The Dynamic Sectoral Growth Linkages: Evidence from Sri Lanka.

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ABSTRACT

An understanding of sectoral growth dynamics becomes more important for policy formulation in designing a balanced growth in the economy. This study attempts to examine the dynamic growth linkages among three major sectors; agriculture, industry and services of the Sri Lankan economy for the period 1960-2017. The variables used in this study are Agricultural GDP, Industrial GDP, Service GDP and Overall GDP. The data for the study are collected from the Central Bank Annual Report 2017. Graphical analysis including scatter plot, line graph, Confidence Ellipse and Nearest Neighbor fit are used to identify the basic features and the relationship between sectoral GDP series. Inter temporal correlation results show that there exists a high positive statistically significant correlation between all sectors GDP at 5 percent level. Unit root test results show that all GDP series are nonstationary. First difference of all log (GDP_i) series are stationary. Engle-Granger (EG) co-integration test using fully modified OLS estimation provides evidence of long run equilibrium relationship between sectors. The results from ECM shows that the coefficient of error correction terms are statistically significant and had expected sign (negative) for all models, all sectors are positively related significantly even in the Short run. The diagnostic test results indicate that the results are robust. Granger causality tests indicate that Agriculture and Industrial Sector Granger cause economic growth significantly. It is also noted that overall economic growth Granger cause agriculture sector GDP. The investigation of causality analysis among sectors show that service and agriculture sectors are having two-way Granger causal relationship in the short run. In addition, Service sector Granger cause Industrial sector while Industrial Sector Granger cause Agricultural sector significantly. In contrast, Error correction term coefficient Granger causality indicator (ECT) shows that there is a significant causal relationship among sectors in the long run. Results indicate that agriculture sector Granger cause other sectors significantly and is base for livelihood for more people. Therefore, government needs to support agriculture sector to have stable overall economic growth. Empirical results indicate that all sectors are interlinked. However, study need to promote all sectors in effective and stable ways.

Keywords: *Causality, Cointegration, Growth linkages, Sectoral GDP dynamics*

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