Wagner's Law in Developing Countries: Evidence from Time Series Analysis

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The objective of this study is to verify Wagner's law in the context of a group of twenty developing countries with the aid of elasticity, causality, cointegration and error-correction approaches. The cointegration tests confirm the presence of long-run relationship between national income and government expenditure in most of the sample countries. Though the evidences from elasticity, Granger causality test and error-correction models are somewhat mixed, the overall weight of the findings is in favour of the law. This revealation, however, is significant especially when several previous studies have questioned the validity of the law by relying exclusively on the Granger tests.

I Introduction

The basic thrust of Wagner's law propounded more than one hundred years ago, is that the level of economic development (for example, GDP per capita) influences the scale of gevernment activity or expenditure. That is, the law postulates a causal relationship from national income to government expenditure. In formulating his law of 'expanding scale of state activity', Wagner basically adopted the Engel curve analysis to explain the demand for public goods [Musgrave, 1959]. Engle's income-consumption analysis suggests that, if the income elasticity of demand for government expenditure is unity, growth in income will be accompanied by equi-proportionate increase in government expenditures, leaving the ratio of gevernment to total activity constant. If the elasticity is greater than one, growth in public expenditure induced by an increase in income will be such that the government output will account for an increasing proportion of total output. Wagner's justification of his "law" implies that he was interested only in the secular growth of public expenditure in relation to output and was concerned primarily with the time pattern of expenditure growth.

Several empirical studies in the past three decades, both time series (for individual and/or group of countries) as well as cross sectional (for countries at various levels of development), have tested