Financial Skill in the U.S. Adult Population: Measuring the Determinants Using A Truncated Regression Model

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Abstract

Financial skill is a key element of financial literacy and capability that equip consumers with the knowledge necessary to manage money effectively. Extensive research highlights the prevalence of poor financial skills among Americans (Lusardi & Mitchell, 2014; OECD, 2005, 2008,2009). Prior studies also demonstrate that various segments of the U.S. population lack various financial skills (Hilgert et al., 2003; Lusardi & Mitchell, 2007a, b). Some other evidence indicates that financial skill might be a prevailing catalyst (Atkinson et al., 2007; Fernandes et al., 2014; Knoll and Houts, 2012; Willis, 2008). Yet very few studies examine individuals' financial skills (Hung et al., 2009; Knoll & Houts, 2012). This study aims to identify the potential covariates that could explain variations in the financial skill of the U.S. adult population using the 2016 National Financial Well-Being Survey (NFWBS) dataset administered and released by the CFPB (2017). The dependent variable, financial skill score, is bounded by "top-coding" and/or "bottom-coding," so Tobit regression (Tobin, 1958) and truncated regression (Cragg, 1971) would be good candidate models. To examine the model performance, i.e., which model better fits with the given dataset, we ran OLS, Tobit, and truncated regression and checked AIC (Akaike's Information Criteria) and Schwarz's BIC (Bayesian Information Criteria), which are widely used model selection criteria. The model selection results indicated that a truncated regression model is the most appropriate for drawing inferences. Out of 144 potential covariates, 28 are found significantly associated with financial skill score at a 5% significance level. The results indicate that determinants related to consumers' financial knowledge, financial self-efficacy, and financial behavior are the prominent factors explaining the financial skill score. Specifically, individuals' financial knowledge is positively associated with their financial skill score. This is demonstrated by the positive associations between financial skill score and individuals who conduct research before making financial decisions, have a solid understanding of financial products, and are familiar with organizations that can help resolve financial service problems. Furthermore, individuals' belief and confidence in their ability to achieve financial goals are positively associated with their financial skill. For instance, those who exhibit high levels of confidence in their ability to achieve financial goals, excel in resisting temptation, and work diligently toward long-term objectives tend to have higher financial skill scores than those lacking such financial self-efficacy. The results suggest that individuals' financial behavior, including controlling spending, paying bills on time, financial planning for the future, saving money, and providing for oneself and family, has a positive association with their financial skill. These findings have significant implications for policies and programs aimed at improving financial literacy and promoting financial well-being. Policymakers can leverage the findings of this research to design policies related to financial education, develop training modules, and plan to launch programs for teenagers and adults. Educators can develop curricula that empower current students to be vigilant in financial decision-making, ultimately leading to better financial lives to serve their own goals. Researchers can further study how to make consumers more financially knowledgeable and make them confident so that they stick to their own financial goals. This way, they will find a way to improve consumers' financial skills. By emphasizing the findings of the study, financial therapists and financial planners can better deal with their clients' behavior in financial decision-making.

Keywords: Financial skill; U.S. adult consumers; OLS; Tobit; Truncated Regression; financial literacy; financial knowledge; financial self- efficacy; financial behavior; personal finance; financial planner

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