Information Source Selection in Borrowing and Investment: A Multinomial Logit Analysis

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Literature Review

Financial literacy significantly influences the decision to engage financial planners, although the relationship is not straightforward. Lusardi and Mitchell (2014) found that individuals with higher financial literacy are better equipped to recognize the benefits of professional financial advice. These individuals can effectively communicate their financial goals and better understand advisors' recommendations. However, Calcagno and Monticone (2015) suggest that highly financially literate individuals might feel capable of managing their finances independently, potentially reducing their likelihood of seeking professional assistance.

Information asymmetry between financial professionals and their clients also impacts advice-seeking behavior. Georgarakos and Inderst (2011) demonstrated that perceived information asymmetry influences trust in financial advisors and willingness to follow their recommendations. When individuals perceive significant information gaps between themselves and financial professionals, they may either seek advice to bridge this gap or avoid advice altogether due to skepticism about advisors' motives (Stolper & Walter, 2017).

Previous studies have demonstrated the benefits of using financial planners (Hanna, 2011, Elmerick et al., 2002; White & Heckman, 2016; Reiter & Qing, 2024). However, there are other sources that consumers use to obtain financial advice such as asking friends and family, using online services, calling around, or asking other non-financial planner professionals such as bankers and attorneys. Most studies have not examined the other sources of information that consumers use to seek financial advice. Therefore, this study mainly focuses on the specific service that consumers utilized including internet/online services, friend/relative, banker, call-around, and financial planner. To our best knowledge, little research has been conducted by comparing the specific help-seeking resources. In addition, to map out the decision differences between borrowing and investing, this study examined them separately.

Data

This study used the 2022 Survey of Consumer Finances (SCF) to examine the decision-making for borrowing and investing. The SCF is a triennial cross-sectional survey of U.S. families and provides the families with information about balance sheets, pensions, income, and demographics. Data from the SCF are widely used in financial planning and economic areas. For the 2022 wave of the survey, 4,595 households were interviewed. This study mainly focused on the most frequently used when making decisions about borrowing and investing; therefore, 3,807 observations were included for the estimation.

Dependent variables

The dependent variable was measured by the following question, “What sources of information do you (and your {husband/wife/partner}) use to make decisions about borrowing or credit?”. To examine the information source for investment decisions, the following questions is used: “What sources of information do you (and your {husband/wife/partner} use to make decisions about saving and investments?” For each of these questions, there are 32 possible responses. This study focuses on the most frequently used: call around, internet/online service, friend/relative, banker, and financial planner.

Independent variables

Demographic variables include respondent’s age, gender, race/ethnicity, marital status, education, household size, and employment status. Economic variables include financial assets, non-financial assets, debt, and homeownership. Other variables include investment horizon, risk tolerance, subjective financial knowledge, objective financial knowledge, and ownership of emergency accounts.

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Model

This study utilized the multinomial logistic regression via maximum likelihood as follows:

$$Pr(information\ resource = financial\ planner) = \frac{1}{1 + e^{X\beta(internet)} + e^{X\beta(relative)} + e^{X\beta(banker)} + e^{X\beta(callaround)}}$$

$$Pr(information\ resource = interenet) = \frac{e^{X\beta(internet)}}{1 + e^{X\beta(internet)} + e^{X\beta(relative)} + e^{X\beta(banker)} + e^{X\beta(callaround)}}$$

$$Pr(information\ resource = relative) = \frac{e^{X\beta(relative)}}{1 + e^{X\beta(internet)} + e^{X\beta(relative)} + e^{X\beta(banker)} + e^{X\beta(callaround)}}$$

$$Pr(information\ resource = banker) = \frac{e^{X\beta(banker)}}{1 + e^{X\beta(internet)} + e^{X\beta(relative)} + e^{X\beta(banker)} + e^{X\beta(callaround)}}$$

$$Pr(information\ resource = callaround) = \frac{e^{X\beta(callaround)}}{1 + e^{X\beta(internet)} + e^{X\beta(relative)} + e^{X\beta(banker)} + e^{X\beta(callaround)}}$$

This paper sets those who use financial planner as a reference group $\beta^{(financialplanner)} = 0$, the remaining coefficients $\beta^{(internet)}$, $\beta^{(relative)}$, $\beta^{(banker)}$, and $\beta^{(callaround)}$ measure the change relative to the reference group. X represents the control variables including demographic, economic, and other variables.

Results

Decisions about Borrowing or Credit

Based on the results from multinomial logit model, as age increases, the likelihood of choosing internet/online service, friend/relative, and call around decreases relative to choosing a financial planner (margins were shown on Figure 2). Women are less likely to choose the internet over using a financial planner as a resource for borrowing or credit decisions than men. Similar results are found for friend/relative, banker, and call around relative to using a financial planner for women; they are more likely to use the financial planner or less likely to use the other sources. Black and Hispanic consumers are more likely to choose banker over a financial planner when making decisions about borrowing or credit than White consumers. Unlike Black households, Asian and other households are more likely to choose internet/online service, relative, and call around over financial planners than White households. As education level increases, the likelihood of choosing banker and call around as information sources decreases relative to choosing a financial planner. As financial assets increase, the likelihood of choosing internet/online service, friend/relative, and call around decreases relative to choosing a financial planner (margins were shown on Figure 1).

Decisions about Saving and Investments

Regarding the information sources used when seeking advice on saving and investment decisions, age and being a woman are associated negatively information resource selection. Asians (and others) are more likely than Whites to seek advice from an internet/online service, a relative or friend, or call around rather than seeking a financial planner. Those with emergency accounts are less likely to choose internet/online service, banker, and call-around than using a financial planner when making decisions about saving and investing. Also, as financial assets increase, the probability of choosing internet/online service, friend/relative, and call around decreases relative to choosing a financial planner.

Implications

Based on the results, Asians are less likely to use a financial planner than Whites and more likely to use other sources, such as friends or relatives. The possible explanation maybe Asians view friends or relatives as trustworthy information source and regard banks as reliable institutions; as a result, it may lead to a stronger preference for friends or relatives instead of financial planners. In addition, Asians may have higher adoption of online services than other racial groups. Interestingly, Black consumers are unlike

the other racial/ethnic categories in that they are not more likely to seek these other avenues. The financial planning industries may lack racial diversity. Based on the most recent demographics from the CFP Board, there are only 2,015 Black or African American financial planners, which contributed only 2% of overall financial planners. Furthermore, women were more likely to use a financial planner than men. It maybe because women were more risk averse and more likely to focus on the long-term financial security.

There are some important implications for practitioners, educators, and researchers in the financial planning area. For practitioners, a financial planner may be aware of the clients' situation including their demographics, financial, nonfinancial, even the way of developing and presenting the financial plan. For example, older individuals may feel less comfortable using online financial tools and rely on trust practitioners over informal networks. Interacting with clients is also a way of building trust, especially for those who undervalue the benefits of asking for help from financial planners. For educators, future potential clients may believe only high-income people need a financial planner. In this case, educators may need to highlight the necessity of using financial planner not only providing why but also explaining how. In addition, educators may also deliver relative training and provide real cases to help students understand how everything works together in reality. In this way, lower asset consumers could benefit from accessible and affordable financial services. For researchers, exploring the resources preferences for different groups of consumers is essential. For example, if the client is the first generation of immigration, this group of consumers may have limited knowledge for tax, retirement, and estate systems. Also, investigating the barriers such as trust, and social inequities is helpful for future research. In addition, promoting alternative ways of evaluating objective financial knowledge and risk performance is also necessary.

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Figures and Tables

Table Comparison of Financial Planner Help-Seeking Sources of Borrowing-Multinomial Logistic Regression

	Internet			Relative			Banker			Call around		
	Coef.	S.E.	OR	Coef.	S.E.	OR	Coef.	S.E.	OR	Coef.	S.E.	OR
Age	**-0.0122***	0.0052	0.9878	**-0.0115***	0.0047	0.9885	0.0046	0.0049	1.0046	**-0.0113***	0.0046	0.9887
Female	**-0.7236*****	0.1320	0.4850	**-0.3250****	0.1164	0.7225	**-0.2596***	0.1196	0.7713	**-0.2496***	0.1122	0.7791
Race (Ref.=White)												
Black	0.3068	0.1990	1.3591	0.3242	0.1822	1.3829	**0.4748***	0.1886	1.6078	0.1220	0.1809	1.1298
Hispanic	0.3802	0.2037	1.4625	-0.0695	0.1939	0.9328	**0.1565****	0.2010	1.1694	-0.3035	0.1951	0.7382
Asian and others	**0.7441*****	0.2044	2.1046	**0.8062*****	0.1832	2.2393	0.5326	0.1962	1.7034	**0.4025***	0.1839	1.4955
Married	-0.2312	0.1545	0.7936	-0.1761	0.1388	0.8386	0.2085	0.1416	1.2318	0.0162	0.1341	1.0164
Education (Ref.=High school)												
Lower than high school	-0.4019	0.3726	0.6690	0.6265	0.3315	1.8710	0.1290	0.3409	1.1376	0.3710	0.3317	1.4493
Some college	-0.2303	0.2001	0.7943	-0.3614	0.1874	0.6967	**-0.6977*****	0.1866	0.4977	**-0.5619****	0.1815	0.5701
Bachelor	-0.2746	0.2075	0.7599	-0.1408	0.1894	0.8687	**-0.6939*****	0.1859	0.4996	**-0.5467****	0.1823	0.5789
Graduate	-0.1871	0.2180	0.8294	-0.2691	0.1997	0.7641	**-1.0328*****	0.1955	0.3560	**-0.6194*****	0.1893	0.5383
Investment Horizon (Ref.=next few months)												
Next year	0.1058	0.2311	1.1116	0.1445	0.2081	1.1554	0.1810	0.2192	1.1985	0.2579	0.2123	1.2942
Next few years	0.1889	0.1939	1.2079	-0.0099	0.1771	0.9902	0.0342	0.1878	1.0348	0.2480	0.1783	1.2815
Next 5-10 years	0.0482	0.2015	1.0494	0.0409	0.1810	1.0418	0.0736	0.1892	1.0763	0.2585	0.1814	1.2950
Longer than 10 years	-0.0300	0.2245	0.9705	-0.0601	0.2026	0.9417	-0.0593	0.2081	0.9425	0.2328	0.1978	1.2621
Risk tolerance (Ref.=not willing to take any risk)												
Take average financial risk	**-0.7821*****	0.1694	0.4575	**-0.4020****	0.1538	0.6690	**-0.7198*****	0.1572	0.4868	-0.2891	0.1525	0.7489
Take above average financial risk	**-0.4670***	0.1930	0.6269	-0.3233	0.1782	0.7237	**-0.7218*****	0.1821	0.4859	-0.2588	0.1757	0.7720
Take substantial financial risk	-0.0062	0.2975	0.9938	0.0190	0.2832	1.0191	-0.1520	0.2852	0.8590	0.2072	0.2749	1.2302
Emergency account	**-0.4400*****	0.1382	0.6440	0.1767	0.1310	1.1932	-0.1268	0.1317	0.8809	-0.2300	0.1240	0.7946
Objective financial knowledge	-0.0023	0.0835	0.9977	-0.0676	0.0746	0.9346	0.0521	0.0773	1.0535	-0.0299	0.0726	0.9706
Subjective financial knowledge	0.0155	0.0328	1.0156	-0.0549	0.0292	0.9466	0.0411	0.0310	1.0420	-0.0020	0.0292	0.9980
Financial assets (log)	**-0.2475*****	0.0338	0.7807	**-0.2610*****	0.0314	0.7703	**-0.1721*****	0.0320	0.8419	**-0.2285*****	0.0299	0.7957

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Nonfinancial assets (log)	-0.0175	0.0260	0.9827	-0.0148	0.0239	0.9853	0.0064	0.0263	1.0065	-0.0126	0.0242	0.9875
Income (log)	0.0262	0.0429	1.0265	-0.0006	0.0360	0.9994	0.0379	0.0354	1.0386	0.0085	0.0331	1.0086
Debt (log)	-0.0045	0.0134	0.9955	-0.0013	0.0120	0.9987	-0.0086	0.0113	0.9914	0.0096	0.0114	1.0097
Household size	**0.1247***	0.0514	1.1329	0.0480	0.0479	1.0492	0.0196	0.0504	1.0198	**0.1197****	0.0459	1.1272
Employed	-0.0615	0.1574	0.9404	**0.2898***	0.1445	1.3361	**0.4822*****	0.1454	1.6197	0.1448	0.1378	1.1558
Homeownership	0.0193	0.1891	1.0195	-0.2233	0.1678	0.7999	0.1549	0.1821	1.1676	0.1314	0.1695	1.1405
Intercept	**3.7339*****	0.6042	41.8399	**4.5496*****	0.5359	94.5912	**1.2201***	0.5526	3.3874	**3.5144*****	0.5210	33.5950

Figure 1

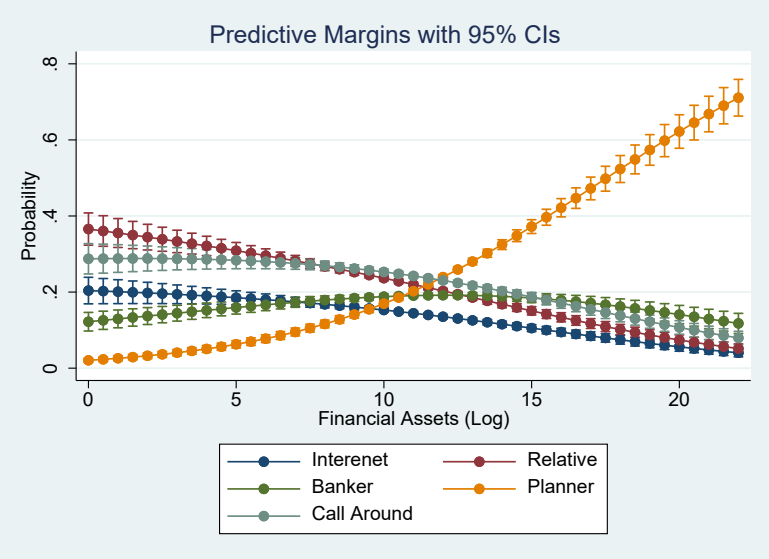

Figure 2

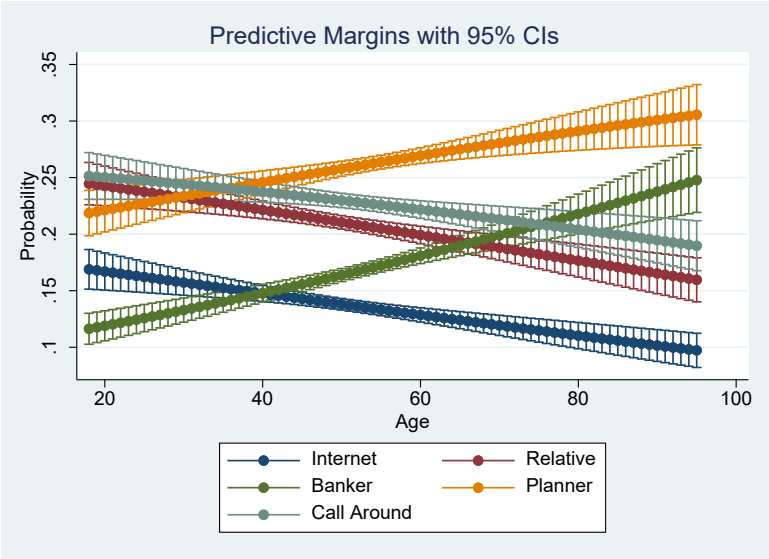

Table Comparison of Financial Planner Help-Seeking Sources of Investing-Multinomial Logistic Regression

	Internet			Relative			Banker			Call		
	Coef.	S.E.	OR	Coef.	S.E.	OR	Coef.	S.E.	OR	Coef.	S.E.	OR

Age	**-0.0172*** **	0.0051	0.9830	**-0.0212*** **	0.0046	0.0045	0.0021	0.0053	1.0021	**-0.0133** **	0.0051	0.9868
Female	**-0.8311*** **	0.1327	0.4356	**-0.5572*** **	0.1137	0.5728	**-0.3134***	0.1295	0.7309	**-0.4330*** **	0.1295	0.6486
Race (Ref.=White)												
Black	0.2670	0.1965	1.3060	0.3813*	0.1687	1.4642	0.2459	0.1936	1.2787	0.3022	0.1890	1.3528
Hispanic	**0.7371*** **	0.2069	2.0899	0.3096	0.1926	1.3629	**0.6416** **	0.2096	1.8996	**0.4178***	0.2127	1.5186
Asian and others	**0.6602*** **	0.2012	1.9352	**1.0405*** **	0.1692	2.8308	**0.5601** **	0.2117	1.7509	**0.5339***	0.2119	1.7057
Married	-0.2836	0.1504	0.7531	**-0.4447*** **	0.1350	0.6410	0.0059	0.1485	1.0059	**-0.3165***	0.1504	0.7287
Education (Ref.=High school)												
Lower than high school	-0.3158	0.3577	0.7292	0.5739	0.3168	1.7752	0.2485	0.3375	1.2821	0.3703	0.3226	1.4482
Some college	-0.0688	0.1938	0.9335	0.0873	0.1800	1.0912	0.0497	0.2024	1.0509	-0.2134	0.1969	0.8079
Bachelor	-0.1633	0.1931	0.8493	-0.0257	0.1772	0.9746	-0.1990	0.1928	0.8196	-0.2760	0.1977	0.7588
Graduate	-0.0309	0.2061	0.9696	0.0047	0.1887	1.0048	-0.3299	0.2125	0.7190	**-0.5083***	0.2114	0.6015
Investment Horizon (Ref.=next few months)												
Next year	0.2031	0.2284	1.2251	0.2917	0.2001	1.3387	**0.4711***	0.2223	1.6017	0.1063	0.2360	1.1121
Next few years	0.0247	0.1883	1.0250	0.1054	0.1692	1.1111	0.2267	0.1969	1.2544	0.2887	0.1892	1.3347
Next 5-10 years	-0.1158	0.1950	0.8907	0.0355	0.1754	1.0362	0.3337	0.1979	1.3962	0.0561	0.2000	1.0577
Longer than 10 years	-0.0110	0.2185	0.9891	0.1557	0.1953	1.1685	0.2951	0.2274	1.3433	0.1278	0.2237	1.1363
Risk tolerance (Ref.=not willing to take any risk)												
Take average financial risk	**-0.4440** **	0.1644	0.6415	**-0.4514** **	0.1466	0.6367	**-0.6700*** **	0.1588	0.5117	-0.2109	0.1726	0.8098
Take above average financial risk	-0.3036	0.1879	0.7381	**-0.3833***	0.1689	0.6816	**-0.6032*** **	0.1882	0.5471	-0.2628	0.1994	0.7689
Take substantial financial risk	-0.2940	0.2965	0.7453	-0.2639	0.2692	0.7680	-0.1675	0.2900	0.8458	0.2179	0.2812	1.2434
Emergency account	**-0.5804*** **	0.1351	0.5596	0.0632	0.1273	1.0653	**-0.3687***	0.1478	0.6916	**-0.3688** **	0.1374	0.6916
Objective financial knowledge	-0.0588	0.0830	0.9429	-0.0619	0.0725	0.9400	-0.0666	0.0823	0.9355	-0.1049	0.0812	0.9004
Subjective financial knowledge	0.0159	0.0331	1.0160	-0.0740*	0.0294	0.9286	-0.0038	0.0320	0.9962	-0.0119	0.0332	0.9882
Financial assets (log)	**-0.1778*** **	0.0321	0.8371	**-0.2462*** **	0.0300	0.7818	**-0.1779*** **	0.0311	0.8370	**-0.2119*** **	0.0323	0.8090
Nonfinancial assets (log)	-0.0010	0.0252	0.9990	0.0008	0.0230	1.0008	-0.0118	0.0255	0.9882	-0.0065	0.0261	0.9935
Income (log)	0.0224	0.0425	1.0227	0.0048	0.0375	1.0048	-0.0386	0.0367	0.9621	0.0723	0.0504	1.0750
Debt (log)	-0.0011	0.0133	0.9989	-0.0110	0.0120	0.9891	-0.0038	0.0133	0.9962	0.0099	0.0139	1.0099
Household size	0.0651	0.0493	1.0673	0.0245	0.0451	1.0248	-0.0271	0.0527	0.9732	0.0904	0.0495	1.0946
Employed	-0.1263	0.1583	0.8814	0.1605	0.1463	1.1741	0.2181	0.1550	1.2437	-0.0187	0.1623	0.9814

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Homeownership	-0.2391	0.1876	0.7874	-0.0690	0.1629	0.9333	-0.0232	0.1887	0.9770	0.0372	0.1874	1.0379
Intercept	**3.1431*** **	0.5940	23.1751	**4.5305*** **	0.5437	92.8091	**2.4203*** **	0.5893	11.2493	**2.2793*** **	0.6242	9.7697

Figure 3

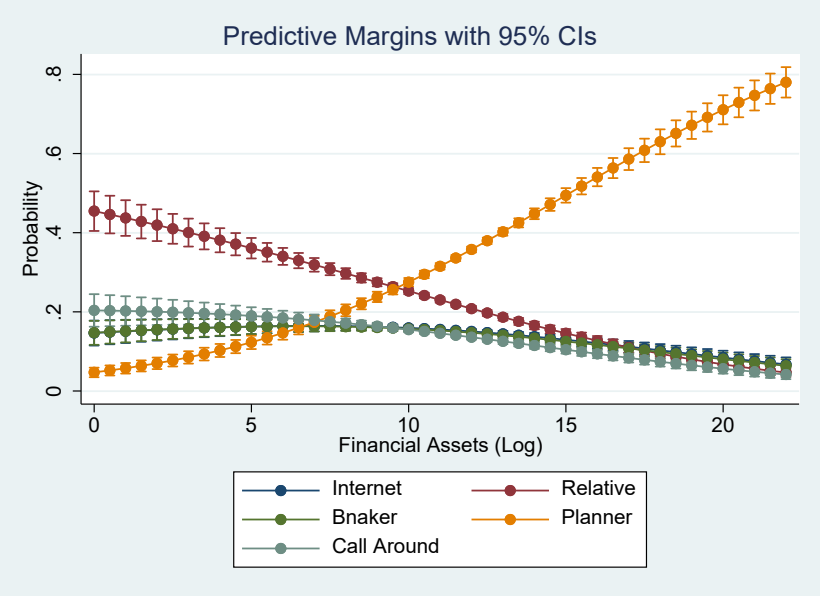
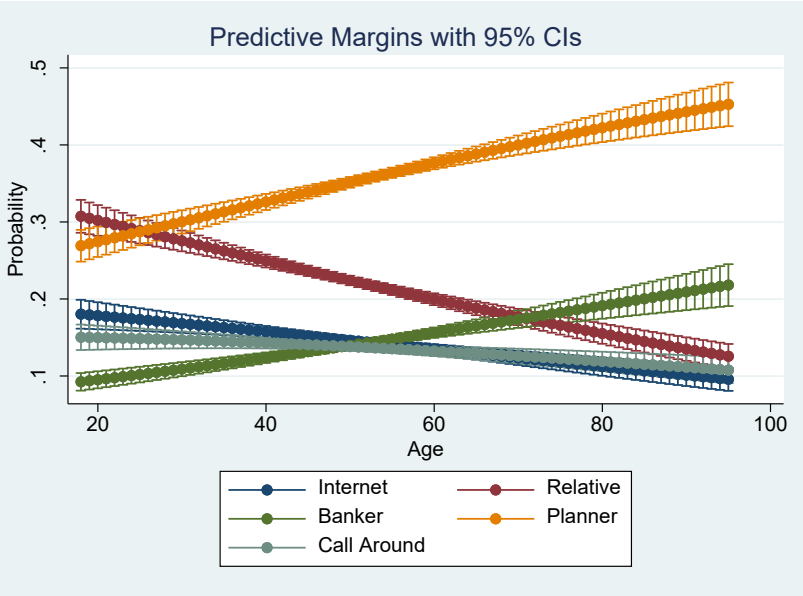


Figure 4



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