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Factors Influencing the Demand for Financial Advice by Individual Households in the United States After the Financial Crisis of 2007-08

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Factors Influencing the Demand for Financial Advice by Individual Households in the United States After the Financial **Crisis of 2007-08** TEXAS TECH

The Market for Financial Advice Is Characterized by Ill-educated Consumers and Self-Serving Vendors

Most individual households are unable to make sound financial decisions on their own (e.g., Guiso and Jappelli, 2009; Kimbell and Shumway, 2007; Lusardi et al., 2011; Lusardi and Tufano, 2009) and thus they subscribe to the services of professional financial advisors. Studies on the reliability of professional financial advice, however, offer inconclusive results: some finding evidence in its support (e.g., Cici et al., 2012; Kramer, 2012) while others offering evidence against it (e.g., Mullainathan et al., 2012; Hackethal et al., 2012; Chalmers and Reuter, 2010; Zhao, 2008; Karabulut, 2013).

A strand of research focuses on studying the individual specific factors that influence the decision of using professional financial advice (e.g., Collins, 2012; Bluethgen et al., 2008; Finke et al., 2011; Joo and Grable, 2001).

Yet another strand of research, that has specially emerged since the financial crisis, studies whether demand for advice increases with financial literacy or not (e.g., Lusardi, 2003, 2008; Collins, 2012; Houston, 2010; Calcagno & Monticone, 2011; Collins & Rourke, 2010; Abreu & Mendes, 2010; Robb et al., 2012; Dolvin & Templeton, 2006).

We Employ a Multinomial Logistic Model to Examine the Effect of **Individual Specific Attributes in Selecting the Type of Financial Advice a Household Subscribes to**

Individual households can avail financial advice from different sources like from institutions that specialize in providing investment advice or from commercial banks which in addition to investment advice provide debt and credit consultations.

Our research is different from a vast body of previous studies which employ a dichotomous choice logistic model where the dependent variable indicate the use of financial advice or otherwise because use of the multinomial logistic model allows us to study how individual households choose among different types of financial advice (e.g., bankers alone, brokers alone, both bankers or brokers, or none of them). The disaggregation allow us to shed light on the effect of the covariates (e.g., demographic variables) on the choice of each type of financial advice. The changes in the independent variables with respect to the dependent variables, can give us a better indication of why might an individual investor choose to use a particular service over another.

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Our Conceptual Framework Is Described Below...

Every individual in everyday life must make choices among the many alternatives they face. This set of alternatives is called *choice set*, and can be any products or items in any market or conditions in a given time. In addition, these different choice sets need to have three characteristics to be suitable for a discrete choice model framework: first, the alternatives must be mutually exclusive; second, they must be exhaustive; and third, the number of the alternatives must be finite (Train, 2009). An imperative consideration in any attempt to model these choices is regarding the potential factors and their impact on the choices that individuals make. In our case, the head of household *i* faces a set of discrete, mutually exclusive choices of using any type of financial advice services (brokers, bankers, both brokers and bankers, or none) that maximizes her utility, which is given by,

$$U_{ij} = z_{ij}\theta + \mathcal{E}_{ij}$$

The utility is reliant on z_{ii} that has both, individual characteristics and choice attributes, $z_{ij} = (x_{ij}, w_{ij})$ where, x_{ij} contains choice attributes and w_{ij} includes individual's characteristics (Greene, 2012).

That is, individual head of the household *i* will choose financial advice *j* over financial advice *k* if and only if $U_{ii} > U_{ik}$ for all other *k j*. If we let Y_i denote the choice made, following McFadden (1974), we assume that J disturbances are independent and identically distributed with Gumbel distributions. That is,

$$F(\varepsilon_{ij}) = \exp(-\exp(-\varepsilon_{ij}))$$

then the probability that a particular head of a household will choose alternative *j* is given by the conditional or multinomial logit model as,

Prob
$$(Y_i = j) = \frac{\exp(z'_{ij}\theta)}{\sum_{j=1}^{J} \exp(z'_{ij}\theta)}$$
 (3)

In our case, the data in hand includes individual characteristics only, thus our model becomes, $exp(w'\alpha)$

(2)

Prob
$$(Y_i = j \mid w_i) = \frac{\exp(w_i \alpha_j)}{\sum_{j=0}^{3} \exp(w_i' \alpha_j)}, \quad j = 0, 1, ..., J$$
 (4)

Because the equations above obtain the estimated probabilities for the j+1 alternatives for the head of the household with her individual specific, w_i , and the probabilities sum to one, only J parameter vectors are required to determine the J+1 probabilities, therefore the utility of the outside option is normalized, that is $U_0=0$. Hence, our probabilities become,

$$P_{I} = \frac{\exp(w_{i}^{\prime}\alpha_{j})}{1 + \sum_{k=1}^{J} \exp(w_{i}^{\prime}\alpha_{k})}, \quad j = 0, 1, \dots, J$$
(5)

The interpretation of the coefficient in these models is troublesome, so a better interpretation would be to report partial effects (Greene, 2012). The marginal effects of the individual specifics on the probabilities can be found as,

$$\delta_{ij} = \frac{\partial P_{ij}}{\partial W_{ij}} = P_{ij} \left[\alpha_{j} - \sum_{k=0}^{j} P_{ik} \alpha_{k} \right] = P_{ij} \left(\alpha_{j} - \hat{\alpha} \right) \quad \text{(Greene, 2012)}.$$

We Use a Set of Data that Carry Information on the Same Individual Before and After the Financial Crisis

This feature allows us to see the changes more clearly and discern potential factors that might have been hidden in previous studies. This also differentiates out work from that of other researchers.

We use Survey of Consumer Finances (SCF) as our data source for it provides detailed information on individual household's assets and liabilities along with useful information for wealth analysis, which includes income, demographics, marital history, employment history, and attitude (Fries et al., 1998). The SCF is conducted every 3 years by the Federal Reserve Board (FRB). However, a time exception was made to the data collection process. To analyze the impact of the 2007-2008 financial crisis on the families that had participated in the 2004-2007 survey, in 2009 the FRB designed a special survey to provide a better measure of how families were affected. We use the follow up survey of 2007-2009 in our analysis as it offers a unique feature of investigating the changes in financial conditions of the head of the households before and after the crisis.



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Our Data Indicates that Plummeting Asset Value Rather than Changes in the Content of Individual Household's Financial Portfolios Might Have Caused the Changes in Wealth After the Crisis

The survey of 2009 indicates that, over the period 2007 through 2009 the median of real family income before tax for U.S households has fallen 7.7 percent similar to the three-year period before. The median value of family income has been decreasing across all demographic groups except a few cohorts. The mean income shows more profound decline across all demographic cohorts than the median value. However, the decrease in both median and mean net worth was substantially larger than the decline in family income for the three-year period 2007-2009. Both median and mean net worth ("the difference between families' gross assets and their liabilities) fell substantially during the period of 2007 to 2009, 38.8 percent and 14.7 percent respectively. Savings, on the other hand, for the same time frame, for the reason that the usual income decreased over the three-year period, shows a modest variation and it rose overall as a percentage of usual income for most income groups. Overall, the changes in wealth, both in the surveys of 2007-2009 and the year after seem to be caused by the plummeting asset values rather than changes in the content of the individual households' portfolios.

The Underlying Assumption in Our Study Is that ...

...individual household's financial services subscription choices are influenced by habit, inertia, personal experience, and environmental forces like, advertising, peer pressure, collective opinion, and other household and family constraints. This set of forces can shape the temporal nature of choice outcomes. Our objective is to explore these forces and their influence on the choices consumers make in choosing a particular financial service (banker, brokers, insurance etc.).

Further Information

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