Investigating the Provincial Government Expenditure–Economic Growth Nexus in a Multivariate Model: Empirical Evidence from Free State Province

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Abstract

This paper examines the relationship between government expenditure and economic growth in the Free State province based two opposing theories (i.e., Wagner's Law and Keynasian theory). Five commonly-used functional forms of Wagner's law are estimated in both bivariate and trivariate models over the period 2001:Q1 to 2014:Q4. Population variable is included as a third endogenous variable in our model to avoid the 'omitted variable' problem and erroneous conclusion on causative link in the specified model. The long-run relations and causal links among variables are tested using the novel Autoregressive Distributed Lag (ARDL)–bound testing approach and Toda-Yamamoto causality test. Our results shows a bi-directional causal link between total provincial government expenditure (PGE) and economic growth (real GDP) in the short run, while the real GDP Granger-causes GE in the long-run. We also find a unidirectional causal flow from population growth to both GDP and PGE in the short-run, suggesting that demographic factor plays a key role in explaining rise in total GE. Other evidence reveals a long-run income elasticity ranging from 0.99 to 1.2%, implying that a 1% increase in real GDP in the Free State will cause PGE to rise by 0.99 – 1.2%. In view of 'voracity effect', we find that total GE can rise by 0.49 – 2.12% in the short-run, in response to a positive shock suggesting that external shocks influences total PGE. Policy implication of our findings provides strong support for the adopted ongoing fiscal consolidation stance by the province to enhance effective allocation of limited fiscal resources, curb wasteful expenditure and reduce government size. Albeit, the bi-directional causal link between real GDP and PGE require policy makers to prudently balance both current and future public expenditures not to crowd-out output and labour productivity.

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