Some new estimates of shadow economy for 80 countries using pooled mean group estimator

ABSTRACT

The purpose of this study is to estimates the size of the shadow economy for 80 countries from nine regions spanning the period 1975-2012 based on Tanzi-type currency demand approach (CDA). This study contributes to the literature in three distinct ways. First, we augment CDA regression with a macroeconomic uncertainty index (MUI). Second, the construction of the uncertainty index is based on the dynamic factor model (DFM). Third, the pooled mean group (PMG) estimator allows in capturing the heterogeneity across countries in the short-run dynamics but imposing restrictions in the long-run parameters. The results confirm the existence of the long-run equilibrium relationship among the variables examined. All coefficients show expected signs along with statistical significance. More importantly, the macroeconomic uncertainty index variable show positive relationship, suggesting that public tend to hold more currency in an uncertain macroeconomic environment. In addition, we observe that developing regions (ranging from 19.9% to 37.3%) exhibit relatively large size of the shadow economy. On the contrary, developed regions have a considerable smaller estimate (ranging from 13.7% to 19.0%) of the size of shadow economy. On average, the world estimate of the shadow economy as a percentage of GDP is about 23.1%.

Keyword: Shadow economy; Currency demand; Macroeconomic uncertainty; Pooled mean group