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Abstract

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The Fiscal Effects of Political Tenure*

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Abstract

We assemble a comprehensive dataset covering a large set of old and new democracies over four decades to document the dynamics of rulers alternating in office. We construct a measure of the tenure accumulated in office by the ruling party (or a coalition of parties) since the establishment of democracy. Our measure reveals a large variation in the political tenure of rulers alternating in office and uncovers an important fiscal effect of political tenure. A ten percent increase in tenure rises government expenditure as percentage of GDP of 0.23 percentage points, and deficit of 0.21 percentage points over the period 1972-2014. We outline a conceptual framework that accounts for the uncovered empirical relationship and suggest the relevance of a fading “honeymoon effect,” which revisits Olson (1984) argument on the dynamic effect of distributional coalitions. The older the ruling group, the more divisive the available policies that can be implemented, which require costly transfers in the form of public expenditure to keep the group together.

Keywords: Political tenure, government expenditure, panel data.

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1 Introduction

Fiscal policies have always been at the centre of the public debate. The government is largely responsible for these policies and the evolution of fiscal aggregates within and between legislatures is potentially affected by political institutions, electoral incentives, and rulers' characteristics. In the last four decades, political scientists and economists provided consolidated evidence linking fiscal aggregates to the institutional context, electoral turnover, electoral concerns, and attributes of leaders, such as partisan affiliation, strength of the ruling party, and government fragmentation.¹ Surprisingly, little attention has received the role played by the political tenure of the ruling party. It seems rather intuitive that if “old” and “young” ruling parties alternate in office, that could matter for fiscal policies, very much like the tenure of a team of managers could matter for a firm strategic choices and overall performance.

To the best of our knowledge, this is the first work that studies whether the tenure accumulated by the ruling party plays a role in the evolution of fiscal aggregates, over and above the age of a democracy, the electoral budget cycle, and a number of other contextual considerations. To document the fiscal effects of political tenure, we proceed in two steps.

We first assemble a novel dataset about political tenure by tracing back information about each party (or coalition of parties) in power starting from the beginning of the 20th century or, for newer democracies, we consider the year of the establishment of a democratic regime as initial condition. We define two alternative measures of tenure. First, we consider the tenure of the party of the ruler, who is the Prime Minister in parliamentary democracies and the President in presidential democracies. For simplicity, we henceforth refer to both institutional figures as PM. This is the number of years while in office accumulated by *the PM party* in all the past and current legislatures. Second, we replace the tenure of the PM party with that of her ruling coalition

¹We review this literature in Section 2.

in multiparty parliamentary democracy. Both measures of tenure uncover a large variation in the political tenure of the governments alternating in office both across parties, and within and between countries.

Given our novel dataset about political tenure, we merge information on political tenure with time series of fiscal policy indicators taken from the Government Finance Statistics (GFS) and the International Financial Statistics (IFS). As a result, we have an unbalanced panel covering sixty-three countries over the period 1972-2014. We document a robust positive relation between tenure and central government expenditure, which is not only significant but also sizeable. For example, an increase of ten percent in the political tenure of the PM party (that is slightly more than one year at the average level of tenure) increases government expenditure as percentage of GDP of 0.23 percentage points. Further, the tenure of the PM herself does not seem to be a confounding factor for the fiscal effect of the tenure of the PM party.

Our results are stable across different model specifications and confounding factors such as age of the democracy, characteristics of political institutions, incumbency of the PM party and of the PM herself, political corruption, and PM party fixed effects. We also uncover a positive relationship between political tenure and deficit, regardless of whether the great recession period is included or not in the sample. There might be a natural concern that our measure of tenure may be overstated, since we would give equal weights to all years in office. For this reason, we also depreciate the tenure at various rates so to weight more the tenure that has been accumulated in more recent years and show that the results are robust under different depreciation rates.

Interestingly, we document that the dynamic of tenure and level of expenditures is influenced by the level of fractionalization of the government and that our results are stronger in the case of multiparty democracies with mixed or proportional electoral systems. We discuss these findings in light of a conceptual framework that revisits Olson (1984) argument on the dynamic effect of

“distributional coalitions” on growth. Our framework hinges on the simple idea of a gradually fading “honeymoon effect”: the older the ruling coalition of parties (or the factions within the single party in office), the more divisive the available policies that can be implemented, simply because consensual policies were typically implemented first, that is, during the honeymoon. An agreement on divisive policies, however, requires costly transfers in the form of public expenditure. When the cost of these transfers is sufficiently steep, the older is the ruling group, the higher are the transfers needed to keep the group together, and the higher is public expenditure. Furthermore, the honeymoon effect will fade sooner when the government composition is more heterogeneous and fractionalized.

We also examine alternative potential explanations. Our evidence indicates that the positive relation between government tenure and fiscal aggregates does not appear to be driven by political corruption or bureaucratic inefficiency, intertemporal incumbency effects, learning by doing or fiscal preferences of the voters.

The outline of the paper is as follows. In Section 2 we discuss the related literature. In Section 3 we describe the data we collected and present basic statistics on political tenure. We outline our methodology for studying the relationship between political tenure and fiscal aggregates in Section 4. We present our results in Section 5 and the honeymoon effect in Section 6. Section 7 discusses alternative potential explanation for our results and concludes.

2 Review of the Literature

This paper is related to two branches of the literature. First, a considerable amount of theoretical and empirical research has examined the role that electoral incentives and political institutions may have in shaping economic policies. Since the seminal work of Nordhaus (1975), political budget cycles (PBCs) have been extensively studied in democracies (e.g., Hibbs, 1977; Alesina, 1987;

Rogoff, 1990; Peltzman, 1992; Petterson-Lidbom, 2001; Brender and Drazen 2005 and 2008; Shi and Svensson, 2002; Akhmedov and Zhuravskaya, 2004; Aidt et al., 2011.) Persson and Tabellini (2003) were the first to document the relationship between political regime, electoral rule and PBCs and many others followed in broadly studying the “economic effects of constitutions” (e.g., Alt and Lassen, 2006; Chang, 2008; Efthyvoulou, 2012; Shelton, 2014 to name a few). Widening the scope of the analysis, recent works have shown that democracy itself has a significant and robust positive effect on economic growth (Rodrik and Wacziarg, 2005; Acemoglu et al. 2019 among others) and on the adoption of economic reforms (Giuliano et al., 2014). Most of the aforementioned studies established their findings for a comprehensive set of countries spanning a few decades. In the same spirit, we also consider a large set of democracies over four decades but we moved beyond institutional predictors to emphasize the importance of a novel dimension of political stability, highlighting the role played by the political tenure accumulated by the PM and her party, or her ruling coalition.

Meanwhile, in addition to the role of institutions, a handle of studies aimed at establishing a tight relationship between government expenditure (or public services) and specific characteristics of the ruler, such as political strength and ideology of the ruling party, political turnover, government fragmentation, and the number of parties in the ruling coalition (e.g., Volkerink and De Haan, 2001; Jones and Olken (2005); Bawn and Rosenbluth, 2006; Primo and Snyder, 2010; Artés and Jurado 2018; Fiva et al. 2018; Akhtari et al., 2022; Marx et al. 2022, Toral, 2022). Further, exploiting variation at the local level, a rapidly growing number of studies shows that the attributes of the PM matters for policies and economic outcomes (e.g., Chattopadhyay and Duflo, 2004; Ferreira and Gyourko 2009; Besley et al., 2011; Clots-Figueras, 2011; Gagliarducci and Paserman 2012; Blinder and Watson, 2016; Brollo and Troiano, 2016; Alesina et al., 2015). This literature has considered important attributes such as gender, age, education, but has paid little attention to the

role of political experience. We contribute to this literature by placing particular emphasis on the experience of the ruling party (or coalition of parties) and providing novel stylized facts about the role played by the political tenure accumulated in office since the establishment of a democracy.

3 Data

This paper uses a longitudinal data set on PM (i.e., the President in Presidential systems and the Prime Minister in Parliamentary systems), her partisan affiliation, and coalition of ruling parties (when present) collected by the authors. We identified all national PM from the beginning of the twentieth century (or since the establishment of a democracy) to 2014. The resulting panel is unbalanced because the establishment of a democratic regime took place in different dates and records about fiscal aggregates are available for slightly different time spans across countries.²

Political tenure We propose two measures of political tenure for parliamentary democracies. The tenure of the PM party ($t.PMp$) measures the years of tenure accumulated by a political party during all the legislatures in which the PM belonged to that political party. We also consider the tenure of the ruling coalition ($t.COALp$), which measures the years of tenure accumulated by each partisan coalition while in office. In the case of presidential democracies, we only consider the former definition of tenure (i.e., tenure accumulated by the party of the President). To construct these variables, we trace back information since a ruling coalition or a political party was born. In particular for *old democracies* - established before 1965, which is the median initial year - we go

²We consider sixty-three democracies. The countries included in our sample are Australia, Austria, Belgium, Bolivia, Brazil, Bulgaria, Canada, Chile, Colombia, Costa Rica, Cyprus, Czech Republic, Denmark, Dominican Republic, El Salvador, Estonia, Finland, Fiji, France, Germany, Greece, Guatemala, Honduras, Hungary, Iceland, India, Ireland, Israel, Italy, Japan, Lithuania, Luxembourg, Madagascar, Malaysia, Malta, Mauritius, Mexico, Nepal, Netherlands, Nicaragua, Norway, New Zealand, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Turkey, United Kingdom, Uruguay and United States. We exclude from our final sample the country-year observations of Guatemala, (1974-1985), Philippines (1972-1986) and Fiji (1987-1989) due to a temporary military or totalitarian regime.

back as early as the beginning of the twentieth century and, for *new democracies*, which account for roughly half of our sample, we collect information since the establishment of the democratic regime. We also constructed the political tenure accumulated by each single PM while in office.

In the upper panel of Table 1 we consider each ruling party as a unit of observation and the tenure accumulated last time we observed the party in office, i.e., the maximum tenure accumulated over the legislatures in office until 2014. Our sample comprises 188 political parties that, at least once, have been in power. Roughly half of these parties are active in European countries, which typically are multiparty parliamentary democracies with mixed electoral rule. Notice that political tenure greatly varies across ruling parties. While the average tenure is slightly above eleven years, the median is only 5.4 years. In particular, one quarter of all ruling parties are relatively “young”, displaying an average tenure of 2.5 years (they are likely to have been in power only once) and, at the top of the distribution, one quarter of parties are relatively “old”, displaying a tenure of about sixteen years. This variation is in part due to cross-countries differences in institutional features, such as the age of the democracy, political turnover, and electoral rule (see Figure A.1). For example, the median tenure of a ruling party is four times larger in old than in new democracies (about 16 versus 3.8 years, respectively, as outlined in the second and third rows of the panel). Similarly, we do observe marked differences across continents: the median tenure is seven times larger in North America and Oceania than in Europe (16 versus 3.8, respectively). However, the large variation in tenure that we document does not only stem from cross-countries differences. In fact, the upper panels of Figure 1 reveal frequent jumps in the tenure of the ruling party after a political turnover within six countries, and similar patterns are observed in the other countries.³ In our sample, political turnover is quite frequent: about 42% of governments formed after an election are ruled by party different from the incumbent one.

³The bottom panel of Figure 1 shows the average tenure of party in office in each continent over time and Figure A.1 in the appendix the average tenure over time in proportional and majoritarian systems.

Since the empirical analysis is carried out at the country-year level, the middle panel of Table 1 reports the descriptive statistics of the political tenure of the PM party (t_PMp) when country-year is the unit of observation, for a total of 1625 observations from 1972 to 2014. The average t_PMp is 14.7 with a standard deviation of 14.9.⁴

Note that t_PMp gives equal weight to all years regardless of whether they have been accumulated, just after the establishment of a democracy or at later stages. Hence, we also consider a depreciated measure of tenure as to weight less the political tenure accumulated in legislatures further away in time.⁵ The figures for depreciated tenure are reported in Table A.1. The sharp differences in political tenures are slightly less marked across the quartiles of the distribution when we depreciate tenure at a yearly rate of 0.05%: about 2.9 years in the bottom quartile, 8.4 at the median, and 18.3 in the top quartile (14 vs 3 years in old vs new democracies). As expected, the highest tenure ever observed in the sample drastically drops substantially once we depreciate it (from 72.3 to 36.6).

Economic Variables The time series of fiscal policy indicators are taken from the Government Finance Statistics (GFS) and the International Financial Statistics (IFS). Descriptive statistics for the central government total expenditure as a share of GDP are reported in the bottom panel of Table 1. We also collected information about other fiscal policy indicators, namely deficit and total revenues and grants. Deficit is defined as the difference between total revenues and grants and central government total expenditure. All these variables are expressed as share of GDP. Economic and demographic indicators such as percentage of population aged 65 or older, percentage

⁴When we replace the tenure of the PM party with that one of the PM ruling coalition in multiparty parliamentary democracies, we observe that average political tenure (t_COAL) is about 10 years with a standard deviation of 12.9 years. Much lower is instead the tenure accumulated by the PM himself, as the turnover of coalitions and PMs occurs much more frequently. PMs display on average a tenure of 2.8 years, with a standard deviation slightly above three years. The longest PM's tenure is of 18.6 years. See Table A.1.

⁵For instance, when we allow tenure to depreciate at a rate of 0.05%, four years of political tenure accumulated twenty years ago result in an additional tenure of 3.6 years. Similarly, four years of political tenure accumulated thirty-five years ago result in an additional tenure of 3.2 years.

of individuals aged 15-64, real GDP growth, estimated measure of the output gap, inflation and unemployment are taken from IFS.

4 Empirical Methodology

We consider a number of dynamic panel data model specifications, which have been popular in this literature, of the form:

$$y_{it} = \alpha_1 + \alpha_2 y_{it-1} + \alpha_3 \ln D_{it} + \mathbf{x}'_{it} \alpha_4 + \mu_j + \lambda_t + \varepsilon_{it},$$

where the fiscal policy indicator (e.g., government expenditure as percentage of GDP) in country i at time t , y_{it} , depends upon the tenure accumulated by the executive in power up to year t , namely $D_{it} = \{t_PMp_{it}, t_COALp_{it}\}$.⁶ In the baseline specification we control for a set of time varying and country specific explanatory variables such as demographic factors (shares of the population under 14 years and over 65 years) and political factors, in addition to the election year. For example, it is important to add certain party specific additional control such as the incumbency of the ruling party or coalition and the government size (i.e., overall seat share obtained in the last election) since they could be potential confounders associated with both tenure and government expenditure. Fiscal policy is often pro cyclical, at least in developing countries as shown by Alesina et al. (2008). For this reason, we also consider specifications that include real GDP growth, a measure of the output gap and inflation. We also include year dummies, (λ_t) , to account for secular changes and aggregate shocks that change over time and affect all countries in the same way, the age of the democracy, which acts as a country specific trend, and PM's party fixed effects, (μ_j) , to control for unobserved characteristics of the PM's party that might be correlated with tenure and can

⁶In our main specification we consider y_{it} as the central government expenditure as share of GDP. In alternative specifications, we also consider the deficit accumulated each year by the central government or tax and revenues, as a share of GDP.

also affect the fiscal aggregates. By doing so, in the most conservative specification, we exploit only the time variation within each ruling party in office and isolate the effect of its unobserved characteristics, as long as they are persistent over time. The ϵ_{it} are clustered at the country level.

Estimation of the model: Our empirical exercise should take into account the presence of unobserved heterogeneity between countries and a possible reverse causality bias between expenditure at time $t - 1$ and tenure at time t . We address the unobserved heterogeneity with a country fixed effect model (FE). Further, the fact that our panel is rather long alleviates concerns about a reverse causality bias. Nickell (1981) shows that the bias is of order $\frac{1}{T}$. In our case, the time dimension of the panel is of forty years and therefore the bias shall be rather small. Nevertheless, we consider an alternative model in which we use the Arellano-Bond (AB) specification that produces unbiased estimates also in presence of reverse causality.⁷

A number of bias reduction procedures have been proposed.⁸ The typical approach is to first first-difference the data to remove the country FE, which yields: $\Delta y_{it} = a\Delta y_{it-1} + b\Delta x_{it} + \Delta e_{it}$, and then to instrument for it, because Δy_{it-1} is correlated with the first difference error term. Andersen and Hsiao (1981) proposed Δy_{it-2} or y_{it-2} as an instrument as these terms are not correlated with Δe_{it} . We implement an extension of the Arellano and Bond (1991) approach, where we use an extended linear GMM estimator that uses lagged differences of y_{it} as instruments for the equation in levels, in addition to lagged levels of y_{it} (in our setting we use y_{it-3}) as instruments for equations in first difference (see Blundell and Bond (1998)). Note that the AB moment conditions are derived under the assumption of no serial correlation in the errors. Hence, after we estimate the dynamic model using this procedure, we test for the presence of second order serial correlation in the error difference.

⁷The AB estimates are unbiased also in presence of reverse causality conditional on the correct specification of the lags of the reverse causality, see Leszczensky and Wolbring (2019). We consider the FE model as our main specification and use AB as a robustness check.

⁸See Arellano and Honoré (2000) for a review of this literature.

5 The Fiscal Effects of Political Tenure

We first discuss the results we obtain with t_PMp and government expenditure as share of GDP (Table 2). Since t_PMp is expressed in log, the estimated coefficient measures the change of government expenditure as percentage of GDP in response to a percentage change in tenure.⁹ We consider four specifications of the FE model with an incremental set of controls. We assume that tenure depreciates at a 0.05% rate, as not to give equal weight to tenure accumulated in different points in time.¹⁰ In Table A.2 we use the Arellano Bond estimation procedure to address the reverse causality concerns and we obtain very similar estimated coefficients in size and significance to the ones discussed below.

Main Results: Across all specifications in Table 2, we estimate a significantly positive coefficient of political tenure of the ruling party. The size of the estimate is rather large: a ten percent increase in tenure is associated with a rise in the share of expenditures on GDP of 0.18-0.23 percentage points. A compelling finding is that when we include a dummy for incumbency (i.e., equal to one when the same ruling party is reappointed after an election) in column 2, and party fixed effects in column 3, the estimated coefficient of interest further increases. This finding indicates the presence of a downward bias when we do not include an incumbency dummy and/or party dummies, μ_j . Regarding the direction of the selection bias, one possible explanation is that more competent parties are more likely to be reappointed, which increases their tenure. They are also more likely to provide public goods in an efficient way and, in turn, they might spend relatively less. A similar reasoning applies to μ_j that, among other things, captures the competence of the party, which is positively correlated with tenure. Note that the estimated coefficient of incumbency is negative and significant: in those legislatures where the incumbent ruling party has been reap-

⁹Because the log of zero cannot be computed, we approximate the tenure of new parties with a tenure of 10^{-18} . Results are qualitatively the same when we use smaller or larger approximations.

¹⁰The first year after which tenure starts accumulating is either 1900 or 1946

pointed, there is a drop in expenditure of 0.30-0.38 of one percent of GDP. This finding is in line with studies showing that political turnovers might be costly (see e.g., Toral (2022)).

Our benchmark specification is column (4) with the full set of controls, where the sign and magnitude of the set of demographic and economic variables are in line with the previous literature (see in particular Alesina et al. (2008)). The estimated coefficient of the age of the democracy is positive, meaning that as the democracy is more established, the expenditure tends to increase. The estimated coefficient for GDP growth absorbs the effect associated with the expected growth and has negative sign because government expenditure is measured as a percentage of GDP. While not significant, the sign of government strength (proxied by seat share) goes in the expected direction. Finally, the estimated coefficient of tenure stands robust when we include additional political controls in Table A.3, such as the ideology of the ruling party and two measures of political turnover: change in the ideological position of the PM party and change of leadership (i.e., change of the appointed PM).

As expected, the fiscal effect of tenure is somewhat more pronounced when we consider a depreciated measure of tenure, which weights less the political tenure accumulated in legislatures further away in time (see Table A.4). When tenure is discounted, the initial year after which tenure starts accumulating (1900 or 1946) becomes irrelevant. Further, when we consider tenure in levels with a quadratic term, rather than in logarithmic form, we show that government expenditure is increasing and concave in political tenure (Table A.5). For example, the estimated coefficients in Column (5) indicate that at the first quartile (i.e., a discounted tenure of 2.89 year) one more year of tenure is associated with an increase of government expenditure of 0.1 of one percent of GDP; at the median (8.29 years) of 0.07. This effect almost vanishes at the top quartile (18.18 years) with an increase of 0.01. In sum, these results indicate that regarding government expenditure the most salient years of tenure are the recent ones and the gradient is more marked in the first

years of accumulated tenure. Interestingly, the effect is not driven solely by the lack of tenure of parties that are in office for the first time ever. In fact, the estimated coefficient of political tenure accumulated up to time t is even stronger when we control for a dummy equal to one in all the years of a legislature with a new ruling party that is in office for the first time (column (7) of Table 3).

Alternative measures of political tenure: One might argue that the fiscal effect of the tenure of the ruling party is capturing the potential effects of other relevant measures of political tenure, such as the tenure of the PM herself. We investigate this hypothesis in panel (a) of Table 3. The first column reports the estimated coefficient of our benchmark specification. In column 2 we consider instead the tenure of the PM herself, rather than the one of the party she is affiliated with. While the estimated coefficient of the tenure of the PM herself is significant, it is only half the size of that one of the PM's party (column (1) versus column (2)). Further, when we run a horse race between the tenures of the PM party and the tenure of the PM herself (column (3)), only the former matters. These results suggest that the tenure of the PM does not seem to be a confounding factor for the fiscal effect of the tenure of the PM ruling party.

We next consider the role played by the tenure of coalition governments (t_COAL) in multiparty parliamentary democracies, where we typically observe a coalition of parties forming a government rather than a single party in office. In column (4) of Table 3, we see that the estimated coefficient of t_Coal on government expenditure is significant and positive, but roughly only half of the size of the one of the PM's party (column (1) versus column (4)). This comparison suggests that the fiscal effect is stronger when we consider the tenure of the PM party rather than the tenure of the ruling coalition. Further, when we include both the tenure of the PM herself in office as well as that one of the ruling coalition, only the latter is significant.

Political Budget Cycles and Other Fiscal Aggregates: Interestingly, the estimated coef-

ficient of election year has the expected sign (see Brender and Drazen (2005)) but is not significant in Table 2.¹¹ To further examine the role played by political tenure and political budget cycles, we extend the analysis to other fiscal policy indicators in Table A.6, where each panel reports the coefficients of political tenure with respect to expenditure, deficit, and tax and revenues and the coefficient of the electoral dummy, using the specifications (1) and (4) of Table 2. The sample consists of a subset of forty-six countries for which data on deficit and revenues are available.¹² We consider three time spans: 1972-2014 (first two columns in Table A.6), 1972-2007 (before the economic crisis), and 1972-2001, which is the last year considered in Brender and Drazen (2005), who document the presence of political cycles in deficit. While the estimated coefficients for election years remain insignificant when we consider government expenditure in the upper panel, the estimates in the middle panel (where deficit is the economic outcome) indicate the presence of a political budget cycle in the earlier sample (until 2001), which is in line with the results of Brender and Drazen (2005), and even just before the breakdown of the economic crisis (until 2007). However, the estimated coefficient of election in the deficit equation becomes insignificant in the longer time span (until 2014)). Note that for this subset of countries, the estimated coefficient of tenure is even higher and still highly significant: the estimate rises from 0.029 (over the period 1972-2014) to 0.033 (1972-2007) and to 0.038 (1972-2001). Interestingly, the fiscal effect of tenure extends also to other fiscal aggregates, and it is more pronounced before the breakdown of the economic crisis.¹³ In particular, in the case of deficit, the estimated of tenure is positive and significant, ranging from 0.017 to 0.037 (middle panel of Table A.6). Specifically, the shorter the time span, the higher the estimated coefficient is. Regarding revenues, we do not discern a robust and significant association between tenure and tax and revenues as a share of GDP (bottom panel of Table A.6).

¹¹We also considered normalized time to the next election, rather than a dummy for the election year: the estimated coefficients of tenure stand robust to this alternative specification and the coefficient of time remains insignificant.

¹²The sample size shrinks because data on revenues are missing for some country-year observations.

¹³In the aftermath of crisis, fiscal policy action was limited.

Political background: We next examine whether there are differential effects of tenure in new and old democracies in Table A.8. In doing so, we consider whether the democracy was established before or after 1965, which is the median initial year. We do not find significant differences in the estimated coefficients of tenure in the bottom and top halves of the age distribution of democracies (column 2). Similarly, the interaction term between tenure and age of a democracy in column (3) is zero and insignificant. We next investigate whether the estimated coefficients of tenure do change across electoral and institutional regimes. In the last two columns of Table A.8 we compare heterogeneous effects of tenure for presidential versus parliamentary democracies and for majoritarian versus proportional and mixed electoral systems. The expenditure elasticity to tenure is somewhat smaller in presidential systems, but the difference is not statistically significant. The fiscal effect of tenure is much larger in democracies with proportional and mixed representation, albeit insignificant.

6 Conceptual Framework

In the previous section we provided robust evidence that the elasticity of expenditure (and deficit) to political tenure is positive. This finding is both novel and surprising. We now interpret our empirical results in light of a simple conceptual framework based on what we refer to as “honeymoon effect”. The idea is based on the conjecture that the older is the ruling group, meant as a coalition of parties in office or as factions within a single party in office, the more “divisive” tend to be the available policies that can be implemented since “consensual” policies will be typically implemented first. Divisive policies require costly transfers within the group in the form of public expenditure as opposed to relatively cheap consensual policies. Hence, the older the coalition, the higher the transfers needed to avoid a breakup of the coalition itself. Increased expenditures over the tenure are the result of the natural fading out of the honeymoon effect. Our argument mirrors, at a government

level, Mancur Olson's description on the long-term effects of "distributional coalitions".¹⁴

In general, a collective decision making process in the presence of some conflict of interest typically involves compromise and - when possible - direct and indirect transfers of various kind. Different political actors may and do have different policy preferences and the actual implemented policy is the outcome of a bargaining process that involves both what to do and what to do first. Consider the stylized example of two players $i = \{1, 2\}$ in a partnership, which can be thought as two parties in the ruling coalitions or two factions within the same ruling party. Each player has preferences over a finite set of policies $n = \{1, \dots, k\}$ denoted by $v_i^n \in \mathbb{R}$. There are as many periods as policies and only one policy can be implemented in each period. Consider the simplest possible bargaining protocol where one of the players controls the agenda and can make a take it or leave it offer to the other player. An offer is a policy to be implemented in this period and a transfer that, in our interpretation, will materialize in public expenditures. If the offer is accepted, the policy is implemented and the partnership moves to next period; if not, the partnership is dissolved, each player gets zero and the game is over. Players maximize the discounted sum of their joint per-period payoff and if at time t policy n were to be implemented and the cost of transfers is linear, the joint payoff gross of equilibrium transfers would be $v_1^n + v_2^n$. In fact, if v_1^n and v_2^n are both negative, the policy will never be implemented and if they are both positive the statement is obvious. If only one of the two is negative then, given linear costs, the transfer must equal the negative valuation for the offer to be accepted.

Suppose further that players have different valuations for the same policy but they share the same ranking of policies. In this case, almost mechanically, the agenda setter will implement consensual policies with both positive valuations earlier - during the honeymoon - and leave divisive policies, which will require transfers to compensate one player, for later periods with the amount

¹⁴Olson refers to *distributional coalitions* as "organizations for collective action within societies [...] oriented to struggles over the distribution of income and wealth rather than to the production of additional output [...]" Olson (1982), page 44.

of transfers increasing in tenure since policies that are more divisive will be postponed. If the ranking of preferences is different, a similar result would hold if the cost of transfers is sufficiently increasing and convex. Furthermore, the conditions on the cost function will be less demanding the more positively correlated the preferences of the players are.

Based on these considerations, we should expect that a less cohesive group will experience a more pronounced increase of expenditure over time. We now turn to investigate whether we find supportive evidence in this direction, that is whether the association between political tenure and expenditure can be influenced by the level of conflict in the government, which might be captured by the ideological heterogeneity within the ruling group. To this end, we investigate whether the point estimates of political tenure change with the fractionalization of the government. To measure fractionalization we use i) the Herfindhal Index, which ranges between 0 and 1 and is the sum of the square of seats share of each party that form the government and ii) the standard deviation in the political positions of the ruling parties along a number of ideological and policy dimension. In particular, we consider the ideological spectrum from far Left to far Right, a measure of the preferences on regulation of the economy from state to market, and a measure of preferences on authoritarian versus libertarian state.¹⁵ Using a fully interacted model, we provide supportive evidence that the elasticity of government expenditure to tenure increases with the heterogeneity in the government in Table 4.

One might argue that new policy issues may emerge or political realignments will take place, which may “reset the clock” of the negotiations. While this is certainly plausible, it is unlikely the case that new policy issues arise every other year. Further, our findings suggest that political tenure is particularly salient at early stages and that the relevant time horizon of negotiations within the ruling group is about a decade.

¹⁵Details on the data sources and on the construction of these indexes can be found in the appendix. Notice that the standard deviation would be zero for single party governments.

7 Discussion

Besides the "honeymoon effect", other complementary narratives may contribute to explain the positive association between government tenure and fiscal aggregates. In the rest of this section we discuss a number of these.

Corruption: A positive correlation between accumulated tenure and public spending could also be the result of the incumbent government using public expenditure to directly affect the election outcome. If corruption could be used to improve re-election chances of a party in office (and hence it contributes to accumulate tenure), we would observe that the effect of political tenure is likely to be mediated in part by an index of corruption. However, when we control for the ICRG index of corruption (taken from the International Country Risk Guide) the estimate of the coefficient of political tenure remains stable (see first and last columns of Table A.7). Further, Brender and Drazen (2008) find little evidence that public expenditure in election years has a positive effect on the probability of reelection.¹⁶

License to Spend: An intriguing alternative explanation could point in the direction of an inter-temporal incumbency effect, with voters rationally granting a "license to spend" to governments with longer accumulated tenure. In fact, such inter-temporal incumbency effect can emerge as an equilibrium phenomenon if both forward looking voters and an incumbent politician with career concerns are symmetrically learning about the unobserved competence of the incumbent. For example, suppose that voters have an optimal level of public expenditure but government rents are always increasing in public expenditure. Furthermore, the election outcome is affected by both the policy chosen and the government competence. If competence is unknown and the policy is observed imperfectly by voters, each time a government is reelected both the government and the voter

¹⁶See also Peltzman (1992)

revise upward their estimates of the politician’s expected competence. Since voters reward political experience, government with longer accumulated tenure can increase spending more than what would be optimal from the voter’s perspective and still get reelected. This theoretical prediction could be easily obtained by extending the career concern framework of Ashworth (2005).¹⁷ Notice that if this mechanism is at play in the data, we might expect that the license to spend granted to incumbents is decreasing in the political experience of the opponent. However, we do not find supportive evidence in this direction in Table A.7. When we control for the tenure of the opponent or we interact the political tenure of the ruling party with that one of the most recent opponent party in office (or the highest tenure among the opponent parties), we do not discern any change in the effects of the political tenure of the ruling party.

Learning by doing: It may take some time to understand the functioning of the administrative machine before an incumbent can affect policy. To this end, Padró I Miquel and Snyder (2006) document that legislative effectiveness of U.S. state legislators rises sharply with tenure not only as a result of selection but also of individuals’ learning-by-doing. Further, Brender and Drazen (2013) note that political leaders in their first years in office affect the composition of expenditure less than leaders in their last years in office. However, in our context it is hard to think that understanding the administrative machine is a fifteen years long process. Rather, it might be related to learning within the legislature. In addition, if learning by doing was the main driver of our findings, we would expect a larger effect in the first years after the establishment of democracy and we do not find it (see Table A.8). Even more importantly, while we also find evidence that the tenure of the PM or President herself is positively associated with public expenditure, when we also include the tenure of the party only the latter one is positive and significant (Table 3). This casts doubts on

¹⁷A recent paper that would also be consistent with a license to spend interpretation is Acharya, Lipnowski and Ramos (2022).

the possibility that individuals' learning by doing is driving our findings.

Fiscal preferences: The positive relation between government tenure and fiscal aggregates might be driven by the fiscal preferences of the voters. For instance, voters may keep reelecting an older government because they want larger expenditure and more deficit. However, previous evidence points into the opposite direction. In particular, voters seems to be fiscal conservatives in established democracies (e.g., Brender and Drazen (2008) and Peltzman (1992)).

To conclude, based on these considerations, our findings are likely related to a fading “honeymoon effect”. Clearly, an important question that is left to ask is whether having an “old spendthrift” in office is good or bad for welfare. The answer depends on the use of spending and therefore, ultimately, on the quality of the policy output. While our results are robust to controlling for a number of measures related to the quality of government and to the overall level of corruption, more work is needed to have reliable measures of the provision of the public good. This is beyond the scope of the present paper and it is left for further research.

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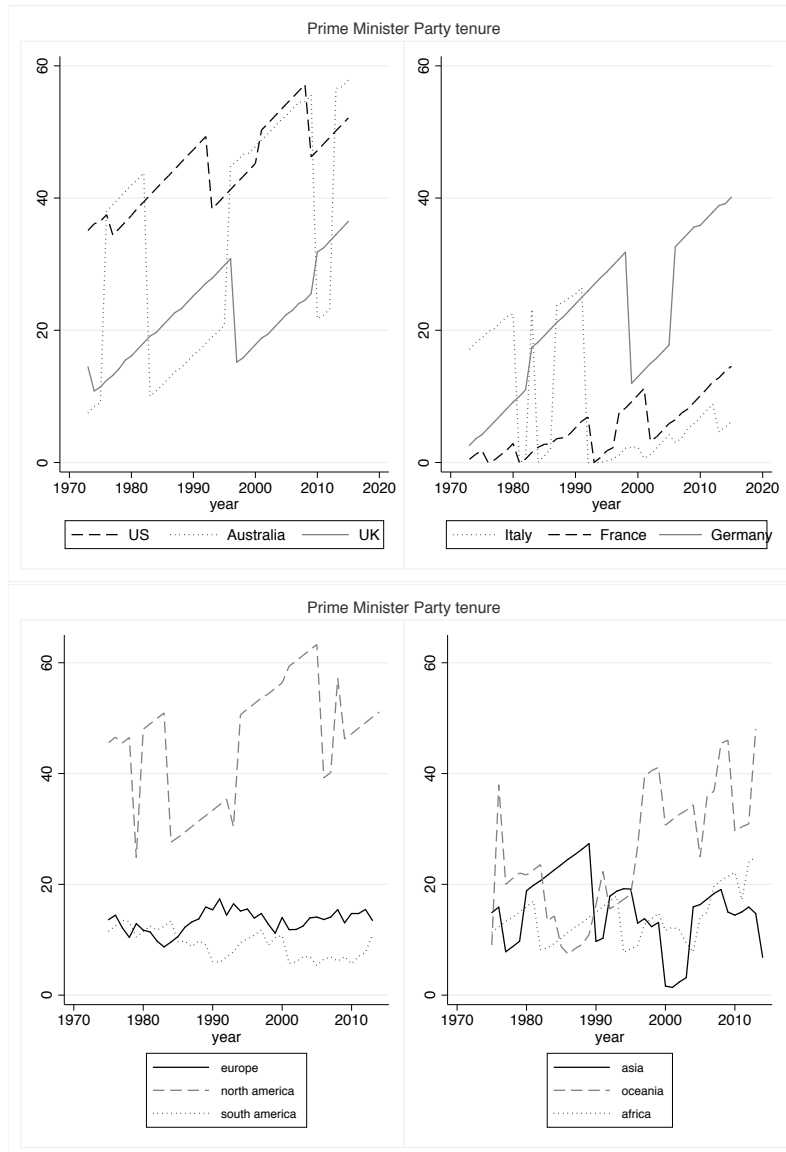
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8 Pictures

Figure 1: Countries and continents



In the upper panel, the y-axis reports the tenure of the prime minister party in office. In the lower panel, the y-axis is the average tenure of prime minister parties in office in the continent.

9 Tables

Table 1: Descriptive Statistics

Tenure: Party Level Summary Statistics							
	Parties	Mean	25%	50%	75%	Max	StDev
Full	188	11.31	2.5	5.47	15.75	72.35	13.74
Old Democracies	82	19.56	5.37	16.07	28.57	72.35	16.93
New Democracies	106	4.92	1.95	3.79	6.84	21.88	4.56
European	100	11.34	2.57	6.89	16.47	53.73	12.24
N. America & Oc.	13	27.79	4.28	23.27	51.12	72.35	24.86
Other	75	8.4	1.95	3.99	10.22	58.14	10.95

Tenure: Country/Year Observations							
	Party/Year	Mean	25%	50%	75%	Max	StDev
Full	1625	14.7	2.98	9.18	23.19	72.35	14.95
Old Democracies	1023	20.8	7.83	17.97	30.78	72.35	15.62
New Democracies	602	4.34	1	2.99	6.25	21.88	4.3
European	893	13.47	2.99	8.97	22.68	53.73	12.64
N. America & Oc.	165	33.51	17	36.49	48.79	72.35	19.56
Other	567	11.17	1.99	5.94	16.02	58.14	12.68

Expenditures as % of GDP: Country/Year Observations							
	Party/Year	Mean	25%	50%	75%	Max	StDev
Full	1625	30.02	21.32	29.98	38.45	69.09	10.62
Old Democracies	1023	32.46	23.93	33.34	40.1	69.09	10.58
New Democracies	602	25.87	17.76	26.06	32.24	59.1	9.31
European	893	36.53	31.67	37.04	41.7	69.09	8.41
N. America & Oc.	165	26.67	21.69	25.05	30.79	53.99	6.82
Other	567	20.74	15.49	19.13	25.25	43.32	6.48

Summary Statistics for the Tenure of the Prime Minister Party (PMP) and the Total Expenditures as share of GDP. The upper panel reports the statistics for the maximum tenure of each PMP in our sample. The middle panel reports the statistics for the tenure of the PMP in office for any country and year in our sample. The lower panel reports the statistics for the Total Expenditures as a share of GDP for any country and year in our sample.

Table 2: Government Expenditure and tenure of PMParty

	(1)	(2)	(3)	(4)
Log Tenure	0.018** (0.007)	0.022*** (0.007)	0.023** (0.009)	0.023** (0.009)
Expenditure _(t-1)	0.803*** (0.027)	0.802*** (0.027)	0.778*** (0.029)	0.778*** (0.029)
Election Year	0.083 (0.189)	0.142 (0.202)	0.215 (0.220)	0.215 (0.220)
Government Strength	-0.732 (0.681)	-0.685 (0.684)	-0.737 (0.753)	-0.737 (0.753)
% pop. under 14	-0.132** (0.065)	-0.135** (0.065)	-0.070 (0.065)	-0.070 (0.065)
% pop. over 65	0.134 (0.155)	0.126 (0.154)	0.238 (0.153)	0.238 (0.153)
Output Gap	0.143*** (0.047)	0.152*** (0.047)	0.154*** (0.054)	0.154*** (0.054)
GDP Growth	-0.193*** (0.032)	-0.195*** (0.032)	-0.221*** (0.034)	-0.221*** (0.034)
Inflation	-0.001 (0.002)	-0.001 (0.002)	-0.001 (0.003)	-0.001 (0.003)
Incumbent PMP		-0.301* (0.176)	-0.376* (0.225)	-0.376* (0.225)
Age of Democracy				1.226* (0.619)
Observations	1625	1625	1625	1625
year FE	1	1	1	1
party FE	0	0	1	1
countries	63	63	63	63
R ²	0.92	0.92	0.90	0.88

Note: Country fixed effect models with standard errors clustered at the country level in parenthesis. We refer to specification of Column 4 as our benchmark.

Table 3: Government expenditure and different measures of political tenure

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log Tenure	0.023** (0.009)		0.020** (0.009)				0.025** (0.010)	
Log Tenure PM		0.010** (0.005)	0.005 (0.005)		0.004 (0.006)	0.001 (0.007)		
Log Coal T				0.012* (0.006)		0.011 (0.007)		
New party							0.188 (0.364)	-0.142 (0.297)
Observations	1625	1625	1625	1149	1149	1149	1625	1625

We include the full set of controls as in the benchmark specification (column 4 of Table 2). We compare the effects of the tenure of the party in office with the tenure of the person in office and the tenure of the coalition in office.

Table 4: Political Heterogeneities

Log Tenure		0.011 (0.015)	-0.011 (0.019)	-0.023 (0.019)	-0.014 (0.017)
Log Tenure · Herfindahl		0.001*** (0.000)			
Log Tenure · Sd Left vs Right			0.018* (0.010)		
Log Tenure · Sd Market vs State		-		0.026** (0.011)	
Log Tenure · Sd Authority vs Libertarian					0.018 (0.012)
Observations		988	988	988	988
countries		37	37	37	37
R ²		0.76	0.76	0.77	0.77

We include the full set of controls as in the benchmark specification (column 4 of Table 2). We allow for interaction effect of tenure with the heterogeneity of the ruling group in a subset of countries for which data are available on fractionalization (Herfindal Index) and ideological heterogeneity of the ruling coalition, measured as the standard deviation of their Left-Right, State-Market and Authority-Libertarian indexes.

10 Appendix

10.1 Variables and Sources

Tenure Information about coalition governments in parliamentary democracies (i.e. identity of coalition parties, Prime Minister party, government type, duration, etc.) are taken from Makie and Rose (1990), Woldendorp et al. (1998, 2013), and for later years from the *European Journal of Political Research* and other online sources (e.g., Zarate’s Political Collections (ZPC) database and Wikipedia.) As for presidential democracies, we collected information about the identity of the President, tenure in office, and political party affiliation from the Political Handbook of the World, the *Election Results Archive* (<http://cdp.binghamton.edu/era/countries/>), and the *Political Database of the Americas* (<http://pdba.georgetown.edu/>).

Expenditure We begin from the database from Brender and Drazen 2013, and we update the database adding the missing years and countries in the following way. Data are taken from the Government Finance Statistics (GFS) of the International Monetary Fund. Specifically, from the GFS Historical Data CD for the period 1972-1989, and from the GFS CD (December 2015) for the period 1990-2014.

Data for Consolidated Central Government¹⁸ were used, integrated with data for the Budgetary Central Government when such information was missing. Data as percentage of GDP are obtained dividing these values by *GDP IFS* 2015.

Importantly, the accounting system used in our two sources differs, switching from the GFSM 1986 to the GFSM 2014 framework. This determines some discrepancies in the classification of expenditures before and after 1990. Caution is, thus, needed when comparing the datasets¹⁹.

¹⁸For the data 1990-2014, expenditures are classified according to the GFSM 2014, which introduced a distinction between Consolidated Central Government *including* social security funds, and Consolidated Central Government *excluding* social security funds. The first category was considered.

¹⁹Also note that, when the fiscal year does not coincide with the calendar year, the IMF approximates by ascribing the values to the calendar year for which the greatest number of monthly observations exist. This seems to be a concern only for few of the countries included in our dataset

GDP IFS 2015 is the Gross Domestic Product as retrieved from the IFS CD (August 2015).

For countries which underwent a change in the national currency, the appropriate exchange rate was applied.

Output Gap computed from GDP time series from World Bank Databank. We adopt an HP filter with smoothing parameter computed using the Ravn-Uhlig rule.

GDP Growth computed from GDP time series from World Bank Databank.

Election Year Indicates whether an election was held in that year. We consider parliamentary elections for non presidential countries and presidential elections for countries with presidential systems. The electoral dummy is coded using information from the Political Handbook of the World, the Election result archive, and the Comparative Political Data Set.

Government Strength Records the total seat share of all government parties. From the Database of Political Institutions 2015.

Inflation Consumer price level annual variation. From the QOG Basic Dataset 2017 (<http://www.qog.pol.gu.se>).

Incumbent PMP Dummy variable equal to 1 whenever the PMP is the same that was in charge at the end of the previous legislature.

Age Of Democracy Indicates the number of year from the first democratic and free election

held in the country. Most of the data are from Boix-Miller-Rosato dichotomous coding of democracy, 1800-2007. Missing data are from Wikipedia.org.

Left Dummy for prime minister party that are defined as communist, socialist, social democratic, or left-wing. From the QOG Basic Dataset 2017 (<http://www.qog.pol.gu.se>).

Change Ideology Dummy that identifies the year in which the ideology of the Prime Minister changes. We use data from the QOG Basic Dataset 2017 (<http://www.qog.pol.gu.se>) where party orientation is defined with respect to economic policy, coded based on the description of the party in the sources, using the following criteria. Right: for parties that are defined as conservative, Christian democratic, or right-wing. Left: for parties that are defined as communist, socialist, social democratic, or left-wing. Center: for parties that are defined as centrist or when party position can best be described as centrist (e.g. party advocates strengthening private enterprise in a social-liberal context). Not described as centrist if competing factions average out to a centrist position (e.g. a party of right-wing Muslims and Beijing-oriented Marxists). 0: for all those cases which do not fit into the above-mentioned category (i.e. party's platform does not focus on economic issues, or there are competing wings), or no information. Dummy is missing for changes from Right, Center or Left to 0.

Change Leader Dummy that identifies the year in which the identity of the Prime Minister changes. We collected our own the data on prime ministry identity.

Herfindahl Index The sum of the squared seat shares of all parties in the government. Missing if there is no parliament. If there are any government parties where seats are unknown or if

there are no parties in the legislature, the Herfindahl is missing. Independents are calculated as if they were individual parties with one seat each. From the Database of Political Institutions 2015.

Presidential From the Database of Political Institutions 2015. Dummy to identifies countries with presidential system. Systems with unelected executives are considered presidential. Systems with presidents who are elected directly or by an electoral college (whose only function is to elect the president), in cases where there is no prime minister, are also considered presidential. In systems with both a prime minister and a president, we consider the following factors to categorize the system: a) Veto power: president can veto legislation and the parliament needs a supermajority to override the veto. b) Appoint prime minister: president can appoint and dismiss prime minister and / or other ministers. c) Dissolve parliament: president can dissolve parliament and call for new elections. d) Mentioning in sources: If the sources mention the president more often than the PM then this serves as an additional indicator to call the system presidential. The system is presidential if (a) is true, or if (b) and (c) are true. If no information or ambiguous information on (a), (b), (c), then (d). Consult Appendix for specific country examples. Countries in which the legislature elects the chief executive are non presidential.

Corruption and Bureaucracy From the QOG Basic Dataset 2017 (<http://www.qog.pol.gu.se>). It's constructed as the difference between one and the mean value of the ICRG variables Corruption, Law and Order and Bureaucracy Quality, scaled 0-1. Higher values indicate lower quality of government.

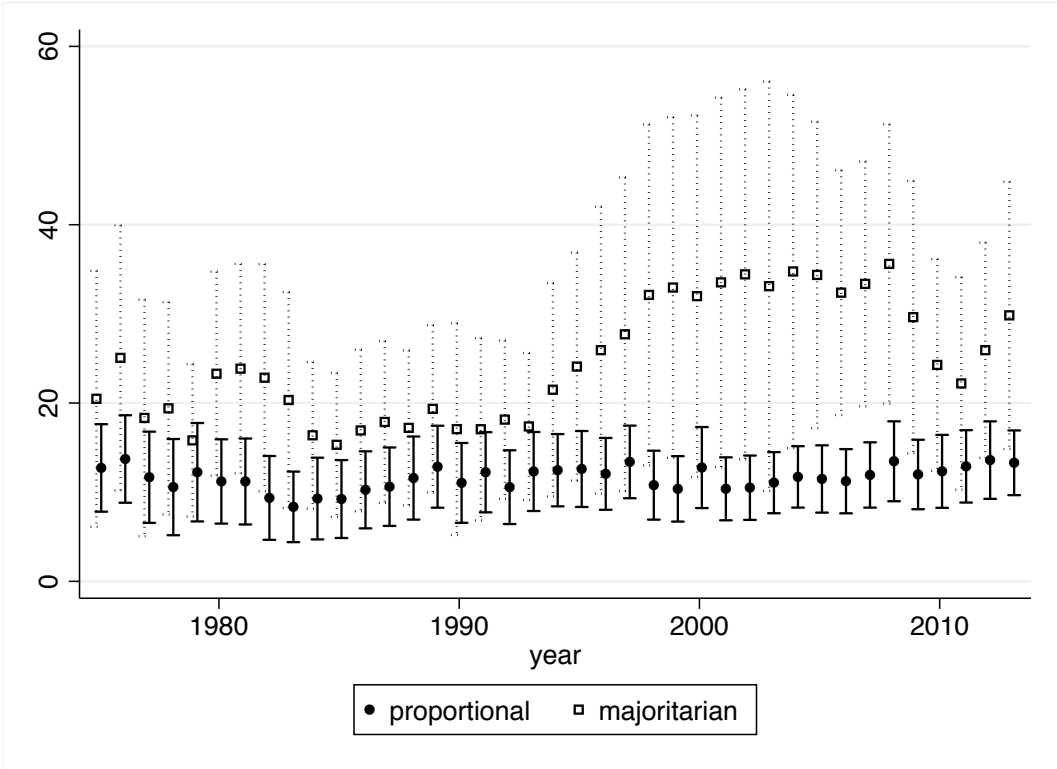
Proportional System We start from the variable "gol est" in QOG Basic Dataset 2017, that takes on one of three values indicating the basic type of electoral system used in the elections:

majoritaria, proportional or mixed. We define proportional if it has at least a part assigned with a proportional system and it is not pure majoritarian.

Ideological Heterogeneity Parliaments and governments database (ParlGov): Information on parties, elections and cabinets in modern democracies. We use the table on party to have a measure of their position in the ideological spectra **Left vs Right** (0–10 scale mean value in left/right dimension with data from Castles/Mair 1983, Huber/Inglehart 1995, Benoit/Laver 2006 and CHES 2010), **State vs Market** (0–10 scale mean value in 'regulation of the economy' dimension with data from Benoit/Laver 2006 and CHES 2010) and **Authority vs Libertarian** (0–10 scale mean value in 'libertarian/authoritarian' dimension with data from Benoit/Laver 2006 and CHES 2010). Then for each ruling coalition we compute the standard deviation of ideology as measure of heterogeneity.

10.2 Additional Material

Figure A.1: Proportional and majoritarian systems



The y-axis reports the average tenure of the prime minister party in office for the observation in our final sample. The subsection 10.1 describes how countries are classified in majoritarian or proportional systems.

Table A.1: Descriptive Statistics: Tenure Discounted and Prime Minister Tenure

Tenure Discounted: Country/Year Observations							
	Party/Year	Mean	25%	50%	75%	Max	StDev
Full	1625	10.8	2.89	8.37	18.27	36.63	9.27
Old Democracies	1023	14.69	6.98	14.14	22.07	36.63	9.28
New Democracies	602	4.2	1	2.98	6.07	20.68	4.07
European	893	10.66	2.96	8.03	18.44	29.84	8.91
Am Oce	165	15.81	9.41	17.78	21.34	29.03	7.71
Other	567	9.57	1.99	5.85	14.57	36.63	9.76
Tenure of the Prime Minister: Country/Year Observations							
	Party/Year	Mean	25%	50%	75%	Max	StDev
Full	1625	2.8	.44	1.94	3.99	18.57	3.13
Old Democracies	1023	3.22	0.58	2	4.76	18.57	3.49
New Democracies	602	2.11	0	1.58	2.99	12.28	2.26
European	893	2.71	0.38	1.82	4.06	15.88	2.95
Am Oce	165	3.07	0.95	2.57	4.88	12.8	2.73
Other	567	2.88	0.4	1.92	3.83	18.57	3.51
Tenure Coalition: Country/Year Observations							
	Party/Year	Mean	25%	50%	75%	Max	StDev
Full	1149	9.82	1	3.98	15.01	72.35	12.86
Old Democracies	893	12.03	1.68	6.52	19.38	72.35	13.75
New Democracies	256	2.09	0	1.35	2.99	11.28	2.43
European	854	8.09	1	3.54	12.75	40.56	9.73
Am Oce	120	26.22	2.81	21	46.48	72.35	22.85
Other	175	6.98	.76	3.99	10.78	32.07	7.88
Maximum Tenure of the Coalition							
	Party/Year	Mean	25%	50%	75%	Max	StDev
Full	129	9.75	1.99	3.75	11.13	72.35	12.84
Old Democracies	75	14.71	2.99	7.85	24.16	72.35	14.86
New Democracies	54	2.87	1.34	2.25	3.59	11.28	2.63
European	100	8.98	2.01	3.76	9.45	40.56	11.1
Am Oce	9	24.96	2.99	23.27	32.56	72.35	24.88
Other	20	6.77	.59	2.65	9.21	32.07	9.31

Summary Statistics for the Tenure of the Prime Minister Party depreciated at a yearly rate of 0.05% (upper panel) and the Tenure of the Prime Minister (lower panel).

Table A.2: Log(Total Expenditure) and tenure of the party of the PM: Arellano-Bond Model

	(1)	(2)	(3)	(4)
Log Tenure	0.023** (0.009)	0.025*** (0.007)	0.025*** (0.007)	0.027*** (0.007)
Expenditure _{t-1}	0.778*** (0.029)	0.755*** (0.043)	0.824*** (0.054)	0.845*** (0.051)
Output Gap	0.149*** (0.055)	0.033 (0.045)	0.050 (0.047)	0.058 (0.047)
Election Year	0.203 (0.216)	0.212 (0.158)	0.219 (0.167)	0.217 (0.168)
% pop. under 14	-0.078 (0.067)	-0.001 (0.021)	-0.001 (0.022)	-0.008 (0.022)
% pop. over 65	0.245 (0.158)	0.280*** (0.070)	0.184** (0.083)	0.175** (0.083)
Government Strength	-0.008 (0.007)		-0.003 (0.004)	-0.003 (0.004)
GDP Growth	-0.219*** (0.034)	-0.195*** (0.027)	-0.205*** (0.028)	-0.210*** (0.028)
Inflation	-0.001 (0.003)		-0.002** (0.001)	-0.002*** (0.001)
Incumbent PMP	-0.378* (0.223)		-0.031 (0.170)	-0.009 (0.172)
Age Democracy	1.097* (0.633)			-0.007*** (0.002)
Observations	1625	1625	1625	1625
Sargan test p value		0.110	0.400	0.294
countries	63	63	63	63

Column 1 reports the benchmark country-FE specification (column 4 of Table 2). Columns 2,3 and 4 report the results for the Arellano-Bond with the last lag of the dependent variable used as instrument. All specifications include the full set of controls and Party and Year Fixed Effects.

Table A.3: Robustness for Political Ideology, Change in Ideology and Change of Leader

	(1)	(2)	(3)
Log Tenure	0.024** (0.009)	0.018* (0.010)	0.019** (0.009)
Election Year	0.200 (0.215)	0.236 (0.214)	0.291 (0.226)
Left	0.259 (0.279)	0.209 (0.347)	0.251 (0.279)
Change Ideology		0.118 (0.354)	
Change Leader			-0.353* (0.192)
Observations	1625	1366	1625
countries	63	59	63
R ²	0.74	0.72	0.74

Effects of Prime Minister Party tenure on level of Expenditure as % of GDP. We include the full set of controls as in column 4 in Table 2. In column 1 we control also for party ideology, in column 2 for a change in ideology respect to the previous government, and in column 3 for a change of the Prime Minister.

Table A.4: Other Measures of Tenure

	(1)	(2)	(3)	(4)	(5)
	FE	FE	FE	AB	AB
Discounted Tenure; $t_0 = 1946$					
Log Tenure	0.022*** (0.007)	0.023** (0.009)	0.023** (0.009)	0.027*** (0.008)	0.027*** (0.008)
Tenure; $t_0 = 1946$					
Log Tenure	0.020*** (0.007)	0.022** (0.009)	0.022** (0.009)	0.024*** (0.008)	0.025*** (0.008)
Tenure; $t_0 = 1900$					
Log Tenure	0.020*** (0.007)	0.022** (0.009)	0.022** (0.009)	0.028*** (0.008)	0.029*** (0.008)
Discounted Tenure; $t_0 = 1900$					
Log Tenure	0.022*** (0.007)	0.023** (0.009)	0.023** (0.009)	0.027*** (0.008)	0.027*** (0.008)
Discounted Tenure Ruling Coalition; $t_0 = 1900$					
Log Tenure Coalition	0.013** (0.01)	0.012* (0.01)	0.012* (0.01)	0.018** (0.01)	0.017** (0.01)

Effects of Prime Minister Party tenure on level of Expenditure as % of GDP with different measures of tenure, in order: tenure computed since 1946 discounted at .05% rate every year (as in the benchmark specification); tenure computed since 1946; tenure computed since 1900; tenure computed since 1900 discounted at .05% rate; and tenure of the ruling coalition since 1900 discounted at .05% rate every year. Columns 1-3 are country-FE models (corresponding to columns 1-3 of Table 2). Columns 4 and 5 are Arellano and Bond (AB) specifications.

Table A.5: Quadratic Total Expenditure and tenure of PMp

	(1)	(2)	(3)	(4)	(5)
	FE	FE	FE	AB	AB
Tenure	0.077* (0.040)	0.111 (0.070)	0.111 (0.070)	0.074** (0.029)	0.121*** (0.033)
Tenure ²	-0.002* (0.001)	-0.003 (0.002)	-0.003 (0.002)	-0.002* (0.001)	-0.003*** (0.001)
Expenditure _{t-1}	0.799*** (0.027)	0.773*** (0.030)	0.773*** (0.030)	0.786*** (0.028)	0.815*** (0.026)
Output Gap	0.155*** (0.047)	0.152*** (0.053)	0.152*** (0.053)	0.049 (0.044)	0.060 (0.045)
% pop. under 14	-0.138** (0.066)	-0.066 (0.069)	-0.066 (0.069)	0.003 (0.022)	-0.004 (0.022)
% pop. over 65	0.121 (0.151)	0.217 (0.167)	0.217 (0.167)	0.235*** (0.055)	0.226*** (0.056)
Election Year	0.085 (0.196)	0.159 (0.214)	0.159 (0.214)	0.193 (0.163)	0.198 (0.165)
Government Strength	-0.007 (0.005)	-0.008 (0.006)	-0.008 (0.006)	-0.002 (0.004)	-0.002 (0.004)
GDP Growth	-0.195*** (0.033)	-0.216*** (0.036)	-0.216*** (0.036)	-0.212*** (0.027)	-0.221*** (0.027)
Inflation	-0.001 (0.002)	-0.001 (0.003)	-0.001 (0.003)	-0.001** (0.001)	-0.002** (0.001)
Incumbent PMP	-0.282 (0.178)	-0.374 (0.238)	-0.374 (0.238)	0.001 (0.177)	-0.058 (0.181)
Age Democracy			1.019* (0.583)		-0.013*** (0.002)
Observations	1625	1625	1625	1625	1625
Year FE	1	1	1	1	1
Party FE	0	1	1	1	1
Countries	63	63	63	63	63

Effects of Prime Minister Party tenure on level of Expenditure as % of GDP with quadratic measure of Tenure. Columns 1-3 are country FE models. Columns 4 and 5 are Arellano and Bond (AB) specifications.

Table A.6: Robustness to Political Cycle

	Full Sample		until 2007		until 2001	
Expenditure						
Log Tenure	0.028*** (0.010)	0.029** (0.012)	0.028** (0.011)	0.033** (0.013)	0.023** (0.011)	0.038** (0.017)
Election Year	-0.005 (0.211)	0.049 (0.228)	0.243 (0.214)	0.354 (0.233)	0.252 (0.253)	0.397 (0.262)
Deficit						
Log Tenure	0.017 (0.010)	0.021* (0.013)	0.020* (0.011)	0.029** (0.014)	0.019 (0.013)	0.037* (0.019)
Election Year	0.150 (0.197)	0.184 (0.207)	0.385* (0.200)	0.461** (0.212)	0.443* (0.248)	0.621** (0.237)
Revenues						
Log Tenure	0.012* (0.006)	0.010 (0.007)	0.008 (0.006)	0.007 (0.007)	0.007 (0.007)	0.005 (0.009)
Election Year	-0.143 (0.115)	-0.132 (0.124)	-0.131 (0.126)	-0.128 (0.143)	-0.168 (0.162)	-0.236 (0.196)
Observations	1191	1191	968	968	743	743
Year FE	1	1	1	1	1	1
Party FE	0	1	0	1	0	1
countries	46	46	46	46	46	46

Main FE specifications (columns 1 and 4 of Table 2) for Expenditure, Deficit and Revenues as % of GDP. The first two columns use the full sample, the third and fourth use observations until 2007, and the last two use observations until 2001 as in Brender and Drazen (2005). The sample size is smaller than in Table 2 because some data on Revenues are missing.

Table A.7: Government Expenditure, Tenure of the opponents, and Corruption

	(1)	(2)	(3)	(4)	(5)	(6)
Log Tenure	0.023** (0.009)	0.023** (0.009)	0.022** (0.009)	0.022** (0.009)	0.022** (0.009)	0.025** (0.010)
Ten. most recent opp.		0.006 (0.007)	0.011 (0.014)			
Ten. · Tenure most recent opp.			-0.000 (0.001)			
Tenure most tenured opp.				0.012 (0.010)	0.022 (0.013)	
Ten · Tenure of most ten. opp.					-0.001 (0.001)	
Corruption						1.891 (2.01)
Observations	1625	1625	1625	1625	1625	1303
countries	63	63	63	63	63	60

Main country-FE specification (column 4 of Table 2). We allow for heterogeneous effect for the tenure of the opponent defined as the tenure of the most recent opponent and the highest tenure among the opponents (columns 1 to 5). Columns 6 controls for corruption

Table A.8: Age of Democracy and Political Systems

	(1)	(2)	(3)	(4)	(5)
Log Tenure	0.023** (0.01)	0.023** (0.01)	0.027** (0.01)		
Ten · New Dem.		0.000 (0.02)			
Ten · Age Dem.			-0.000 (0.00)		
Ten · Presidential				-0.003 (0.017)	
Ten · Proportional					0.023 (0.014)
Observations	1625	1625	1625	1532	1532
Year FE	1	1	1	1	1
Party FE	1	1	1	1	1
Countries	63	63	63	60	60
R ²	0.74	0.74	0.74	0.76	0.74

We include the full set of controls as in the benchmark country-FE specification (column 4 of Table 2). In columns 2 and 3 we allow for heterogeneous effect between old (born before 1965) and new (born after 1965) democracies (age of the democracy). The last two columns compare heterogeneous effects for Presidential vs Not Presidential countries and for Proportional Systems vs Not Proportional Systems. We consider Proportional a system where a positive share of seats is assigned through a proportional rule.