## Understanding the Nature of Causality between Economic Growth and Government Revenue in Gauteng: A Granger Causality Approach

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## ABSTRACT

Wagner's Law asserts that government expenditure rises as the economy expands. This has often been investigated in the past. This paper extended this theory to state that if government expenditure increases as the economy grows, then it must be doing so because government revenue is increasing as well. This paper uses the Granger causality tests to ascertain if there is causality between economic growth and government revenue in Gauteng, as well as the direction of the causality, if any. Essentially the Granger causality approach determines if previous economic growth is helpful in predicting current revenue levels.

The results show that with some revenue sources (revenue from casino gambling and revenue from motor vehicle licences) evidence of Granger causality was found. However, for revenue from health patient fees, revenue from horse racing and betting, and total revenue, no evidence of Granger causality was found. The results were congruent with conventional thinking about the sensitivity of sources of revenue to changes in economic growth.

From a policy perspective, the results suggest that revenue management activities are not necessarily subject to limits of prevailing economic conditions. That efforts to increase revenue levels in times of low economic growth, can be successful. The key to unlocking further revenue in the Gauteng Provincial Government context lies in understanding that the limitations placed on revenue collection by low economic growth to a large extent can be mitigated by improvements in revenue management. In particular, more careful economic analysis on the specific revenue sources may be necessary.

Keywords: Wagner's Law, Government Revenue, Granger Causality