The Relation between Internet Use and Financial Planner Use

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Abstract

In an analysis of a combination of the 1998 to 2007 Survey of Consumer Finances datasets, the use of the Internet for savings and investment decisions grew much more rapidly than the use of financial planners for those decisions. A multivariate analysis of the use of financial planners showed that all other things being equal, use of the internet for savings and investment decisions had a negative effect on the likelihood of using a financial planner for savings and investment decisions. It is possible that increases in the client base for financial planners is limited by the growth of savings and investment resources on the Internet, although financial planners could adopt measures proposed for other professional services to deal with the competition in information resources.

JEL codes: D13, L86

Introduction

With commercial starting about 1995, consumers have increasingly engaged in information seeking through the Internet. When the Internet Systems Consortium (ISC) counts the number of IP addresses in 2001, the number of possible hosts was around 100 million. In 2011, the number of Internet host stood at more than 800 million, up greatly from 2001 (ISC, 2011). Emergence of the Internet as a source of consumer information has changed almost every aspect of daily life, and consumers' financial life is not an exception.

The Internet affects consumers' financial life in two ways. First, the Internet changes how consumer use financial services like banking and insurance. In the financial services sector, banks and insurance companies have offered the on-line channel, while maintaining their traditional branch offices. Their service provision through the Internet is now matured, and also consumers get used to work with banks and insurance companies through the on-line channel. (Kolodinsky, Hogarth, & Hilgert, 2004). Second, the Internet changes how consumers search and evaluate financial information. The substantial amount of investment information is disseminated through websites, discussion boards, and chatting rooms today. Many consumers start their search for saving and investment information in large portal sites owned by corporations (e.g. MSN Money, Yahoo Finance, Quickens), or monthly/ annual subscription sites (The Motely Fool). These information sources on the Internet provide most financial advices without charge,

or with low price. Information search is a method of reducing uncertainty and perceived risk in consumers' decision-making (Urbany et al., 1989). In this study, we will focus on the second one, the Internet's impacts on consumers' saving and investment information search behavior.

By searching information on the Internet, consumers can save the cost of professional financial advice, and meet more saving and investment products with less time, place, and psychological constraints. As saving and investment information become available on the Internet with low price, consumers might be more reluctant to pay a fee and/ or commissions for financial planners. However, little studies have tested the impact of the Internet on consumers' financial planner use. Thus, this study aims to examine whether consumers will still want to work with a financial planner when the Internet provides financial information. At the end, we will discuss how financial planners should respond to their clients' Internet use.

Objectives of this study are 1) to determine the percentage of respondent who use the Internet for financial information across 1995-2007 and 2) to determine whether clients' Internet use has a negative effect on financial planner use. To analyze these issues, we will use the 1995, 1998, 2001, 2004, 2007 releases of the Survey of Consumer Finances (SCF).

Literature Review

Consumers' Financial Planner Use

Financial planners are professionals who work with clients' investment, retirement, credit, tax, and estate planning (Langehr, 1991). Since financial products are very highly developed service products whose attributes are complex and less standardized, consumers often experience cognitive burdens in making informed decisions. Financial planners aid these consumers to establish appropriate investment strategies. In 2007, one-fourth of households (25.2 %) reported financial planner use for saving and investment and/or credit and borrowing decision (Hanna, 2011). Households' financial planner use demonstrates their recognition of the value of informed decisions in personal financial planning (Finke, Huston, & Winchester, 2011).

A stream of empirical studies has examined impacts of demographic and financial variables on financial planner use using the Survey of Consumer Finances (SCF) (Elemrick, Montalto, & Fox, 2002; Chang, 2005, Hanna, 2011). In these studies, positive effect of high levels of education, liquid assets, and risk tolerance were commonly discovered, while negative effects of Hispanic, and single male households were also consistent. Effects of independent variables on financial planner use are organized in Tables 2. Among these studies, Elmerick, Montalto & Fox (2002) and Hanna (2011) examined financial planner use for saving and investment and/or credit and borrowing decisions; Chang (2005) examined financial planner use only for saving and investment decision.

Consumers' Internet Use for Personal Finance

The Internet has an advantage in a price competition with other information sources. Most of saving and investment information on the Internet are provided almost for free since the

cost of re-producing on-line contents is very low. By merging human capitals with financial information on the Internet, consumers can make an informed choice with low cost compare to using a financial planner.

However, the quality of information on the Internet and the possibility of information overload are disadvantages of using the Internet. A few studies have concerned about deceptiveness and inconsistencies of information on the Internet (Bessell et al., 2002; Hirchey, Richardson, & Scholz, 2000; Mcleod, 1998). Also, consumers may experience information overloads especially when they are required to search unlimited amount of information within the limited time constraints (Anckar & Walden, 2000).

For consumers' Internet use for saving and investment decision, Chang (2005) used the 1998 SCF and examined effects of demographic and financial variables. In 1998, the proportion of consumers who used the Internet for saving and investment decision was 9.2% which was much lower than 20.5% of financial planner use. In Chang's research, variables which had positive effects on Internet use for savings and investment decisions were levels of education, liquid assets, and single male household; a variable which had a negative effect on Internet use was age. Effects of independent variables on Internet use are organized in Table 1.

Internet Use and Financial Planner Use

Between 1998 and 2007, a slow growth of financial planner use has been reported, within a range of 20% to 25% (Hanna, 2011). This trend of financial planner use has been possibly affected by Internet use, considering a rapid growth of Internet use in the same period. In this section, we introduce theories and models which support the relation between Internet use and financial planner use.

First, the personal financial planning delivery model and the electronic market hypothesis support the relation between Internet use and financial planner use. In the personal financial planning delivery model, the role of a financial planner is defined as an intermediary who has information about specialist advisors (Black, Ciccotello, & Skipper, 2002). A financial planner is placed between specialist advisors (e.g. CPAs, Lawyers, Stock brokers etc.) and an individual client in order to coordinate their transactions. Consumers can save the information search costs, transaction costs, and monitoring costs by using a financial planner as an intermediary.

In the Internet era, however, information search costs have been reduced as the information asymmetry between a financial planner and a client has been narrowed down. Transaction costs have also been reduced with the development of the electronic network. Under these circumstances, the threatened intermediaries hypothesis expect the deterioration of the traditional intermediaries and the development of "cybermediaries" (Sarkar et al. 1995). Cybermediaries directly connect a producer and a consumer in the electronic market. Based on the threatened intermediaries hypothesis, we can suspect that the financial market possibly bypasses financial planners who are traditional intermediaries.

Second, the de-professionalization hypothesis supports the relation between Internet use and financial planner use. The de-professionalization hypothesis suggests the obsolescence of the concept of the profession due to the computer technology (Huag, 1973). As the Internet

contributes to the diffusion of investment information, consumers possibly accumulate knowledge on financial planning, and need less financial advice. De-professionalization has also been discussed for nurses, social workers, and other professions (Andrews & Kari, 2011; Randall & Kindiak, 2008).

In empirical studies on the relationship between internet use and professional service use, negative association has hardly been revealed. When Frambach, Roest, & Krishnan (2007) investigated consumers' choice between the on-line and off-line sources for purchasing a home mortgage loan, consumers preferred the off-channel over the on-line channel across every purchase decision-making stage. Also in Lee (2008)'s study on health professional visits, Internet use was positively associated with health professional visits in the next period. However, clients of financial planners might have been more strongly attracted to the superior cost efficiency of the Internet, since they are noticeably sensitive to the price of financial advice (Barber & Odean, 2001; Bluethgen, 2008).

When Peterson & Merino (2003) offered 14 propositions on consumers' information search behavior on the Internet, they suggested that the Internet would become consumers' initial and primary information source once consumers start incorporating the Internet as an information source. In sum, the threatened intermediaries hypothesis which is applied to the personal financial planning delivery model, a de-professionalization hypothesis, and Peterson & Merino's propositions support a negative relation between Internet use and financial planner use. In this study, we examine the impact of the Internet on financial planner use for saving and investment decision-making. Based on the results, we discuss how financial planners should respond to their clients' internet use.

Research Question

Does Internet use for savings and investment decisions have a negative impact on use of financial planners? If there is a negative impact, are financial planners threatened by the Internet?

Method

The 1995, 1998, 2001, 2004, and 2007 releases of the Surveys of Consumer Finances are analyzed in this study, to describe the changes in Internet use and financial planner use across years. The Survey of Consumer Finances is a national survey conducted by the Federal Reserve Board, which represent the national population. The SCF has included a question asking use of information sources for financial decision making since 1995. Specifically, the respondents were asked to answer the following question:

"How do you (and your spouse/partner) make decisions about saving and investment? Do you call around, read newspapers, material you get in the mail, or use information from television, radio, and online service or advertisements? Do you get advice from a friend, relative, lawyer, accountant, banker, broker, or financial planner? Or do you do something else?"

Hanna and Lindamood (2010) mentioned that this measurement item does not specify the timing of using information sources. Also, whether the financial planner had a credential cannot be identified. However, this bivariate self-reported question is still the best available choice for investigating use of information sources for financial decision making. Respondents of the SCF are allowed to answer to a maximum of 10 information sources as a response to this question. Response alternative are identical across survey years except the 1995 SCF. In the 1995 SCF, "computerized data services; other data services" was included as an alternative, instead of "online service/internet." Also, in 1995 the SCF combined "Financial Planner" and "Broker" responses. Therefore, even though we report 1995 results for descriptive purposes, we do not include the 1995 survey in the multivariate analysis.

Hypothesis

H1: Internet use has a negative effect on financial planner use for saving and investment decision.

Findings

Descriptive Statistics (Trends)

On average, 19.4% of households used a financial planner, and 17.8% of households used the Internet for saving and investment decision across 1995- 2007. Both consumers' internet use and financial planner use have been growing in this period. However, the trends vary for each information source. Trends of financial planner use and internet use are shown in Table 3 and Figure 1. Trends in Figure 1 suggest that internet use, which has showed more rapid growth, might inhibit growth of financial planner use in the future. The proportion of households who used the Internet was 0.3% in 1995, 8.3% in 1998, 14.8% in 2001, 19.5% in 2004, and 28.3% in 2007. Internet use started to match financial planner use in 2004, and exceeded financial planner use in 2007. On the other hand, the proportion of households who used a financial planner was 19.6% in 1995, 18.5% in 1998, 17.7% in 2001, 19.4% in 2004, and 21.9% in 2007.

Chi-square analysis

Some consumers might want to use both the Internet and financial planner, in order to find and confirm the trustworthiness of the information obtained from each source. Since the use of information sources were measured with the multi-response variable in the SCF, we could evaluate the relation between financial planner use and internet use. Results of the chi-square analysis, shown in Table 3, suggest that financial planner use and internet use are associated in 1998, 2007, and in the combined data (p-value < 0.001). In 2007, one third of financial planners' clients (33.1%) were also using the Internet for saving and investment decision.

Multivariate Result

We conducted a logistic regression similar to Hanna (2011) but added a variable of internet use for saving and investment decision. Results of the logistic regression in Table 4 show that those

who use the Internet are less likely to use a financial planner, when all other things are equal. Based on this result, we accept hypothesis 1.

Even after controlling internet use, effects of independent variables on the likelihoods of using a financial planner were similar with Hanna (2011). Independent variables which shown positive effects were levels of education, positive net worth, negative net worth, single female households. Independent variables which shown negative effects were presence of a child under age 19, single male household, low and substantial levels of risk tolerance, along with Internet use. Although directions of effects were similar to those found by Hanna (2011), magnitudes of independent variables were greater after controlling Internet use, especially for levels of education.

Conclusions

The result of multivariate analysis supports a hypothesized negative relationship between internet use and financial planner use. However, we do not know the time sequence in measurements of variables, so we should not necessarily conclude that internet use has a direct causal effect on financial planner use. There is also the possibility of an endogenous relationship, with financial planner use having a causal impact on internet use for savings and investment decisions. Future research should investigate this possible relationship.

In Table 3, a third of financial planner clients also used the Internet in 2007 (33.1%). We can find a way for financial planners to respond to their clients' internet use from McMullan (2006). Although McMullan initially suggested these steps for health professionals who face the Internet savvy clients, an adaptation with internet savvy clients is not an exclusive task for health professionals. McMullan distinguished patient-physician relationships in the Internet era into three types. In the first stage, experts feel threatened and respond defensively to on-line information. However, in the next stage, experts collaborate with patients in searching and analyzing on-line information. Ultimately, in the most advanced stage, experts guide an appropriate use of on-line information for their patients. In the field of personal financial planning, financial planners should be aware of consumers' information seeking behavior on the Internet, and be ready to guide their clients. From the literature on health informatics, we could find out that patients do not regard the information on the Internet as a replacement of health care professionals. Instead, patients turned to the Internet when they need confirmation, additional information, or were dissatisfied with the information provided by physicians (Nicolas *et al.* 2003). Thus, patients' internet use sometimes resulted in rise in likelihoods of visiting health professionals (Lee, 2008).

The Internet is an innovative source of financial information which has been rapidly accepted. In our descriptive result, the rapid growth of internet use for saving and investment decision was observed, and this trend is expected to continue as less educated, low income population gets more familiar with the Internet. Thus, the gap between internet use and financial planner use will possibly increase.

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1) **Table 1** Internet use for financial decisions

Author (Year)	Data	Variables
Chang (2005)	SCF 1998 (N=4305)	Demographics - Education (+) - Age (-) - Single male headed household (+) - Single female headed household (-) - Race (n.s.) Financial Situations - (log) income (n.s.) - (log) liquid assets (+) - Financial risk tolerance (+)

Table 2 Financial planner use for financial decision

Author (Year)	Data	Variables
Elmerick (2002)	SCF 1998	Demographics - Education (+) - Age 45-54 (+) - Hispanic (-) - Being a single male household head (-) - Being Employed (+) Financial Situations - Income (+) - Net worth (+) - Financial assets (+)
Chang (2005)	SCF 1998	Demographics - Education (+) - Age (n.s.) - Single male headed household (n.s.) - Single female headed household (+) - Race Black (+) - Race Other (-) Financial Situations - (log) income (-) - (log) liquid assets (+) - Financial risk tolerance (+)
Hanna (2010)	SCF 1998 SCF 2001 SCF 2004 SCF 2007	Demographics - Age (+; linearly increase up to 42) - Education - Children under 19 - Employed Financial Situations - Above average risk tolerance (+) - Substantial risk tolerance (-) - Net worth (+) - More Negative Net worth (+) - Home-owners

Table 3 Percent of Households Using Financial Planners for Savings and Investment Decisions, of Households Using the Internet for Savings and Investment Decisions

Year	Number of Households (total)	Percent of Households Using Financial Planners	Percent of Households Using Internet	Percent of Financial Planner Users Who Used Internet	Chi-Square Test for Association Between Financial Planner Use and Internet Use (P-value)
1995[a]	4,299	19.61	0.31	0.24	0.1785(0.6727)
1998	4,305	18.47	8.29	11.55	13.61(0.0002)
2001	4,442	17.73	14.78	17.94	7.5987(0.0058)
2004	4,519	19.42	19.52	20.06	0.2022(0.6529)
2007	4,418	21.92	28.29	33.13	14.3261(0.0002)
Combined 1998 to 2007	17,684	19.39	17.79	21.29	35.7417(<0.0001)

In the 1995 SCF, use of a financial planner was combined with stock broker in the public dataset. In the 1995 SCF, "computerized data services; other data services" was included as an alternative, instead of "online service/internet."

Figure 1 Use of Financial Planners and Use of the Internet for Savings and Investment Decision

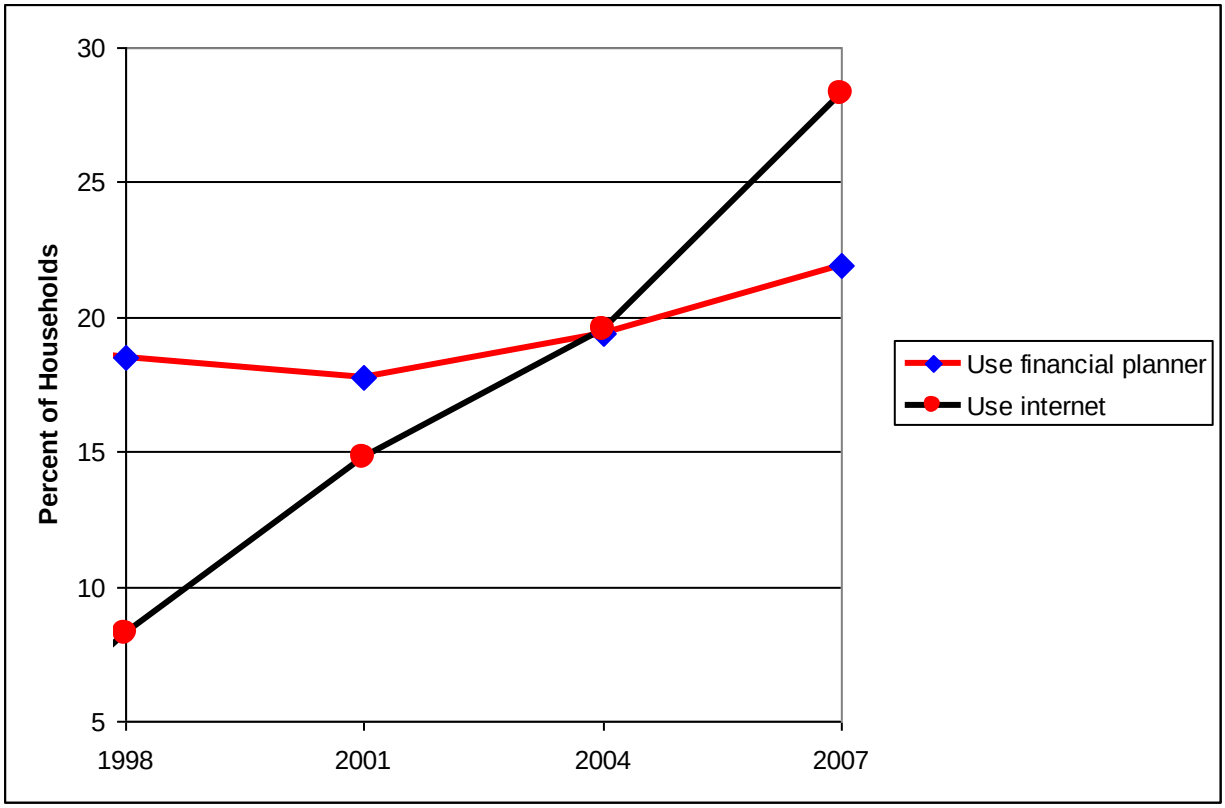

Table 4 Multivariate Analysis

Variable	Reference	Use financial planner for saving and investment decision			
		Coefficient	*P* Value	s.e.	Odds Ratio
Intercept		-3.3039	.000	.2632	
Use the Internet	(Non-users)				
Users		-0.2043	.000	.0477	0.815
Age		0.0262	.001	.0082	1.027
Age squared		-0.00033	.000	.0000	1.000
Race	(White)				
Black		0.2075	.005	.0740	1.231
Hispanic		-0.2978	.004	.1037	0.742
Asian & other		-0.3711	.001	.1117	0.690
Education	(< high school)				
High school degree		0.4149	.001	.1283	1.514
Some college		0.7183	.000	.1279	2.051
Bachelor's degree		0.8534	.000	.1302	2.348
Post-bachelor degree		0.9882	.000	.1317	2.686
Survey year	(1998)				
2001		-0.0445	.414	.0545	0.956
2004		0.0962	.075	.0540	1.101
2007		0.3912	.000	.0536	1.479
Marital status	(married)				
Partner		-0.0919	.293	.0873	0.912
Single male		-0.2578	.000	.0672	0.773
Single female		0.2234	.000	.0579	1.250
Employment status	(employee)				
Self-employed		-0.1119	.018	.0475	0.894
No work but not retired		-0.2607	.083	.1505	0.771
Retired		0.0257	.715	.0703	1.026
Presence of a child under age 19		-0.1656	.000	.0436	0.847
Risk tolerance	(above average)				
No risk		-0.9620	.000	.0650	0.382
Average risk		-0.0616	.168	.0447	0.940
Substantial risk		-0.2995	.000	.0828	0.741
Income (log) [if ≤ 0, log (.01)]		0.0261	.040	.0127	1.026
Net worth (log) [if ≤ 0, log (.01)]		0.1032	.000	.0119	1.109
-Net worth (log) [if ≤ 0, log (.01)]		0.0973	.000	.0145	1.102
Homeowner		0.1770	.005	.0623	1.194
Concordance (mean)		71.4 %			