Financial advisor participation rates and low net worth investors

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Abstract

This study presents a simple analytical framework to identify the key determinants underlying the incentives for households to engage financial advisors. Using the US 2007 Survey of Consumer Finances we employ a logistic regression approach to understand the characteristics of households who engage financial advisors for investment or comprehensive financial advice. We find that age, education, employment category, income and net worth are highly significant variables related to the propensity to engage a financial advisor. The results also indicate significantly reduced active engagement between advisors and low net worth investors than claimed by the low net worth investors in the survey. We construct a model to derive the expected fee profile of financial advisors as a function of wealth and compare the fee structure against a financial advisor client portfolio. We find that a combination of lower aggregate costs per investor and higher expected fee income motivates advisors to target higher net worth investors. Advisors therefore prefer higher net worth investors due to the lower aggregate costs of engagement which drives low investment participation rates by less wealthy households.

Key words: Financial advisors, commissions, investor participation, logistic regression.

1. Introduction

Retail investors seek guidance from investment advisors to manage their investments and to meet their own and their families' financial goals. Investors rely on advisors for investment advice and expect that such advice to be given in the investors' best interest. However a relatively small proportion (21 percent) of US households actively access financial advisor services (Elmerick *et al* 2002). The financial advice industry is dominated by large dealer groups and financial institutions with around 85 percent of financial advisors being directly associated with a product manufacturer or fund manager.

Several studies that investigated the motivations of investors have found four principle ways in which investors remunerate advisors (directly or indirectly via product manufacturers): (a) trail commission as a percentage of assets (around 35 percent of advisor revenue); (b) upfront commission as a percentage of the initial investment (26 percent); (c) fee for service as a percentage of assets under advice (23 percent); and (d) fee for service as a fixed dollar amount or on an hourly rate paid up-front or out of the product (16 percent) (Hackethal *et al* 2011; ASIC, 2008). Other findings include the observation that around 36 percent of investors consult a professional as the first step in deciding about an investment but only 15 percent of individuals actively use a financial advisor for wealth creation and/or wealth protection (ASIC, 2008). As a proportion of the population and even as a proportion of the high-net worth segment of the population, this represents a low penetration rate.

The key question of this analysis is whether the low advisor penetration rate is the same relative proportion across wealth levels and if not then are the high-net worth segment disproportionately targeted at the expense of less wealthy investors? We propose two hypotheses to explore this

question. First financial advisors primarily target groups with a higher probability of investing or seeking wealth protection advice and second, households are more likely to be actively courted by financial advisors when they belong to a financial cohort where the cost of engagement is relatively low.

Fundamental to this analysis is the difference in financial advisor penetration rates between low and high net-worth individuals. The importance of improving the penetration rate is highlighted by low financial literacy levels across the general population. Lack of financial literacy has important consequences. Those who lack literacy are much less likely to plan for retirement (Lusardi and Mitchell, 2007a), are more likely to end up with less wealth close to retirement (Lusardi and Mitchell, 2007b), are less likely to invest in stocks (Elmerick *et al* 2002; Campbell, 2006) and are more likely to use high-cost means of borrowing (Lusardi and Tufano, 2009). Individuals are confronted with a great variety of products ranging from quite simple to very complex structures whilst the onus of managing prudential credit levels and retirement income increasingly rests with the individual. Poor levels of financial literacy should motivate individuals to seek professional assistance for managing personal wealth however it appears that the opposite is the convention. That is, while financial literacy levels have been shown to be much more prominent in low net-worth individuals (Worthington, 2006) one would expect this investment cohort to exhibit a higher propensity to seek professional advice. Improving the advisor penetration rate to lower net worth individuals is therefore a critical aspect of improving the quality of general financial investment decisions. The above hypotheses examine the true level of difference in financial advisor penetration rates and explain why lower net worth households are not actively courted by financial advisors, despite the clear need for financial advice.

This study firstly investigates the use of financial advisors by US households to identify the financial and socio-demographic characteristics of households that have engaged a financial

advisor for credit and borrowing advice, savings and investment advice or comprehensive advice. This analysis provides a timely update of the study of Elmerick *et al* (2002) for US households however it extends previous research by analysing the use of insurance to protect wealth and it also simplifies analysis around the employment categories of investors. We then analyse sample client portfolios of financial advisors to gauge the level of engagement by advisors with investors. This analysis seeks to explain why financial advisors prefer to avoid long-term engagement with low-wealth households. The under-representation of low-wealth clients of financial advisors relative to the population indicates a preference by both low-wealth households and financial advisors to avoid investment interaction. We then employ a model to describe the relationship between the costs of courting potential investors to show that financial advisors are likely to earn better commissions when deliberately targeting potential investors with available financial assets to invest in excess of around US$200,000.

2. Literature review

Participation rates of households accessing investment advice has received relatively limited attention in the literature. A range of studies have documented the heterogeneity in individual financial portfolios with specific reference to holdings of stock as an investment as well as potential explanation for the so-called 'stock nonparticipation puzzle' (Mankiw and Zeldes, 1991). More recently Cocco *et al* (2005) showed that limited financial market participation and low investments in stocks in particular can result in substantial welfare losses. A sizeable literature also addresses transaction and information costs to broadly explain why some individuals choose zero holdings for stocks and other financial assets (Vissing-Jorgensen, 2004; Lusardi and Mitchell, 2007a; Jappelli, 2010). Elmerick *et al* (2002) and Campbell (2006) showed that the use of financial advisors by US households varies by the financial and socio-demographic characteristics of the household itself. Several studies have found that relatively small proportions

of the total population use financial advisors while the majority of households rely on non-professionals due to cost and trust factors (Grable and Joo, 2001; Roy Morgan Research, 2003). The likelihood of seeking help outside one's social network tends to increase as the degree of complexity or the need for specialised knowledge increases (Chang, 2005) and more recent studies find that the primary reason individuals hire a financial advisor, tax accountant or lawyer was that these professionals were more knowledgeable of investments than the client (Elmerick *et al* 2002; Chang, 2005; Hanna and Lindamood, 2010).

A key question missing from the current literature is what actually motivates households to engage a financial advisor for personal wealth advice, and is this motivation related to household net worth? If access to a financial advisor is driven by net worth, then at what level of net worth do both households and financial advisors consider it economically efficient to engage? The participation rate dynamic represents a distinct gap in the literature however this study has access to data sets that enables close examination of this question. We thus extend the 'stock nonparticipation puzzle' of Mankiw and Zeldes (1991) to personal wealth advice.

Low levels of financial advisor participation, particularly among low net worth households, are puzzling given the availability of advice options. Studies that find significantly a lower level of financial literacy among low net worth households relative to high net worth households (Hershey *et al* 1998; Worthington, 2006; Courchane *et al* 2008; Lusardi and Mitchell, 2007b; Jappelli, 2010) suggests a greater degree of financial advisor engagement among low net worth households is expected. However our analysis shows that net worth, which drives economic efficiency in the provision of financial advice, is the key determinant of financial advisor participation.

Hanna and Lindamood (2010) discuss the theoretical benefits of using a financial advisor based on expected utility analysis, and estimated the monetary value of hypothetically ideal advice to a

naïve consumer. Assuming plausible values of risk aversion they show that advice that is likely to increase wealth in the future is not valued as much as the expected wealth increase and highly risk-averse investors do not place much value on such advice. However, advice that reduces the risk of large wealth losses has very high value, even if the probability of the loss is very low, and the value of such advice increases substantially with risk aversion. Highly risk-averse investors thus place extremely high values on risk reducing advice. Akerlof and Shiller (2009) go so far as to suggest that uninformed financial decisions by individuals contributed to the 2008 global financial crisis. Because many complex borrowing and investing decisions are not well understood by the average household, Akerlof and Shiller recommended that public sector incentives be considered to encourage more people to seek financial advice.

3. Methodology

Data used for this study are from the 2007 US Survey of Consumer Finances (SCF) sponsored by the US Federal Reserve Board. The Survey of Consumer Finances (SCF) is a triennial survey of the balance sheet, pension, income and other demographic characteristics of US households. The public use data set is a cross-sectional data set that includes information collected through interviews from a wide spread of 4,422 US households, both geographically and economically, and provides detailed information on the financial resources and financial behaviours of households. The SCF data includes information collected over the range of household financial and non-financial assets, debt, the use of financial services and the sources of financial advice.

Two questions included in the 2007 SCF are used to identify the proportion of households that use financial advisors for advice concerning the use of credit and borrowing and for advice concerning savings and investments. We classify households seeking credit and borrowing advice only if they use a financial advisor for such advice and nothing else. Similarly we also classify

households seeking savings and investment advice only if they use a financial advisor for such advice and nothing else. If households use financial advisors for advice on both credit and borrowing and on savings and investments then the household is classified as seeking comprehensive advice. The three categories are mutually exclusive. The information concerning the use of financial advisors relies on the respondent's perception of what constitutes a financial advisor and makes no judgement regarding the credentials or certification of advisors. The survey question delineates between the use of lawyers, accountants, insurance agents, bankers, brokers and financial advisors so any ambiguity in the source of financial advice is avoided.

An array of independent variables are analysed to identify the socio-demographic and financial variables that are linked to the use of financial advisors by households. The main socio-demographic variables include age, education, race/ethnicity, household marital status, household size and employment status. Financial variables include net income, net worth, financial assets, direct holdings of stock, the ratio of debt-to-income and the ratio of insurance to debt. The debt-to-income ratio serves as a proxy for relative indebtedness measured as the ratio of consumer debt (total debt less non-residential property debt) to annual household income.

4. Results

4.1 Descriptive statistics

The proportion of households that use financial advisors and the variability of use by socio-demographic and financial characteristics of households are presented in Tables 1 and 2. Almost one-third (32.5 percent) of households in the sample engaged a financial advisor for advice relating to credit and borrowing and/or savings and investing. The majority of households who engage financial advisors are seeking only savings and investment advice (16.2 percent) while

households engaging advisors are seeking advice only on credit and borrowing make up a very small portion (3.4 percent). The proportion of households in the survey seeking comprehensive advice is 12.9 percent. These proportions remain largely consistent across the demographic and financial subgroups. Subgroups more likely than average to engage a financial advisor include older individuals, college graduates, individuals employed in managerial/professional roles and the self-employed. These traits are consistent with those established in the existing literature (Elmerick, Montalto and Fox, 2002; Roy Morgan Research, 2003; Worthington, 2006). The number of children per household appears to make relatively little difference in the use of financial advisors.[1] The insurance to debt ratio results in Table 2 imply a low level of insurance coverage relative to household liability across the households surveyed.

The proportion of households seeking either comprehensive advice or investment advice tends to increase with levels of income, net worth and the value of financial assets. The use of financial advisors for either comprehensive advice or investment advice does not noticeably differ with the level of debt to income ratio nor does it differ with the level of insurance to debt ratio. In all cases the use of financial advisors for credit and borrowing advice is low regardless of socio-demographic or financial characteristic.

The analysis found that around 33 percent of respondents currently use or have used a financial advisor recently. Only around 5 percent of households in the lowest net worth decile use a financial advisor while around 52 percent of households in the highest decile use a financial advisor. The median net worth of those who use a financial advisor (US$1.047m) is over six times as high as the median level for those who do not (US$164,300).

[1] Interestingly the sole household that contained 10 children in the 2007 SCF engaged in comprehensive financial advice with a financial advisor.

The socio-demographic and financial characteristics of households that use financial advisor were examined and the analysis highlighted the propensity for college educated, White non-Hispanic, married, and professionally employed individuals and households to engage with a financial advisor for either investment or comprehensive financial advice. The 45-64 age group comprises over 50 percent of the total proportion of households who seek either investment or comprehensive advice through a financial advisor. Households with high levels of income, net worth and financial assets are over-represented as a proportion of the number of households who engage a financial advisor for either investment or comprehensive advice relative to the total number of households in the survey. Neither the debt to income ratio nor the insurance to debt ratio indicate significant differences in the use of a financial advisor for either investment or comprehensive advice. The low insurance to debt ratio indicates that a great proportion of households who engage a financial advisor are notionally under-insured relative to their overall liability. This finding is confusing given the capacity of financial advisors to offer insurance as a component of a comprehensive advice package.

4.2 Logistic regression of socio-demographic and financial characteristics

The study of the 1998 Survey of Consumer Finances in Elmerick *et al* (2002) relied on probit analysis to define the characteristics of households who engage the use of financial advisors. Probit analysis is closely related to logistic regression since the logit transformation essentially computes a logistic regression. However probit analysis is more appropriate for designed experiments whereas logistic regression is more appropriate for observational studies. The probit analysis generally reports estimates of effective values for various rates of response while the logistic regression procedure reports estimates of the odds ratios for independent variables. We employ a multivariate logistic regression model to study the effect of each of the socio-demographic and financial variables while controlling for the effects of the independent variables.

Multivariate logistic regression equations were derived for each of the three types of advice. Table 3 tabulates the results.

The effects of the socio-demographic and financial characteristics on the engagement of financial advisors by households vary by usage category. Younger households are more likely to engage a financial advisor for comprehensive advice however those in the age category 35-54 are more likely to engage a financial advisor for investment advice than other age categories. Education, household income, net worth and financial assets are positively related to the likelihood of engaging a financial advisor for comprehensive advice. Controlling for differences in education and income, households of African American heritage are more likely than both White non-Hispanic and Hispanic households to engage a financial advisor for savings and investment advice, but White non-Hispanic households dominate other race categories in the engagement of comprehensive advice.

Our analysis is consistent with the findings in Hanna and Lindamood (2010) that the median net worth of those who use a financial advisor ($251,000) is over three times as high as those who do not (US$88,000). The effect of the debt to income ratio characteristics on the propensity to engage a financial advisor is unclear for both investment and comprehensive advice but it is worth noting that some moderate level of debt appears to be related to the likelihood of engagement. The significance of socio-demographic and financial characteristics affecting the likelihood of the above groups to engage a financial advisor for credit and borrowing advice only is low in almost all areas.

4.3 Financial advisors and the young

A significant omission from the survey is an examination of the financial advisor engagement behaviour with individuals in the 18-24 age bracket. Evidence from other studies suggest that despite relatively high levels of disposable income, young people display low rates of financial literacy and financial competence (Lachance *et al* 2006; Norvilitis *et al* 2006). For instance the ANZ survey of adult financial literacy in Australia found that young people aged 18-24 years were overrepresented in the lowest quartile of both financial literacy and competence (Roy Morgan Research 2003). There is further evidence to suggest that most young people seek financial information from non-professionals in preference to financial professionals and organisations (Chen and Volpe, 2002) and other evidence suggests they prefer to access informational material on money management rather than debt (Lyons, 2004). Despite the apparent need for financial education and counselling, only a small proportion of young workers (3 percent) had ever sought information or advice about managing or organising their finances (Norvilitis *et al* 2006). Participants most commonly reported receiving information on managing or organising their finances from their parents, friends and other family members. While not surprising the fact that young workers seek information from non-professional sources is of concern as there is evidence that young adults reporting family as their main source of learning about personal finances have a lower level of knowledge than those reporting having gained knowledge in this area from courses, the media or financial counsellors (Lachance *et al* 2006).

5. Engagement perspectives of financial advisors

5.1 Advisor remuneration

The probability of being aware of the availability of investment advice depends on an advisor's incentives to inform investors; that is, on the cost of information production and the probability that investors will actively engage with an advisor, once they are aware of it. More intense social interaction increases the probability of awareness, but might discourage direct information production. The effects of social interaction on investment behaviour are ambiguous and are therefore ignored in this analysis. We analyse is the implication of awareness for the analysis of low levels of financial advisor engagement and estimate the effects of participation costs on both high and low wealth investors.

Noting the propensity for wealthier households to engage financial advisors for investment or comprehensive advice we now reverse the analysis to examine the motivations and actions of financial advisors in engaging groups of clients based on their socio-demographic and financial characteristics. As described above the socio-demographic characteristics of clients are strongly related to the financial characteristics such that targeting married, college-educated, mature-age, professional/managerial workers is likely to yield higher levels of continuing engagement and access to greater financial assets by financial advisors. We analyse the problem of an advisor matching financial securities, investments and insurance products to households.

Historically advisors manage financial and other assets in return for a fee or commission b based on the level of investment and the complexity of advice. We simplify the analysis at this stage to focus on investment levels only. Adapted from Guiso and Jappelli (2005) if there are n potential

households the expected benefit to an advisor or dealer group is the product of *b* and the expected amount to be invested denoted as:

$$E(V) = bp(R)p(A|R)n\bar{\gamma}, \quad (1)$$

where $p(R)$ is the probability that a given household seeks planning advice, *p(A|R)* is the probability that the household invests with a financial advisor, conditional on knowledge of their capability and $\bar{\gamma}$ is the average amount invested by each household. It is necessary to assume that entry costs affect the participation decision so that not all households will invest with the advisor, therefore *p(A|R)*<1. We will show that entry costs greatly affect an advisor's incentive to market products to potential investors.

Advisors can broaden the investor base by informing them about appropriate financial products through standard marketing vehicles (advertising, information sessions and referrals). Let $s: s \in \{0, \infty\}$ denote the number of information signals in the wider market. The probability that a given household seeks planning advice $p(R)$ can be represented as

$$p(R) = \frac{s/n}{\mu + s/n}, \quad (2)$$

where μ is the inefficiency parameter of the information or advertising technology. A lower value of μ means that a given number of signals is likely to lead to a higher probability of seeking advice $p(R)$. Some investors may never receive a signal even if the number of signals is very large. As the number of signals grows we would expect $p(R) \to 1$ and with lower μ convergence is faster. For a finite number of signals and non-zero μ the probability of seeking advice would

strictly be less than unity, $p(R) < 1$. The probability that an individual receives the signal and engages in advice increases with the number of signals.

Assuming that the production of a signal costs c dollars, after substituting for $p(R)$ from (2) the advisor will seek to maximise profits as follows

$$\max_s \Pi(s) = bp(A|R)n\bar{\gamma}\left[\frac{s/n}{\mu+s/n}\right] - cs, \tag{3}$$

subject to $s \geq 0$. This relation describes the difference between aggregate expected commissions and the total cost of the signals. The first order condition of the above maximisation yields

$$c = \frac{bp(A|R)n\bar{\gamma}\mu}{(\mu+s/n)^2}, \tag{4}$$

which highlights that the cost of attracting new investors is a positive function of the probability of investing in financial securities conditional on their awareness of financial advice services (as well as obviously commission and the amount invested) and an inverse function of the number of signals sent (and the inefficiency parameter). As the effectiveness and coverage of the information signals to attract new households increases, the cost of engagement declines by an order of two. So targeting specific cohorts of investors by advisors is much more cost effective than employing a broad awareness campaign around the use of financial advisors for the provision of investing or comprehensive advice.

However it is common for advisors to target groups of investors based on financial characteristics that will yield the greatest benefit to the advisor in terms of commission per unit of wealth. From

(3) investors can be categorised by net worth into *k* subgroups and advisors then choose the number of signals for each group that maximises total profits

$$\max_{s_k} \sum_{\mathrm{k}} \Pi(s_k) = bp_k(A|R)n_k\bar{\gamma}_k\left[\frac{s_k/n_k}{\mu+s_k/n_k}\right] - cs_k, \qquad (5)$$

where $k = 1, \dots, K$ denotes each subgroup of investors. From the first order condition we obtain

$$\frac{s_k}{n_k} = \sqrt{\frac{\mu b p_k(A|R)\bar{\gamma}_k}{c}} - \mu, \qquad (6)$$

which is a simple rearrangement of the signalling intensity for the *k*th group of investors in (4). Wealthier individuals are more likely to be targeted by advisors through signals simply due to the fact that the average amount invested $\bar{\gamma}_k$ is larger.

This model therefore provides two testable hypotheses. First, financial advisors primarily target groups with a higher probability of investing or seeking wealth protection advice. Second, households are more likely to be made aware of the capability of financial advisors when they belong to a socio-demographic or financial cohort where the cost of engagement is lower.

5.2 Engaging clients

Previous models in the literature implicitly assume that advisors send signals evenly to all potential households and the incentive to send a signal is related to the product of the average probability of investing through the advisor and the average amount invested. This is a reasonable assumption if information is communicated through broad media campaigns so that in principle all potential households are contacted. However, blanket advertisements are costly and it is

suboptimal to send signals to households who are unlikely to use a financial advisor even if informed about them. The more realistic outcome is that financial advisors observe socio-demographic and financial characteristics of potential households that are correlated with the probability of investing through the advisor and the net worth of the household. Advisors are able to group potential households according to these characteristics and target likely buyers. The implication is that the probability of receiving a signal also depends on a set of observable characteristics associated with investing. In the empirical analysis we focus on household socio-demographic and financial characteristics as proxies for the probability of engagement and the average amount invested.

Assuming fixed costs of engagement with an advisor, the wealthier cohort of households are more likely to engage with financial advisors and potentially invest larger amounts and as such they are likely to receive more signals. A similar argument applies to individuals with higher education. Conversely groups with a very low probability of engaging a financial advisor are not targeted and are therefore assumed to remain unaware, unless there are information spillovers from other individuals.

A first order condition from (3) is the notion that no signal to a group of households will be sent if

$$bP(A|R)\bar{\gamma} \leq c\mu. \qquad (7)$$

This relationship indicates that for a constant information inefficiency factor, if the cost of informing households is unlikely to be recovered through a commission on the product of the average amount invested and the conditional probability of investing, then no signal will be sent.

Using a cross-sectional proprietary financial planning database from A&F Financial Advisors LLC we construct a profile of advisor commission b as a percentage of total funds under management (FUM) $\bar{\gamma}$ which is illustrated in Figure 1. The client database comprises 1168 clients of whom 75 percent are on a commission-based fee (876 clients on commission). The data for both the SCF and the financial advisor client register are geographically and economically spread across the US and are thus largely representative of both the level of financial advisor use and of households in general.

Taking a representative sample from the database that excludes high-net worth clients who pay a fixed fee and using a nonlinear least squares estimation approach for commission b as a percentage of total funds under management (FUM) $\bar{\gamma}$, the result is a power curve relationship of the form

$$b = \gamma \bar{a}^{-\alpha}, \tag{8}$$

where γ and α are positive constants. This curve represents the commission-based structure of advisors where a sharp increase in the fee as a proportion of FUM is necessary to properly compensate the advisor.

Table 4 shows the descriptive statistics of both funds under management (FUM) and associated fees paid by clients in a sample client portfolio. The median FUM and associated fee represents an annual commission of around 1.6 percent of wealth under the advisor which is consistent with the assumed fee modelled using the power relationship in (8).

Table 5 shows that in terms of the categories of financial assets the proportion of clients who engage financial advisors is relatively similar to the proportion of fees as a percentage of wealth measured by the fees charged on financial assets. This suggests that low wealth individuals contribute fees in line with their proportionate level of engagement with financial advisors.

5.3 Low wealth households and advisor disengagement

To test the first hypothesis discussed in Section 5.1 we examined the cumulative wealth of low to high net worth households and their level of engagement with a financial advisor using both the 2007 SCF data and the sample client data. Figure 2 shows the cumulative distribution of wealth for households in the SCF 2007 survey measured against individuals in the sample client portfolio capped at wealth levels less than US$2.5m. Financial advice for individuals with wealth levels in excess of around US$2.5m is generally associated with more sophisticated investment techniques and subsequent fee structures and as such is excluded from this analysis. These profiles demonstrate that the full wealth distribution of a sample client portfolio of a financial advisor is largely a subset of the population who use a financial advisor as represented in the SCF.

However for levels of wealth below US$200,000 in financial assets the cumulative distribution of clients is significantly less than the cumulative distribution of the wider population as shown in Figure 3. In fact the cumulative distribution of clients in the sample portfolio is substantially less than the cumulative distribution of households in the SCF which indicates that financial advisors prefer to avoid long-term engagement with low wealth households despite the claim from survey participants from the broad spectrum of net worth that they have engaged with a financial advisor. The t-tests of three categories of financial assets for the SCF data and the sample client data in Table 6 confirm this observation.

Standard financial theory predicts that investors should accept at least some risk commensurate with a positive expected level of return however this assertion ignores the costs of participation, which for low levels of wealth can easily overwhelm short-term gains. The under-representation of low-wealth clients in sample client portfolios relative to the population indicates a preference by both low wealth households and financial advisors to avoid investment interaction. Using common utility functions it has been shown that wealthier households are willing to take greater risk within their portfolio which is partly a result of greater participation in risk asset classes by wealthier households and partly the capacity to offset fixed participation costs (Campbell, 2006; Hannah and Lindamood, 2010). The high proportion of fees assumed from (8) and modelled using the sample client portfolio data confirms the relatively diminished participation levels for disposable wealth in terms of financial assets below $200,000. Figure 3 shows that while low-wealth households may claim to be engaged with a financial advisor, from the advisor's perspective the proportion of low net worth households who are active clients of advisors is significantly less than expected.

Figure 4 illustrates the cumulative net worth distributions of SCF 2007 survey participants, SCF survey participants who engage a financial advisor for investment or comprehensive advice and a financial planning client portfolio for financial assets between US$200,000 and US$1m. These are the households that comprise the so-called middle class. Beyond the $200,000 threshold the representation of clients within an average planning portfolio largely resembles the wider sample surveyed in the SCF and the sample surveyed who engage a financial advisor for either investment or comprehensive advice.

This provides reasonable evidence to suggest that the portfolio of advisors is a result of directly targeting households whose net worth exceeds a threshold of around US$200,000. There is sufficient evidence to support both the first and second hypotheses that financial advisors target

groups with higher probability of investing and that households are more likely to be informed of planning services when they belong to a socio-demographic or financial cohort with lower engagement costs illustrated in the above profiles.

The second hypothesis proposed in Section 5.1 was that households are more likely to be made aware of the capability of financial advisors when they belong to a group where the cost of engagement is lower. Using the data from the 2007 SCF and the results in Table 2, the relationship given in (6) provides a ready estimate for the optimal number of signals per unit of potential investors for a given level of against financial assets. The relationship is illustrated in Figure 5 which describes the scaled number of signals per potential investor against financial assets, assuming a constant μ and commission b in line with the power curve relationship in equation (8) calibrated to the 2007 SCF data. The declining volume of investors as net worth and financial assets increase as well as the increased likelihood of investing in line with net worth translates into a greater intensity level of signals per potential investor. As the figure shows when financial assets exceed around US$200,000 the optimum intensity level of signals per potential investor plateaus. For investors with less than US$200,000 in financial assets the number of signals per potential investor is expected to be significantly smaller simply due to the large volume of potential investors in this financial cohort. Aspiring to a better saturation level for low net worth investors requires a significant investment in information and awareness campaigns. The number of signals per potential investor in the low net worth cohort would need to be at least double the number of signals in the higher net worth cohorts to achieve the same return. This is clearly a suboptimal strategy which directly results in financial advisors deliberately targeting potential investors with available financial assets to invest in excess of around US$200,000. While low net worth households may aspire to seek financial advice the active engagement of financial advisors to seek out the low net worth clients, even though a ‘fair’ fee is charged (as per the power function), is not economically efficient. The hypothesis that households are more likely

to be engaged by financial advisors when they belong to a group where the cost of engagement is lower therefore holds.

Modest advisor participation by low net worth households has a number of implications for advisors, households and regulators. Government regulators have consistently campaigned for the protection of consumers of financial products while actively increasing access to financial advice for low net worth individuals. This is evidenced by the financial advisory industry of some countries shifting from a commission-based advice structure to a fee-for-service advice mechanism which is partly intended to render the general preference of advisors for high net worth households obsolete. Reforms in the US (Dodd–Frank Wall Street Reform and Consumer Protection Act), the UK (FSA Retail Distribution Review) and Australia (ASIC Future of Financial Advice) are driving the shift but, not surprisingly, such reforms are encountering strong resistance from advisors. High signalling costs, in the absence of government subsidies, will continue to place an emphasis on high net worth households by advisors since the active engagement of low net worth clients remains economically inefficient. While consumer protection reforms may encourage the general use of advisors by removing commission-based fees, it is unclear whether low net worth households will actually seek professional advice as their awareness is likely to remain at current levels. Therefore while such reforms have the potential to offer economically efficient advice to low net worth households, the active engagement of such clients by advisors is unlikely to change due to high signalling costs.

6. Conclusion

Using a logistic regression on US 2007 SCF data we showed that education, household income, net worth and financial assets are positively related to the likelihood of engaging a financial advisor for investment and comprehensive advice. Using a sample financial advisor client

portfolio, our analysis revealed that the relatively low financial planning participation rates by lower net worth households appears largely due to the lack of direct targeting by advisors to offer advice to households with fewer financial assets to invest. Financial advisors are reluctant to actively engage with low net worth clients even though these clients claim the existence of an active client relationship. The fee structure imposed on clients resembles a power function which translates into high fees relative to current net worth for households with less than US$200,000 to invest. While conceptually this is a relatively trivial result, it highlights the existence of a threshold below which fees as a proportion of financial assets under management are very high. We also showed that low net worth clients are under-represented in advisor portfolios relative to the SCF survey results suggesting that advisors are actively avoiding households whose disposable wealth lies beneath the $200,000 threshold. Using a model of the relationship between the cost of signalling potential investors and the commissions earned from such investors we showed that financial advisors are likely to earn better commissions when deliberately targeting potential investors with available financial assets to invest in excess of around US$200,000.

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Characteristic	Credit advice only	Investment advice only	Comprehensive advice
Total	3.4	16.2	12.9
Age			
<35	3.6	8.7	7.8
35-44	3.3	15.8	12.8
45-54	3.3	17.5	15.3
55-64	3.2	20.4	15.6
65-74	3.6	17.9	14.9
75+	3.3	14.7	7.2
Education			
<High school	3.1	5.7	3.4
HS grad	3.5	9.9	7.5
Some college	3.9	16.2	10.0
College degree	3.2	21.7	18.7
Race/Ethnicity			
White non-Hispanic	3.2	17.9	14.3
African American	4.3	10.3	6.4
Hispanic	4.2	7.8	6.1
Other	3.4	11.3	12.4
Marital status			
Married	3.0	18.4	14.9
Unmarried	4.1	11.7	8.9
Number of children			
0	3.4	16.6	13.0
1	4.6	14.8	11.4
2	2.2	16.9	14.5
3	3.3	14.7	14.4
4	1.9	18.7	10.2
5	3.7	11.1	7.4
>5	0.0	11.8	5.9
Employment classification			
Managerial/professional	3.3	20.8	19.0
Technical/sales/service	3.6	15.5	9.3
Other	3.4	10.5	7.2
Unemployed	3.2	13.1	9.6
Occupation categories			
Employee	3.5	15.3	11.3
Self-employed	3.2	21.3	19.6
Retired, disabled, student	3.1	13.7	10.0
Unemployed	4.0	9.5	7.9

Table 1: Percentage of households with various socio-demographic characteristics that engage financial advisors by advice type. *Source:* 2007 Survey of Consumer Finances.

Characteristic	Credit advice only	Investment advice only	Comprehensive advice
Total	3.4	16.2	12.9
Income			
<25k	3.9	5.8	4.1
25-50k	3.8	10.0	6.6
50-75k	3.5	14.3	9.8
75k+	3.0	23.1	19.5
Net worth			
<50k	3.4	6.8	4.3
50-100k	3.3	12.5	7.0
100-200k	4.1	12.7	6.0
200k+	3.2	21.7	18.9
Financial assets			
<25k	3.3	7.1	4.1
25-50k	4.7	14.3	9.3
50-100k	3.3	19.1	10.6
100k+	3.3	23.0	20.7
Debt/Income Ratio			
= 0	3.1	15.2	10.2
0 - 0.1	3.1	16.2	16.5
0.1 - 0.35	3.2	17.5	13.1
0.35+	5.0	14.7	11.1
Insurance/Debt Ratio			
= 0	3.4	15.7	12.3
0 - 0.5	2.4	20.8	24.9
0.5 – 1	1.6	24.1	12.5
>1	3.4	19.5	16.3

Table 2: Percentage of households with various financial characteristics that engage financial advisors by advice type. *Source:* 2007 Survey of Consumer Finances.

Characteristic	Credit advice only	Investment advice only	Comprehensive advice
Age			
<35	-0.15016	-0.15414†	1.14433*
35-44	-0.12817	0.07277†	1.04675*
45-54	-0.20147	0.02914†	0.88946*
55-64	-0.21960	0.12953	0.67433*
65-74	0.01107	0.04976	0.63952*
75+	0.01098	0.09956	0.41517*
Education			
<High school	-0.01875	-0.65114*	-0.67660*
HS grad	0.09430	-0.42553*	-0.29356*
Some college	0.15534†	-0.01816*	-0.24322*
College degree	0.16739	0.26590*	0.23190*
Race/Ethnicity			
White non-Hispanic	-0.07236	0.54611*	0.21002*
African American	0.15579	0.54935*	0.11649†
Hispanic	0.30556	0.30830	0.10124
Other	0.08671	0.18921	0.00000
Marital status			
Married	-0.26501†	0.04405†	-0.08469*
Unmarried	-0.50087†	0.03591	0.15821*
Occupation categories			
Employee	0.06599	-0.02793†	-0.25804†
Self-employed	0.06803	-0.01509†	-0.07396*
Retired, disabled, student	-0.25917	-0.04020	0.00017
Unemployed	0.09810	-0.02801	0.00000
Income			
<25k	0.47133†	-0.74356*	-0.42926*
25-50k	0.25200	-0.43690*	-0.22329*
50-75k	0.19003	-0.20969*	-0.20628*
75k+	0.17781	0.27811*	-0.17161*
Net worth			
<50k	-0.05260	-0.06458	-0.31550
50-100k	0.07927	0.05265	-0.34480†
100-200k	-0.01891	0.01174†	-0.17879*
200k+	0.00761	0.34199*	1.06510*
Financial assets			
<25k	-0.50745†	-0.61705*	-1.20483*
25-50k	-0.01768	-0.19944	-0.69008*
50-100k	-0.49339	-0.00156	-0.53307*
100k+	-0.57602	0.31195*	-0.10981*
D/I Ratio			
= 0	-0.46120†	-0.04109†	-0.23245†
0 - 0.1	-0.36907	-0.19852*	0.03522
0.1 - 0.35	-0.25995	-0.02006	-0.02903†
0.35+	-0.18964	0.00551	0.03509

Table 3: Multivariate logistic regression results of the likelihood of using a financial advisor by advice type. *Source:* 2007 Survey of Consumer Finances. * indicates significance at the 0.01 level, † indicates significance at the 0.05 level.

Statistic	FUM	Fee
Mean	465,710	4,952
Standard Error	57,256	490
Median	251,425	4,024
Standard Deviation	499,144	4,274
Kurtosis	2.15023	2.50554
Skewness	1.69790	1.58808
Range	2,067,450	20,546
Minimum	16,921	167
Maximum	2,084,371	20,713
Sum	407,961,761	4,338,017
N	876	876

Table 4: Descriptive statistics of funds under management (FUM) and associated fees in US$ of a financial advisory client portfolio. *Source:* A&F Financial Advisors LLC.

	Credit advice only		Investment advice only		Comprehensive advice	
Financial assets	Fees	Clients	Fees	Clients	Fees	Clients
10-25k	2.7	3.0	12.0	12.4	7.7	7.5
25-50k	4.7	4.7	15.5	14.9	8.7	8.5
50-100k	2.7	2.7	18.8	19.3	10.3	10.4
100-250k	4.3	4.2	16.7	16.3	15.2	15.5
250-500k	1.9	1.9	23.5	23.7	21.5	21.8
500-750k	3.7	3.8	23.3	23.4	20.7	20.7
750-1000k	2.4	2.5	22.6	22.7	22.1	21.8
1,000-2,000k	4.1	4.0	24.1	24.2	21.8	22.0
2,000-5,000k	3.0	3.0	25.3	25.3	25.7	25.7
5,000k+	3.3	3.3	27.4	27.4	22.3	22.3

Table 5: Descriptive statistics of funds under management (FUM) and associated fees in US$ of a financial advisory client portfolio. *Source:* A&F Financial Advisors LLC.

	SCF FA Households		Sample Client FA		
Financial assets	Mean	Std Dev	Mean	Std Dev	p-value
<$200k	65,133	60,482	112,553	65,313	0.001714
$200-$500k	336,055	93,362	313,374	91,228	0.370757
$500-$1000k	719,195	169,547	752,143	166,660	0.594317

Table 6: T-tests for the empirical distribution of 2007 SCF data and sample client portfolio data by financial asset categories. *Source:* 2007 SCF; A&F Financial Advisors LLC.

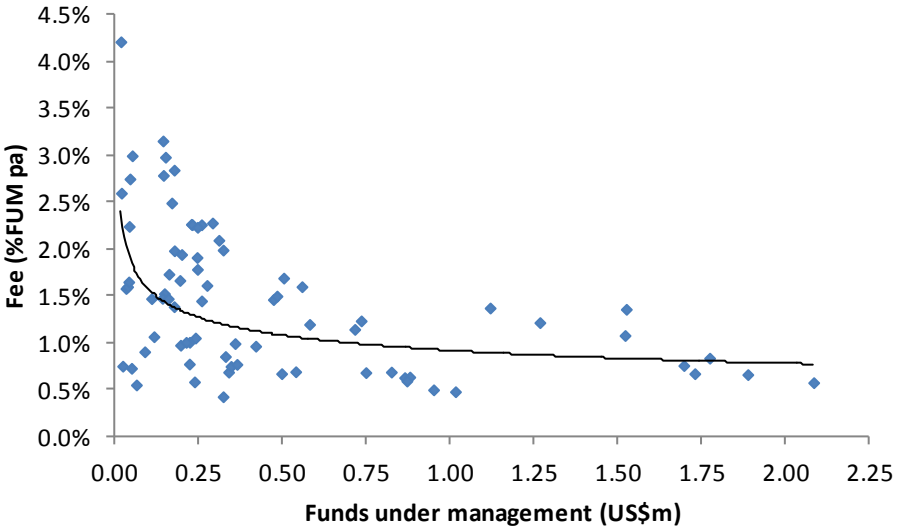

Figure 1: Commission as a percentage of funds under management (FUM) in US$ with a fitted power curve using least squares. *Source:* 2007 Survey of Consumer Finances.

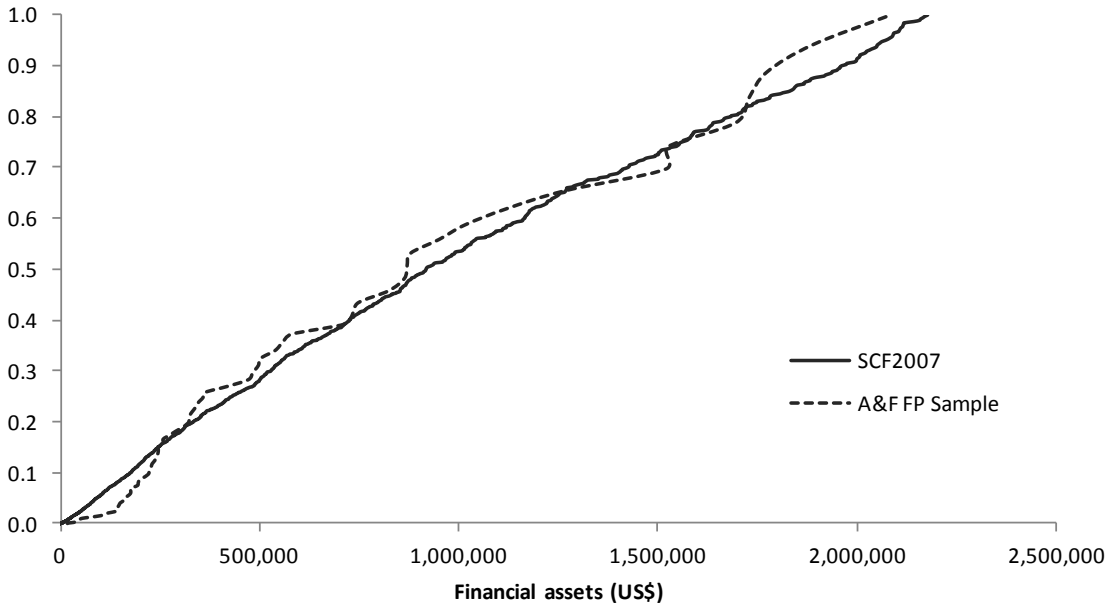

Figure 2: Cumulative wealth distribution of SCF 2007 survey participants and a financial planning client portfolio for financial assets under US$2.5m. *Source:* 2007 Survey of Consumer Finances, A&F Financial Advisors LLC.

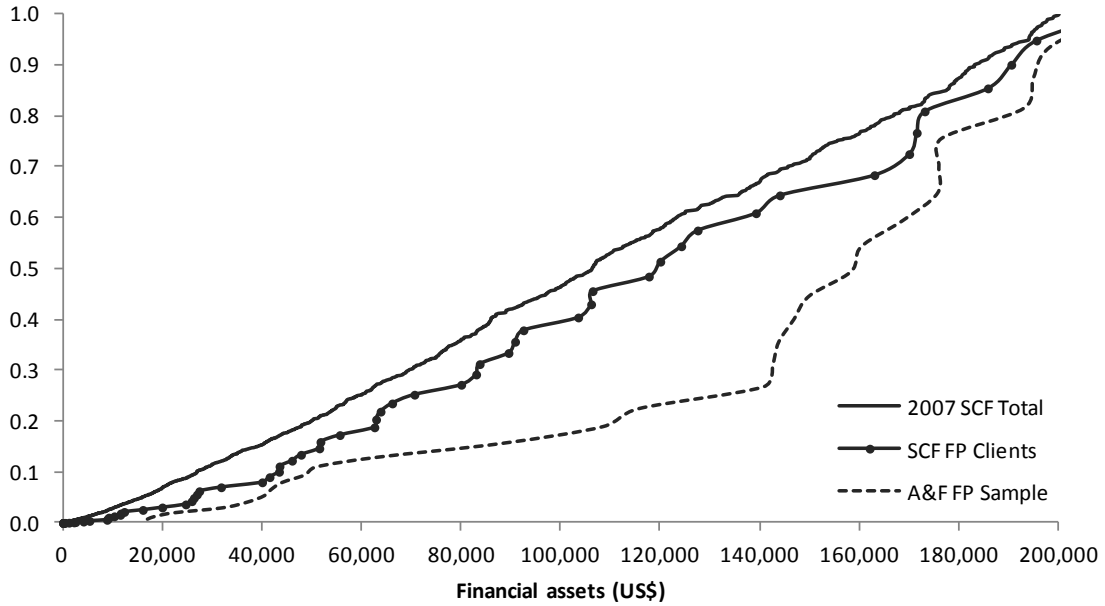

Figure 3: Cumulative wealth distribution of SCF 2007 survey participants, SCF survey participants who engage a financial advisor for investment or comprehensive advice and a financial planning client portfolio for financial assets under US$200,000. *Source:* 2007 Survey of Consumer Finances, A&F Financial Advisors LLC.

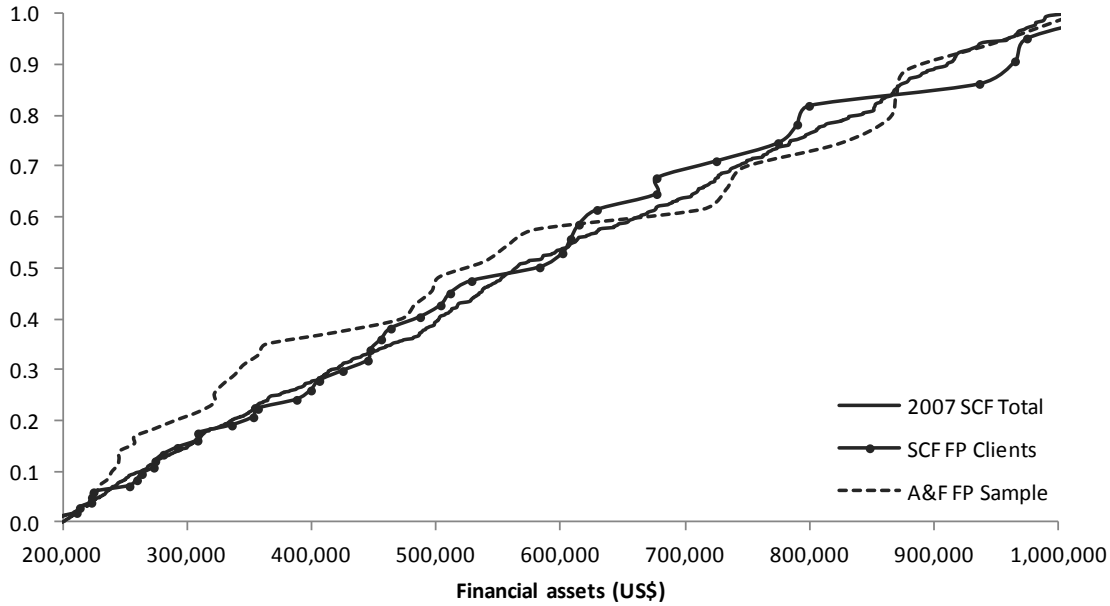

Figure 4: Cumulative wealth distribution of SCF 2007 survey participants, SCF survey participants who engage a financial advisor for investment or comprehensive advice and a financial planning client portfolio for financial assets between US$200,000 and US$1m. *Source:* 2007 Survey of Consumer Finances, A&F Financial Advisors LLC.

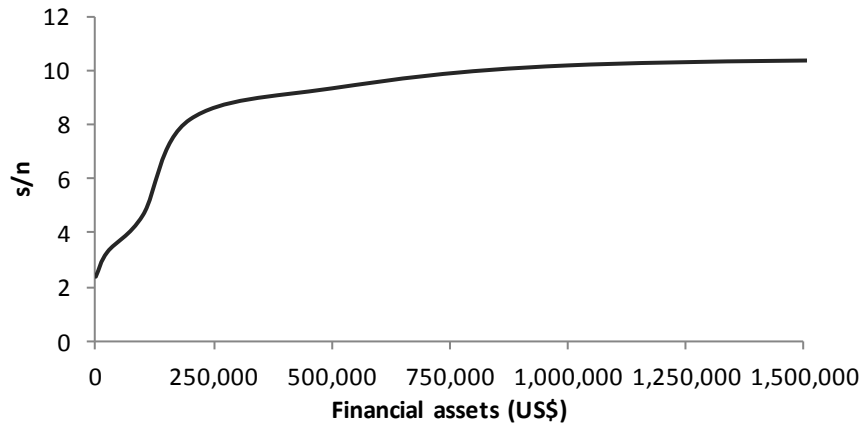

Figure 5: Optimal signals per number of potential investors based on financial assets.

Biography

Jason West is a Senior Lecturer at the Department of Accounting, Finance and Economics at Griffith University. He also serves as a consultant to the global resources and energy sector. His research appears in journals such as *Annals of Actuarial Science*, *Asia Pacific Financial Markets* and the *Electricity Journal*. He can be reached at Griffith Business School, 170 Kessels Road, Nathan, QLD 4111 Australia, j.west@griffith.edu.au.