Income Elasticity of Health Consumption in Sri Lanka

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Among middle income countries, Sri Lanka reports to have satisfactory levels of health status but with lower expenditure on health. With future growth, country is also expected to experience various health threats linked to numerous transitions, while health consumption would have to rise. Being a developing country Sri Lanka has achieved higher levels of health status but with less overall expenditure on health. This study aims at estimating income elasticity and the interest rate elasticity of health consumption in Sri Lanka. Annual data of the period 1990 -2016 are used for the study. Real Total Health Expenditure (RTHE) as a proxy for health consumption stands as the dependent variable, while Per Capita Real GDP (PRGDP) and Fixed Deposit Rate (FDR); as the proxies for income and interest rate respectively are independent variables in the analysis. Augmented Dickey Fuller (ADF) Unit-root test was carried out to test the stationary condition of data series. According to ADF test results, all the three variables are identified as non-stationary which becomes stationary at the first difference. At a situation where all variables are I (1), the suitable method to find the long run relationship was Co- integration Method. Hence, the Johansen Co-integration Test was employed while Vector Error Correction Model (VECM) facilitated the finding of short run dynamics. There was one co-integration relation among the variables. In the long run, income shows a positive relationship with health expenditure indicating that health consumption had a positive relation with income while interest rate had a negative relationship. Health consumption is corrected towards equilibrium within a one year period which is a very little rate of adjustment. R squared of model is satisfactory & explanation power of the model is 65%. Results concludes that when income increases people tend to increase health care consumption but with an elasticity less than one. Since Sri Lanka is still a developing nation, this comparative inelasticity is obtained but research can be done to observe changes in this responsiveness with the increasing income in the country.

Keywords: co-integration test; health consumption; income elasticity; vector error correction model