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Why are corrupt countries less successful in consolidating their budgets?☆

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ABSTRACT

Following the financial crisis, many countries introduced fiscal stimulus packages making budget consolidations in the future rather challenging. Using a data set for 28 OECD countries spanning the period 1978–2007, we contribute to the literature on success probabilities of consolidation attempts by exploring the impact of corruption, and in particular the interplay of corruption and the choice of the policy instrument. We find that corruption significantly reduces the success rate. When controlling for the change in government expenditures, however, the impact of corruption is insignificant or at least becomes less pronounced. We therefore relate the choice of the fiscal instrument to corruption and find that corrupt countries rely significantly less on expenditure cuts during periods of consolidation attempts. We conclude that international organizations should be careful in observing what corrupt countries do when trying to consolidate their budgets.

1. Introduction

1.1. Motivation and main results

Due to the global economic recession, most countries introduced fiscal stimulus packages leading to serious budget deficits. In the US, the budget deficit has recently exceeded one trillion for the first time in history. In Europe, government budget deficits are deteriorating swiftly, and deficits are amounting to more than 7% of the GDP in some countries including Ireland, France and Austria. The most recent and striking budget crisis was experienced by Greece, and indirectly in other Euro zone countries, which agreed on a multi-billion dollar aid package to help Greece fight its crippling debt and deficit burden. Thirty billion will be provided by loans from the International Monetary Fund (IMF), and another eighty billion are to be paid out by EU member states over the next three years.

In the aftermath of the crisis, many countries have already started programs to re-consolidate their budgets, and the question why some countries had been more successful in the past than others is of relevance to both academics and policymakers. Most of the empirical research on budget consolidations agrees that countries relying primarily on cutting government expenditure rather than on increasing tax revenues were more successful. [1] Our paper contributes by analyzing the impact of corruption, and in particular by exploring the interplay between corruption and the choice of the policy instruments. Following the literature (see below), we restrict attention to so-called *attempt periods* where countries are seriously trying to reduce their budget deficits.

Our first result is that corruption significantly decreases the probability of successful budget consolidations: in our benchmark regression, an increase of the corruption index by one point reduces the success probability by around 16%. Second, we find that the impact of corruption becomes much less pronounced and in many specifications even insignificant when we control for the percentage of the reduction of government expenditure in the total fiscal impulse during attempt periods. The relative expenditure change itself has the expected positive impact on fiscal balances, and this already indicates that the lower success rate of corrupt countries may come from choosing the wrong instrument. To test this hypothesis, we analyze

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[1] See Alesina and Perotti (1997b), Daveri and Tabellini (2000), Alesina et al. (2002) and Ardagna (2004).

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the determinants of the policy instrument choice during attempt periods, and we find that corrupt countries reduce their expenditures, relative to the total impulse, to a much lower degree than non-corrupt countries do.

Our results show that there are two negative impacts of corruption on fiscal consolidation success: a *direct* effect that can be attributed to the well-known adverse effects of corruption itself,[2] and an *indirect* effect coming from the instrument choice. We conclude that international organizations should pay particular attention to the composition of fiscal policy of corrupt countries during attempt periods.

Our data set for the fiscal and monetary variables is taken from the OECD Economic Outlook Database, consists of 28 OECD countries and covers the period 1978–2007. In our benchmark regressions we restrict the analysis to 22 long-established member countries for reasons of institutional consistency of the dataset and comparability with the results from the literature, and to the period 1984 to 2005 due to missing observations for some countries, the usage of lag and lead variables, and availability of corruption indices. In our benchmark regressions, we use the widely adopted corruption index from the International Country Risk Guide (ICRG), but we check for robustness by using the corruption index from Transparency International (TI). In our robustness checks, we also use an enhanced country set in order to include the new OECD member states.

A potential concern with our results is endogeneity as successful budget consolidations may influence the degree of corruption. This problem is virulent in most papers on the impact of corruption on macroeconomic variables, and we address it by considering the most important instrumental variables suggested in the literature. We find that the percentages of Protestants in the population (and to a lower degree the duration of democracy) are the best instruments available, and using them as instrumental variables basically confirms our results.

1.2. Relation to the literature

The seminal papers on the success of budget consolidations by Alesina and Perotti (1995 and 1997a) analyze if and why large fiscal impulses (*attempts*) consolidate the government budget in a sustainable manner (*success*). They show that fiscal adjustments relying mainly on expenditure cuts are more likely to be successful, and that cutting social expenditures and the government's wage bill are the most promising ways of cutting expenditure.[3] The most prominent explanation in the literature is that cutting expenditures reduces wages and production costs due to lower labor demand, thereby stimulating output in the private sector, increasing growth rates and reducing budget deficits.[4]

Ardagna (2004) finds that, for budget consolidation, the size of the attempt itself matters more than the composition which, on the other side, is more important for growth. Growth rates themselves are important in explaining budget consolidation, but Ardagna shows that composition still matters if growth rates are controlled for.[5]

Moreover, our paper contributes to the empirical literature on the impact of corruption on macroeconomic outcomes. Mauro (1998) shows that corruption affects the composition of government spending, in particular by reducing education expenditures. Other effects on the composition of government spending identified in the literature are higher military expenditures (Gupta et al., 2001), higher public investment and lower expenditures on operations and maintenance (Tanzi and Davoodi, 1997). Hence, corruption increases public investment but reduces its productivity. The effect of corruption on the success of fiscal adjustments, and the impact of corruption on the relative changes of instruments during attempt periods have not been analyzed yet.

When analyzing the impact of corruption, we have to be aware of the fact that other political factors are also likely to affect the persistence of fiscal adjustments. In particular, Alesina and Drazen (1991) argue that too many political parties may block each other which is empirically confirmed in Tavares (2004) and Mierau et al. (2007). We take this into account by incorporating a "Herfindahl index" for governments measuring political concentration.[6]

The most successful instrumental variables for corruption include Protestantism (see La Porta et al. (1999), Treisman (2000) and Hakkala et al. (2008)), ethnolinguistic fragmentation (see Mauro (1995, 1998)), legal origin (La Porta et al., 1999) and democracy (see Aidt et al. (2008)). The literature just mentioned adds to our understanding by discussing why these variables may be reasonable instruments, and we find that only Protestantism and, to a lesser extent, the duration of democracy can be used in our context, which can be attributed to the fact that our data set consist exclusively of industrialized countries.

The remainder of the paper is organized as follows: Section 2 describes the data. Section 3 analyzes the impact of corruption on the success probability of attempts. Section 4 investigates the choice of the policy instrument. Section 5 tackles the endogeneity problem by using different instrumental variables. Section 6 concludes.

2. Data, definitions and summary statistics

Our original data set consists of 28 OECD countries with an observation period between 1978 and 2007.[7] In our *benchmark regressions*, we extend the data set used by Alesina and Perotti (1995 and 1997a), which consists of the 20 oldest OECD member states, by adding Iceland, Luxembourg and New Zealand. As we do not have the corruption index used in the benchmark regression for Germany, this leaves us with 22 countries. In robustness checks, we also include the new OECD member states, and we include Germany when using a different corruption index. Due to the information available, country numbers are different in different robustness checks.

The following variables are used in our paper:

Corruption measures

In our benchmark regressions, we use the "International Country Risk Guide" (*ICRG*) provided by the Political Risk Services Group.[8] It covers the time period 1984–2005. The alternative Transparency International Corruption Perception Index (*TI*)[9] available for the time period 1980–2007 will be used in a robustness check. For both indices, higher numbers mean *less* corruption which we use synonymously to *better* governance throughout. We decided to use *ICRG* in the benchmark regressions as many of the early observations are missing in *TI* or have been generated ex post.

Cyclically adjusted attempt episodes

Following the literature on success determinants of budget consolidation pioneered by Alesina and Perotti (1997a), we restrict

[2] Other negative impacts of corruption on economic performance have been confirmed in Mauro (1995), Murphy et al. (1991), Acemoglu (1995), Ehrlich and Lui (1999) and Aidt et al. (2008) for instance.

[3] Contrary to this line of literature, however, Heylen and Everaert (2000) find that reducing the government wage bill increases the debt–GDP ratio three years after the adjustment.

[4] See e.g. Alesina et al. (2002) and similarly Alesina and Perotti (1997b), Daveri and Tabellini (2000), Alesina et al. (2002) and Ardagna (2004).

[5] Ardagna (2007) confirms most of these results using more recent data, but even finds that the composition does not matter at all.

[6] Other political factors discussed in the literature include the political orientation of governments (see Tavares (2004)) and federalism (see Cox and McCubbins (2001), Tsebelis and Chang (2004) and Schaltegger and Feld (2009)).

[7] Mexico and Turkey are omitted due to lack of data on fiscal variables.

[8] Downloadable at www.prsgroup.com.

[9] Downloadable at www.icgg.org.