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Electoral systems and fiscal policy outcomes: Evidence from Poland

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ABSTRACT

This article studies the causal effect of electoral systems on fiscal outcomes using an empirical design exploiting a discontinuity in the application of electoral rules in Polish municipalities in the period 2002–2014. In that period, municipalities followed either majoritarian or proportional (PR) systems, depending on the population size. The article provides evidence that the PR system results in smaller municipalities' own revenue, larger intergovernmental transfers and, consequently, greater vertical fiscal imbalance. It is demonstrated that the reduction in own revenue under the PR system is arguably driven by lower accountability of policy-makers, which leads to lower effort of policy-makers in stimulating local labour markets and entrepreneurship. An increase in intergovernmental grants, in turn, can be explained by a larger share of incumbents affiliated with national political parties.

1. Introduction

Do constitutional features, such as form of governments and electoral regimes, affect fiscal policy outcomes? This question is one of the most prevalent in political economy literature over the last 15 years or so. Notwithstanding a large amount of research in this area, there is little consensus over what and how constitutional rules drive fiscal policy outcomes. Cross-country studies, which are the most common in assessing the effects of constitutions on fiscal outcomes, suffer from two main problems. First, they miss institutional details, which might be crucial in driving the effects. Second, they are plagued by endogeneity problems, referred to as an omitted variable bias and reverse causality (Eslava, 2011; Alesina and Passalacqua, 2015). The credibility revolution, which stresses more careful exploration of causality through a robust research design (Angrist and Pischke, 2010), only recently has got attention in research on institutional public finance.

This article aims at estimating the causal effect of only one constitutional aspect relevant for fiscal policy formation, namely electoral systems. It does so by exploiting a unique institutional design of electoral systems at the local level in Poland. Electoral systems constitute a crucial element in democracy as they matter for how public preferences are translated into political representation and further into policy-making. The main institutional components of electoral systems are district magnitude (the number of seats allocated in an electoral district) and electoral formula (way of translating votes into seats). Based on these two criteria, the most frequent distinction is made between majoritarian and proportional representation (PR) (Lijphart, 2012). The former combines small district magnitude (often single-member districts) with plurality vote. The PR, on the other hand, relies on large districts (i.e. multi-member districts) and proportional formula.[1] In the Polish municipalities, these two distinct electoral

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[1] One more crucial dimension that differentiates electoral systems is a ballot structure, i.e. whether votes are cast for individual candidates (open-list) or for party lists (close-list). The electoral systems studied in this article do not vary with this respect as in both majoritarian and PR systems voters cast votes on individual candidates.

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systems were applied to elect the members of municipal councils (the legislative body of a municipality). A municipality was subject to either majoritarian system or PR depending on its population size. In the period of 1998–2014, the national electoral law stipulated that the municipalities of up to 20,000 inhabitants be subject to majoritarian elections and that the municipalities above this threshold be governed by open-list PR. This setting implies the application of regression discontinuity (RD) design, which amounts to a comparison of municipalities just below and just above the 20,000 threshold. This quasi-experimental setting of the electoral systems in the Polish municipalities, caused by a legal break, allows for a credible evaluation of the effects of electoral regimes on fiscal policy outcomes.

In their seminal book, Persson and Tabellini (2003) investigate both theoretically and empirically the impact of electoral systems on fiscal outcomes, such as the composition of public expenditure, the size of government and budget balance. In the cross-country setting, Persson and Tabellini demonstrate three crucial results. They show that the majoritarian electoral systems (due to reduced fragmentation and larger personal accountability) lead to (1) the reduction in size of government by 5% of GDP, (2) reduction of the welfare state by 2–3% of GDP and (3) the improvement in fiscal balance by 1–2% of GDP.

Persson and Tabellini (2003, 2004a, 2004b) were aware of the inherent problems involved in studying the effects of institutions on policy outcomes and to the extent possible, in their view, they tried to tackle these problems. Nonetheless, some authors find their approach unsatisfactory (Acemoglu, 2005). The identification of causal effects of constitutional rules is difficult for several reasons. First, electoral systems are 'slow moving institutions', i.e. reforms of electoral systems are rare (see, for instance, Lijphart (2012) and Norris (1997)). Thus, the empirical identification mostly relies on cross-country variation in electoral regimes. As the number of countries, and democracies in particular, is limited, this leaves the researchers with a small number of observations. Second, and potentially more important, is the fact that the selection of constitutions is clearly non-random. The choice of electoral rules might be endogenous and causally related to other determinants of fiscal policy outcomes. The third problem is related to the issue of constitutional patterns. It is often the case that certain institutional aspects go together in making it difficult to untangle the effect of a specific rule. For instance, plurality formula is usually applied in a single rather than a multi-member district. For all these reasons, estimates and conclusions presented by Persson and Tabellini (2003) should be treated with some caution.

A lack of robustness seems to be further confirmed by a recent literature which finds mixed results of electoral systems on fiscal policy outcomes.[2] Even though Blume et al. (2009) confirm the results obtained by Persson and Tabellini (2003), based on an extended sample (at least when it comes to the effects of electoral systems), other authors find opposite or no effects of electoral systems on fiscal outcomes. Regarding the size of government, for instance, Aidt et al. (2006) find that the change from a majority to PR system in Western European countries in the years 1830–1938 did not contribute to growth in government spending and rather held back spending on health, education and welfare. Similarly, using a sample of 65 democracies over the period 1975–2005, Klomp and de Haan (2013) show that governments in majoritarian systems spend more rather than less as compared to governments in PR systems. On the other hand, Fumagalli and Narciso (2013) find no effects of electoral systems on size of government using data for 85 democratic countries in the 1990s. Lastly, Funk and Gathmann (2013) find no evidence in favour of a positive association between a PR and larger governments for the Swiss cantons.

The approach in this article is novel as it exploits exogenous variation in the Polish electoral rules (the electoral systems are imposed on the municipalities by the central government and vary based on an arbitrary threshold) and deals with an unusually large dataset. The data collected for this article covers all 2478 Polish municipalities over the period 2002–2014. The beginning and end of this time period was marked by two key reforms. In 2002, the central government introduced the direct elections of mayors in the Polish municipalities, virtually changing the form of government from a parliamentary to presidential system. It means that this article studies the effects of electoral systems (majoritarian and PR) under the presidential form of government.[3] In 2014 the central government decided to abolish the threshold based on which municipalities were assigned to either majoritarian election or PR and basically restored the system which was in place before 1998. Besides some minor reforms, the governance setting in the Polish municipalities in years 2002–2014 was relatively stable and, thus, enable uncovering the impact of electoral systems on fiscal policy outcomes.

The results demonstrated in this article confirm that the electoral systems matter for fiscal policy outcomes. In the setting of Polish municipalities, the PR system leads to lower own revenue, higher intergovernmental transfers and larger vertical fiscal imbalance (VFI) as compared to the majoritarian system. VFI captures a mismatch between own revenue and total expenditure and is a crucial feature of intergovernmental fiscal relations (Eyraud and Lusinyan, 2013). The effects are not only statistically significant but are also non-negligible from an economic point of view and robust to alternative specifications and falsification tests. Particularly, it appears to be unlikely that the municipalities purposefully manipulate their population records in order to get a desired electoral system (sorting). Furthermore, since other institutional changes occur at the population threshold of 20,000, it is demonstrated that confounders do not drive the results.

This article adds to the emerging literature that uncovers the relation between institutions and fiscal policy outcomes through the application of quasi-experimental research designs. RD design has recently become one of the major quasi-experimental tools in studying the effects of local institutions on public finance. Recent contributions utilising RD in studying fiscal policy outcomes are, *inter alia*, Pettersson-Lidbom (2008, 2012) and Hinnerich and Pettersson-Lidbom (2014) for Sweden and Finland, Egger and Koethenbuerger (2010), Arnold and Freier (2015) and Asatryan et al. (2015) for Germany, Gagliarducci and Nannicini (2013),

[2] Also, earlier literature was quite ambiguous regarding how coalition governments, which are more likely under the PR, affect the size of government and public debt. For instance, contrary to Sachs and Roubini (1989), de Haan and Sturm (1994, 1997) found that neither debt accumulation nor spending bias is associated with a power dispersion index, which captures the size of governing coalition.

[3] The interaction between electoral systems and the reform of form of government in the Polish municipalities is studied by Kantorowicz and Koppl-Turyna (2016).