

## A Canonical Analysis on the Relationship between Financial Risk Tolerance and Household Education Investment in Sri Lanka

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**Abstract:** This paper is aimed at examining the relationship between risk tolerance behaviour and the education investment of families in different social sectors, i.e. urban, rural, and estate, in Sri Lanka. At the initial step, the study used Binary Logistic Regression for identifying the significant variables for financial risk tolerance and for household investment on education. Having identified the two sets of variables for each domain, the second step was to apply the Canonical Analysis in order to examine the association between risk tolerance behaviour and education investment. The data for the study was obtained from a sample survey conducted in six Divisional Secretariat Divisions (DSDs) of three districts in Sri Lanka. The sample was selected considering the social sectors as strata, using multi-stage sampling technique joined with cluster sampling. The study found that 'social sector' and 'education of household head' were the main contributors to 'household investment on education'. It revealed that when the 'social sector' changes from urban to rural and rural to estate there is a tendency of households to decrease the share of expenditure on education. However, the 'education level of the household head' had a significant positive impact for the investment in education. It also found that 'income quartile, decision maker', 'income diversification', and 'financial literacy' positively contributed to 'risk tolerance behaviour'. However, the findings show that financial risk tolerance decreases with the distance of households to a financial institute. The canonical relationship shows a negative association between 'income quartile' and the 'social sector' and the 'income quartile' improves with the change of the 'social sector' from estate to rural and rural to urban. It also revealed that 'income quartile' was positively associated with the 'education of the household head'. A primary conclusion can be arrived at that income and spatial related attributes are crucial in determining the impact of risk tolerance in household education investment. In addition, the study revealed that risk tolerance and, in turn, the tendency to invest in education increases with the change of gender from female to male. Therefore, it suggests that gender related attributes are also important in the financial risk tolerance and education investment.

**Key words:** Binary regression, Canonical analysis, Education investment, Risk tolerance, Social sector

### 1. INTRODUCTION

Many economists have considered education expenditure as an investment. The pioneering Economist, Smith (1776) had clearly stated in the 'Wealth of Nations' that the skills acquired through education is a form of fixed capital that has an earning power. Marshall (1890) in 'Principles of Economics' reiterates that 'the most valuable of all capital is that invested in human beings' (p.564). After a long delay, Schultz (1961) created a revolution by introducing his human capital theory, which directly mentions that investment on education as another form of capital. Since then, the idea that education expenditure is an investment in human beings that transforms labour into valuable human capital became a popular and widely used concept in development economics and many academic applications.

Even if either the public or private sector provides education, the demand for education has arisen at family level by allocating a part of family expenditure for the education of children. However, the family