Education Loan Profile of US Households

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Education loan has been considered as an important vehicle to provide a postsecondary education opportunity for many Americans (Braga, 2016). However, increasing dependence on education loan discourages households from other important financial decisions, including homeownerships (Shand, 2007) and retirement savings (Elliott, Grinstein-Weiss, & Nam, 2013). In order to understand the education loan profile of the US households in a more comprehensive way, this study examined factors associated with various aspects of education loans. While previous studies focused on the increasing size of education loans, this study investigated household debt burden and repayment problems besides increasing education loan size when analyzing antecedents of education loans.

This study used a pooled dataset of 2010 and 2013 Survey of Consumer Finances (SCF) released by the Federal Reserve Board. To account for possible sample bias, this study conducted Heckman two-stage model (Heckman, 1979). In the first stage of the Heckman model, this study utilized a probit regression model to analyze factors related to holding education loan. An inverse Mills ratio was calculated to represent of possible selection bias for the analysis of education loan debt in the second stage. In the second stage, this study conducted Ordinary Least Square (OLS) regression model and logistic regression model. The first stage dependent variable was whether or not household had the outstanding balance of education loans. Specifically, it was coded 1 if a household had the balance still owed on the education loans after the last payments were made and 0 if otherwise. The second stage dependent variables were: (1) the amount of outstanding education loan balance (continuous variable), (2) whether or not meeting the debt payment-to-income (DTI) ratio guideline (coded as 1 if the ratio is less than 0.4, and was coded as 0, otherwise), and (3) whether or not having education loan delinquency (coded as 1 if the education loan payment was behind schedule, and coded as 0, otherwise). The first stage includes age of respondent, age-squared, educational attainment, marital status, log of household income, race/ethnicity, employment status, and survey year. In addition to variables in the first stage, the second stage includes use of financial planner, homeownership, credit constraints, and the inverse Mills ratio.

Results from the second stage showed determinants associated with three education loan characteristics. Single households had lower amount of education loan than married couples, and household income was negatively related to the amount of education loan. Compared to Whites, Blacks had higher amount of education loan while Hispanics and Asian/others had lower amount of education loan. Households with credit constraints had higher amount of education loan than those without credit constraints. Households with higher income and homeownership were more likely to meet debt-to-income 0.4 cut-off point. With respect to education loan delinquency, homeowners were less likely to be delinquent than renters. Households with credit constraints were more likely to be delinquent on education loan debt repayment than those without credit constraints.

This study examined possible negative consequences of having the high level of education loan, such as repayment problems (i.e., heavy financial burden, debt delinquency), and total outstanding balance of education loan. Although this study did not incorporate various types of the education loans or institutions, our findings provide insights into research, education, and public policy areas by describing a more comprehensive viewpoint of education loan profile in the US.

References

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