Turnout under Semi-presidentialism: First- and Second-order Elections to National-Level Institutions

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Keywords

Turnout, first and second-order elections, semi-presidentialism, presidential power, legislative elections, presidential elections

Abstract

We test the effect of the importance of elections by focusing on turnout at presidential and legislative elections in countries with semi-presidential constitutions. These countries have two potentially first-order elections, but they vary considerably in the powers that are granted to their presidents and prime ministers. We hypothesise that turnout at legislative elections will vary inversely with presidential power and that above a certain degree of presidential power turnout at presidential elections will be higher than turnout at legislative elections. We test these hypotheses on the set of electoral democracies from 1989-2010 inclusive. Controlling for standard social, political and institutional variables, we find strong support for our propositions. The findings show that the importance of the electoral contest is a determining factor for turnout at legislative elections and that the relative importance of presidential and legislative elections can be understood as a continuous scale, and not merely dichotomously.

Acknowledgements

We would like to thank the anonymous reviewers for their very helpful comments as well as Shane Martin for his feedback. As ever, the authors are solely responsible for the final article and its contents.

Word count: 9,592

Why do people turn out to vote at elections? This is an important issue. Turnout is often taken as an indicator of the democratic health of a polity. Falling turnout is usually interpreted as a sign of a failing democracy (Lutz & Marsh, 2007, p. 549). Turnout can also be seen as a sign of the importance of elections to voters. There is a general assumption that, all else equal, the less important the election the lower the turnout (Reif & Schmitt, 1980). The standard way of identifying the effect of such second-order elections is in a multi-level context. Turnout at elections to national-level institutions is likely to be greater than turnout at elections to sub-national or supra-national institutions. This proposition has received strong empirical support (Marsh, 1998; Hix & Marsh, 2011). In addition, the US experience clearly shows that there is a higher turnout at congressional elections in years when the elections are held concurrently with the presidential election than at mid-term congressional elections. Thus, even though Congress is a 'first-order' national-level institution, when we control for the effect of synchronised elections voters treat congressional elections as if they were less important, second-order elections.

In this article, we test the effect of the importance of elections to voters by examining turnout in countries with two potentially decisive national-level institutions, but where regular mid-term elections are absent. We do so by focusing on differential turnout at national-level elections in countries with semi-presidential constitutions. These countries have in common both a directly elected fixed-term president and a prime minister and cabinet that are collectively responsible to the legislature. Thus, they have two national-level elections. However, these countries vary considerably in the powers that are granted to their presidents and prime ministers. Some countries have strong

presidents and weak prime ministers, such as France and Russia. Other countries have weak presidents and strong prime ministers, such as Austria and Bulgaria. In a previous study, Dettrey and Schwindt-Bayer (2009) demonstrated that presidential power had no effect on turnout at presidential elections. In this article, we focus on legislative elections under semi-presidentialism. Tavits (2009) argued that voter fatigue under semi-presidentialism led to lower turnout at legislative elections in semi-presidential countries relative to parliamentary countries even controlling for presidential power. In this article, we hypothesise that under semi-presidentialism turnout at legislative elections varies as a function of presidential power. In countries where presidents are strong, legislative elections become second-order. We test this hypothesis on the set of semi-presidential electoral democracies from 1989-2010 inclusive. Controlling for standard social, political and institutional variables, we find strong support for our proposition. We also show that above a certain degree of presidential power, turnout at presidential elections is higher than at legislative elections.

These results have implications for the study of turnout generally, emphasising the importance of elections as a determining factor for turnout to national-level institutions. They also open up a new perspective on second-order elections, showing that the relative importance of elections can be understood as a continuous scale, and not merely, as is usual, dichotomously. Finally, the result also has implications for the study of semi-presidentialism, revealing that the introduction of this constitutional arrangement can lead to differential turnout at presidential and legislative elections.

The importance of elections, voter turnout and semi-presidentialism

Considerable political and academic attention has been paid to the issue of voter turnout. In the context of consolidated democracies where turnout seems to be declining over time (Blais, 2007, p. 624), decision-makers have taken steps to try to reverse this general trend, introducing initiatives such as e-voting and simplifying the procedures for electoral registration. For political actors, the decline in turnout is taken as an indicator of social and political malaise and reforms to increase turnout are part of a plan to re-engage citizens with the political process. For their part, academics have identified various social, political and institutional determinants of turnout. In a meta-analysis of 83 aggregate-level empirical studies, Geys (2006, p. 653) found that "a number of (theoretically important) variables are significantly related to turnout rates". Apart from the puzzles inherent in the study of turnout, so many academics have been motivated to examine this topic because, similar to political decision-makers, there is a desire to understand a phenomenon that is intrinsic to modern political life and the functioning of contemporary democracies.

Just as turnout has been taken as an indicator of the general health of a democracy, it has also been interpreted as a sign of the importance of particular elections to voters. Here the standard distinction is between first and second-order elections (Reif & Schmitt, 1980). First-order elections are those to institutions that are most salient to citizens, invariably national-level representative institutions such as legislatures. They are elections that "decide who is in power and what policies are pursued" (Schmitt, 2005, p. 651). Second-order elections are those to less salient institutions, such as those at the sub-national or supra-national level. These elections "are perceived to be less important,

because there is less at stake" (ibid.). Reif and Schmitt (1980) hypothesised that second-order elections would have various consequences relative to their first-order counterparts. One such consequence was that the level of participation would be lower at elections to second-order institutions. This proposition has now been tested many times and, in general, has been found to be robust. For example, Hix (1998) confirms that turnout at elections to the European Parliament (EP) is lower than elections to national parliaments. Koepke and Ringe's (2006) study of EP elections found less support for some of the other consequences of second-order elections, but confirmed the proposition in relation to turnout. Lijphart (1997, p. 6) cites evidence to suggest that turnout is lower at local elections than at national elections. Equally, Rallings and Thrasher (2007) provide figures demonstrating that there is a large 'turnout gap' between local and national elections in the UK with, as expected, turnout being much lower in the former.

As the above examples indicate, the standard application of the second-order model is a multi-level comparison of voter turnout. However, this model can also be applied to presidential systems where there are two decisive national-level elections. For example, in the US the presidency and Congress are both powerful institutions that help to determine what policies are pursued. That is to say, they are both first-order institutions. Here, though, it is commonly observed that there is a higher level of turnout at congressional elections in years when the elections are held concurrently with the presidential election than at mid-term congressional elections (Blais, 2007, p. 626; Kuenzi & Lambright, 2007). More generally, a study of congressional elections in Latin America, Fornos et al. (2004) found that turnout was about 5 per cent higher when legislative elections were held concurrently with presidential elections. Thus, even

though the standard application of the second-order model is based on a comparison of turnout at elections to national-level institutions with elections to sub-national or supra-national institutions, this model may also be applied to a comparison of turnout at elections to solely national-level institutions. Voters consider elections to some national-level institutions to be more important than to others.

To test the relative importance of national-level elections as a determining factor in voter turnout, we focus on countries with semi-presidential constitutions. Semi-presidentialism is the situation where a constitution makes provision for both a directly elected president and a prime minister and cabinet that are collectively responsible to the legislature (Elgie, 1999). Even though, by definition, semi-presidential countries share basic constitutional features, the key observation about semi-presidentialism is that it is not a unimodal category. Semi-presidential countries vary considerably in the powers that their constitutions grant to the president, the prime minister and the legislature. This variation can be captured in different ways. Shugart and Carey (1992) distinguished between president-parliamentary and premier-presidential forms of semi-presidentialism. In the former, the government is responsible to both the president and the legislature, whereas in the latter it is responsible solely to the legislature. Metcalf (2000) reworked Shugart and Carey's method of measuring presidential power indicators to allow cross-national measures of presidential power to be constructed. Siaroff (2003) undertook a similar exercise, providing scores for a wide range of presidential, parliamentary and semi-presidential countries. Costa Lobo and Amorim Neto eds. (2010), Krouwel (2003), and Van Cranenburgh (2008) have all conducted equivalent exercises. Whichever method is adopted, the "critical characteristic of semi-presidential constitutions is that they do not

locate the power to control the government as unambiguously with either president or assembly as presidential or parliamentary constitutions do" (Schleiter & Morgan-Jones, 2010, p. 1418).

In this context, semi-presidential countries provide a good test of the effect of the perceived importance of national-level elections on turnout because, as in presidential systems, there are elections to two potentially decisive first-order institutions, the presidency and the legislature. We test three hypotheses. The first two relate to presidential power and turnout at presidential and legislative elections separately. The third relates to presidential power and turnout at presidential elections relative to legislative elections.

The first hypothesis relates to the relationship between presidential power and turnout at presidential elections. In a recent paper, Dettrey and Schwindt-Bayer (2009) demonstrated that variation in presidential power did not affect the level of turnout at presidential elections. Their study pooled presidential and semi-presidential democracies. If they are correct, then we would not expect presidential power to be associated with turnout at presidential elections even if we restrict the sample solely to semi-presidential countries.

The second hypothesis relates to the relationship between presidential power and turnout at legislative elections. Under semi-presidentialism, we expect variation in presidential power to create legislative elections of differing importance. When the president is powerful presidential elections are the principal electoral contest. Presidential candidates present competing programmes that cover all aspects of foreign and domestic policy. Voters and parties expect the winning candidate to implement their programme.

To do so, the president needs the support of the legislature. Voters are aware of this requirement. As a result, we would expect them to return a legislature that is favourable to the president. With the support of the legislature, the president can appoint a loyal prime minister and a government tasked with implementing the election programme. So, with the presidential election being the primary electoral contest, we would expect parties to devote fewer resources to the legislative election and/or voters to be less interested in it, thus decreasing turnout at legislative elections. By the same token, when presidents are weak legislative elections are the principal electoral contest. Here, the prime minister is the main political leader. The prime minister takes power by virtue of the support of the legislature. With the legislative election being the predominant electoral contest parties and/or voters devote more attention to it, thus increasing turnout at legislative elections. Thus, we hypothesise that, all else equal, turnout is likely to be lower at legislative elections in countries with strong presidencies than in those with weak presidencies. To put it another way, in countries where presidents are strong, legislative elections become second-order.

The third hypothesis relates to presidential power and turnout at presidential elections relative to legislative elections. Given we expect presidential power to affect the level of turnout at legislative elections, we might also expect this relationship to affect the level of turnout at presidential and legislative elections relative to each other. In particular, if turnout at legislative elections decreases with presidential power but turnout at presidential elections stays the same, then we would expect turnout at presidential elections to be greater than turnout at legislative elections after a certain level of presidential power. As research on turnout generally focuses on one or other set of

elections in isolation, the issue of the relative value of turnout has never been examined. Thus, whereas the existing literature suggests that a particular type of election is either first-order or second-order, we expect legislative elections to become second-order relative to presidential elections as presidential power increases. This suggests that we should understand the value of elections on the basis of a continuous scale rather than dichotomously.

In this article, we bring together two previously separate literatures. Whereas there is an abundant literature on turnout generally and the distinction between turnout at first- and second-order elections in particular (Clark & Rohrschneider, 2009; Marsh, 1998; Schmitt, 2005), this work has not been applied systematically to the relative importance of national-level elections. Also while certain studies have incorporated semi-presidential countries in more general studies of turnout (Dettrey & Schwindt-Bayer, 2009; Pacek et al., 2009; Tavits, 2009), to our knowledge there is no study that applies the logic of first and second-order elections to the context of legislative elections under semi-presidentialism. Equally, while there is now a growing literature on semi-presidentialism, this work has tended to focus on the effect of this regime type on democratic stability (Elgie and Schleiter 2011; Elgie, 2011; Moestrup, 1999; Skach, 2005) and on relations between the president, the prime minister and the legislature (Protsyk, 2006; Schleiter & Morgan-Jones, 2010; Sedelius & Ekman, 2010). In this article, we focus on the differential effect on turnout of presidential power under semi-presidentialism. In a recent article, Tavits (2009 47) found that turnout at legislative elections in semi-presidential countries was 7 percent lower than at the same elections in countries with an indirectly elected president. She also found that the effect of direct vs.

indirect elections survives even when presidential powers are controlled for (ibid. 48). She attributed these findings to the effect of voter fatigue in countries with both presidential and legislative elections. In this article, we argue that under semi-presidentialism presidential power can have the effect of generating first and second-order elections. Such a study is important because it speaks to the debate about the quality of contemporary democracies. If we can provide a richer explanation of voter turnout, then we are better placed to address the normative questions that are raised about the effects of apparently declining turnout over time. In the next section, we outline the research design that allows us to test our propositions about the effect on turnout of the perceived importance of legislative elections under semi-presidentialism.

Case selection, model specification, variables

To test for the effect of the relative importance of national-level elections on turnout, we compiled a new data set that includes data for all democratic semi-presidential countries. We identify the list of countries with semi-presidential constitutions from Elgie (2011, p. 24). We identify democracies by referring to Freedom House's list of Electoral Democracies.[1] This list is available from 1989-2010 inclusive. Therefore, our sample includes all elections in semi-presidential countries that Freedom House classes as Electoral Democracies between these dates.[2] For countries that were already classed as Electoral Democracies in 1989 but where no election was held in that year, we include turnout for the most recent election prior to that time. For example, the observations for Finland begin with the 1988 presidential election. If a country is first classed as an

Electoral Democracy at some point after 1989, we include only the elections from this point onwards. So, we include Mali from 1992. Similarly, if a country loses the status of an Electoral Democracy, then we cease to include it in the dataset.[3]

Our dependent variable is voter turnout. If there is a two-round electoral system, such as in the vast majority of our sample of countries for the presidential elections, we record the turnout figure at the first round of the election. This is because competition at the second round is usually restricted to a smaller number of candidates, which may artificially increase or decrease the turnout figure depending on the context of the election. In the literature, there are two general ways of measuring turnout. It can be calculated either as a percentage of the registered voters in a country or as a percentage of the voting age population. As Geys (2006) notes, there is no decisive argument in favour of one or other of these alternatives. The choice between the two is mainly a function of data availability. In our case, we measure turnout as a percentage of registered voters. This is because most of our turnout data were gathered from national electoral commission websites that do not have any statistics on voting age population. We preferred, where possible, to use official sources for turnout rather than rely on the International Institute for Democracy and Electoral Assistance (IDEA) website, even though this source provides data for both indicators of turnout and even though it is commonly used in turnout studies.[4] We chose to do so because of the unreliablity of the information recorded in the IDEA website. For example, the IDEA website records turnout at the 2010 Croatian presidential election as 50.13 per cent of registered voters, whereas we record a figure of 43.96. This is because the IDEA database records the official second-round figure rather than the first-round figure.[5] There is also a

discrepancy between the IDEA figure for the 2000 Croatian presidential election (60.88 per cent) and the official first-round turnout figure (62.98 per cent).[6] Where information is not available on national electoral commission websites, we rely on country-specific or region-specific sources that specify first-round turnout figures.[7] Overall, we were able to gain information for 254 elections held in 39 countries.[8] The dataset is unbalanced because all the countries are not included for all the period 1989-2010 inclusive and because some countries have held more elections than others. There are 137 parliamentary elections and 117 presidential elections. The average turnout rate of our sample is 66.50 per cent (with no significant difference between average legislative and presidential turnout rates) and there is a high standard error (14.26).

In terms of explanatory variables, we include a dummy variable (Legis) that is equal to 1 for legislative elections and 0 for presidential elections.

To identify the likely importance of an election to voters, we use the Siaroff (2003) index. This index of presidential power is based on nine indicators, including whether the president chairs cabinet meetings, whether or not the president can veto legislation passed by parliament, whether or not the president can invoke emergency powers and so on. Siaroff records a score of 1 if the president in a particular country enjoys the power in question and 0 otherwise. The individual scores are summed. Thus, countries emerge with a presidential power score somewhere in a range from 0-9. If a country was not included in the Siaroff study, then we calculated the value of the Siaroff index. Given our sample includes only countries with a popularly elected president and given one of the Siaroff indicators is whether or not the president is directly elected, the lowest possible Siaroff value in our sample is 1. This score is recorded for Austria,

Iceland and Slovenia. The highest Siaroff value in our sample is 8. This score is recorded for Mozambique and São Tomé and Príncipe. Table 1 below indicates the number of countries at each level of the Siaroff index.[9]

Table 1 about here

We include an interaction variable (LegSia) that multiplies the legislative election dummy variable by the Siaroff index. This allows us to test our main theoretical hypotheses. More precisely, we estimate the following equation:

$$\text{Turnout} = \alpha + \beta\ \text{Legis} + \gamma\ \text{Siaroff} + \delta\ \text{LegSia} + \mu\ X + \varepsilon$$

Where:

Legis is the legislative dummy variable

Siaroff the value of the Siaroff index

LegSia the legislative dummy multiplied by the Siaroff index

X a vector of control variables

Using this estimation, we can directly assess the relationship between presidential power and turnout at presidential elections by looking at the coefficient associated with the Siaroff variable ($\hat{\gamma}$). As explained before, we do not expect the estimated coefficient to be significant.

As we use an interaction term, it is not possible to assess directly the relation between turnout at legislative elections and presidential power. Instead, this relationship is measured by the sum of two coefficients, the estimated coefficients associated with Siaroff ($\hat{\gamma}$) and LegSia ($\hat{\delta}$).[10] We expect this sum to be negative as turnout at legislative elections is expected to decrease with presidential power.

This equation also allows us to compare the level of turnout at presidential elections relative to legislative elections. To do so, we calculate the sum ($\hat{\beta} + \hat{\delta}$ Siaroff) for each value of the Siaroff index. A negative and significant sum would suggest that turnout is higher at presidential elections than legislative elections.[11]

In his meta-analysis of the determinants of turnout, Geys (2006) distinguishes between socio-economic, institutional and political factors. Here, we follow his categorization and include each of the three factors as control variables. A detailed presentation of the theoretical justifications for these determinants is beyond the scope of this paper. They are introduced merely to avoid omitted-variable bias. We do not claim to be providing any new insights in relation to these variables. We merely record the expected effect of each variable on turnout.

The principal socio-economic factor identified by Geys (ibid.) is the size of the country's population. We include a variable for the natural log of a country's population (lnPop).[12] The main argument advanced to justify the introduction of this variable is related to the Downs' (1957) model of rational voting. The probability of casting a decisive ballot is inversely related to the size of the constituency. Thus, we would expect a negative relationship between turnout and the size of the population.

The sample of countries included in our dataset also requires the introduction of certain socio-economic control variables that are not generally identified in Geys (2006) meta-study. Our sample contains countries with very different levels of economic development. Therefore, we include a variable that records the natural log of the level of GDP per capita (lnGDPc).[13] According to Blais et al. (2003), turnout is expected to be higher in more developed countries. This is because development is associated with a

higher level of education and a broader range of social concerns, thus generating more competitive elections. Moreover, even though all of the countries in our sample have passed a certain threshold of democracy, there remains considerable variation in the overall level of democracy. Therefore, we also include the level of democracy in a country as a control variable. There is no particular theoretical justification concerning the direction of the relationship (if any) between turnout and level of democracy. However, as democracy is higher in more developed countries, one might expect the level of democracy to have a positive impact on turnout. Our measure of democracy (Demo) is a dummy variable that distinguishes between the electoral democracies that are classed as Free by Freedom House and those that are classed as only Partly Free.[14] The correlation between democracy and development means that we do not introduce both of these control variables simultaneously.

We include two institutional control variables. The first captures the nature of the electoral system, which is probably one of the most important factors influencing turnout. The lower level of disproportionality between votes and seats in proportional representation electoral systems constitutes a clear incentive for voters to turn out (Geys, 2006). Thus, we would expect turnout to be higher, ceteris paribus, in legislative elections with proportional representation (PR).

The second institutional variable captures whether or not there are concurrent presidential and legislative elections. Concurrent elections are likely to boost turnout (ibid.). In our sample, only a small number of countries hold or have held concurrent elections. They have been held regularly in Mozambique, Namibia and Peru. In Romania, concurrent elections were held until 2004 inclusive. In other countries, the occurrence of

synchronized presidential and legislative elections varies depending on the particular electoral calendar and political circumstances. There are 41 concurrent elections in our dataset. In order to control for this particular institutional context, a dummy variable (Synch) is introduced in the estimations. We expect its estimated coefficient to be positive.

Another institutional variable which is often introduced in turnout analysis is compulsory voting. However, there is only one country in our sample, Peru, where voting is compulsory. The introduction of this variable would be equivalent to introducing a dummy variable for Peru and, therefore, is not meaningful for the purposes of this study.

We also include two political control variables. The first captures the level of electoral competition. When the outcome of an election is expected to be close, then the level of turnout is likely to be higher. This factor has long been recognized as a decisive factor that determines turnout. The theoretical explanations refer either to Downs' (1957) model of rational voting or to the extra resources that political parties deploy in the case of close elections (Cox & Munger, 1989). Consistent with the standard operationalisation of this variable, we include an ex-post (based on electoral results) measure of competitiveness. The variable Closeness is defined as the difference between the score of the two first lists (or candidates) multiplied by -1 (in order to generate an indicator whose value increases with the degree of closeness). The estimated coefficient associated with this variable is expected to be positive.

The second political variable captures the level of party competition. As Geys (ibid.) clearly explains, various theoretical arguments have been developed concerning the relationship between turnout and party fragmentation and there is no standard

expectation. Some expect a negative relationship (turnout decreasing with the number of parties), whereas others expect a positive relationship (turnout increases with the number of parties). The results of empirical studies present conflicting results (ibid.). Thus, we have no explicit expectation about the effect of this variable. To capture the level of party competition, we include the Effective Number of Parliamentary Parties (ENPP). We record the figures calculated by Michael Gallagher.[15] If the data were not available in Gallagher database, we calculated the value of the ENPP index using electoral results.

Finally, we introduce two additional control variables that were not identified in Geys' (ibid.) analysis. First, as our study concerns semi-presidential countries, it seems logical to take account of cohabitation, which is a specific situation that can occur only in this type of regime. Cohabitation is defined as the situation where the president and the prime minister are from opposing political parties or coalitions and where the president's party is not represented in the government (Samuels & Shugart, 2010). Thus, periods of cohabitation record the situation where a partisan president is isolated within the executive. Cohabitation usually occurs when the president's party loses the legislative election and is forced out of government, or when a president is elected from a party that is not in government and the legislature is not dissolved giving no chance for the president's party to be returned to government. Our database contains 42 cases of cohabitation. There is no literature about the effect of cohabitation on turnout.[16] However, we might have reason to believe that when an election takes place during a period of cohabitation, the stakes are likely to be high since these elections will decide whether or not cohabitation ends. If so, then we would expect turnout to be higher at elections that

occur during a period of cohabitation. Thus, the coefficient associated to the dummy variable Cohab is expected to be positive.

The final control variable captures the fact that our dataset includes founding elections. Founding elections are the first elections held in states that have democratised for the first time, such as the presidential election held in Congo-Brazzaville in 1992 or the legislative election held in Namibia in 1989, or in newly created states, such as the presidential election in East Timor in 2002. It is generally found that turnout is higher at founding elections (Kostadinova and Power 2007, Fornos et al. 2004). Thus, we expect the coefficient associated with the dummy variable Founding to be positive.

The case selection generates a panel dataset, containing observations about different countries and different elections over time. Such a dataset cannot be properly estimated using OLS regression since it will violate the assumption of homoskedasticity and uncorrelated error terms (Wooldridge 2010). Surprisingly, despite the inadequacy of the OLS method, most of the comparative literature on turnout has used this method of estimation. For instance, of the 13 empirical studies identified by Geys (2006) that are based on a panel dataset, only two use estimation techniques that are appropriate to panel data.[17] It is only recently that techniques adapted to a panel dataset have started to be used in this literature (for example, Tavits 2009, Fornos et al. 2004, Endersby & Krieckhaus 2008) and that the issue of econometric robustness has been discussed.

With panel data, two main estimation techniques can be employed depending on how the cross-sectional heterogeneity is modeled, the fixed effects model (or least squares dummy variable) or the random effects model (Wooldridge 2010). The choice between these two estimation techniques is not always straightforward. For the purposes

of this paper, there are two reasons for adopting the random effects method of estimation. First, the Hausman test indicates that the random effects model is appropriate.[18] The second argument is related to the characteristics of the regressors included in the estimation. When there is an explanatory variable that is time invariant within groups, the fixed effect estimators cannot be computed since the time-invariant regressors would be perfectly collinear with the fixed effect for that country (Wooldridge 2010). In our case, using the fixed effect model would prevent us from introducing certain time-invariant variables, such as the characteristics of the electoral system. Therefore, we estimate the model using the random effects technique.[19]

Another issue with panel datasets is the possibility of heterogeneity across time. "The two-way error components model allows for specific time effects accounting for unobserved factors assumed to affect all individuals in a similar way at a given point in time" (Baltagi et al. 2008: 64). Our dataset includes concurrent presidential and legislative elections, namely two country observations that occur at exactly the same date. This prevents us from using a two-way random effects model. An alternative way of accounting for the possibility of time effects is to introduce a trend variable. In our case, this is well suited to the dataset because of the temporal evolution of the turnout variable. There has been a general decrease in turnout over time (Gray & Caul 2000, Blais 2000). For this reason a trend variable is particularly appropriate in a comparative study of turnout.[20] Surprisingly, though, to our knowledge it has never been introduced in any such study. Thus, we employ a random effects model and include a trend variable.[21]

Results and robustness tests

Table 2 presents the results of our estimation. They show that the estimated coefficient associated with the Siaroff variable is negative but not significant. In other words, this result confirms the Dettrey and Schwindt-Bayer (2009) finding. Turnout at presidential elections does not depend on the level of presidential power. Voters seem to be just as inclined to turn out and vote at the election for a less powerful president as for a more powerful president.

Table 2 about here

The results also confirm our main theoretical hypothesis concerning turnout at legislative elections. The sum $\hat{\gamma} + \hat{\delta} = -0.64 - 1.34 = -1.98$ is negative and highly significant (Model 1).[22] This confirms that the higher the presidential power, the lower the turnout at legislative elections.

As explained above, the estimated equation also allows us to compare the level of turnout at both types of election. Table 3 gives the value of the sum ($\hat{\beta} + \hat{\delta}$ Siaroff) for each value of the Siaroff index, the value of its standard error and the Student t. For instance, in countries with a Siaroff value of 4, turnout at legislative elections is lower than turnout at presidential elections. The estimated coefficient is negative and highly significant. In fact, the results in Table 3 show that turnout at legislative elections is always lower than turnout at presidential elections when the Siaroff value is higher than 3. By contrast, in countries with a weak president (a Siaroff value of 3 or lower) the estimated coefficient is still negative but not significant. In other words, in these latter countries there is no difference between turnout at presidential and legislative elections.

Thus, turnout at legislative elections relative to presidential elections varies as a function of presidential power.

Table 3 about here

The results for the control variables are globally consistent with our expectations, except for the socio-economic determinants of turnout. As regards the latter, we expected to find a negative relationship between turnout and population and a positive relationship between turnout and economic development. However, our study did not demonstrate any significant relationship between turnout and either of these two variables. In order to check the robustness of our result, we ran an OLS estimation. This is because the Blais' study on economic development and many of the studies that include a population variable are based on the results of an OLS model. When we did so, we found highly significant negative coefficients for both variables. However, as noted above, it is inappropriate to use OLS to estimate a panel dataset. Therefore, while we do not return the standard results for the socio-economic determinants of turnout in our estimations, we conclude that this is because of the estimation techniques used in previous studies.[23]

The results concerning the institutional determinants of turnout are as expected. Using an electoral system based on proportional representation boosts turnout. Equally, concurrent elections also have a positive and highly significant impact on turnout. As regards political factors, the coefficient associated with the closeness variable is positive (turnout increases with the closeness of the race) and highly significant. As noted previously, the relationship between turnout and the number of parliamentary parties was theoretically undetermined. Our results suggest the existence of a negative relationship.

The higher the number of party (or the degree of fractionalization), the lower the rate of turnout.

The two last control variables introduced in the estimations were not significant. When elections occur during a period of cohabitation, there is no impact on turnout. Equally, founding elections have no impact. This last result can probably be explained by the fact that a trend variable is introduced in the estimation and thus trumps the effect of founding elections. As can be seen, the coefficient associated with this trend variable is negative and highly significant. Turnout has declined over the period. The founding election variable also captures this situation. It is certainly the case that many studies have shown that turnout is higher at the first democratic elections than at the following elections. When the trend variable is excluded from the estimation, the coefficient associated with the Founding variable becomes positive and highly significant while the other results remain unchanged.

In order to assess the robustness of our estimations, we ran various tests. (See Table 2). Model 2 presents a reduced model that includes only those control variables that were found to be significant. This estimation also presents robust standard errors. In terms of additional estimation techniques, whereas a number of recent studies have used methods that are appropriate for panel data, there is no agreement as to which models should be employed. Endersby and Krieckhaus (2008) and Dettrey and Schwindt-Bayer (2009) estimate an OLS model with robust standard errors adjusted for country-clustered standard errors. However, the asymptotic properties of the estimator are not verified when the number of clusters is small and the estimated coefficient can then be biased and/or inefficient (Wooldridge 2003). The problem is that in most studies of turnout the

number of clusters (i.e. countries) is indeed quite small. Nevertheless, we used this method of estimation and it does not change our results (Model 2). The exclusion of the non-significant variables in Model 1 does not lead to any change in the other estimated coefficients. We also estimated the model on a sample excluding all the synchronized elections and the results were not changed at all. In their study, Fornos et al. (2004) use a generalized estimating equation (Liang & Zeger, 1986). This estimation technique aims to take grouped data into account even in the case of a small number of clusters (and thus does not suffer from the problem outlined in the previous technique). Again, when we use this method, we return equivalent results to those presented before (Model 3). Overall, we are confident that our results are not sensitive to the particular estimation technique that is employed.

Finally, we checked for the presence of outliers and influential observations. When we compute the Cook's distance, which takes into account the leverage and/or the large residual of a data point, we identify 23 observations whose Cook's distance is above the conventional cut-off value for this test (4/n). Running the estimation without these observations does not change the results. The exclusion of the observations with an absolute value of the studentized residual above 2 also does not change the results. Similarly, the exclusion of the observations with a leverage (measured by the diagonal elements of the hat matrix) above the usual cut-off value[24] does change one aspect of the results. Of the 6 observations with a leverage above the cut-off value, two stand out. They are the data points for the legislative election in Russia in 1993 and Poland in 1991. These two observations have the highest ENPP value in the sample. The exclusion of these two observations leads to the estimated coefficient associated to the ENPP variable

becoming insignificant. This result raises some doubts about the previously reported ENPP result, suggesting that there might not be a relationship between turnout and the number of political parties. However, it should be stressed that we do not aim to make a contribution to the literature on turnout in this regard and that the exclusion of these two observations does not change the results regarding our main explanatory variable.

Discussion

By definition, semi-presidential countries share certain institutional characteristics. In practice, though, semi-presidential countries vary considerably in the prominence they give to these institutions. In some the president is little more than a figurehead and the prime minister is the focus of decision-making. In others, the president is the foremost political figure and the prime minister is subordinate. In this article, we have demonstrated that semi-presidential countries can vary in another way as well. Even though all semi-presidential countries hold elections to two national-level institutions, they can differ in terms of the importance that is placed on these elections. In semi-presidential countries the importance of legislative elections varies inversely with the level of presidential power. Currently, countries as diverse as the Czech Republic, Italy, Moldova and Nepal are considering introducing the direct election of the president and adopting a semi-presidential constitution. This article has shown that, depending on the power of the president in these countries, turnout at legislative elections may vary as a consequence of any such reform. And yet, when debating the choice of semi-presidentialism, this issue is never mentioned. We are not suggesting that the likelihood

of differential turnout is an argument either for or against semi-presidentialism. We are saying, though, that in order for a more informed constitutional choice to be made, citizens in these countries and others citizens should be made aware that differential turnout is a potential consequence of the introduction of a semi-presidential system.

The results also speak to the classical distinction between first- and second-order elections. This distinction implies a binary categorisation with some elections being important and other elections being unimportant. The results here clearly show that the importance of elections has to be considered along a continuum. In countries with a low level of presidential power, voters are faced with two first-order elections. However, as presidential power increases legislative elections lose their first-order status little by little and end up as second-order elections. Previously, Van der Eijk et al. (1996, p. 162) advanced a hypothesis of this sort. In the conclusion to their study they noted: "Some second-order elections are evidently more second-order in character than others, which leads to the idea that some first-order elections may also be more second-order in character than others". To our knowledge, this hypothesis has never been empirically tested. Our results demonstrate the validity of their intuition.

We have demonstrated that in semi-presidential countries with powerful presidents, turnout is higher at presidential elections than legislative elections. However, we are not in a position to conclude whether this is because instrumental voters perceive the presidential election to be more important than the legislative election and, therefore, are more likely to turn out to vote at the former relative to the latter, or because parties consider the presidential election to be more important than the legislative election and, consequently, deploy more campaign and communication resources to that election, thus

generating more voter interest. There is anecdotal evidence to suggest that voters respond to the value of the election rather than the mobilization of resources. For example, the Romanian president has a Siaroff value of 5, implying that legislative elections are second-order. Indeed, at the 2008 legislative election turnout was 39.2 per cent, whereas at the 2009 presidential election it was 54.4 per cent. However, official figures show that the PDL party spent 14.9 million Lei on President Băsescu's re-election campaign and 25.9 million Lei on the party's legislative election campaign.[25] Therefore, the level of turnout was higher at the presidential election, even though parties devoted many more resources to the legislative election. That said, campaign expenditure limits are more permissive at legislative elections. By itself, this will have artificially inflated the level of spending there relative to presidential elections. Clearly, more research is now needed to determine the extent to which the level of turnout varies as a function of whether voters perceive particular elections to be more important or whether they are encouraged to participate more by the activity of political parties.

This issue is closely related to an ongoing debate in the general literature on turnout. The standard wisdom is that turnout is higher when election contests are closer. Our study has confirmed this result. Why, though, is turnout higher when elections are closer? Is it because closeness increases the value of turnout to rational voters (Matsusaka & Palda, 1993), or is it because parties mobilise more resources (Cox & Munger, 1989)? One of the problems with providing an answer to this question is that closeness may be endogenous to party mobilisation. Closeness may make parties mobilise more, leading to closer elections and more party mobilisation, and so on. By contrast, the importance of elections does not depend on the degree of party mobilisation. Their importance is

determined by the power of the institution that is being elected. Therefore, to test whether turnout is higher at first-order elections because instrumental voters consider them to be more important or because parties mobilise more resources, we simply need to measure the extent of party mobilisation. We can do so directly through the relative levels of campaign expenditure, the amount of advertising and so on. Therefore, this article not only establishes a research agenda, it does so in a way that is susceptible to robust empirical testing.

Conclusion

This article has combined two previously separate literatures, the literature on the relative importance of elections and the literature on the variation in presidential power under semi-presidentialism. To date, the literature on the relative importance of elections has focused overwhelmingly on the differential importance of elections to national-level institutions compared with elections to sub-national or supra-national institutions (Reif & Schmitt, 1980). This article has extended the logic of first and second-order elections to the national level. We have demonstrated that there is variation in the importance of elections to national-level institutions as well. Equally, until now the literature on the variation in presidential power under semi-presidentialism has tended to focus on the effect of such variation on democratic performance (Elgie and Schleiter 2011; Elgie 2011) or levels of conflict within the executive (Protsyk, 2006). Tavits (2009) has argued that voter fatigue accounts for the lower level of turnout at legislative elections under semi-presidentialism relative to parliamentarism even controlling for presidential power.

In this article we have demonstrated that variation in presidential power under semi-presidentialism means that even though these regimes have two national elections they are not necessarily of the same importance. We have clearly demonstrated that the importance of legislative elections and, therefore, the rate of turnout depend on the power of the president.

This article has also contributed to our general understanding of first- and second-order elections. In the literature, this distinction is understood to be binary. However, this article has shown that the distinction should be understood as a continuum ranging from less important to more important elections. This result could be applied to the comparative study of sub-national elections. Are certain sub-national elections more important than others? In addition, while we have not aimed to demonstrate whether voters intrinsically perceive certain elections to be more important than others and, therefore, turn out to vote in greater or lesser numbers, or whether parties perceive them to be more important and devote differential resources to them, thus generating more or less interest among voters accordingly, we have demonstrated that the validity of either proposition could be tested without any inherent endogeneity problem.

Overall, this article has shed new light on the relative importance of elections under semi-presidentialism. Given so many countries have now chosen this form of government and that others are considering doing so, the findings have important implications for constitutional choice. Citizens need to be aware that depending on presidential power the choice of semi-presidentialism is likely to lead to differential turnout at national-level elections. Knowledge of such an effect may have a bearing on

whether certain countries wish to remain semi-presidential and on whether other countries wish to choose this type of constitutional arrangement.

Notes

[1] Retrieved from http://www.freedomhouse.org/template.cfm?page=439 (accessed 17 June 2011).

[2] We were unable to include Kyrgyzstan (1995-2000) in the sample. Some elections held in the other SP countries are not included in the sample because of missing data for the dependent and/or the independent variables.

[3] We do not include the election in the year in which the country loses its status as an Electoral Democracy.

[4] Retrieved from http://www.idea.int/vt/index.cfm (accessed 21 June 2011).

[5] Retrieved from http://www.idea.int/vt/country_view.cfm?id=98 (accessed 21 June 2010). The official first and second-round turnout figures from the Croatian State Electoral Commission are available at: http://www.izbori.hr/izbori/dipFiles.nsf/0/9EAC74D78305D7CBC12578170048CC68/$File/konacno_izvjesce_OESS-a.pdf (accessed 21 June 2010).

[6] The official first-round turnout figures for the 2000 presidential election are available at: http://www.izbori.hr/2000Pred/Pred1Krug.htm (accessed 21 June 2011).

[7] These sources included the African Elections Database (http://africanelections.tripod.com/), the Electoral Institute for the Sustainability of Democracy in Africa website (http://www.eisa.org.za/WEP/ea.htm), and Wikipedia country election pages (http://en.wikipedia.org/wiki/Elections_by_country).

[8] They are: Armenia (1999), Austria (1986-), Bulgaria (1992-), Cape Verde (1991-), Central African Republic (1993-1999, 2005), Congo-Brazzaville (1992-1993), Croatia

(1992-), East Timor (2002-), Finland (1988-), France (1988-), Georgia (2004), Guinea-Bissau (19994-1999, 2005-2009), Haiti (1995, 2006), Iceland (1988-), Ireland (1989-), Lithuania (1992-), Macedonia (1994-), Madagascar (1992-2007), Mali (1992-), Mauritania (2007), Moldova (1994-1998), Mongolia (1993-), Montenegro (2006-), Mozambique (1994-2004), Namibia (1989-), Niger (1993-1995, 1999-2004), Peru (1990, 2001-), Poland (1991-), Portugal (1987-), Romania (1992-), Russia (1993-2003), Senegal (2001-), Serbia (2007-), Slovakia (1999-), Slovenia (1992-), Sri Lanka (1989-2010), São Tomé and Príncipe (1991-), Taiwan (1998-), Ukraine (1994-).

[9] The number of observations in Table 1 (45) is greater than the number of countries in our sample (39) because in some countries the value of the Siaroff index changed over the period.

[10] For a detailed presentation of empirical analysis using interactive variable, see Brambor et al. (2005) and Kam and Franzese (2007). The standard error of this sum of estimated coefficients is calculated using the following formula: where .

[11] The standard error is calculated as explained in the previous footnote where this time Z = Siaroff.

[12] The source of the population figures is the World Bank's World Development Indicators. Retrieved from: http://data.worldbank.org/data-catalog/world-development-indicators (accessed 21 June, 2011).

[13] The source for the GDP data is the ERS International Macroeconomic Data Set, which provides annual figures for Real 2005 GDP Per Capita in US dollars. Retrieved from: http://www.ers.usda.gov/Data/Macroeconomics/ (accessed 21 June 2011). The GPD data

is missing for East Timor. Thus, this country is not included in the regressions presented in Table 2. However, it is included in the estimations in Table 3.

[14] The classifications for our period are available at: http://www.freedomhouse.org/template.cfm?page=439 (accessed 21 June 2011).

[15] Retrieved from http://www.tcd.ie/Political_Science/staff/michael_gallagher/ElSystems/index.php (accessed 28 June 2011).

[16] Most studies of cohabitation focus on the degree of conflict between the president and the prime minister that it generates. See, for example, Pierce (1991).

[17] Four of these papers use a regression based on average turnout over the period and nine use OLS to estimate their panel dataset.

[18] More precisely, the null hypothesis that the two estimates should not differ systematically is not rejected at the 10 percent level.

[19] Other panel data methods of estimation have been used. For various reasons, they are less adapted as we will explain later in the section on robustness.

[20] Another solution would have been to include in the estimation the lagged dependent variable. However, as our data set covers two different types of election, it raises the problem to define this lagged variable. Is it the previous election or the previous election of the same type?

[21] The Trend variable is equal to 1 for the elections that occurred in the first year of our sample, that is in 1986 and to 25 in 2010.

[22] The covariance is equal to -0.143 which amounts to a standard error for the sum of the two coefficients equal to 0.85 and thus to a value of Student t of 2.32.

[23] This result is not shown in order to save space. We did not find any significant relationship between turnout and the level of democracy using the random effects model. In the OLS model, the estimated coefficient associated with the democracy variable was also not significant.

[24] Which is equal to (2k+2)/n with k the number of regressors.

[25] The expenditure figures are available from the Permanent Electoral Authority. Retrieved from: http://www.roaep.ro/ro/section.php?id=28&l2=39&l3=45&lm=archived, and http://www.roaep.ro/ro/section.php?id=28&l2=39&l3=45 for the 2008 legislative election and the 2009 presidential election respectively (both accessed on 27 September 2011).

Table 1 Value of the Siaroff index in the sample of countries

Value of the Siaroff index	1	2	3	4	5	6	7	8
Number of countries	3	4	4	4	5	11	12	2

Table 2 The importance of presidential and legislative elections under semi-presidentialism

	(1)	(2)	(3)
lnPop	0.208		
	(0.15)		
lnGDPc	0.0391		
	(0.03)		
Synch	10.42***	9.765***	9.389***
	(4.05)	(3.92)	(3.61)
PR	5.329**	5.524**	5.830**
	(2.46)	(2.56)	(2.53)
Closeness	0.136***	0.126***	0.125***
	(3.55)	(3.40)	(3.15)
ENPP	-1.066**	-1.003*	-1.074*
	(-1.99)	(-1.93)	(-1.95)
Cohab	-0.0603		
	(-0.04)		
Founding	1.826		
	(0.76)		

Trend	-0.590***	-0.603***	-0.596***
	(-5.58)	(-6.20)	(-5.69)
Legis	1.866	1.894	1.660
	(0.58)	(0.59)	(0.48)
Siaroff	-0.640	-0.402	-0.404
	(-0.74)	(-0.54)	(-0.56)
LegSia	-1.338***	-1.369***	-1.360**
	(-2.61)	(-2.69)	(-2.46)
Constant	78.80***	81.93***	82.07***
	(3.42)	(15.63)	(15.72)
N	252	255	255
R^2 between	0.0995	0.0661	
R^2 within	0.293	0.288	
R^2 overall	0.183	0.173	
Chi2	89.30	86.05	73.86

t statistics in parentheses

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

(1) Random effect model; (2) Robust standard errors adjusted for clustering; (3) Generalized estimating estimation

Table 3 Turnout differential and presidential power

		coef	standard error	Student t
Siaroff	=			
1		0.53	2.78	0.19
	2	-0.81	2.40	-0.34
	3	-2.15	2.09	-1.03
	4	-3.49	1.86	-1.88
	5	-4.82	1.75	-2.75
	6	-6.16	1.80	-3.43
	7	-7.50	1.97	-3.80
	8	-8.84	2.26	-3.92

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