

- Thesis Title: “An Evaluation of Consumption Function for Pakistan Based on Time Series Analysis”

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### **ABSTRACT**

Besides gross domestic product, aggregate consumption is the single most important macroeconomic variable which affects various sectors of the economy, directly or indirectly. For example, consumption is said to be the biggest component of aggregate demand and hence is a major determinant of economic fluctuations in an economy. Besides these well known effects of consumption, it also has a number of other effects which are very relevant from the policy perspective. For instance, variations in consumption are strongly associated with variations in government tax revenues (in particular where bulk of tax revenue is collected through consumption taxes), variations in the balance of trade, inflation and so on.

Keeping this immense importance of aggregate consumption in mind, it is important to know the sources that cause variations in aggregate consumption. This very topic is under serious scrutiny since the times of Keynes (1936) but no single answer has been reached as yet. In particular, there are still debates on the differences of short run and long run consumption study has been designed to seek answers for some of the debated issues in the area.

The study utilizes time series data from 1971 to 2012 and most of the variables mentioned relevant in the literature. As is the routine in contemporary time series based econometric analysis, we have checked all the variables for their order of integration. Since most of the Variable under consideration were found to be non stationary, the use of conventional ordinary least square was ruled out and we searched for our answers using the relatively new cointegration analysis. The relevant technique, in our case, was the Johansen and Juselius (1992) cointegration (JJ hereafter) technique which has a number of advantages over the Engle Granger cointegration technique.

The JJ test confirms the long run equilibrium relationship between consumption and the set of explanatory variables (income, wealth, rate of interest, relative prices, liquidity constraints as proxied by unemployment, government expenditure, uncertainty and exchange rate) and then we moved to estimate the VECM model to the long and short run coefficients of the variable explaining consumption. The resulting ECM term turned out to be negative and statistically significant, meaning that the set of explanatory variables, listed above, causes variations in long run consumption behavior of Pakistan. After arriving at a parsimonious ECM model, we then carried out the short run causality analysis.

The major conclusions of the study, based on the estimated long run consumption function are that current income, real exchange rate and interest rate have no explanatory power for

explaining consumption. On the other hand, variables such as government expenditure, and liquidity constraints effects long run consumption negatively and the wealth effects on consumption are positive. Form the long run consumption function, we failed to found any evidence of the price confusion effect.

Similarly, the short run consumption function, based on the error correction mechanism, reveals that personal disposable income effects consumption positively while rate of interest and uncertainty affects it negatively. The short run consumption function shows that Pakistani consumers do suffer from the from the price confusion effects in the short run. However, wealth and liquidity constraints both turned out to be insignificant factors in the short run.