MACROECONOMIC DYNAMICS OF INCOME GROWTH: EVIDENCES FROM ARDL BOUND APPROACH, GMM AND DYNAMIC OLS

Dr. Muhammad Mustafa
School of Business
South Carolina State University
Orangeburg, SC 29117
USA

Dr. Haile M Selassie
School of Business
South Carolina State University
Orangeburg, SC 29117
USA

ABSTRACT

Using the annual data from 1980 through 2015, and applying the Autoregressive Distributed Lag (ARDL) Bound Approach, Dynamic OLS (DOLS) and Generalized Method of Moments (GMM) methodologies, this paper attempts to identify some major macroeconomic drivers of income growth in South Carolina. The ARDL Bounds testing approach, proposed by Pesaran, Shin, and Smith (2001) has several advantages compared to widely used Johansen and Juselius (1990) cointegration technique. One advantage is that it lends itself to estimating the long-run relationship without requiring the pretesting of the presence of unit root. Also, the error-correction modeling by the ARDL cointegration procedure facilitates both short-run and the long-run causality. The long-run results show that capital investment, export, government expenditure, and new business have significant positive effect on the growth of income. The short run dynamic results confirm that capital investment, export, government expenditure and new business establishment have significant and positive impact on income growth. The long term estimates indicate that a 1% increase in capital investment, export, government expenditures, and new business would increase income growth by 7.71, 33.7, 16.89, and 28.4 percent respectively. Also, GMM and Dynamic OLS estimates find capital investment, export, government expenditures and new business have significant and positive impact on income growth. The results imply a commitment to export promotion, capital investment, government expenditures and new business are important ingredients for successful state growth strategy.

Keywords: Income Growth, ARDL Bound Approach, DOLS, GMM.