Does the composition of public expenditure affect economic growth? Evidence from the Swiss case

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Abstract

In light of tightening budget constraints caused by the recent financial and economic crisis and population ageing, it has become increasingly important to explore which portfolio of public expenditure generates economic growth. This paper, therefore, estimates the growth effects of the composition of public expenditure for the Swiss case. One main finding is that public expenditures on transport infrastructure, education and administration foster growth. Since non high-quality data, which can bias least square estimators, is pervasive in economics, statistically robust estimation methods are applied.

The full text can be downloaded (restricted) at:

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See also the introduction of the paper below:

I. Introduction

The goal of this paper is to demonstrate which public expenditure items can be growth-enhancing by applying statistically robust estimation methods to Swiss data. This practice is uncommon, but particularly appropriate, in the field of economics because non high-quality data are pervasive (Zaman *et al*., 2001; Colombier, 2009). Analysing the impact of the composition of public expenditure on economic growth can be crucial for formulating long-term economic policy. The majority of OECD countries face demographic burdens due to the ageing of their societies, a trend that is likely to have a strong impact on public finances. The financial and economic crisis has placed even more strain on public finances, proven by mounting government deficits and debts worldwide. In the aftermath of this crisis governments are forced to curb expenditures to achieve sustainable public finances, but due to tightening budget constraints, non-growth-enhancing expenditures may crowd out outlays that would potentially boost economic growth. Hence, a so-called "budget crowding out" may ensue. Therefore, the issue of which government expenditures can foster sustained movements in economic growth rates is becoming increasingly important. This study shows, for instance, that the organisation of government administration itself can be pertinent to economic growth.

Many empirical studies have been carried out to test the hypothesis of endogenous growth theory that governments can actively foster economic growth (Barro and Sala-i-Martin, 1992). According to a comprehensive survey by Nijkamp and Poot (2004, p. 104), which comprises 123 articles, the majority of these studies (77%) are based on cross-country or panel data. In contrast, this paper applies a time-series approach, for the following reasons. Though cross-country or panel data studies have their merits, they suffer severely from the heterogeneity of the underlying data set. Countries differ from each other in many respects, such as in their political-economic systems, their respective cultures, history and geographical features and so on. As Durlauf (2000, p. 252) states (a respected figure in empirical growth economics): "…heterogeneity is a key feature of national experience". The resulting econometric problem, termed "parameter heterogeneity", can lead to inconsistent estimates (e.g. Temple, 2000). As a result, a cross-country or panel data approach does not allow for a consistent estimation of country-specific growth effects and might cause bias in the estimation of the average growth effect (Lee *et al.*, 1998). Hence, to avoid parameter heterogeneity, time series studies such as that conducted by Kocherlakota and Yi (1997) using U.K. and U.S. data, which is likely to produce more robust results, should be carried out. Kocherlakota and Yi (1997) propose extending time series analysis regarding growth effects of fiscal variables to other countries and to a broader range of government policy variables. It would appear to be particularly apt for Switzerland to adopt this practice proposed as the comprehensive system of direct democracy that prevails here clearly distinguishes Switzerland from other developed countries. Furthermore, searching the economic data base IDEAS for *time series* studies that analyse the *growth impact* of the *composition of public expenditure* has yielded only two hits at the time of writing. Thus, there seems to be relatively few time series studies in this field. This paper seeks to make a contribution to this literature.

This present paper is organised as follows - in the following section, the methodology used for this analysis and the data are described. After reporting the findings of the growth regressions in section three, concluding remarks are provided in the final section, section four.