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$$\frac{n!}{(n-1)!} p^{m-1} (1-p)^{n-m} = p \sum_{\ell=0}^{n-1} \frac{\ell+1}{n} \frac{(n-1)!}{(n-1-\ell)! \ell!} p^{\ell} (1-p)^{n-1-\ell}$$
$$= p \frac{n-1}{n} \sum_{\ell=0}^{n-1} \left[\frac{\ell}{n-1} + \frac{1}{n-1} \right] \frac{(n-1)!}{(n-1-\ell)! \ell!} p^{\ell} (1-p)^{n-1-\ell} = p^2 \frac{n-1}{n} +$$

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Partisan Fiscal Policy: Evidence from Central and Eastern Europe

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Abstract:

This paper examines effects of political ideology of a governing party on fiscal outcomes, using data from eight Central and Eastern European countries in the 2001-2017 period. The analysis shows that there is a statistically significant effect of conservative governments on fiscal variables, namely they tend to reduce expenditures and improve fiscal balance by 0.4-0.7% of GDP. Conservative governments are found to reduce expenditures on social security and health care, but they tend to increase subsidies. This may be explained by their proximity to business interests that typically benefit from these subsidies. Our result suggest that while conservative governments do tend to reduce public spending and run smaller deficits, their impact on fiscal outcomes is more limited than they often claim.

JEL: E62, H10, H50, H62

Keywords: Fiscal policy, political parties, budget deficit, Europe

1 Introduction

A substantial body of literature is devoted to the analysis of the effects political preferences may have on fiscal outcomes. The main concern is how the fiscal outcome is determined by the political ideology of the governing party. Most of this work has been concentrated on the United States or the Western-European members of the European Union. Much less attention is given to the countries in Central and Eastern Europe, as their political institutions are often less stable and ideologies less pronounced than in established democracies. However, limiting our scope to the eight countries in the CEE region that has been members of the European Union since 2004 (Czech Republic, Hungary, Poland, Slovakia, and Slovenia), 2007 (Bulgaria and Romania), or 2013 (Croatia) allows us to analyze effects of different political alliances on the budgetary outcomes.

This paper considers whether governments defined as conservative have any tangible effect on fiscal outcomes, namely government revenues, expenditures and the budget balance. To achieve this goal, we build a database of governments in the region and test a simple fiscal model that allows to separate impact of the political ideology. We show that conservative-leaning governments in the CEE region typically reduce fiscal deficits, and that they do so by reducing expenditures, not by raising taxes. Conservative governments appear to reduce mainly social expenditures and expenditures on health care, while there are no significantly robust effects on education, defense or public sector wages. Expenditures on subsidies tend to rise during the conservative governments' tenure, however, signaling that these governments may prefer to divert expenditures from their political opponents (typically recipients of social welfare) to their supporters in the (subsidized) business sector.

The rest of the paper is organized as follows: Section 2 discusses effects of partisan policy on fiscal outcomes and effects the government ideology may have. Section 3 then analyzes the political parties topography in Central and Eastern Europe while section 4 presents the fiscal data used in the models. We discuss the model and main results in Section 5 and conclude with some general observations in Section 6.

2 Partisan Fiscal Policy

An extensive literature exists on effects that political ideology has on fiscal outcomes in the United States, Western European countries or, more generally in the OECD countries. In one of the pioneering studies Cowart (1978) analyzed fiscal policies in Western Europe. He tested a hypothesis that left-dominated governments will have larger deficits than conservative governments, as they pursue higher public expenditures over time. Carlsen (1997) uses a public choice argument that political parties follow interest of their respective constituencies. Using data from 18 OECD countries during 1980-1992, he finds that the government ideology has a significant impact on fiscal policies when unemployment is high or rising. As unemployment is more important for supporters of left-leaning (social-democratic) parties, they place a premium on insuring low levels of unemployment. However, the effect disappears when unemployment is low or decreasing.

Cusack (1997), on the other hand, argued that the ideological character of governing parties is dominated by macroeconomic conditions, namely unemployment. His analysis was more favorable to the left-leaning governments as they run a counter-cyclical policy, only engaging in deficit spending during a boom. Governments dominated by right-of-the-centre parties are seen as engaging in pro-cyclical policies, especially during an economic slowdown or a crisis. Similar argument is formulated by Persson and Svensson (1989) who point out that the time inconsistency makes deficits attractive to both parties, but more so to the conservative ones. In his seminal work on the US partisan policy, Blinder (2016) shows that Democratic administrations tend to have a smaller fiscal deficit than a Republican led ones. Muller, Storesletten and Zilibotti (2016) showed that Democrats pursue a more aggressive countercyclical fiscal policies, but that they still reduced public debt in the U.S. by raising revenues by 0.8% of GDP, more than expenditures (by 0.6% of GDP). Alesina, Cohen and Roubini (1993) nevertheless show that left leaning governments “have one-half a percent [of GDP] higher fiscal deficits per year in office.”

Other papers (Garrett 1997) argue that as economic interdependence increases and national economies open to international flows, fiscal policy cannot be used as an instrument of economic management. Ideological inclinations of governments should thus play a lesser role as fiscal policy is increasingly dictated by external factors. The European Union represents a very strong example of this trend, as its fiscal rules are increasingly intricate and restrict fiscal independence of member countries. Indeed, Peters (1991) shows that the partisan structure of governments is irrelevant to fiscal balances. Szymanska (2018) argues that the strengthening of fiscal governance after the great financial crisis have lessened impact of domestic political parties. Similarly Robertson (1982) analyzing nine OECD countries did not find any impact of the partisan composition on deficits. The same conclusion was reached by De Haan and Sturm (1994) and Barta (2018) studying fiscal policy outcomes in the European Community during the 1980s and in the new century respectively. Alesina (1998) showed that a successful fiscal consolidation may be achieved both by a centre-right or centre-left government.

There are few studies analyzing political economy aspects of fiscal policy the CEE region. Lipsmeyer (2002) analyzed early years of economic transition focusing on old-age pension spending specifically. Her analysis of six countries (the Czech Republic, Estonia, Hungary, Poland, Slovakia, and Slovenia) showed that “right parties” defined increased spending on old-age pensions compared to “left” parties. Lipsmeyer interprets this as a consequence of more radical economic transformation pursued by “right” parties, which had increased social costs and led to higher unemployment and/or early retirements.

Schneider and Zapal (2006) focus on fiscal policy in new EU member countries prior their accession. They identified two groups of countries, one of which is characterized by a lower share of government expenditure in GDP and also by low budget deficits. The other group has a higher government share in the economy and runs high and persistent fiscal deficits. As it happens, the low government and low deficit group has also experienced higher economic growth, confirming that high government expenditure financed with high deficits does not promote sustainable economic growth.

The most comprehensive study by Hallberg and Ylaoutinen (2009) focuses more on the institutional background of fiscal policy and shows that widespread coalition governments in the region tend to widen fiscal deficits compared to (rarer) single-party governments, but results are not very robust. They also showed that a gradual convergence to the EU fiscal rules improved multi-annual planning and thus diminished partisan aspects of fiscal policy. Tavits (2009) provided a comprehensive analysis of fiscal policy until 2004. She dismissed the classical argument that left-leaning governments would widen deficits and argued instead that less fragmented center-left parties faced less competition from within their part of the spectrum and at the same time, they sought to establish their credentials as responsible guardians of economic transition from a planned economy to a market system. This gave left-leaning parties room and motivation to run less expansionary fiscal policies. A shift from a conservative to a social democratic (centre-left) government should decrease spending by 0.8% of GDP, according to Tavits. The centre-left governments were also found to spend less on health and education, albeit not on social security programs.

In our study, we will analyze fiscal policy outcomes in eight Central and Eastern European countries since 2001, widening and extending Tavits' model to recent years. Our analysis will focus on the aggregate fiscal variables - revenues, expenditures and the balance. We will, however, study also the expenditure side structure, similar to Tavits study, as to gain more nuanced view of the partisan impact on fiscal policy. First, we have to establish the political party spectrum in Central and Eastern Europe.

3 Political Parties in Central and Eastern Europe

Establishing political orientation of a government is fairly straightforward in a majoritarian election system. Blinder (2016) can distinguish Democratic and Republican administrations without any problems. Hibbs (1977) developed the partisan theory in which parties implement policies favoring their core constituencies, again on the U.S. data. However, Central and East European countries rely on variations of proportional representation in their elections. Only Hungary, Lithuania and Ukraine (two latter are not included in our sample) employ a mixed system, which incorporates some elements of majoritarian systems (Inter-Parliamentary Union, Parline Database).

Hallberg and Ylaoutinen (2009) show that electoral rules shape the political party system. Proportional representation typically encourage multi-partyism and government coalitions are the norm. The situation is even more complicated when there are several social cleavages (ethnic, religious, language - Cox 1997). Hloušek and Kopeček (2010) show that all these cleavages are present in Central and Eastern Europe and complicate the political landscape.

Hellén, Berglund and Aarebrot (1998) also demonstrate that multi-dimensional cleavage spaces are widespread in Central and Eastern Europe, yielding to diverse party systems. Moreover Tavits (2009) shows that party system volatility was much higher in these countries compared to Western-European counterparts in the early 2000's. Hallberg and Ylaoutinen (2009) argued, however, that the degree of political stability was gradually increasing, allowing for a more traditional analysis.

Assigning a binary political orientation to political parties, or even their coalitions, in Central and Eastern Europe is wrought with problems. In an early and pathbreaking study Evans and Whitefield (1993) argued that Central European countries, perhaps with the exception of Slovakia, should converge to the Western European party structure, while Eastern European countries would be characterized by higher volatility. In a later study Evans (2006) was more ambiguous, arguing that each country political spectrum was determined by “its specific social composition, historical inheritance, and post-communist economic and political performance” (p.263).

In our study, we follow Lipsmeyer (2002) who uses left-right political measure as the one most often used in the literature given its intuitive and straightforward nature. She concludes that “the Czech Republic, Hungary and Poland appear to approach a semantic left-right interpretation that is typical for advanced capitalist countries where both redistributive, social protectionist economics and political-cultural libertarianism count as leftist” (p.653). We use the terms right-leaning, centre-right and conservative as synonyms, while the opposite political pole is alternatively labeled left-leaning, centre-left or socialist/social democratic. We also use the parties’ self-identification, especially after their respective countries have become EU members (2004, 2007 or 2013) and joined EU-wide “political family” in the European Parliament as documented in Johansson and Raunio (2019).

Several countries - Bulgaria, Croatia, Hungary, Slovakia - have witnessed emergence of two main political blocks as well as long periods of one-party rule. The political landscape in other countries have been more complicated. There were two caretaker governments in the Czech Republic in 2009-2010 and again in 2013. Neither was characterized by a political ideology (and the latter was never appointed by a parliamentary vote). In Romania, a left-right coalition in 2008 was followed by a series of government collapses and reshuffles in 2009-2012 that make it impossible to assign a political affiliation to these governments. Slovenia’s party system has been characterized by high fragmentation and fluidity since its inception (Hloušek and Kopeček, 2010), which has been compounded by increasingly personalized political parties in recent years (Party of Alenka Bartušek, List of Marjan Šarec....). Mainly for these reasons, Slovenia did not have either conservative nor socialist government for 10 out of 18 years in our database. Poland represents another idiosyncrasy. The country has been governed by centre-right or conservative governments since 2006. The currently dominant Law and Justice (PiS) pursues a distinctly conservative agenda, but it is not a member of the EPP family in the European Parliament. The opposition Civic Platform (PO) is an EPP member, but in the Polish context, it is seen as a centrist, moderate party. For that reason, we label PO as “liberal” and PiS as “conservative.”

Table 1. Government and political parties 2001-2018

	Year	Leading political party	EPP affiliation	Political Family
Bulgaria	2001-2005	National Movement Simeon	n.a.	Conservatives
	2006-2009	Bulgarian Socialist Party	PES	Socialist/Social Democrats
	2010-2013	GERB	EPP	Conservatives
	2014	Bulgarian Socialist Party	PES	Socialist/Social Democrats
	2015-2018	GERB	EPP	Conservatives
Croatia	2001-2003	Social Democratic Party of Croatia	n.a.	Socialist/Social Democrats
	2004-2011	Croatian Democratic Union	n.a.	Conservatives
	2012-2015	Social Democratic Party of Croatia	PES	Socialist/Social Democrats
	2016-2018	Croatian Democratic Union	EPP	Conservatives
Czech Republic	2001-2006	Czech Social Democratic Party	PES	Socialist/Social Democrats
	2007-2009	Civic Democratic Party	EPP	Conservatives
	2010	independent	n.a.	n.a.
	2011-2013	Civic Democratic Party	AECR	Conservatives
	2014-2017	Czech Social Democratic Party	PES	Socialist/Social Democrats
	2018	ANO	ALDE	Liberals
Hungary	2001-2002	Fidesz	n.a.	Conservatives
	2003-2010	Hungarian Socialist Party MSZP	PES	Socialist/Social Democrats
	2011-2018	Fidesz	EPP	Conservatives
Poland	2001	Solidarity Electoral Action AWS	n.a.	Conservatives
	2002-2005	Democratic Left Alliance	PES	Socialist/Social Democrats
	2006-2007	Law and Justice PiS	EPP	Conservatives
	2008-2015	Civic Platform	EPP	Liberals*
	2016-2018	Law and Justice PiS	AECR	Conservatives*
Romania	2001-2004	Social Democratic Party	n.a.	Socialist/Social Democrats
	2005-2008	National Liberal Party	EPP	Conservatives
	2009-2012	Democratic Liberal Party/ Social Democratic Party/ Democratic Union	n.a.	Liberals
	2013-2015	Social Democratic Party	PES	Socialist/Social Democrats
	2016 2017-2018	Independent Social Democratic Party	n.a. PES	n.a. Socialist/Social Democrats
Slovakia	2001-2006	Democratic Christian Union	EPP	Conservatives
	2007-2010	Smer/SD	PES	Socialist/Social Democrats
	2011-2012	Democratic Christian Union	EPP	Conservatives
	2013-2018	Smer/SD	PES	Socialist/Social Democrats
Slovenia	2001-2004	Liberal Democracy of Slovenia	n.a.	Liberals
	2005-2008	Slovenian Democratic Party	EPP	Conservatives
	2009-2011	Social Democrats	PES	Socialist/Social Democrats
	2012	Slovenian Democratic Party	EPP	Conservatives
	2013	Positive Slovenia	ALDE	Liberals
	2014-2018	Modern Centre Party	ALDE	Liberals
<i>Memo</i>				
Number of years of conservative governments				63
Share of conservative governments' time in power				46%

Source: Johansson, Raunio (2019), *European Parliament, national political parties*, <http://www.parties-and-elections.eu/index.html>.

* Civic Platform of Poland is a member of the EPP, but it's classified as not conservative.

As we are concerned about the economic dimension of the political topography, we assign the label “conservative” to those political parties that either have been members of the European Peoples’ Party group in the European Parliament or shared the main conservative political goals - see table 1. Our data suggest that Bulgaria, Croatia and Hungary have had the longest tenure of parties labeled as conservative: 14, 12 and 11 years respectively. Romania and Slovenia are on the other extreme with 4 and 5 years of the conservative government respectively. The data also show that incumbent governments never won elections in Bulgaria, Romania and Slovenia. On the other hand, 3 out of 5 elections in our database re-elected the incumbent party in Hungary (once socialist MZSP and twice conservative Fidesz). Overall, conservatives were in charge 46% of time between 2001 and 2018, social democrats 38% with the rest split between liberal and independent/technocratic governments. There are four dominating political parties in the region, each with 10 years heading a government coalition: Fidesz (Hungary), Czech Social Democratic Party, Croatian Democratic Union, and Smer/SD (Slovakia). Fittingly, two are conservative parties, two social democratic.

4 Fiscal Data

Our model will be able to answer only a simple question: do conservative governments run different fiscal policies than other governments, either social-democratic or liberal? Our main explanatory variable is a binary variable *Conservative* which equals one in years a conservative political party led a government in a given country (Table 1). The variable is set to zero in all remaining years. We do not attempt to replicate Tavits (2009) model which distinguished governments according to their attitude toward the EU or a number of ex-communists in the cabinet. On the other hand, our variable avoids inherently difficult assessment of the ideology of all political parties in the region. In addition our model includes a set of variables to control for the external economic conditions and domestic business cycle. Real GDP growth in the euro area minus Slovakia and Slovenia is used as measure of the external economic environment, while the domestic business cycle is modeled by the unemployment rate variable.

Fiscal data used in the panel is comprised of general government budgetary data for eight Central and Eastern European countries gathered from the Eurostat database. The model employs annual data on (general) government revenues and expenditures with further breakdown to expenditures on social security, old-age pension, health care, education, public sector wages, defense, and government subsidies to private sector in years 2001-2017 (the most recent detailed data is for 2017, Eurostat provides only aggregate data on expenditures, revenues and balances for 2018). We use data in the form of GDP percentages, to avoid problems with non-stationarity. Table 2 illustrates main variables and their statistical features and Table A1 in appendix shows national statistics in more detail.

Two groups of countries with respect to real GDP growth emerge: high performers with annual real growth around 4% over our 18-year time span (Romania, Slovakia, Poland and Bulgaria) and a slower growing group (the Czech Republic, Hungary, Slovenia and Croatia). One obvious explanation of the divergence would be the initial GDP per head with was highest in Slovenia, the Czech Republic and Hungary, while Bulgaria and Romania were the poorest within the

group. However, high government expenditures in the slow-growing group (46.5% on average) compared to the more frugal high performers (40.6% on average) might have contributed to a lower growth as well.

The model's endogenous variables are detailed in Table A1 in the appendix. Social protection is the highest spending item in all Central and Eastern Europe countries, but the share of expenditures on GDP declined in all countries, except Romania and Slovakia, between 2001 and 2017, most remarkably in Poland from almost 19% of GDP to roughly 16% now. The decline in Poland was driven by lower pension expenditures that declined by 3% of GDP between 2001 and 2017, helped by a pension reform (that was partially reversed in 2018). Health expenditures vary most among countries, with Romania spending on average one half of the Czech Republic's share. They nevertheless gradually converge as well, with health expenditures rising fast in Bulgaria, Romania and Slovakia. All countries, except Slovakia, also reduced their public spending on education (Poland and Romania by 1% of GDP, almost 20% in real terms!). Public sector wages are high in all countries in our sample, but while Poland was able to reduce them by 1.5% of GDP between 2001 and 2017, their share increased in Romania, Bulgaria and also in the Czech Republic. Defense spending represents the smallest spending item in our sample, averaging only 1.3% of GDP, with all countries except Poland reducing defense spending between 2001 and 2017. Only slightly higher are subsidy expenditures, but they vary widely. The Czech Republic spends an astounding 2.2% of GDP on subsidies, while Poland, Slovakia, Slovenia and Romania spend only 0.5% of GDP.

Table 2: Summary statistics

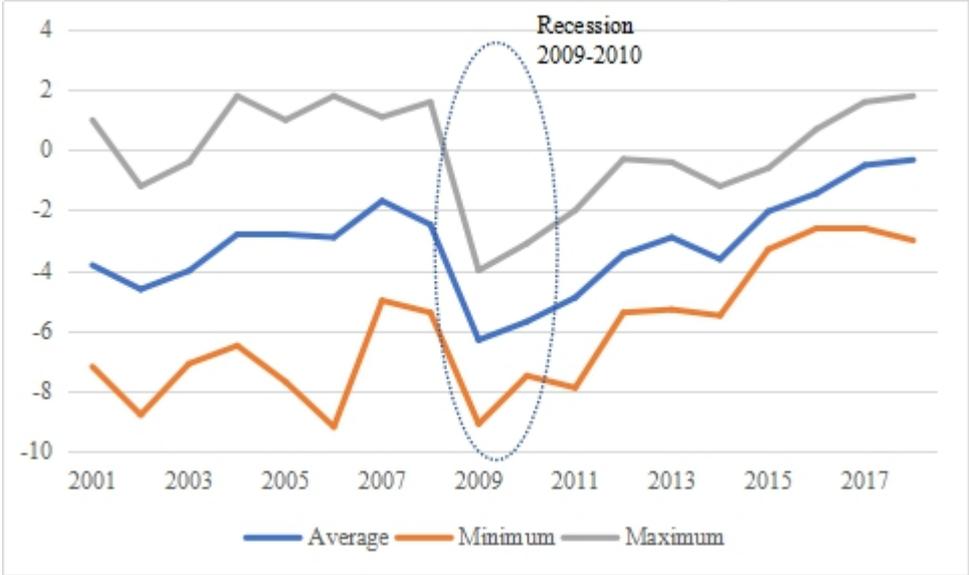
128 observations	Average (% of GDP)	SD
Total Revenues	39.74	4.1
Total Expenditures	43.01	4.87
Balance	-3.29	2.43
Debt	43.80	19.18
Expenditures:		
Social Protection	14.41	2.30
Old-Age Pensions	8.14	1.42
Health Care	5.63	1.27
Education	4.78	0.97
Public Sector Wages	10.02	1.43
Defense	1.31	0.44
Subsidies	1.35	0.59
Revenues		
VAT	8.28	1.76
<i>Memo</i>		
Real GDP Growth	3.06%	3.18
Unemployment	9.75%	4.11
Eurozone GDP Growth	1.18%	1.78

Source: Eurostat database.

Our sample period, 2001-2017 includes the great financial recession that hit the region in 2009 and 2010. In 2008, the average fiscal deficit was only 2.5% of GDP, distorted by a Romanian deficit of 5.4% of GDP. In 2010, all countries run a deficit wider than 3% of GDP and Romania, Poland and Slovakia all had deficits around 7% of GDP - Chart 1. During the same period real

GDP declined 7% in Croatia, 5% in Hungary, but it increased 11% in Poland and 5% in Slovakia. Such an abrupt divergence in performance shows different adjustment strategies. Poland and Hungary may serve as two extremes: while the Hungarian budget deficit remained largely unchanged (from an already substantial deficit of 5% of GDP in 2007), Poland let fiscal automatic stabilizers work at full and its fiscal balance worsened by more than 5% of GDP between 2007 and 2010.

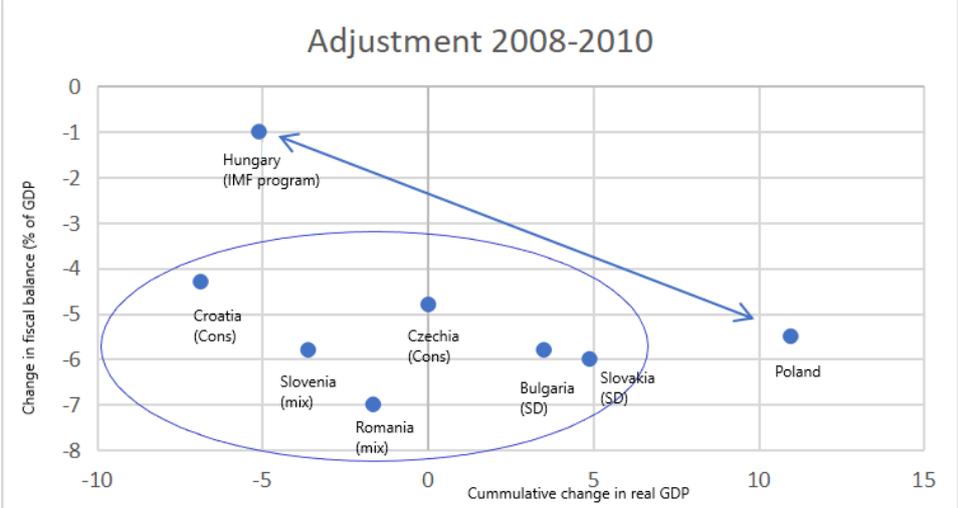
Chart 1. Fiscal balance in Central and Eastern Europe



Source: Eurostat database.

Fiscal adjustment in the remaining 6 countries was similar to Poland: deficits widened by 4-7% of GDP. Growth performance in these countries differed widely, however. While Bulgaria and Slovakia managed a modest growth over the 2008-2010 period, Romania, Slovenia and especially Croatia were hurt badly by the recession - see Chart 2. It is interesting that the two better performing countries during the great recession - Bulgaria and Slovakia - were run by a social-democratic governments, while the worst performing Croatia had a conservative government. Croatia, however, was not a EU member until 2013 which might have affected its recession 2008-2010, perhaps even more that the ideology of the governing party at that time. Also, adjustment strategies in Bulgaria and Slovakia were very different: while the Slovak government raised expenditures substantially, Bulgaria left them largely unchanged.

Figure 2. Fiscal adjustment and real GDP growth in 2008-2010



Source: Eurostat, the author.

5 Results

In the results section, we present results of ten different equation estimations, each in two separate specifications. We report the estimators and the probabilities for each estimator in the brackets using the standard 10%, 5%, and 1% significance levels.

We used fixed effects method for 128-observation panel data, controlling for country specific effects. The separate models for aggregate variables (total expenditures, revenues and the balance) and for major expenditure items have been estimated. Each equation was estimated using the ordinary fixed effects (FE equations in the tables below) and then using the correction error models (ECM equations in the tables below), including a lagged dependent variable to deal with autocorrelation issues that are prevalent in fiscal policy models. While the signs and interpretation of results remains the same among the FE and ECM equations, the ECM models typically show slightly lower significance of the main exogenous variable(s).

Table 3 provides the estimation results for the aggregate equations. The fit, approximated by the adjusted R^2 , is obviously better for the expenditure and revenue equations than for the fiscal balance equation. Standard macroeconomic variables of *unemployment* and the external demand proxied by the *Eurozone GDP* growth have the expected sign in all three equations, but are significant only for the expenditures and the fiscal balance equations. Increasing unemployment by 1 percentage point increases expenditures by 0.22% of GDP in the standard fixed effect equation and by 0.12% of GDP in the ECM model, both highly significant estimators. Unemployment seems to reduce the fiscal balance (or widen the deficit) by 0.14% of GDP in the standard FE setting, but the effect vanishes in a more rigorous ECM model. The Eurozone growth improves the fiscal balance significantly in both model specifications by 0.19-0.36% of GDP. The channel for improving fiscal balances is the lower expenditures, by 0.16-0.24% of GDP as the Eurozone GDP growth picks up by 1 percentage point while the Eurozone growth does not seem to have any significant effect on government revenues.

Most importantly, the *Conservative* variable is significant in the expenditure and (partially) in the fiscal balance equations. A conservative government decreases public expenditures by 0.64-0.83% of GDP in the ECM and the FE specifications respectively. The estimator is significant at 5% in the FE specification and only marginally less so in the ECM specification, suggesting a relatively consistent impact the conservative governments had on public expenditures in Central and Eastern Europe. The conservative government effect on fiscal balance is less unambiguous: the FE specification suggests a modest improvement in the balance, but the effects is taken away in the ECM specification, so it probably owes more to autocorrelation effect. Not surprisingly, the revenue equation is driven by autocorrelation almost exclusively with no exogenous variables significant even at the 10% level in either specification. The estimator suggests that, ignoring the independent effects of other variables in the model, as much as 95% of the level of the previous revenues is carried over to the next year.

Table 3: Aggregate equations

	Expenditures		Revenues		Balance	
	FE	ECM	FE	ECM	FE	ECM
Conservative	-0.8318**	-0.6399*	-0.1462	-0.1570	0.6655*	0.3964
	(0.029)	(0.066)	(0.649)	(0.562)	(0.090)	(0.241)
Unemployment	0.2206***	0.1197**	0.0787	0.0264	-0.1381**	-0.0218
	(0.001)	(0.054)	(0.151)	(0.436)	(0.039)	(0.714)
Eurozone growth _{t-1}	-0.2420**	-0.1575*	0.1093	0.0009	0.3580***	0.1876**
	(0.017)	(0.092)	(0.203)	(0.989)	(0.001)	(0.046)
ECM term	-	0.4248***	-	0.9520***	-	0.5526***
	-	(0.000)	-	(0.000)	-	(0.000)
Adj. R ²	0.8436	0.8706	0.8375	0.8735	0.3787	0.5026

Source: Author.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 4 summarizes seven partial equations for seven expenditure categories: total social security expenditures, old-age pensions expenditures (which is a subset of the previous item), health care, education, public sector wages, defense, and subsidies. These expenditures amount to 37.5% of GDP on average, almost 90% of all expenditures in the eight countries. While overall statistics for these equations are fairly significant, it is due to the general stability of these expenditures, and the individual variables' significance is typically low. Looking at the *conservative* variable, we find it significant in three equations: social security, health care and subsidies. First, conservative governments have a significant and negative impact on social security spending. The effect is 0.27-0.41% of GDP in the two specifications, both significant at the 5% level. It may be interesting that there is no effect of a conservative government on old-age spending, which is determined by the pension system rules and has a significant inertia. Second, conservative governments seem to spend less on health care as well (by 0.2% of GDP), but the effect vanishes in the ECM specification.

There seem to be no ‘conservative’ effect on spending on education, public sector wages or defense. All these spending programs are highly autocorrelated with no statistically significant effects of exogenous variables. Perhaps surprisingly, a conservative government has a positive impact on government spending on subsidies, as they increase by 0.1-0.2% of GDP, significantly in both specifications. This may reflect conservative governments’ closer relationship to domestic business that tend to benefit most from the subsidies. It, at the same time, undermines slightly the conservatives’ fiscal frugality argument: increase in subsidies offsets any reductions in health care spending, with a more questionable effects on long-term productivity growth.

Table 4: Expenditure equations

	Total Expenditures		Social Security		Old-Age Pensions		Health Care	
	FE	ECM	FE	ECM	FE	ECM	FE	ECM
Conservative	-0.8318 ** (0.029)	-0.6399* (0.066)	-0.4067 ** (0.017)	-0.2725 ** (0.050)	-0.1421 (0.388)	-0.1596 (0.132)	-0.2231 ** (0.016)	-0.0587 (0.450)
Unemployment	0.2206** * (0.001)	0.1197** (0.054)	0.1527 *** (0.000)	0.0483* (0.075)	0.0763 *** (0.007)	0.0124 (0.502)	-0.0244 (0.118)	-0.0051 (0.694)
Eurozone growth _{t-1}	-0.2420 ** (0.017)	-0.1575* (0.092)	-0.1372 *** (0.003)	-0.0897 ** (0.017)	-0.1248 *** (0.005)	-0.0603 ** (0.036)	-0.0482 ** (0.050)	-0.024 (0.243)
ECM term	-	0.4248 *** (0.000)	-	0.5737 *** (0.000)	-	0.7386 *** (0.000)	-	0.5834 *** (0.000)
Adj. R ²	0.8436	0.8706	0.8539	0.9034	0.6194	0.8425	0.8616	0.9080

	Education		Wages		Defense		Subsidies	
	Fixed Eff.	ECM	FE	ECM	FE	ECM	FE	ECM
Conservative	-0.0649 (0.366)	-0.0154 (0.795)	-0.1810 (0.128)	-0.0154 (0.856)	0.0349 (0.609)	0.0093 (0.819)	0.2053 *** (0.001)	0.0673 * (0.099)
Unemployment	0.0245 ** (0.046)	0.0119 (0.239)	0.0126 (0.531)	-0.0188 (0.198)	0.0175 (0.133)	-0.0045 (0.524)	-0.0069 (0.577)	-0.0082 (0.238)
Eurozone growth _{t-1}	-0.0081 (0.672)	-0.0104 (0.508)	-0.0389 (0.220)	-0.0082 (0.714)	0.0174 (0.339)	-0.0120 (0.277)	-0.0220 (0.256)	-0.0201* (0.062)
ECM term	-	0.5960 *** (0.000)	-	0.7397 *** (0.000)	-	0.7940 (0.000)	-	0.8194 *** (0.000)
Adj. R ²	0.8525	0.9009	0.8135	0.9073	0.324	0.7601	0.5931	0.8703

Source: Author.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

6 Conclusions

In this paper we examined effects of political ideology of a governing party on fiscal outcomes, using data from eight Central and Eastern European countries that have become the EU members in several waves since 2004. We expanded on research by Lipsmayer by incorporating more recent and standardized fiscal data sets. We presented a detailed analysis of the political parties' orientation and identified that for 46% of the period 2001-2017, a conservative party was the sole or a dominant governing party across the eight countries in our sample. At the same time, our definition of a conservative government was stricter than in Lipsmayer's work and allows for a narrower interpretation.

Our analysis shows that there is a statistically significant effect of conservative governments on fiscal variables. A conservative government is estimated to reduce expenditures by 0.6-0.8% of GDP. They, at the same time, do not seem to have any impact on the revenues, so the conservative effect on fiscal balance is somewhat weaker. Fiscal balance improves by 0.4-0.7% of GDP, but the effect is statistically less robust than in the case of government expenditures. When we analyzed structure of public spending and effects a conservative government may have on it, we found statistically significant impact on social security, health care, and on subsidies. While conservative governments reduce social security expenditures by 0.3-0.4% of GDP and health care expenditures by 0.1-0.2%, they increase spending on subsidies by 0.1-0.2% of GDP.

Our results seem to confirm studies by Alesina, Cohen and Roubini (1993) who argued that left-leaning governments increase spending by 0.5% of GDP. Our result, on the other hand, do not support conclusions of Lipsmayer (2002) or Tavits (2009) who argued that either there is no significant effect (Lipsmayer) or that left-centre parties even cut government spending in an attempt to establish their transformation credentials (Tavits).

Our more traditional results may be a consequence of a wider and more recent data set within the framework of economic transition in Central and Eastern Europe. While centre-left parties might have been eager to demonstrate their fiscal responsibility in the 1990's and in the run-up to the EU membership, the incentives have been changing after the 2008-2009 financial crisis. Since then, centre-left parties have become more focused on social security as the dominant motivation was to distance themselves from the crisis and demonstrate their socialist credentials.

Another result of our analysis that deserves attention is the conservative governments' apparent willingness to spend more on subsidies by 0.1-0.2% of GDP. This may be explained by their proximity to business interests that typically benefit from these subsidies. So we can conclude that while conservative governments do tend to reduce public spending and run smaller deficits, their impact on fiscal outcomes is more limited than they often claim.

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Appendix

Table A1: National statistics

	Years of conservative governments	Average annual GDP growth (%)	Average unemployment (%)	Average government expenditures (% of GDP)	Average government revenues (% of GDP)	Average budget balance (% of GDP)
Bulgaria	14	3.63	10.78	37.55	37.04	-0.65
Czechia	6	2.81	6.41	42.65	39.89	-2.77
Croatia	12	1.85	13.42	47.51	43.54	-3.96
Hungary	11	2.18	7.66	49.14	44.42	-4.71
Poland	7	3.66	11.84	43.70	39.53	-4.18
Romania	4	4.09	6.86	36.02	32.85	-3.17
Slovakia	8	4.06	13.89	40.99	37.16	-3.84
Slovenia	5	2.15	7.18	46.48	43.48	-2.99

Table 3: National statistics (cont., % of GDP)

	Social protection	Old-age pensions	Health care	Education	Public sector wages	Defense	Subsidies
Bulgaria	12.18	8.28	4.68	3.78	9.15	1.58	1.06
Czechia	12.59	6.93	7.37	4.88	8.72	1.12	1.96
Croatia	14.99	8.52	6.42	5.06	11.62	1.37	2.15
Hungary	16.10	6.89	5.18	5.39	11.16	1.05	1.35
Poland	16.68	9.80	4.60	5.57	10.79	1.63	0.74
Romania	11.25	8.34	3.73	3.52	8.74	1.61	1.12
Slovakia	14.42	6.84	6.50	3.86	8.42	0.93	1.02
Slovenia	17.04	9.50	6.54	6.18	11.54	1.18	1.34

Source: Eurostat database, Johansson, Raunio (2019), European Parliament, <http://www.parties-and-elections.eu/index.html>

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