Gender differences in household education expenditure: two-step hurdle model

ABSTRACT

This study examines the evidence on gender differences in household education expenditure. It also aims to handle the potential channel of bias in gender differences in expenditure. The sample of household education expenditure in Malaysia provided by the Department of Statistics Malaysia consists of a significant number of households, which is 47% of 8,332 households that do not report their education expenditure (missing). Thus, to prevent potential bias estimates in the household education expenditure model source from the missing data, this study employs the two-step Hurdle Model. The first step is to estimate whether households enrol their child into school or not, and the second step is to estimate how much expenses are spent on children's education conditional on households with children enrolled in school only. While there is no significant results using the standard Working-Leser model, the Hurdle model shows that there are significant differences in educational spending between sons and daughters in the younger age group (5-12 years). Specifically, households preferred to spend money on sons' education about double of the daughters' education expenditure. Researchers may wish to consider this method when handling significant missing data to prevent potential bias in estimation.