Persistence in government spending fluctuations: New evidence on the displacement effect

A comment on Goff

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According to Peacock and Wiseman's (1961) displacement effect hypothesis large scale social disturbances shift government expenditures to new levels which persist to a large extent despite the temporary nature of the disturbance. The economics profession has largely ignored the displacement effect so that empirical investigations are rare. Recently, Henrekson (1993) reviews critically the small number of empirical studies and analyses the Peacock-Wiseman effect for Sweden and the United Kingdom over the period from 1922 to 1987 concentrating on the effects of World War II. Henrekson applies the intervention analysis proposed by Box and Tiao (1975) and does not find empirical support for the hypothesis. To stimulate debate Rowley and Tollison (1994) offer the argument that there is no evaluation of the displacement effect with respect to the ending of the Cold War between East and West.

Against this background Goff's (1998) paper is an important contribution to the literature. The study is conducted in a fairly reasonable manner. The economic foundation of persistence of shocks to government spending, the time series methods and the empirical findings are clearly presented. Goff applies two measures of persistence (Campbell and Mankiw, 1987; Cochrane, 1988) to investigate the displacement effect for the United States over the period from 1889 to 1995. Relying on these techniques Goff interprets his findings as evidence in favor of the displacement hypothesis because the time series on government spending display strong persistence to temporary shocks and the persistence has increased during this century.

Investigating Peacock-Wiseman's hypothesis by using the above mentioned time series methods provokes the following question: Are the parametric and non-parametric persistence measures adequat tools to evaluate the displacement effect? There is one aspect which is important in this context. The displacement effect hypothesis refers to relatively infrequent but important events. Wars and natural disasters are often cited and provide good

examples for this kind of shocks. Yet the statistical methods implemented by Goff assume shocks which occur every period with small variance and, therefore, are unable to examine the importance of infrequent large shocks. Consequently, these methods are not appropriate to evaluate the Peacock-Wiseman hypothesis. In addition to this argument, Balke and Fomby (1991) show that the presence of large and infrequent permanent shocks generates problems of identification, estimation and interpretation of measures persistence. Investigating fifteen major post-World War II macroeconomic time series for the United States Balke and Fomby (1994) find significant evidence that large and infrequent shocks are typical of macroeconomic time series and are an important source of variability; see also Bradley and Jansen (1995).

An empirical investigation of the displacement effect requires an analysis of the importance of large shocks in general, namely an attempt to establish the existence, the frequency, the timing, the persistence of large shocks and whether they coincide with important economic events. The empirical strategy proposed by Balke and Fomby (1991) consists of a search for outliers and is useful for this task. Once the timing and the classification of outliers are identified, an intervention model is estimated to assess the importance of the outliers. Such a methodology appears to be more consistent with Peacock and Wiseman's original writings than the techniques used in Goff's paper.

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