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Was Fiscal Policy Destabilizing?*

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**Economic Policy and Output Volatility in Spain, 1950-1998:
Was Fiscal Policy Destabilizing?**

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ABSTRACT

Was Spanish fiscal policy destabilising? We estimate policy reaction functions and test the impact of fiscal shocks on growth volatility over the period 1950-1998. We find that a transition from pro-cyclical to countercyclical fiscal policy occurred in the late years of the Franco regime, contributing to the stabilization of the growth pattern. The timing of the shift, between the late 1960s and early 1970s, was not determined by a single policy change, but rather by gradual pressure from economic liberalization, the external constraint imposed by a fixed exchange rate regime and the modernization of fiscal policy instruments. The aggressiveness of fiscal shocks also decreased over time, thus contributing to the progressive stabilization of output growth. There appears to be little necessity to appeal to a ‘Great Moderation’ of monetary policy to understand the greater stability of the Spanish economy from the 1980s

JEL Codes: E32, E62, N14

Keywords: fiscal reaction function, fiscal shocks, SVAR, growth volatility

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Introduction

Has fiscal policy been stabilizing or destabilising? Has government spending and taxation smoothed or exacerbated the volatility of the growth process? Whether stabilising or destabilising, the rise of big government in the twentieth century almost certainly influenced fluctuations in economic activity. It follows that changes of economic or political regime may have altered the pattern of growth and its volatility. Indeed falling volatility (the so-called ‘Great Moderation’) has been observed in most industrialized countries over the last quarter of the 20th century. However, its connection with changes in the conduct of macroeconomic policy has been explored only in relation with monetary policy (Stock and Watson 2003). Indeed, empirical studies suggest that fiscal policy in both industrialized and developing countries has been much less countercyclical or acyclical (thus stabilizing) than suggested by either standard Keynesian models or Barro-type tax smoothing models (Fatás and Mihov 2008 and 2009).

This paper explores these questions and propositions for a half century of Spanish experience. Our concern is not only to assess whether fiscal policy increased or reduced output volatility but also to establish whether it did so systematically so that fiscal policy regimes can be identified in the form of reaction functions.

In the case of Spain, fiscal policy is especially prominent since monetary policy emerged later than in most of the rest of Western Europe as an autonomous instrument of economic policy. During the 1950s, the central bank guaranteed unconditional liquidity to the government and the public sector through the automatic discount of public debt. This policy was discontinued only in 1962, when the Bank of Spain was nationalised and put under the control of the Ministry of Finance, but quantitative credit schemes remained the main instrument of monetary intervention and the monetary base was hardly managed (Poveda 1972). Only in 1973 did monetary policy come of age, with broad money and then private sector liquidity used as intermediate target, and bank reserves as the instrumental target (replaced by short-term interest rate after 1984) (Aríztegui 1990; Ayuso and Escrivá 1998). However, recent studies (Gadea et al. 2008; Bajo Rubio et al. 2010) contend that fiscal dominance (a regime under which fiscal deficits determine the path of money creation and the sustainability of fiscal policy is

achieved through adjustments in the price level) prevailed for most of the postwar period, and was not clearly reversed until the 1990s, when the Bank of Spain gained formal independence.

Even so, little attention has been paid to the contribution of fiscal policy to Spanish macroeconomic volatility in the period of most rapid economic growth, the quarter of century after 1950. For the post-1980 period, some studies suggest that fiscal policy stabilised private consumption and output growth, mainly thanks to an expansion of welfare provisions and the increasing size of the public sector (Dolado et al. 1993, Gómez 1993, Marín 1997). In the other direction, De Castro (2003) estimated that for the period 1980-2001, government spending shocks were the most important exogenous source of output volatility, explaining 15 per cent of GDP variance at a one-year horizon.

Our original contribution is threefold. First, we provide a much longer perspective on the conduct of fiscal policy than the current empirical literature, which usually is limited to the post-1970 period. Second, we shed light on changes in fiscal behaviour of governments in the transition from autocracy to democracy, thus contributing to the literature on fiscal policy under authoritarian polities. Third, we uncover shifts in fiscal policy regimes and provide empirical evidence of their impact on output volatility over time. In so doing we offer an alternative to the ‘Great Moderation’ of monetary policy as an explanation for the enhanced stability of the Spanish economy from the 1980s.

Section 1 outlines the conceptual framework of the paper and surveys the existing literature. Section 2 discusses the history and institutions of Spanish fiscal policy in the years 1950 to 1998. Section 3 empirically estimates government’s reaction functions—that is, the impulse-response dynamics of fiscal policy and output—using both a Structural VAR framework and an instrumental variable approach. Section 4 focuses on the time-varying magnitude of discretionary fiscal shocks and measures their impact on growth volatility.

1. Fiscal policy and the cycle: theory and empirical literature

Growth cycles may be represented as the response of the economy to a series of random shocks. Most instability originates on the demand side of the economy, which fiscal policy both influences and reacts to. Three elements of fiscal policy can be distinguished: *a cyclical, non-discretionary component*, determined by automatic stabilizers such as tax revenues (pro-cyclical) or unemployment benefits (countercyclical); *a discretionary and systematic component*, that is, deliberate and systematic responses of the government to the state of the economy; and *a discretionary and non-systematic component*, that is, budget decisions not related to economic fluctuations. Any of the three components can be responsible for a change in the growth cycle pattern.

Fiscal policy influences growth volatility primarily through structural features of the fiscal regime. These structural characteristics include the size of the public sector, and therefore the proportion of GDP devoted to public spending and taxation, and the composition of tax receipts and expenditures. A small government sector has a smaller stabilising or destabilising impact, other things being equal. Modern fiscal regimes, based on a progressive tax system and large spending on unemployment benefits and other subsidies related to economic fluctuations, exhibit greater stabilizing properties than regimes with regressive taxation and spending concentrated on government purchases (van den Noord et al. 2000, pp. 6-8; Andrés et al. 2007). In fact Gali (1994) finds a significant stabilizing effect of government size on GDP variability in a sample of OECD countries in the period 1960-90 as do Fatás and Mihov (2001) for a similar sample and period, after controlling for additional factors such as international openness. More recent studies suggest that the stabilizing effect of government size may have significantly declined since the 1980s (Mohanty and Zampolli 2009). The latter evidence is consistent with the decline of fiscal multipliers observed by Perotti (2005).

The second element, systematic discretionary responses to cyclical fluctuations, can be modelled by ‘reaction functions’ (Fatás and Mihov 2003) or ‘fiscal rules’ (Gali and Perotti 2003). Non-systematic discretionary changes are “fiscal shocks”, that is, changes in the fiscal stance that are exogenous to the economy and to built-in characteristics of the tax and spending process (such as implicit or explicit rules and the institutional

arrangements). Denoting g as the growth of real government spending (net of automatic stabilizers), and y as output and demand growth, the discretionary systematic component of policy is measured by the parameter c in the reaction function

$$g = c_1 (y - y^*) + u_g \quad (1)$$

where y^* is a target output growth, y is the realized (or expected) growth rate, and non-systematic discretionary changes in spending are represented by u_g , which are 'political shocks'.

The impact of fiscal policy is through an aggregate demand or, say, an IS function, where u_y represents demand shocks;

$$y = b(g) + u_y \quad (2)$$

Substituting the reaction function in the IS function, growth of spending is dampened when $c_1 < 0$; discretionary policy is stabilising. When $c_1 > 0$ aggregate demand growth is reinforced by government expenditure; policy exacerbates cyclical fluctuations. Figure 1 illustrates.

FIGURE 1 HERE

A positive demand shock, such as a rise in the demand for exports, shifts the IS or aggregate demand function upwards in figure 1. A boom begins but fiscal policy reaction is to stabilise, so g is cut back and short run output expansion is less than in the absence of reaction. A reaction function with the opposite gradient represents a destabilising government. In the long run increased government spending has no effect on output or aggregate demand (as a first approximation – ignoring possible crowding out of productive investment), because it is simply redistributive.

In the model of figure 1, long run fiscal equilibrium in a static economy requires that taxes cover government spending including debt service. Otherwise debt is accumulating or decumulating, which is not sustainable in the long run. We assume tax revenues adjust somehow. The impact of the government spending change depends upon these taxes. But in the short run on the reaction function the government can run up or run down debt as necessary. The IS, aggregate demand or impact function, how spending affects income and output, assumes tax revenues are endogenous, part of the

