Working full time	(0.200) 0.037	(0.133) -0.024
Fully retired	(0.102) 0.282	(0.073) 0.164
Workplace pension	(0.226) -0.108	(0.157) 0.037
<b>Characteristics :</b> Minimum living needs at retirement: Less than 40%	(U.066)	(0.047) Ref.
40%		0.127*
50%		(0.075) 0.096 (0.067)

## Table A1: Satisfaction with the Censored Sample (Bivariate probits with selectivity bias)

60%		0.065
70%		0.045
More than 80%		-0.078
Never save for retirement	-0.093	-0.552***
Risk averse	-0.098	(0.092) 0.009
Preference for receiving cash today	-0.079	-0.079
Preference for investing	(0.084) 0.115	-0.062
Financial literacy	-0.006	(0.066) 0.060
Male	(0.068) -0.055	(0.048) -0.071
Post-secondary diploma	(0.067) -0.097 (0.073)	(0.047) 0.102** (0.051)
<b>Age:</b> Age<45	Ref.	Ref.
45<= age<54	-0.153*	0.273***
54<=age<65	-0.128	0.485***
	(0.106)	(0.059)
Number of income earners aged 18 or older in the household: One income earner		Ref.
Number of income earners aged 18 or older in the household: One income earner Two income earners		Ref.
Number of income earners aged 18 or older in the household: One income earner Two income earners Three or more income earners		Ref. -0.120* (0.063) -0.155* (0.089)
Number of income earners aged 18 or older in the household:         One income earner         Two income earners         Three or more income earners         Marital status:         Other family type		Ref. -0.120* (0.063) -0.155* (0.089) Ref.
Number of income earners aged 18 or older in the household:         One income earner         Two income earners         Three or more income earners         Marital status:         Other family type         Single individual household		Ref. -0.120* (0.063) -0.155* (0.089) Ref. -0.022
Number of income earners aged 18 or older in the household:         One income earner         Two income earners         Three or more income earners         Marital status:         Other family type         Single individual household         Couple with children		Ref. -0.120* (0.063) -0.155* (0.089) Ref. -0.022 (0.107) 0.115
Number of income earners aged 18 or older in the household: One income earner Two income earners Three or more income earners Marital status: Other family type Single individual household Couple with children Couple with no children		Ref. -0.120* (0.063) -0.155* (0.089) Ref. -0.022 (0.107) 0.115 (0.090) 0.250***
Number of income earners aged 18 or older in the household: One income earner Two income earners Three or more income earners Marital status: Other family type Single individual household Couple with children Couple with no children Single parent family		Ref. -0.120* (0.063) -0.155* (0.089) Ref. -0.022 (0.107) 0.115 (0.090) 0.250*** (0.088) 0.211*
Number of income earners aged 18 or older in the household: One income earner Two income earners Three or more income earners Marital status: Other family type Single individual household Couple with children Couple with no children Single parent family Employment sector: Other industries	Ref.	Ref. -0.120* (0.063) -0.155* (0.089) Ref. -0.022 (0.107) 0.115 (0.090) 0.250*** (0.088) 0.211* (0.124)
Number of income earners aged 18 or older in the household: One income earner Two income earners Three or more income earners Marital status: Other family type Single individual household Couple with children Couple with no children Single parent family Employment sector: Other industries Manufacturing	Ref. -0.083	Ref. -0.120* (0.063) -0.155* (0.089) Ref. -0.022 (0.107) 0.115 (0.090) 0.250*** (0.088) 0.211* (0.124)
Number of income earners aged 18 or older in the household: One income earner Two income earners Three or more income earners Marital status: Other family type Single individual household Couple with children Couple with no children Single parent family Employment sector: Other industries Manufacturing Services sector	Ref. -0.083 (0.114) 0.004 (0.102)	Ref. -0.120* (0.063) -0.155* (0.089) Ref. -0.022 (0.107) 0.115 (0.090) 0.250*** (0.088) 0.211* (0.124)
Number of income earners aged 18 or older in the household: One income earner Two income earners Three or more income earners Marital status: Other family type Single individual household Couple with children Couple with no children Single parent family Employment sector: Other industries Manufacturing Services sector Public administration	Ref. -0.083 (0.114) 0.004 (0.103) 0.002 (0.129)	Ref. -0.120* (0.063) -0.155* (0.089) Ref. -0.022 (0.107) 0.115 (0.090) 0.250*** (0.088) 0.211* (0.124)

Atlantic	Ref.	Ref.
Quebec	-0.169	0.065
	(0.154)	(0.100)
Ontario	-0.301**	0.037
	(0.151)	(0.097)
Manitoba, Saskatchewan	-0.251	0.019
	(0.178)	(0.118)
Alberta	-0.418**	-0.052
	(0.177)	(0.112)
British Columbia	-0.498***	0.058
	(0.165)	(0.107)
Constant	1.894***	-0.911***
	(0.328)	(0.201)
Observations	3610	
	-3285.984	
	-3280.397	
Censored obs	1825	
Uncensored obs	1785	
chi2	44.675	
Prob < chi <sup>2</sup>	0.018	
rho	-0.657	

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Robust athrho : -0.863

VARIABLE	Product Offering	Financial Advisor
Number of year household used a financial advisor		
Less than 6 years	Ref.	
7 to 14 years	0.101	
15	(0.069)	
15 or more years	0.063	
	(0.077)	
Household's annual income before taxes Income before taxes <35000	Ref.	Ref.
35000<= income before taxes <60000	-0.330*** (0 119)	0.075
60000<= income before taxes <90000	-0.180	0.167**
	(0.120)	(0.085)
Income before taxes >=90000	-0.292**	0.323***
	(0.119)	(0.093)
Savings: savings=0		Ref.
savings>0 & savings<=3000		0.258***
savings>3000 & savings<=10000		0.429***

savings>10000		(0.068) 0.558*** (0.080)
Sources of income: Government transfers, investment income and other income	Ref.	Ref.
Wages and salaries	-0.130	0.020
Self-employment income	-0.186 (0.245)	(0.119) 0.029
Working full time	0.008	-0.016
Fully retired	(0.107) 0.074 (0.000)	(0.073) 0.169
Workplace pension	(0.220) -0.034 (0.067)	(0.157) 0.042 (0.046)
Characteristics : Minimum living needs at retirement: Less than 40%	(0.001)	Ref.
40%		0.127*
50%		(0.074) 0.102
60%		(0.066) 0.054
70%		(0.072) 0.039
More than 80%		(0.078) -0.100 (0.077)
Never save for retirement	-0.066	(0.077) -0.541***
Risk averse	(0.194) -0.078 (0.025)	0.007
Preference for receiving cash today	(0.085) -0.149*	(0.060) -0.071
Preference for investing	(0.087) 0.018	(0.059) -0.056
Financial literacy	(0.097) 0.053	(0.066) 0.060
Male	(0.068) -0.056	(0.047) -0.067
Post-secondary diploma	(0.067) -0.150** (0.071)	(0.047) 0.107** (0.051)
<b>Age:</b> Age<45	(0.071) Ref.	(0.031) Ref.
45<= age<54	-0.129	0.272***
54<=age<65	(U.U79) -0.096 (0.086)	(0.053) 0.485*** (0.058)
Number of income earners aged 18 or older in the household:	(0.000)	(0.000) Dof
I wo income earners		-0.118*

Three or more income earners		(0.062) -0.138 (0.086)
Marital status:		(0.000)
Other family type		
Single individual household		-0.026
Couple with children		0.127
Couple with no children		0.252***
Single parent family		0.229*
Employment sector:		(0.120)
Other industries	Ref.	
Manufacturing	-0.113	
	(0.117)	
Services sector	-0.079	
	(0.105)	
Public administration	-0.085	
Designer	(0.132)	
Regions: Atlantia	Daf	Dof
Allahlic	Kei.	Rei.
Quebec	-0 208	0.068
	(0 163)	(0 100)
Ontario	-0.330**	0.036
	(0 158)	(0 097)
Manitoba. Saskatchewan	-0.239	0.016
	(0 188)	(0 118)
Alberta	-0.345*	-0.052
	(0.178)	(0.112)
British Columbia	-0.468***	0.054
	(0.168)	(0.107)
Constant	2.347***	-0.921***
	(0.289)	(0.199)
Observations	3610	
II_C	-3187.112	
	-3128.823	
chi2	42.512	
Prob < chi <sup>2</sup>	0.029	
Censored obs	1825	
Uncensored obs	1785	
rho	-0.803	

Robust athrho : -1.102

VARIABLE	Knowledge Level	Financial Advisor

Number of year household used a financial advisor Less than 6 years	Ref.	
7 to 14 years	0.009	
15 or more years	-0.038	
Household's annual income before taxes Income before taxes <35000	(0.083) Ref.	Ref.
35000<= income before taxes <60000	-0.394***	0.074
60000<= income before taxes <90000	(0.129) -0.315**	(0.077) 0.161*
Income before taxes >=90000	(0.132) -0.360*** (0.131)	(0.085) 0.318*** (0.093)
Savings: savings=0		Ref.
savings>0 & savings<=3000		0.253***
savings>3000 & savings<=10000		0.438***
savings>10000		(0.003) 0.557*** (0.078)
Sources of income: Government transfers, investment income and other income	Ref.	Ref.
Wages and salaries	-0.289	0.011
Self-employment income	-0.248	0.023
Working full time	0.152	-0.016
Fully retired	(0.110) 0.275	(0.072) 0.166
Workplace pension	(0.257) -0.078 (0.067)	(0.156) 0.050 (0.046)
Characteristics : Minimum living needs at retirement: Less than 40%		Ref.
40%		0.135*
50%		(0.075) 0.132**
60%		(0.066) 0.080
70%		(0.072) 0.050
More than 80%		(0.079) -0.071
Never save for retirement	0.051 (0.140)	(0.077) -0.541*** (0.092)

Risk averse	-0.045 (0.089)	0.010
Preference for receiving cash today	-0.223**	-0.071
Preference for investing	-0.082	-0.057
Financial literacy	0.005	0.058
Male	-0.118*	-0.066
Post-secondary diploma	(0.069) -0.159**	(0.047) 0.109**
Age:	(0.077)	(0.051)
Age<45	Ref.	Ref.
45<= age<54	-0.138* (0.079)	0.271***
54<=age<65	-0.044	0.489***
Number of income earners aged 18 or older in the household:	(0.001)	(0.000)
One income earner		Ref.
Two income earners		-0.092
Three or more income earners		-0.108
Marital status:		(0.087)
Other family type		Ref.
Single individual household		0.005
Couple with children		0.133
Couple with no children		(0.000) 0.254***
Single parent family		(0.084) 0.255**
Employment sector:		(0.120)
Other industries	Ref.	
Manufacturing	-0.058	
Services sector	0.028	
Public administration	(0.104) 0.050	
Regions:	(0.133)	
Atlantic	Ref.	Ref.
Quebec	-0.022	0.069
Ontario	-0.101	0.044
Manitoba, Saskatchewan	(0.155) -0.175	(0.096) 0.032
	(0.184)	(0.118)

Alberta British Columbia	-0.106 (0.177) -0.156	-0.044 (0.111) 0.061
Constant	(0.167) 2.507*** (0.310)	(0.107) -0.972*** (0.200)
Observations II_c II Censored obs Uncensored obs Prob < chi^2 rho No convergence for the bank advisor sample	3610 -3079.100 -2988.014 1825 1785 0.033 -1.000	
Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1 Robust athrho: -1.137*		
VARIABLE	Financial Outcome	Financial Advisor
Number of year household used a financial advisor Less than 6 years	Ref.	
7 to 14 years	-0.015	
15 or more years	(0.069) -0.095 (0.076)	
Household's annual income before taxes Income before taxes <35000	Ref.	Ref.
35000<= income before taxes <60000	-0.243**	0.074
60000<= income before taxes <90000	-0.210 (0.134)	(0.078) 0.170** (0.086)
Income before taxes >=90000	-0.255* (0.153)	0.331*** (0.095)
Savings: savings=0		Ref.
savings>0 & savings<=3000		0.254***
savings>3000 & savings<=10000		(0.074) 0.425*** (0.075)
savings>10000		0.549*** (0.089)
Sources of income: Government transfers, investment income and other income	Ref.	Ref.
Wages and salaries	-0.318 (0 199)	0.021
Self-employment income	-0.283 (0.215)	0.026 (0.134)

Working full time	0.139	-0.030
Fully retired	0.128	0.154
Workplace pension	0.000	0.043
Characteristics : Minimum living needs at retirement: Less than 40%	(0.000)	Ref.
40%		0.113
50%		(0.075) 0.097
60%		(0.067) 0.060
70%		(0.073) 0.030
More than 80%		(0.082) -0.096 (0.077)
Never save for retirement	0.055	-0.546***
Risk averse	-0.090	0.011
Preference for receiving cash today	(0.005) -0.174* (0.004)	-0.077 (0.059)
Preference for investing	0.006	-0.062
Financial literacy	0.001	0.063
Male	-0.116	-0.071
Post-secondary diploma	-0.217***	0.105**
Age: Age<45	(0.073) Ref.	Ref.
45<= age<54	-0.151*	0.273***
54<=age<65	-0.059	0.483***
Number of income earners aged 18 or older in the household: One income earner	(0.120)	Ref
Two income earners		-0.112*
Three or more income earners		-0.130
Marital status: Other family type		Ref
Single individual household		-0.003
Couple with children		(0.104) 0.135 (0.090)

Couple with no children		0.254***
Single parent family		(0.007) 0.213* (0.123)
The industry sector: Other industries	Ref	(0.123)
Goods-producing industries	-0.096	
Service-producing industries	(0.115) -0.041 (0.103)	
Public administration	-0.098 (0.127)	
Regions: Atlantic	Ref	Ref
Quebec	-0.076	0.066
Ontario	-0.177	0.039
Manitoba, Saskatchewan	(0.149) -0.093 (0.170)	0.018
Alberta	(0.176) -0.247	-0.049
British Columbia	(0.173) -0.343** (0.404)	(0.112) 0.064
Constant	(0.164) 2.303*** (0.330)	(0.107) -0.913*** (0.203)
Observations II_c II N_cens k_aux chi2 Prob < chi^2 rho	3610 -3219.390 -3212.835 1825 1785 52.323 0.002 -0.721	
Robust standard errors in parentneses *** p<0.01, ** p<0.05, * p<0.1 Robust athrho: -0.726		

VARIABLE	Personal Attention	Financial Advisor
Number of year household used a financial advisor Less than 6 years	Ref.	
7 to 14 years	0.037 (0.068)	
15 or more years	0.017 (0.077)	
Household's annual income before taxes Income before taxes <35000	Ref.	Ref.

35000<= income before taxes <60000	-0.229** (0.116)	0.073 (0.078)
60000<= income before taxes <90000	-0.138	0.167*
Income before taxes >=90000	-0.169	0.327***
Savings: savings=0	(0.100)	Ref.
savings>0 & savings<=3000		0.271***
savings>3000 & savings<=10000		0.449***
savings>10000		0.566***
Sources of income: Government transfers, investment income and other income	Ref.	Ref.
Wages and salaries	-0.084	0.019
Self-employment income	-0.035	0.026
Working full time	0.038	(0.134) -0.017
Fully retired	(0.106) 0.111	(0.074) 0.162
Workplace pension	(0.217) -0.100	(0.157) 0.041
<b>Characteristics :</b> Minimum living needs at retirement: Less than 40%	(0.067)	(0.046) Ref.
40%		0.081
50%		(0.076) 0.090
60%		(0.065) 0.059
70%		(0.071) 0.033
More than 80%		(0.079) -0.095
Never save for retirement	0.114	(0.078) -0.537***
Risk averse	(0.247) -0.149*	(0.094) 0.001
Preference for receiving cash today	(0.086) -0.068	(0.060) -0.072
Preference for investing	(0.087) 0.042	(0.059) -0.057
Financial literacy	(0.095) -0.027	(0.066) 0.059
Male	(0.067) -0.063 (0.066)	(0.047) -0.071 (0.047)

Post-secondary diploma	-0.144* (0.074)	0.103** (0.051)
Age: Age<45	Ref.	Ref.
45<= age<54	-0.162**	0.272***
54<=age<65	(0.080) -0.108 (0.000)	(0.054) 0.482*** (0.050)
Number of income earners aged 18 or older in the household: One income earner	(0.090)	(0.059) Ref.
Two income earners		-0.116*
Three or more income earners		(0.062) -0.136 (0.086)
Marital status: Other family type		Ref.
Single individual household		-0.022
Couple with children		(0.102) 0.129
Couple with no children		(0.088) 0.237***
Single parent family		(0.065) 0.187 (0.121)
The industry sector: Other industries	Ref.	(0.121)
Goods-producing industries	-0.037	
Service-producing industries	-0.030	
Public administration	(0.101) -0.050 (0.127)	
Regions: Atlantic	Ref.	Ref.
Quebec	-0.045	0.068
Ontario	-0.247	0.043
Manitoba, Saskatchewan	-0.113	(0.097) 0.029
Alberta	(0.187) -0.327*	(0.119) -0.047
British Columbia	(0.176) -0.265	(0.112) 0.065
Constant	(0.165) 2.157*** (0.281)	(0.107) -0.910*** (0.199)
Observations II_c LI	3610 -3163.382 -3138.189	

Censored obs		
Uncensored obs	1785	
chi2	36.610	
Prob < chi <sup>2</sup>	0.103	
Rho	-0.829	
Robust standard errors in parentheses		

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Robust athrho: -1.076

VARIABLES Accessibility **Financial Advisor** Number of year household used a financial advisor Ref. Less than 6 years -0.046 7 to 14 years (0.070)0.023 15 or more years (0.083)Household's annual income before taxes Income before taxes <35000 Ref. Ref. 35000<= income before taxes <60000 -0.172 0.080 (0.117) (0.078) Ò.174\*\* 60000<= income before taxes <90000 -0.036 (0.123) (0.085) Income before taxes >=90000 -0.067 0.328\*\*\* (0.124) (0.093) Savings: savings=0 Ref. savings>0 & savings<=3000 0.254\*\*\* (0.065) savings>3000 & savings<=10000 0.418\*\*\* (0.065) 0.557\*\*\* savings>10000 (0.078) Sources of income: Government transfers, investment income and other income Ref. Ref. -0.191 0.007 Wages and salaries (0.192)(0.120)Self-employment income -0.103 0.019 (0.211) (0.134)Working full time 0.033 -0.012 (0.112) (0.072) Fully retired 0.155 0.171 (0.254) (0.157)Workplace pension -0.022 0.043 (0.068) (0.046)Characteristics : Minimum living needs at retirement: Less than 40% Ref.

40%		0.108
50%		(0.075) 0.119*
60%		(0.065) 0.069
70%		(0.072) 0.045
More than 80%		(0.079) -0.075
Never save for retirement	0.117	(0.076) -0.537***
Risk averse	(0.141) -0.009	(0.092) 0.002
Preference for receiving cash today	(0.086) -0.089	(0.059) -0.076
Preference for investing	(0.087) 0.056	(0.059) -0.056
Financial literacy	(0.101) -0.008	(0.066) 0.060
Male	(0.069) -0.032	(0.047) -0.073
Post-secondary diploma	(0.070) -0.187**	(0.047) 0.102**
Age:	(0.077)	(0.051)
Age<45	Ref.	Ref.
45<= age<54	-0.197**	0.264***
54<=age<65	-0.026	(0.053) 0.487***
Number of income earners aged 18 or older in the household: One income earner	(0.090)	(0.058) Ref.
Two income earners		-0.101
Three or more income earners		(0.062) -0.100
Marital status: Other family type		(0.000) Ref.
Single individual household		0.035
Couple with children		(0.103) 0.159*
Couple with no children		(0.088) 0.285***
Single parent family		(0.084) 0.243**
The industry sector: Other industries	Ref.	(0.120)
Goods-producing industries	0.021	
Service-producing industries	(0.114) 0.022	

	(0.099)	
Public administration	-0.071	
	(0.125)	
Regions: Atlantic	Ref.	Ref.
Quebec	-0.258 (0.183)	0.069
Ontario	-0.371** (0.176)	0.037
Manitoba, Saskatchewan	-0.314	0.031
Alberta	-0.524*** (0.193)	-0.056
British Columbia	-0.354* (0.188)	0.067 (0.107)
Constant	2.307*** (0.293)	-0.956*** (0.199)
Observations	3610	
ll_c	-3039.302	
	-3012.510	
N_cens	1825	
k_aux	1785	
chi2	36.348	
Prob < chi^2	0.108	
rno	-1.000	
No convergence for the bank advisor sample		

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Robust athrho: -0.732

VARIABLE	Independence	Financial Advisor
Number of vear household used a financial advisor		
Less than 6 years	Ref.	
7 to 14 years	0.018	
·	(0.063)	
15 or more years	0.007	
,	(0.071)	
Household's annual income before taxes		
Income before taxes <35000	Ref.	Ref.
35000<= income before taxes <60000	-0 147	0 078
	(0,107)	(0.080)
60000<= income before taxes <90000	-0.215*	0.174**
	(0.120)	(0.088)
Income before taxes >=90000	-0 213	0.333***
	(0.149)	(0,099)
Savings:	(0.110)	(0.000)
savings=0		Ref
Satingo S		1.01.

savings>0 & savings<=3000		0.272***
savings>3000 & savings<=10000		0.423***
savings>10000		0.561***
Sources of income: Government transfers, investment income and other income	Ref.	(0.100) Ref.
Wages and salaries	-0.074	0.022
Self-employment income	(0.173) 0.021 (0.105)	0.028
Working full time	(0.195) 0.055 (0.097)	(0.133) -0.011 (0.077)
Fully retired	-0.051	(0.077) 0.168 (0.155)
Workplace pension	-0.039	0.038
<b>Characteristics :</b> Minimum living needs at retirement: Less than 40%	(0.002)	(0.048) Ref.
40%		0.097
50%		(0.077) 0.096
60%		(0.064) 0.053
70%		(0.071) 0.035
More than 80%		(0.082) -0.092
Never save for retirement	0.194	-0.547***
Risk averse	-0.069	0.000
Preference for receiving cash today	-0.000	(0.062) -0.074
Preference for investing	0.088) 0.064	-0.058
Financial literacy	-0.072	0.060
Male	-0.062	-0.069
Post-secondary diploma	-0.083	(0.047) 0.102** (0.052)
<b>Age:</b> Age<45	Ref.	(0.052) Ref.
45<= age<54	-0.177**	0.273***
54<=age<65	(0.086) -0.095 (0.114)	(0.054) 0.487*** (0.059)
Number of income earners aged 18 or older in the household: One income earner		Ref.
--	---------------------	----------------------
Two income earners		-0.121*
Three or more income earners		-0.134
Marital status: Other family type		Ref.
Single individual household		-0.031
Couple with children		0.111
Couple with no children		0.237***
Single parent family		0.188
The industry sector: Other industries	Ref.	()
Goods-producing industries	-0.042	
Service-producing industries	0.001	
Public administration	-0.024	
Regions: Atlantic	Ref.	Ref.
Quebec	-0.168	0.066
Ontario	-0.283*	0.037
Manitoba, Saskatchewan	-0.219	0.015
Alberta	-0.435**	-0.052
British Columbia	-0.312*	0.067
Constant	1.912*** (0.337)	-0.902*** (0.200)
Observations	3610	
II_C II	-3281.203	
II Ni cens	-JZ49.UZO 1895	
k aux	1785	
chi2	32.348	
Prob < chi^2	0.219	
rho	-0.854	

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Robust athrho: -0.638

### Appendix B

#### December 2010 survey: Questions used in the analysis

Q2: How many income earners aged 18 or older are living in your household? (Select 1 only)

- 1
- 2
- 3 or more

Q3: Which of the following best describes the composition of your household? (Select 1 only)

- Single individual household
- Couples, with no children
- Couples with children
- Single parent family
- Other family types

Q5: In 2009, what was your household's annual income BEFORE TAXES (rounded to the nearest thousand dollars)? For example, Fifty Thousand should be entered as 50000)? Please exclude government transfers) Government transfers include Child Tax benefits, OAS, GIS, Spouse's allowance, CPP or Quebec Pension Plan, Employment Insurance benefits, Social Assistance and Provincial Income Supplements, Worker's Compensation Benefits, Goods & Services Tax and Harmonized Sales Tax Credits and Provincial or Territorial Tax Credits, etc.

Q8: In 2009, how much after-tax income did your household save (rounded to the nearest thousand dollars)? For example, Fifty Thousand should be entered as 50000)? Please include new any money put into the following products – RRSP Savings, TFSA Savings, Employee Contributions to Employer Sponsored Pension Plan, Savings/Chequing Account, Mutual Funds/Stocks/Bonds and Other Financial Assets. Please do not include mortgage payments and real estate purchases.

Q9: How much after-tax income does your household save in a typical year (rounded to the nearest thousand dollars)? For example, Fifty Thousand should be entered as 50000)? Please include new money put into the following products – RRSP Savings, TFSA Savings, Employee's Contributions to Employer Sponsored Pension Plan, Savings/Chequing Account, Mutual Funds/Stocks/Bonds and Other Financial Assets. Please do not include mortgage payments and real estate purchases. If you do not know, please check the "don't know" box.

Q16: To what extent to you either agree or disagree with the following statement. 'I am confident that I will have enough money to retire comfortably?

- 1 Strongly disagree
- 3
- 4
- 5 6
- 6
- 7

8 9 10 - Strongly agree 11 Don't know

Q20: To what extent do you trust the following individuals or organizations for the management of your retirement savings? Please use a scale of 1 to 10 where 1 is "very low level of trust" and 10 is "very high level of trust"

- The Government (i.e. Canada Pension Plan / Quebec Pension Plan)
- Your Employer
- Your Financial Institution (i.e. Banks, Trust or Credit Unions)
- Your Insurance Company
- Your Financial Advisor

Q24: Please indicate the industry section from which the two highest income earners living in your household derives income, or derived major income during the last full-time employment year. (Select 1 for each of the two highest income earners)

- Agriculture, Forestry, Fishing and Hunting
- Mining
- Utilities
- Construction
- Manufacturing
- Wholesale Trade
- Retail Trade
- Transportation and Warehousing
- Information
- Finance and Insurance
- Real Estate and Rental and Leasing
- Professional, Scientific, and Technical Services
- Management of Companies and Enterprises
- Administrative and Support and Waste Management and Remediation Services
- Education Services
- Health Care and Social Assistance
- Arts, Entertainment, and Recreation
- Accommodation and Food Services
- Other Services (except Public Administration)
- Federal Government
- Provincial Government
- Municipal Government
- Other/Not Applicable

Q25: Approximately how many people work in the organization where the income earner living in your household works? (Select 1 only for each of the two highest income earners)

- 1

- 2-4
- 5-9
- 10-49
- 50-199
- 200-499
- 500-1,999
- 2,000-4,999
- 5,000-9,999
- >=10,000

Q28: What is the major source of income for the two highest income earners living in your households (Select 1 only)?

- Wages and salaries
- Self-employment income
- Government transfers
- Investment income
- Pension
- Other

#### June 2011 follow-up survey: Questions used in the study

Q1: What best describes the current work situation for each of the primary and secondary income earners in the household? Please select 1.

- Working full-time
- Working part-time
- Partially retired
- Fully retired
- Looking for work
- Other (e.g. disability, returned to school)
- Does not apply

Q4: What will be the sources of income for your household in retirement? *If retired, what are your sources of non-employment retirement income?* Please select all that apply.

- Government pension (OAS, GIS, CPP)
- Workplace pension
- Registered Savings (RRSP, RRIF & TFSA)
- Private, non-registered savings
- Borrowing against my home (i.e. reverse mortgage)
- Sale of my business
- Sale of my house
- Inheritance
- Other (please specify)

Q6: With reference to the previous question, what do you think would be the **<u>minimum</u>** % of your current household income that you would need to cover your household's **<u>minimum</u>** living needs at retirement? Please select 1 only.

- less than 30%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%
- More than 100%

Q 12: Still thinking about all the financial investments held by your household, approximately how much is (i.e. dollars) invested in each of the following? Please round to the nearest thousand dollars and <u>do not include</u> the value of your house.

- RRSP (Registered Retirement Savings Plan)

- RESP (Registered Education Savings Plan)
- RDSP (Registered Disability Savings Plan
- LIRA (Locked in Retirement Account)
- TFSA (Tax Free Savings Account)
- RRIF (Registered Retirement Income Fund)
- LRIF (Locked-in Retirement Income Fund
- LIF (Life Income Fund)
- Other Non-registered savings excluding housing (e.g. bank account, non-registered investment account)
- Other (please specify)

Q19: At what age have you or would you consider saving for the retirement? Please enter an age or select from 1 of the following

- [AGE]
- I will never save for retirement
- Other (please specify)

Q21: When the market fluctuates up and down (and your investments do, too), what is your household's initial reaction is likely to be? Please select 1 only.

- Remain calm
- Worry a little
- Worry a lot
- I don't really know

Q22: If you were to be presented with an opportunity to receive a cash award, what would you prefer? Please select 1 only.

- 100% chance of receiving \$500
- 50% chance of receiving \$1,200 but 50% chance of receiving \$0

Q23: If you were given the choice of receiving cash today or in the future, what would you prefer? Please select 1 only.

- \$1,000 today
- \$1,100 in 6 months

Q24: If you were given the choice of receiving cash today or in the future, what would you prefer? Please select 1 only.

- \$1,000 today
  - \$1,100 in a year

Q25: If you were given the choice of receiving cash today or in the future, what would you prefer? Please select 1 only.

\$1,000 today

- \$1,100 in a year

Q26: If the interest rate on your savings account is 2 percent a year and inflation is 3 percent a year, after five years, you would expect the money in the account to buy how much? Please select 1 only.

- More than it does today
- Exactly the same as it does today
- Less than it does today
- Don't know

Q 28: What sources of financial advice do you rely on for your household? Please select and rank all that **a**pply where 1 is the most important.

- Teller at the Bank branch
- Advisor at the Bank branch
- Broker or financial planner affiliated with a bank
- financial planner
- Employer / Workplace Pension provider
- Call centre
- Accountant
- Do my own financial planning and investment decisions
- Family & Friends
- The household does not use advice
- Other (please specify)

Q29: Which of the following words do you associate with the term "Financial Advisor?" Please select all that apply.

- Competent
- Unnecessary
- Important
- Friendly
- Dull
- Ego
- Confusing
- Professional
- Smart
- Satisfying
- Trustworthy or trusted
- Honest
- Solid
- Dependable
- Detached
- Salesman
- Caring
- Questionable
- Disappointing

– Other. Please describe

Q30: Does anyone in your household currently deal with a financial advisor?

- Yes
- No

Q32: Thinking about your primary financial advisor, how would you rate your household level of satisfaction with the following items? Please use a scale of 1 to 10 where 1 means "extremely dissatisfied" and 10 means "extremely satisfied"

- Value for money / cost
- Product offering
- Service offering (e.g., financial planning, tax advice, insurance advice, asset allocation)
- Knowledge level
- Financial outcome/performance
- Personal attention and understanding of my situation
- Accessibility
- Independence (I have the feeling is working for me and not for a firm)
- Other (please specify)

Q33: Thinking about your criteria for selecting a financial advisor, what was important to your household? Please rank your top 3 choices where 1 being the most important. What criteria would your household use to select a financial advisor? Please rank your top 3 choices where 1 being the most important.

- Having an existing business relationship or investments with the advisor's firm
- Personal solicitation by the advisor
- Recommendation by friends or family
- Brand and reputation of the company that the advisor works for
- Value for money / Cost
- Product offering (Breath and choice of investment products)
- Service offering (e.g., financial planning, tax advice, insurance advice, asset allocation)
- Knowledge level
- Track record of financial performance
- Personal attention and understanding of my situation
- Accessibility
- Trust in individual
- Independence (I have the feeling is working for me and not for a firm)
- Other (please specify)

Q34: For how long has your household used a financial advisor? Please select 1 only.

- Less than 1 year
- 1 to 3 years
- 4-6 years
- 7-9 years

- 10 -14 years
- 15 or more years
- I no longer use a financial advisor
- I have never had a financial advisor

Q35: How often does your household consult with your financial advisor? Please select 1 only.] [IF Q30 = "Yes" AND Q28 = "Do my own financial planning and investment decision" ASK] "How often do you review your investments? Please select 1 only" How often does your household consult with its primary source of advice? Please select 1 only

- More than once a month
- Once a month
- Once every three months
- Once every six months
- Once a year
- Less than once a year

Q38: Thinking about your financial affairs, what aspects of your household financial life would you prefer to manage yourself or let a financial advisor help manage for you? Please select 1 for each.

Manage myself

Manage with an advisor's help

- Planning the household's financial future (education, retirement, insurance, estate planning)
- Organizing the household's financial affairs (Budgeting, debt management)
- Maximizing tax benefits (RRSP, TSFA, etc.)
- Increasing the amount saved
- Providing investment ideas
- Choosing the right investments
- Improving investment performance
- Reducing investment risk
- Keeping track of my investment portfolio

Q.39: What have your household achieved with the help of your primary financial advisor? Please answer Yes or No for each. What would your household expect to achieve with the help of a financial advisor? Please answer Yes or No for each.

A plan for the household's financial future (e.g. education, retirement, insurance, estate planning)

- Organizing the household's financial affairs (e.g. budgeting, debt management)
- Greater savings
- More investment ideas
- Better investment returns
- More predictable returns
- Better organized investment portfolio

Q42: What reasons would lead your household to consider <u>not</u> using a financial advisor? Please rank your top 3 choices where 1 is the most important.

- I have too little money to need advice
- I am capable of managing my own finances
- Financial advice does not help me
- Financial advice is too expensive
- I don't trust financial advisors
- Previous experience with financial advisors
- Other (Please specify)

Q44: What is your highest level of education completed? Please select 1 only.

- Post-Graduate (University, Master's degree or doctorate)
- Post-Secondary (University)
- Post-Secondary (College or Technical School)
- Secondary/High School
- Primary/Elementary School
- None of the above

# Appendix C

## Table B1: Construction of Variables\*

Dependent variables	
Assets	sq12total drop missing value in sq12total drop if sq12total<1000 (no zero) asset=log(sq12total)
The household has a financial advisor	Dummy: 1 if sq30 ==1, 0 if sq30==2 Bank advisor = 1 if (sq28_2<=5 & sq28_2>=1) or (sq28_3<=5 & sq28_3>=1) No Bank Advisor=1 if sq28_4<=5 & sq28_4>=1 drop if (Bank advisor =1) & sq30==1 & (No Bank Advisor=0)
Readiness for Retirement	Dummy: 1 if q16>=6 & q16<=10, 0 if q16>=1 & q16<=5
Trust	
Trust	Dummy: 1 if q20_5>=6 & q20_5<=10, 0 if q20_5>=1 & q20_5<=5
Trust	Dummy: 1 if sq29_11==1, 0 if sq29_11==0
Satisfaction	
Satisfaction	Dummy: 1 if sq29_10==1, 0 if sq29_10==0
	Dummy: 1 if sq32_1>=6 & sq32_1<=10,
Value for Money	0 if sq32_1>=1 & sq32_1<=5
	Dummy: 1 if $sq_{32}_{2} = 6 \& sq_{32}_{2} = 10$ ,
Product Offering	$0 \text{ if } \text{sq}32_2 = 1 \text{ & sq}32_2 = 5$
Son inc. Offering	$Dummy: 1    Sq_2_3>=0 & Sq_2_3<=10,$
	0 if square square $-3$
	0  if the devised
Knowledge Lovel	Duffinity. The square $42-0 \approx square 42-10$ , 0 if square $42-18 \approx 32$ $42-5$
	0 if no advisor
	Dummy: 1 if $a_{32} = 6 \& a_{32} = 5 = 10$
Financial Outcome	0  if so 32 5>=1 & so 32 5<=5
	0 if no advisor
	Dummy 1 if $s_{a32} = 6 \& s_{a32} = 6 <= 10$
Personal Attention	0 if so32 $6 \ge 1$ & so32 $6 \le 5$
	0 if no advisor
Accessibility	Dummy: 1 if sq32 7>=6 & sq32 7<=10.
	0 if sq32 7>=1 & sq32 7<=5
	0 if no advisor
Independence	Dummy: 1 if sq32_8>=6 & sq32_8<=10,
	0 if sq32_8>=1 & sq32_8<=5
	0 if no advisor
Confidence	

High Confidence	Dummy: 1 if indexsq29>=0.8, 0 otherwise
Low Confidence	Dummy: 1 if indexsq29<=0.21, 0 otherwise
Sense of serenity	Dummy: 1 if sq21==1, 0 if sq21==2   sq21==3
Greater savings	Dummy: 1 if sq39_3==1, 0 si sq39_3==2

Independent variables	
Household's annual income before taxes	
Income before taxes <35000	Dummy : 1 if q5<35000, 0 otherwise
35000<= income before taxes <60000	Dummy : 1 if q5>=35000 & q5<60000, 0 otherwise
60000<= income before taxes <90000	Dummy : 1 if q5>=60000 & q5<90000, 0 otherwise
Income before taxes >=90000	Dummy : 1 if q5>=90000, 0 otherwise
Savings:	
savings=0	Dummy : 1 if max(q8,q9) ==0, 0 otherwise
savings>0 & savings<=3000	Dummy : 1 if max(q8,q9) >0 & max(q8,q9) <=3000, 0 otherwise
savings>3000 & savings<=10000	Dummy : 1 if max(q8,q9) >3000 & max(q8,q9) <=10000, 0 otherwise
savings>10000	Dummy : 1 if max(q8,q9) >10000, 0 otherwise
Sources of income:	
Government transfers, investment income and	Dummy : 1 if $a_{2}^{2}a_{2}=3.45$ 0 otherwise
other income	
Wages and salaries	Dummy : 1 if q28a==1, 0 otherwise
Self-employment income	Dummy : 1 if q28a==2, 0 otherwise
Working full time	Dummy : 1 if sq1x1==1, 0 otherwise
Fully retired	Dummy : 1 if sq1x1==4, 0 otherwise
Workplace pension	Dummy : 1 If sq4_2==1, 0 if sq4_2==0, 0 otherwise
Characteristics :	
Minimum living needs at retirement:	
Less than 40%	Dummy : 1 if sq6==1   sq6==2, 0 otherwise
40%	Dummy : 1 if sq6==3, 0 otherwise
50%	Dummy : 1 if sq6==4, 0 otherwise
60%	Dummy : 1 if sq6==5, 0 otherwise
70%	Dummy : 1 if sq6==6, 0 otherwise
More than 80%	Dummy : 1 if sq6==7   sq6==8   sq6==9   sq6==10, 0 otherwise
Never save for retirement	Dummy : 1 if sq19idk==1, 0 if sq19idk==0 or if sq19idk==2
Risk averse	Dummy : 1 if sq22==1, 0 if sq22==2
Preference for immediate consumption	Dummy : 1 if sq23==1 & sq24==1, 0 otherwise
Preference for investing	Dummy : 1 if sq23==2 & sq24==2, 0 otherwise
Financial literacy	Dummy : 1 if sq25==3 & sq26==3, 0 otherwise
Male	Dummy : 1 if gender==1, 0 if gender==2
Post-secondary diploma	Dummy : 1 if sq44>=1 & sq44<=3, 0 otherwise
Age:	
Age<45	Dummy : 1 if age<45, 0 otherwise
45<= age<54	Dummy : 1 if age>=45 & age<54, 0 otherwise

54<=age<65	Dummy : 1 if age>=54 & age<65, 0 otherwise
Number of income earners aged 18 or older in	
the household:	
One income earner	Dummy : 1 if q2==1, 0 otherwise
Two income earners	Dummy : 1 if q2==2, 0 otherwise
Three or more income earners	Dummy : 1 if q2==3, 0 otherwise
Marital status:	
Other family type	Dummy : 1 if q3==5, 0 otherwise
Single individual household	Dummy : 1 if q3==1, 0 otherwise
Couple with children	Dummy : 1 if q3==2, 0 otherwise
Couple with no children	Dummy : 1 if q3==3, 0 otherwise
Single parent family	Dummy : 1 if q3==4, 0 otherwise
The industry sector:	
Other industries	Dummy : 1 if q24a==23, 0 otherwise
Goods-producing industries	Dummy : 1 if q24a>=1 & q24a<=5, 0 otherwise
Service-producing industries	Dummy : 1 if q24a>=6 & q24a<=19, 0 otherwise
Public administration	Dummy : 1 if q24a>=20 & q24a<=22, 0 otherwise
Regions:	
Atlantic	Dummy : 1 if region==1, 0 otherwise
Quebec	Dummy : 1 if region==2, 0 otherwise
Ontario	Dummy : 1 if region==3, 0 otherwise
Manitoba, Saskatchewan	Dummy : 1 if region==4, 0 otherwise
Alberta	Dummy : 1 if region==5, 0 otherwise
British Columbia	Dummy : 1 if region==6, 0 otherwise
Number of people working in the income	
earner's organization	
1	Dummy : 1 if q25a==1, 0 otherwise
2-9	Dummy : 1 if q25a==2  q25a==3, 0 otherwise
10-49	Dummy : 1 if q25a==4, 0 otherwise
50-199	Dummy : 1 if q25a==5, 0 otherwise
200-499	Dummy : 1 if q25a==6, 0 otherwise
500-1999	Dummy : 1 if q25a==7, 0 otherwise
2000-9999	Dummy : 1 If q25a==8 q25a==9, 0 otherwise
10000 or more	Dummy : 1 if q25a==10, 0 otherwise
Financial advisor for at least 10 years	Dummy : 1 if sq34==5   sq34==6, 0 otherwise
Number of year household used a financial	
advisor	
Less than 6 years	Dummy : 1 if sq34==1  sq34==2   sq34==3, 0 otherwise
7 to 14 years	Dummy : 1 if sq34==4   sq34==5, 0 otherwise
15 or more years	Dummy : 1 if sq34==6, 0 otherwise

\*q refers to the initial survey and sq to the follow-up survey