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# Counter-cyclical budget policy across varieties of capitalism☆

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ABSTRACT

The role of macroeconomic policy in the different varieties of capitalism has been largely ignored. Recent contributions to the literature have argued that nonliberal economies, i.e. coordinated market economies, should be expected to have less accommodating (i.e. less counter-cyclical) macroeconomic policies than liberal varieties. Using time-series cross-section data on 18 OECD countries between 1980 and 2009, this paper tests that hypothesis and, more particularly, whether the reaction of discretionary fiscal policy to macroeconomic shocks is different between liberal and nonliberal varieties of capitalism. The test results do not support the conclusion that nonliberal economies' macroeconomic policy would be less counter-cyclical than that of liberal economies. On the contrary, discretionary fiscal policy has been more counter-cyclical in former economies.



## 1. Introduction

This paper investigates developed countries' reaction to macroeconomic shocks. It is generally acknowledged that developed economies run counter-cyclical fiscal policies whereas developing countries mainly rely on a pro-cyclical stance (Perotti, 2004; Gavin and Perrotti, 1997; Catao and Sutton, 2002; Kaminsky et al., 2005; Woo, 2005; Alesina and Tabellini, 2005). Recent literature (Soskice, 2007) has argued that different varieties of capitalism should exhibit differentiated budget policy responses to macroeconomic shocks. Because liberal and nonliberal (a.k.a. coordinated) market economies possess different structural features in the fields of industrial relations, education and vocational training, corporate governance, inter-firm relations and intra-firm coordination (Hall and Soskice, 2001), the need for a counter-cyclical macroeconomic policy would not be the same in each variety.

Soskice (2007), Carlin and Soskice (2009) and Iversen and Soskice (2010) have presented some theoretical and empirical elements in favour of a clear differentiation between varieties of capitalism with respect to their aggregate demand management regimes (ADMRs). Liberal market economies (LMEs) such as the US would have to conduct a more active and more counter-cyclical discretionary government spending policy than nonliberal, coordinated, market economies (CMEs) such as Germany. Faced with the same adverse macroeconomic shock, a CME would implement a rather restrictive budget policy in order to limit the deficit, whereas an LME would choose an expansionary budget deficit to limit the effects of the negative shock on the level of activity or unemployment. This differentiation of ADMRs would correspond to a systemic requirement for each type of capitalism. Because of the presence of a strong welfare state and other institutional characteristics such as employment protection, nonliberal varieties of capitalism have built-in automatic stabilisers that make discretionary economic policy interventions less

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necessary. Also, their political systems, based on proportional representation and leading to coalition governments, would make it necessary to adopt a rule-based policy instead of using their own discretion, in order to prevent soaring deficits and to send a signal to trade unions that wage hikes that could threaten competitiveness would not be accommodated by the fiscal or monetary authorities.

There would thus be some complementarity between the production regimes (which can be either liberal or coordinated) and the aggregate demand management regimes (accommodating or conservative). This complementarity would then help to explain why some countries' macroeconomic policies would react more strongly to macroeconomic shocks and be strongly counter-cyclical, whereas others' would be less reactive.

The aim of this paper is to investigate these matters by testing whether one could differentiate among the discretionary fiscal policies implemented by liberal and nonliberal developed economies. In particular, the paper tests how the discretionary component of fiscal policy reacts to macroeconomic shocks for different varieties of capitalism. These tests are carried out using data from a panel of 18 OECD countries for the 1980–2009 period. Contrary to the expectations of the Varieties of Capitalism literature, our findings do not show that the fiscal policy of liberal market economies is systematically more counter-cyclical than that of nonliberal economies. In fact, a strongly counter-cyclical policy seems to be characteristic of nonliberal varieties of capitalism: the budget policy is expansive in the slump and restrictive in the boom. By contrast, the more liberal market economies seem to adopt a less counter-cyclical stance: their fiscal policy response to shocks is moderate.

The paper is organised as follows. Section 2 reviews the treatment of the pro/anti-cyclical stance of budget policy in the dedicated empirical literature and presents the arguments relating the cyclical stance (pro- or counter-cyclical) of a country to its type or variety of capitalism (liberal or coordinated). According to these arguments, liberal varieties are expected to be more counter-cyclical than coordinated (i.e. non-liberal) economies. Section 3 presents the empirical strategy adopted to test this prediction: data sources, variables used, and estimators. Results are then presented in Section 4, and their interpretation is discussed. A short conclusion follows.

## 2. Macroeconomic policy and varieties of capitalism

### 2.1. Assessing the counter-cyclicality of macroeconomic policy

In order to assess whether fiscal policies are pro- or counter-cyclical, one usually relates some indicator of fiscal policy, e.g. the budget balance, to a measure of economic shock. A positive association means that a recession, for instance, leads to a decrease in the budget surplus or an increase in the budget deficit. In this case, fiscal policy is said to be counter-cyclical since the evolution of the budget balance will act in an expansionary way. By contrast, if the correlation between the indicator of shock and the variable representing fiscal policy is negative, the policy acts in a pro-cyclical way. A recession will then lead to a tighter budget balance, which will reinforce the initial effect of the negative shock. To sum up, a counter-cyclical policy is expansionary in bad times and contractionary in good times. A pro-cyclical policy is exactly the opposite.

It is also a common practice to distinguish the discretionary part of fiscal policy from its non-discretionary part. The latter acts as an "automatic stabiliser" for the level of output. If tax rates and discretionary government spending as a fraction of GDP are kept constant over the business cycle, total government spending as a share of GDP will go down in booms and increase in recessions, making thus aggregate budget policy *de facto* counter-cyclical. However, the size of the automatic stabilisers reflects the structure of the economy, e.g. the size of the welfare state, rather than the action of the government. The evolution of discretionary government spending signals the policy stance of the government: whether the latter pursues a pro-cyclical policy by cutting expenditure (or raising taxes) in bad times or a counter-cyclical policy by increasing government spending in recessions. With such a definition of a pro/counter-cyclical policy, leaving discretionary government spending and tax rates constant over the business cycle would then be considered as an a-cyclical policy.[1] The coexistence in the literature of different definitions of pro/counter-cyclicality then explains why this literature also refers to different indicators of fiscal policy such as: the level of the primary balance as a share of GDP (Celasun and Kang, 2006), total budget surplus, spending or tax revenues as a share of GDP (Alesina et al., 2008), real government purchases or real government receipts of direct and indirect taxes net of transfers to businesses and individuals (Auerbach and Gorodnichenko, 2012). There are also debates related to the estimation of the fiscal policy reaction: whether the reaction is symmetric or asymmetric over the cycle (Auerbach and Gorodnichenko, 2012), or depends on the economic environment and variables such as the exchange rate regime (pegged versus flexible), the state of public finance or the health of the financial system (Corsetti et al., 2012) or the type of business cycle, i.e. demand shocks or supply shocks (Dobrescu and Salman, 2011). The main interrogation is however whether countries respond to economic shocks in a counter-cyclical or a pro-cyclical way. Answers depend of course on the sample of countries and time period considered. Authors that focus on discretionary budget policy use budget indicators that are corrected from the effect of the business cycle, either in level or in first difference, most often the cyclically adjusted primary balance.[2] The most commonly-used variable for the business cycle effect is the output gap, i.e. the difference between actual and potential output (GDP).

[1] This corresponds to the definition adopted in Kaminsky et al. (2005). The other definition, which relates the evolution of total budget expenditure or tax rates to the business cycle is to be found for instance in the real business cycle literature. See also Alesina and Tabellini (2005).

[2] Celasun and Kang (2006) compare different estimators for fiscal reaction functions and conclude that a specification with the budget variable in level and country fixed effects outperforms other estimators.