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Fiscal decentralization, Ideology and Political Legislation Cycles: A Test on the Italian Regions

Abstract:

This study tests the implications of Political Legislation Cycles (PLC) in the legislative production of the Italian Regions from 2000 to 2024. The PLC theory highlights a dynamic distortion in policy decisions driven by electoral incentives, which prompts legislators to concentrate the approval of laws near the end of the legislature and can be interpreted as a measure of lack of political accountability. Focusing on Italian Regions, this research sheds light on how fiscal decentralization influences legislative behavior. Our findings reveal discernible legislative cycles primarily within Regions with an Ordinary Statute (RSOs), characterized by lower fiscal autonomy and competencies compared to the Special Statute (RSS) Regions. Furthermore, legislative cycles' magnitude is more pronounced in regions in Central and Southern Italy compared to Northern regions. Some evidence that regions governed by left wing coalitions are associated with cycles of greater magnitude is also found. Political alignment of regional coalitions with the central government's majority is also found to positively impact the size of the observed cycles.

Keywords: Political legislation cycles, Economic theory of legislation, Negative binomial regression.

JEL codes : C49, D72, H19, H61, H62.

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1. *Introduction*

The panel data study of Padovano and Sy (2023) marks the first attempt of a comprehensive comparative analysis of Political Legislation Cycles (hereinfater PLC) across nations characterized by different institutional configurations. In the same vein as in the pioneering work of Shi and Svensson (2006) about the conditional Political Budget Cycles (hereinafter PBC), Padovano and Sy (2023) interpret the PLC as a dynamic distortion in policy decisions driven by electoral incentives that essentially leads voters to misjudge legislators' competence (Padovano and Petrarca, 2017; Gratton et al., 2021). As such the PLC can be understood as a quantitative indicator of a lack of electoral accountability, only more general than PBC, as it encompasses all policy decisions enacted through legislation, not just the budgetary ones. A comparative analysis of the determinants of PLC can therefore unveil which institutional arrangements are characterized by greater legislative cycles and therefore generate lower political accountability. Drawing on theoretical insights from Persson and Tabellini (2003) regarding the economic and political consequences of constitutions, coupled with contributions from the political economy literature, Padovano and Sy (2023) evaluate that parliamentary government systems, PR electoral rules, asymmetric decentralization of policy decisions and the level of democracy on the legislative cycles are associated with PLC of greater magnitude and, therefore, lower political accountability in a panel of nineteen countries from 1975 to the 2010s.

While this approach does mark an advance in the empirical PLC research, a cross country comparative analysis inevitably runs the risk of overlooking some crucial political and institutional conditioning factors; the considerable institutional and politcal heterogeneity that exists across countries at the level of national governments may not be entirely captured by the regressors included in the empircal model; nor country fixed effects can impose adequate *ceteris paribus* conditions (de Haan and Klomp, 2013). For instance, a cross-country sample makes

it difficult to assess the role played by different political ideologies, budgetary procedures and fiscal arrangements in generating political agency problems. Focusing the analysis on plurality of lower-tiered governments within a single country may instead offer a solution to this problem, since subcentral government units provide a multiplicity of cross-sectional observations with a minimum of clearly identifiable institutional variations. This allows to isolate the effects of that particular institutional variation on the explanatory variable, leaving degrees of freedom to examine the role played by other conditioning factors as well.

Building on this premise, this paper undertakes an examination of PLC within the framework of Italian regional governments from 2000 to 2024. The choice of this sample allows to focus on the link between legislative cycles and the level of decentralization in tax and spending decisions. Specifically, we aim to ascertain whether the Italian regional legislators, subject to different degrees of fiscal autonomy and accountability, embodied in the Ordinary vs. Special Statute that each region may have, generate legislative cycles of diverse magnitude. Furthermore, this sample also allows us to examine to which extent differences in party ideology and ideological alignment with the central government affect legislative cycles.

We innovate with respect to the PLC literature (Padovano, 2024; Lagona and Padovano, 2008; Gratton et al., 2018, 2021), since this is the very first analysis focusing specifically on the link between fiscal decentralization and the slack in agency relationships between voters and electoral representatives; moreover, it also the first analysis of PLC conducted at the level of subcentral governments.

Our research shows that legislative cycles are more evident in Italian regions with Ordinary Statutes (RSOs) than in those with Special Statutes (RSSs). This difference mainly stems from the lower fiscal autonomy and more limited competencies of the fifteen RSOs compared to the five RSSs. RSOs in fact exhibit a more asymmetric decentralization of fiscal and spending authority and face softer

budget constraints, as they rely relatively more on transfers from the central government to finance their expenditures. In contrast, RSSs may retain a larger share of regionally generated revenues and enjoy also greater spending autonomy. According to Rodden and Eskeland (2003), this asymmetric fiscal decentralization results in a lower level of fiscal accountability for the representatives of RSOs, which in turn may generate legislative cycles of greater magnitude[2].

The rest of the paper is organized as follows. Section two offers a review of the PLC literature and identifies the hypotheses put under test. Section three describes the dataset and introduces the dependent variable, namely the monthly counts of approved laws, as well as the empirical strategy and the econometric model adopted. In section four the main results of the estimates are discussed, while section 5 concludes. Finally, the appendix describes the institutional, economic and political differences that characterize the Italian regions.

2. *Literature review and testable hypotheses*

2.1. The political legislation cycles theory. There are essentially two main categories of PLC models, both predicting a surge in legislative activity towards the end of a legislative term, albeit driven by distinct mechanisms. One class of models explains legislative cycles through the dynamic interactions among bureaucrats, legislators and voters (Gratton et al., 2018, 2021). Within this framework, legislators possess private information regarding their competence levels, known only to themselves, though voters may recognize it with delay. Both competent and incompetent legislators seek re-election by enacting reforms, yet only the competent ones are able to draft meaningful legislation. The effectiveness of these reforms, and therefore the competence of the legislator, may become apparent to voters through the bureaucracy responsible for implementing the approved legislation.

[2] In the working paper version of this article (Padovano and Sy, 2024) we provide a more detailed discussion of the politics, the competences, the legislative processes and the socio-economic conditions of the Italian Regions; we also describe the construction of the data set..

Efficient bureaucrats promptly execute the reforms approved by politicians, thus giving voters ample time to evaluate their effectiveness. If instead bureaucrats become overwhelmed by a plethora of (potentially ineffective) legislated reforms to implement, they may fail to provide voters with enough opportunities to assess the true value of the legislation and, therefore, the competence of the legislators. This situation incentivizes incompetent legislators to approve numerous laws towards the end of the legislative term, prior to elections, to hinder voters' ability to discern their true capabilities. Even efficient bureaucrats may struggle to implement these reforms in time for voters to evaluate their true value. Incompetent legislators thus achieve two outcomes: first, they project an image of activity to voters, who may mistake this activity for competence; second, they burden the bureaucracy with numerous reforms, reducing its efficiency and impeding competent legislators from showing their true abilities.

Gratton et al. (2021) find empirical support for the predictions of their model using data about the timing and quality of legislation passed by the Italian Parliament from 1948 until 2018, controlling for the perceived efficiency of the central government's bureaucracy.

While intriguing, this approach places a substantial theoretical burden on data regarding legislative production, as it requires to incorporate in the analysis elements such as indexes of quality of the bureaucracy, measures of verbosity and transparency of the texts of the laws to perform an empirical test. Moreover, its empirical strategy lacks flexibility in analyzing the impacts of alternative institutional frameworks: the interaction between legislators and bureaucrats is supposed to produce a legislative cycle irrespective of the institutional setting where it happens. For a more versatile avenue in comparative institutional analysis, the second strand of PLC theory (Padovano and Petrarca, 2017) offers an alternative. This model generates predictions about the timing of legislative production that can be sensitive to the institutional framework where laws are

being approved, but at the same time it does not require quality evaluations of legislation and of the bureaucracy.

Unlike the conventional principal-agent framework found in the public choice literature (Rogoff, 1990; Rogoff and Siebert, 1988; Shi and Svensson, 2006), this model introduces a political setting where three sets of collective agents interact: 1) the government in office, referred to as the "legislator"; 2) special interest groups; and 3) unorganized voters. Voters and interest groups represent the demand side of the political market, while the legislator represents the supply side. This setup makes the characterization of politics more similar to the "common agency model" of Bernheim and Whinston (1986) and Dixit, Grossmann and Helpman (2002).

The logic of the Padovano and Petrarca (2017) model is straightforward. Individual voters seek to obtain "general public goods" through legislation enacted by the legislator. Conversely, individuals within organized interest groups incur coordination costs to secure "specific private goods" for group members, again via legislative measures approved by the legislator. The distinction between "general public goods" and "specific private goods" lies in their redistributive nature, with the former being less redistributive and therefore, in terms of votes, less politically costly to obtain.

Voters possess incomplete information, akin to Gratton et al. (2018, 2021), whereas interest groups, due to their organization, possess complete information. Only voters can ensure re-election to the legislators through their votes, while interest groups demand legislation to the legislator in exchange for information and economic resources.

The legislator's objective is to maximize the probability of re-election by producing legislation favoring both voters and special interest groups. This legislative production takes the form of two distinct instruments, referred to as "laws" and "decrees" in the jargon of the model. These instruments differ in their information costs: laws require explicit parliamentary votes and/or publication

procedures, which make them highly visible; decrees instead are typically executive acts that require less visible approval and publication procedures; hence they are less easily well-known. Decrees are therefore assumed to be visible only to interest groups, whereas laws are known to all agents in the model. Given that any legislative action redistributes property rights, the legislator can opt between these instruments to supply specific private goods to interest groups or public goods to voters.

The model predicts a two-phase strategy for the legislator to maximize his probability of re-election. In the first stages of the legislature, after the elections, the legislator initially redistributes specific private assets to interest groups through decrees, in order to obtain economic resources from them. As the next election draw near, the legislator switches to distributing public goods to voters by means of laws. Furthermore, only the competent legislator can use the resources and the information obtained from fully informed special interest groups to signal his/her competence by boosting legislative production at the end of the term. If the legislature dissolves prematurely, the anticipated peak in legislative production should not materialize, as legislators' optimization of their dynamic objective function lacks the correct expected time horizon.

Absent premature dissolution, the model predicts a lower-than-average number of laws approved in the early years of the legislature, with a peak in legislative production occurring in the final months before elections. Conversely, decrees are expected to see greater utilization in the early stages of the legislature, followed by a slowdown in the final months. Consequently, we can assert the following:

Proposition 1: Ceteris paribus, *the production of laws reaches a low point in the first months of a new legislature and attains a peak in the last months of a legislature, provided that the legislative elections are held at the expected time.*

2.2. Empirical tests of the theory. Over the past fifteen years, numerous studies have provided empirical validation for the aforementioned predictions. Empirical tests of PLC theory have yielded substantial supportive evidence across a diverse array of institutional frameworks, including parliamentary systems like Italy (Gratton et al., 2021; Lagona and Padovano, 2008; Lagona et al., 2015), presidential systems such as the Czech Republic (Brechler and Gersl, 2014), supranational institutions like the European Parliament (Kovats, 2009), staggered legislations observed in countries like Germany and Japan (Willumsen et al., 2018), and semi-presidential systems like France (Padovano and Gavoille, 2017).

Notably, empirical investigations conducted in individual countries undergoing democratization processes, such as the Czech Republic (Brechler and Gersl, 2014), the Republic of South Korea (Lagona and Padovano, 2021) and Ukraine (Padovano and Veselova, 2024), have also provided support for PLC theories.

These studies predominantly adopt time series data for individual countries characterized by changes over time of their institutional settings in order to verify the impact of different institutional configurations on the intensity of the legislative cycle.To date, the only cross-country comparative analysis of PLC theory has been undertaken by Padovano and Sy (2023). In this study, the authors exploit a comprehensive panel dataset encompassing 19 countries from 1975 to 2020. Their research specifically shows how government systems, electoral rules, the degree of decentralization and the level of democracy (measured by the Polity V indexes) influence the underlying logic of PLC theory.

While the panel data comparative approach provides valuable insights into the PLC literature, it may fail to capture several relevant institutional variables. To avoid this possible problem, an alternative empirical strategy is focusing on a lower level of government within a single country, where a large enough number of jurisdictions are endowed with similar powers to legislate, although they may vary along a given political or institutional dimension. Changes in legislative patterns

across jurisdictions may therefore be reconducted to such institutional variation. This setting reduces the risk of omitting pertinent institutional controls compared to cross countries samples.

The sample of the Italian regions provides an attractive testing ground for the PLC theory, given its inclusion of a large number of units (21 between regions and autonomous provinces) embedded in similar political and institutional environments. Comparable data about their legislative output is available between 2000 circa to 2024. While the PLC has never been tested at subnational levels of government, for the PBC instead subnational governments have constituted a frequent testing ground. Political budget cycles have been observed in various regions and levels of government, like, for instance, Russian regions (Akhmedov and Zhuravskaya, 2004), Canadian provinces (Blais and Nadeau, 1992), Portuguese municipalities (Veiga and Veiga, 2007) and French municipalities (Foucault et al., 2008). Moreover, subnational political budget cycles have been detected in non-OECD countries too, such as Brazil (Sakurai and Menezes Filho, 2011), Colombia (Drazen and Eslava, 2010), and India (Baskaran et al., 2015). Overall, these studies suggest a large diffusion of PBCs at the local level, which are demonstrably influenced by various institutional and economic factors, with the structure of fiscal decentralization and the level of local fiscal transparency emerging as key determinants (Benito et al., 2013; Baskaran et al., 2015).

2.3. Contributions of a single country comparative study to the PLC literature.

Our objective in analyzing the predictions of PLC theory using a regional sample is twofold. Firstly, we aim to ascertain whether local legislators exhibit similar legislative cycles to those already observed in national parliaments. Secondly, if such cycles are evident, we seek to understand to what the extent fiscal accountability (or any other type of politico-institutional variation) can explain variations in the magnitude of these cycles among legislators in different regions.

To contextualize this approach, it is pertinent to revisit the insights gathered by the public choice literature on decentralization and fiscal accountability. A well-established principle in public choice theory, introduced by Brennan and Buchanan (1980), suggests that fiscal decentralization enhances political accountability and curtails public spending, provided that it involves both the power to tax and to spend in a manner to maintain the budget balanced also at the local level. This result is due to two main reasons: first, symmetric decentralization provides citizens-taxpayers also with the option to exit, and not only with the voice option; second, it fosters competition among multiple jurisdictions, thereby fragmenting the Leviathan and mitigating excessive spending and political rents.

Yet, finding countries where tax and spending powers are equally decentralized is rare; typically, the power to tax remains primarily with central governments, whereas spending decisions are more easily decentralized. This asymmetry introduces three key distortions that can curtail the potential efficiency gains of fiscal decentralization. Firstly, local policymakers may not fully consider the cost of local spending when they can finance additional expenditure through central transfers or shared revenues, leading to overspending and to a deficit bias. This is often referred to as the "common pool" problem. The distinction between RSOs and RSSs among Italian regions allows isolating such a "common pool" problem, because the expenditures of RSOs are financed relatively more through grants than those of RSSs (see Annexes). Secondly, local politicians may rely on the expectation of central government bailouts, weakening their incentives to behave in a fiscally responsible manner and resulting in increased overall spending (Rodden and Eskeland, 2003)—a phenomenon known as the "soft budget constraint". A way to test this problem associated with decentralization is by looking at "alignment effects", namely the possibility that the central government be more prone to finance (or to bail out) regional governments ruled by similar ideological coalitions (Padovano, 2014; Solé-Ollé and Sorribas-Navarro, 2008; Dasgupta et al., 2001;

Arulampalam et al., 2009; Goodspeed, 2002). Thirdly, the proliferation of government levels complicates voters' monitoring efforts and reduces the effectiveness of their relationships with multiple representatives (Franzese, 2010), especially when shared responsibilities across government tiers make it more costly for voters to attribute policies to specific policymakers—the so-called "multiple agent" problem. The characteristics of our sample, where all voters elect and must be informed about the same number of government levels, does not allow us to test this hypothesis.

In this scenario, increased spending and soft budget constraints related to bailout expectations by specific regions are likely to amplify the magnitude of the PLC there. That because greater spending opportunities must be enacted through legislation; furthermore, the reduced accountability that asymmetric decentralization engenders is another channel that might determine legislative cycles of greater magnitude. Consequently, we can propose the following proposition:

Proposition 2: Ceteris paribus*, the magnitude of the legislative cycle should be higher in regions with lower levels of fiscal accountability.*

3. The dataset

3.1. Endogenous variable: monthly counts of laws. For the purposes of our research, the data encompasses regional laws from 2000 to 2024, plus the provincial laws of the autonomous provinces of Trento and Bolzano. The starting point of 2000 is determined by the implementation of the constitutional law 1/1999 that introduced the possibility of direct elections of the Presidents of the Region (now often improperly called "Governors") in Italy. All RSOs adopted this reform and started new legislatures in the year 2000; yet Valle d'Aosta and Trentino-Alto Adige opted to maintain the system of indirect election of the President of the Region; for

these two regions the collection of legislative data starts in 1998 and 1999 respectively, i.e., with the legislature closer to the time of the constitutional reform, in order to have a similar number of sampled legislatures across all regions. The remaining three RSSs, Sicily, Sardinia, and Friuli-Venezia Giulia also adopted the direct election of the president of the region, but starting from the legislatures that begun in 2001 for Sicily, in 2004 for Sardinia and in 2003 for Friuli-Venezia Giulia. We have therefore adopted these years as the starting point of the first legislature included in the sample. The ending year of 2024 reflects the availability of data on regional legislative production at the time of the study for most regions. We have excluded data related to still ongoing legislatures, opting to truncate the sample in the last legislature closed before 2024. Consequently, we have an unbalanced panel dataset.

Excluding the five regions with special autonomy, the fifteen RSOs comprise a total of 68 legislative terms. Among these, 14 ended prematurely, which implies that 54 out of 68 legislative terms have reached their regular five-year term. Typically, early conclusions occur because of the resignation of the President of the Region or the dissolution of the Council. In the case of the RSSs, out of a total of 13 legislative terms considered, only 2 have ended prematurely.

It must be emphasized that this study focuses on the monthly distribution of the *quantity* of regional laws during a legislature. Limitations of data availability do not allow to consider other regional legislative instruments, such as regulations issued by regional offices. The daily minutes of the legislative activities of all regional councils are not available in a consistent and comparable manner, which forces us to resort to monthly counts of regional laws. Finally, it is important to note that this analysis is purely quantitative and does not delve into the specific subject matters (and redistributive potential) of each regional law, in any event a difficult and highly discretionary evaluation.

Table 1 displays the descriptive statistics for the monthly counts of regional laws. The total number of laws included in the analysis is 15,682, with a monthly average of approximatively 3 and a variance of 9, i.e., 3 times the average. Such overdispersion is a common characteristic of count data analysis and it is typically encountered in empirical studies of PLC, as it is, indeed, the first evidence of the presence of legislative cycles.

[Table 1 about here]

Figures [1a-1u] illustrate the legislative activity of the different regions observed over the period for which data are available. The vertical red lines on the graphs indicate the months in which regional legislative elections were held. Peaks of legislative production before the elections are not easily detectable in the sample of Italian regions, contrary to most national samples analyzed in the literature. This may well depend on the presence of legislative sessions and/or on different practices and calendarizations of legislative activities in different regions. A more in-depth regression analysis is therefore required.

Figures [1a-1u about here]

3.2. PLC explanatory variables. As outlined in Proposition 1, we expect that the monthly counts of regional laws decline in the initial months of a new regional legislature and that they exhibit a peak (or demonstrate an upward trend) in the final months of the legislative term, contingent upon the legislative elections being held as scheduled. We aim to capture such dynamics by introducing several variables: 1) *StartlegiX* is a dummy that takes the value of 1 during the initial *X* months of a new legislature and 0 otherwise. *X* is set to 15 in this study, as it is usually done in studies of PLC at the national level[3]. This variable accounts for the time needed for a new regional council to settle and transition from proposing to approving legislation. 2) *EndlegiX* is a set of dummy variables, each taking a value

[3] We have also tested for alternative measures of *StartlegiX*: 3, 6 and 12 months. The results of the estimates, qualitatively not much different, are available upon request.

of 1 in the last *X* months (*X* taking values of 3, 6, and 12) before a legislative election, and 0 otherwise. These variables capture the potential surge in legislative activity near elections, with different evaluations of "nearness". 3) *Early* is a dummy variable controlling for legislatures that ended prematurely, because of resignations of the President of the Region or of the entire council. 4) *Budget* is a dummy variable, set to 1 in December, meant to capture the approval of the budgetary law that is due to pass in the last month of every year, which may imply a greater legislative output with respect to the rest of the year. 5) Finally, we incorporate a majority index *Maj.gm*, which measures the size of the majority of the regional government. We hypothesize that, insomuch as larger majorities make it easier to pass legislation, a higher value of this variable be correlated with higher legislative output.

3.3. Other conditioning variables. To address the pronounced regional disparities within Italy, our study incorporates a set of explanatory variables to account for institutional and economic differences across regions, between the different political ideologies of the regional governments, and finally, a set of other control variables.

The first set of additional explanatory variables relates to financial accountability at the regional level. As outlined in the annexes, a key institutional variation lies between Ordinary Statute Regions (RSOs) and Special Statute Regions (RSSs), with the latter being more fiscally autonomous and responsible than the former. To capture this distinction, we introduce a series of dummy variables for each region in two alternative ways. In one approach, we identify the fifteen RSOs together by one dummy (called RSO) and the five RSSs (including the two autonomous provinces of Bolzano and Trento) together by another distinct dummy (called RSS). In the other approach, we group the fifteen RSOs into a single dummy (again called RSO) and leave the RSSs as separate., i.e., each one being identified by a specific dummy bearing the region's name. As Proposition 2 states, we expect the PLC to

be higher in the less fiscally responsible RSOs compared to the RSSs. To gauge the degree fiscal decentralization and test Proposition 2 as well, we utilize the variable *Transfer Dependency*, which represents the ratio of transfers received from the central government normalized by each region's own revenues [4]. This metric reflects regions' dependence on transfers from the central government to fund their expenditures, particularly in healthcare, which is their most important policy responsibility. As already explained, we expect that higher values of transfer dependency translate into PLCs of greater magnitude. The descriptive statistics for this variable show that transfer dependency is significantly higher in the 15 RSOs and in the southern RSSs (Sicily and Sardinia), with average values of 52% and 81% respectively, compared to the northern RSSs, which have a mean transfer dependency ratio of about 31% (see Table 2 and Figure 2). The high values in Sicily and Sardinia can be attributed to additional transfers received for development purposes and island status (Giarda, 2005).

[Table 2 and Figure 2 about here]

Additionally, we must account for the geographic and economic divide between the North and South of Italy. We introduce three separate dummies indicating regions located in the *Center*, in the *Northern*, and in the *Southern* part of Italy (which includes the two islands of Sicily and Sardinia). We have no theoretical *a priori* on the effects of regional differences on legislative production; we leave it to the empirical analysis to detect if any correlation exists.

The second set of explanatory variables represents the dynamics of party politics at the regional level. Specifically, we consider the ideological orientation of the standing regional government, using a dummy variable *Ideology* which takes the

[4] Data are from the Italian Agency for Territorial Cohesion (*Sistema di Conti Pubblici Territoriali*, CPT). The average value of this ratio for all regions from 2000 to 2024 is equal to 0.5 in the sampled data. This value is consistent with reports from Brosio and Piperno (2007) and Padovano (2012). The index is measured by : $Transfer\ dependency = \frac{Transfers\ \ from\ central\ governments}{Regional\ own\ revenues}$

value of 0 to denote left-wing regional governments and 1 for right-wing ones. Left-wing parties are chiefly represented by *Democratici di Sinistra* (Democrats of the Left) and PD (Democratic Party), while the right-wing political spectrum is predominantly represented by *Forza Italia* (FI), *Lega Nord*, PdL (People of Freedom), and *Alleanza Nazionale* (National Alliance). Again, since there is no *a priori* on the correlation between this variable and the regressand, it is up to the empirical analysis to reveal whether regional governments of different ideologies show different patterns of legislative activity.

Furthermore, we have incorporated a historical perspective on the ideological orientation of the regional government body. We have created a series of dummy variables to distinguish the degree of stability of the ideological orientation of each region from 2000 to 2024. Regions where the ideological orientation remained stable throughout the sample period are labeled "*Stable*"; those where it changed once or twice are labeled "*Almost*"; and those whose ideological orientation changed more than twice are labeled "*Swing*". We hypothesize that historical partisanship in regional elections reduces candidates' incentives to appeal and cater the interests of swing voters, who should be more sensitive to policy distortions in their electoral decisions than ideologically motivated ones. Such reduced accountability may lead incumbents to pursue private agendas, increasing the number of legislated reforms that cater to private interests (Besley et al. 2010) which, ultimately, implies and expansion of the legislative cycle. Conversely, "swing" regions are expected to have higher accountability from incumbents, and their voters are supposed to tolerate less the dynamic distortions in policy decisions revealed by the PLC. We therefore expect a negative sign for the dummy *Swing*[5]. There are no specific expectations for regions where historical partisanship was "*Almost*" stable from 2000 to 2024; the

[5] See Besley, Persson and Sturm (2010) for a similar classification of the US States as well as underlying explanation.

empirical analysis will reveal the sign of this variable. Table 3 illustrates the data for ideological and political variables of the regions.

[Table 3 about here]

Finally, in order to test another implication of Proposition 2, we have created a dummy variable called "*Aligned*", which takes the value of 1 for regions and years where the coalitions supporting the regional and central governments share the same ideological orientation, and 0 otherwise. This variable aims to proxy the region's bailout expectations and to measure the softness of budget constraints. In the empirical literature on the so-called alignment effect, where this dummy is commonly adopted (Dasgupta et al., 2001; Arulampalam et al., 2009), the anticipated sign on the coefficient is positive, since the central government is expected to support relatively more the ideologically aligned regional governments by means of transfers. Consequently, bailout expectations are expected to rise, leading to soft budget constraints and potentially to higher PLC (Padovano, 2014; Dasgupta et al., 2001; Arulampalam et al., 2009).

Finally, the last set of covariates aims to control for the age structure of the regional population, for the degree of urbanization and for the income per capita of each region, as a proxy for the state of the regional economy. Firstly, we account for significant differences in age structure (population under fourteen and over sixty-five) that exist among the Italian regions through the variables *Youngpop* and *Elderlypop*. Regions with relatively younger and (even more importantly) older populations may be characterized by higher demand for healthcare services, which may in turn induce regional governments to take more policy decisions and hence legislate more, especially at the end of the legislature when it is more visible for voters. We also consider the degree of urbanization of the region's population by the variable called *Urban*[6]; this variable is aimed to capture the demand of other

[6] The degree of urbanization is computed as the average percentage of provinces located in urban and suburban areas over the total number of provinces within a region from 2000 to 2021.

public goods and services which may not be directly related to age-sensitive demand for healthcare. By the same logic applied to the age structure of the population, we expect a positive sign on this variable. Lastly, the variable *GDP* measures the per capita income of each region. In relation to Proposition 2, we expect a negative effect of this variable on the PLC. Higher regional tax bases are indeed negatively correlated with transfer dependency (r = - 0.55), thereby enhancing fiscal autonomy and responsibility. This, in turn, is expected to result in lower legislative cycles.

3.4. Estimation technique. The conventional Poisson fixed effect model method used for analyzing panel count data (Cameron and Trivedi, 2013) assumes that the mean and variance of the count data be equal. This assumption is not satisfied in our sample, as the overdispersion of the monthly counts of regional laws shows. This is a typical feature of count data in the PLC literature. To address this issue, we employ a negative binomial type 2 function, estimated via maximum likelihood. This approach allows us to account for the variation in the variance-to-mean ratio by including an overdispersion term, which is estimated along with the covariates.

$$Var\,[y_{it}|x_{it}, \alpha_i] = \mu_{it} + \theta\mu_{it}^2 \quad (1)$$

To test our propositions, we have estimated equation (2) via a pooled negative binomial type 2 maximum likelihood model with a common intercept. *V'* represents the vector of additional covariates described in the previous section that will be progressively included to test our propositions. X measures the time interval captured by the relevant dummy, either 3, 6 or 12 months.

$$E(Y_{it}) = \alpha \cdot \exp(\beta_1 Startlegi15 + \beta_2 EndlegiX + \beta_3 Early + \beta_4 Budget + \beta_5 Maj.gm + B_v V') + \epsilon_{it} \quad (2)$$

The estimates are presented in their exponential form for ease of interpretation. Specifically, for any dummy variable $x = [d, \boldsymbol{z}]$, where **z** denotes all regressors other than the binary regressor d in this model:

$$\frac{E[y|d=1,z]}{E[y|d=0,z]} = \frac{\exp(\beta_d + z'\beta_z)}{\exp(z'\beta_z)} = \exp(\beta_d) \quad (3)$$

meaning that, in any month t, the total number of laws is $exp(\beta_d)$ times larger if the dummy variable takes the value of 1. A value of the coefficient $\beta_d < 1$ can then be interpreted as a negative sign; conversely a value of $\beta_d > 1$ can be interpreted as a positive sign.

4. Estimates

Result 1: presence of a cycle. Our initial findings, presented in models 1-3 of table 4, involve estimating equation (2) using just the standard PLC variables. We observe that data support *Proposition 1* only when examining legislative cycles that occur six and twelve months before the normal conclusion of regional legislatures, but not just three. The PLC in the Italian regions therefore appears in the form of a surge at the end of the legislature rather than a peak, as it is instead often the case for national legislatures (including the Italian one, as evidenced by Lagona and Padovano, 2008). In other words, evidence of PLC is found, but during the last year or six months before the next expected elections; a peak in the very last months before the elections is not found, either because of the calendarization of legislation or because regional legislators spend the last months in constituency work; in the last 3 months legislative production is in fact 20% lower than the average. Precisely, the final 12 and 6 months witness an increase of 10% and 15% in enacted laws, respectively, whereas the initial 15 months consistently exhibit a lower-than-average legislative output (between -26% and -24%) compared to other months in the legislatures. Additionally, the behavior of all other PLC variables confirms the expected hypotheses. Particularly evident in the surge of law production is the positive and significant coefficient on the variable *Budget*; it reveals that legislative activity is nearly 2,32 times higher in December, in coincidence with the approval of the budget law, than in the rest of the year. Moreover, our analysis confirms that

premature dissolutions of regional legislatures disrupt the legislative cycles, as shown by the negative coefficient of the variable *Early*, which indicates a statistically significant reduction of approved laws in the last 6 and 12 months before the premature dissolution of the regional council, equal to approximately 34% to 36% with respect to the legislature's average. Furthermore, we find that the size of the majority significantly and positively influences the approbation of laws, in line with theory.

Models 4-5-6 in table 5 incorporate a suite of control variables, namely the age structure of the population, the urbanization levels and per capita income. Our findings corroborate the hypothesis that all these factors affect legislative output, except the level of income, while leaving the results on the PLC variables substantially unaltered. Specifically, the data indicates a significant and positive correlation between the proportion of the elderly population and the number of laws approved, although of a limited size. The estimated coefficient on the share of the elderly population appears to increase legislative production by 4%, likely reflecting the legislative response to healthcare demands and expenditures. In contrast, the percentage of youth (aged 14 and under) appears not to have any notable impact on legislative activity. The urbanization coefficient reveals a more noticeable 43-44% increase in legislative production in more urbanized regions compared to more rural ones. This aligns with the observation that highly urbanized regions, such as Lombardy and Campania, among others, demand more public goods and services to their regional governments, which respond through a greater legislative activity.

The values of the Akaike Information Criterion (AIC) for models 4-5-6 indicate that the consideration of these control variables actually improves the specification of the model, as evidenced by their lower AIC values compared to those of models 1-3. For instance, we observe a decrease from 22,762.141 in model 2 to 18,374.858 in model 5, indicating an enhanced fit of the model to the observed data.

[Table 4-5 about here]

Result 2: fiscal accountability and PLC. Moving to the comparative stage of the analysis, models 7-8-9 of table 6 include the *Transfer Dependency* ratio as a covariate, one of the main focuses of the present analysis. The estimated coefficient on that variable lends empirical support to Proposition 2, as it reveals a positive correlation between diminished fiscal accountability and PLC, with an approximative 10% surge in legislative output during the 6 to 12 months preceding the end of the regional legislature's term.

A further refinement of this result is achieved in models 10-12 of table 7, which incorporate the dummies for the region types grouped together, denoted by the variables *RSO* and *RSS*, both interacted with *EndlegiX*. These interactions unveil that legislative cycles are statistically significant only in the 15 regions governed by Ordinary Statutes (RSOs) during the 12 and 6 months before regional elections. This observation is consistent with Proposition 2, which underscores the lower fiscal accountability observed in RSOs compared to regions with RSSs. All other variables maintain their expected sign and significance levels, except *Maj.gm*. Such an odd result could be attributed to the positive correlation between variables denoting a region's statute and the variable *Maj.gm* (r = 0,23). The new AIC values span from 20,063.212 to 20,088.531. Similarly, in models 13-15 of table 8, we revisit the previous model by incorporating interactions between *EndlegiX*, *RSO* and the region-specific dummies for each of the five RSSs. The outcomes mirror the previous findings, confirming that only RSOs exhibit legislative cycles akin to PLC when compared to RSSs. All variables regain their significance and expected signs. These models demonstrate broadly similar AIC values, ranging from 20,041.742 to 20,082.291.

[Table 6-8 about here]

From this stage onwards, we restrict the analysis to the 15 RSOs, as PLC is found exclusively there. This allows us to further investigate the effects of the explanatory variables under scrutiny on the patterns of legislative approbation.

To begin, Proposition 2 finds further support in models 16-18 of table 9, when we incorporate controls for the geographical localization of RSOs through an interaction between *EndlegiX* and the vector of dummies *Geo*. This addition evidences a comparatively smaller increase in legislative cycles within the economically more advanced Northern regions compared to those of the rest of the country. Specifically, we observe a 23-30% (in the Central RSOs) and 53-38% (in the Southern RSOs) surge in the approval of laws during the 12 to 6 months before the end of regional legislatures; on the other hand, no cyclical pattern is observed in the Northern regions. This result could also be attributed to the lower educational attainment levels in these regions, which may result in a lower control over legislators. This possibility is not explicitly controlled for by the covariates adopted in our study, even though it is is likely captured by the various geographic dummies. A better proxy for electoral control may be the level of voters turnout in regional elections, as a proxy of voters' participation and awareness of legislators' activities. This covariate, however, shows no distinct impact on legislative activity, as evidenced by the estimates of models 19-21 of table 10.

The Akaike Information Criterion (AIC) values for models 16-18 are notably consistent, ranging from 14,764,631 to 14,768,723.

[Table 9-10 about here]

Result 3: PLC and ideology. In our conclusive tests, models 22-24 of table 11 investigate the interplay between legislative cycles and the ideological orientation of regional majorities. The data indicates that left-leaning majorities are more inclined to intensify legislative cycles, particularly in the terminal phase of the legislature, with an increase of 18-23% in the approval of regional laws, compared to right-wing ones. The correlation between legislative cycles and party orientation

is not coincidental but it reflects regional political dynamics. The greater evidence of PLC in the RSOs of Central and Southern Italy, namely in regions that throughout the sample period have been traditionally governed by center-left and left-wing majorities, underscores the ideological influence on legislative production [7]. This pattern is consistent with our finding that left-oriented majorities, prevalent in these regions, tend to be characterized by legislative cycles of greater magnitude. This could be attributed to the generally more interventionist approach of left-leaning governments, which often translates into increased regulation actions and policy changes. When translated into legislative behavior, such ideological differences imply that left-leaning governments should propose more bills and implement more laws.

[Table 11-12 about here]

In addition, models 25-27 of table 12 show that PLC is found both in aligned and non-aligned regional governments, although with differences of magnitude that are statistically relevant. While for non-aligned governments the magnitude of the cycle remains almost the same during the period between 12 and 6 months before the elections, denoted by a 15-16% surge in law production similar to that found in models 1-3, for aligned regional governments instead the effect appears more pronounced the closer we get to the regular end of the legislature. Specifically, the surge in law production is manifested by a 7 percentages points positive increase,

[7] This pattern of results reflects the broader political landscape of Italy in our sample period from 2000 to 2024. Right-wing parties in Italy, represented in this period mainly by formations such as *Forza Italia* (FI), *Lega Nord*, and *Alleanza Nazionale*, stand relatively more for pro-business agendas and, at the regional level, greater regional autonomy. Conversely, the left-wing parties, chiefly the DS and then by the PD, support a more interventionist role of the state. The Ordinary Statute Regions (RSOs) of Northern Italy, particularly Lombardy and Veneto, have been mostly governed by right-wing coalitions, with parties like FI and *Lega Nord* expressing the governor. In contrast, in the sample period regions like Emilia Romagna have remained under the steadfast control of PD. Central Italy's RSOs have largely been governed by center-left and left-wing coalitions, with recent political shifts observed in Umbria and Marche. Southern RSOs, often swing regions, have predominantly seen center-left dominance, with occasional deviations. The Special Statute Regions (RSSs) present a dichotomy, with Northern regions like Valle d'Aosta and Trento leaning towards center-left governance, while Sicily has been a stronghold for center-right majorities, barring the XVI legislature.

from 13% at 12 months before the elections to 20% at 6 months before the elections. This finding supports our expectation that regional governments ideologically closer to the central government are more likely to receive additional resources from it in the eve of regional elections; this generates bailout expectations that boosts pre-electoral spending. To implement these extra-spending, more laws need to be passed, resulting in PLC patterns of greater magnitude compared to non-aligned regions. Interestingly, models 28-30 of table 13 reveal that PLC is detected only in the RSOs where the ideological orientation of the majority coalition remained stable from 2000 to 2024. This includes regions like Emilia-Romagna, Lombardy, Marche, Tuscany and Umbria. Indeed, political partisanship, or the dominance of a single ideological orientation, can be viewed as a lack of political competition that diminishes political accountability; this ultimately results in PLC of greater magnitude. Again, also in this context voting turnout does not seem to affect the cycle, as models 31-33 of table 14 show. These findings replicate, in the domain of the legislative output of Italian regions, the results of Besley et al. (2010) in their study of political competition and lack of accountability in the American states.

[Table 13-14 about here]

5. Conclusions

In conclusion, our study provides critical insights into the Political Legislation Cycles (PLC) in the most important subcentral government tier in Italy, the regions. Our findings reveal a fairly complex legislative dynamics, particularly within regions that hold an Ordinary Statute (RSOs), whose fiscal accountability is lower than that of their Special statute (RSSs) counterparts. RSOs are in fact characterized by a pronounced asymmetry in fiscal decentralization and prove relatively more dependent on central government transfers, especially for healthcare spending. RSSs, on the other hand, maintain a greater proportion of locally generated revenue,

allowing for greater fiscal independence from the central government. This difference in fiscal structures underscores the importance of fiscal accountability as a check on legislative cycles – and the agency problems they reveal.

In the sample of RSOs, our analysis also indicates a negative correlation between the magnitude of legislative cycles and economic development, as legislative cycles appear far more evident in regions of Central and Southern Italy than in Northern ones. Ideological leanings, with center-left and leftwing majorities prevalent in these regions, also appear to be an important determinant of legislative cycles. Left-wing regional governments, with a more interventionist ideological approach to politics, are characterized by more intense PLC-type legislative patterns. Finally, ideological alignments between central and regional governments are correlated with greater legislative cycles in the RSOs, where the party systems are more comparable to the national one. For all these results we have also conducted robustness checks using alternative durations to define legislative periods, which consistently supported our initial findings.

This research pioneers the empirical testing of PLC theory at the subnational government level. The Italian regional context provides a unique opportunity to quantitatively assess the efficiency of the agency relationships between voters and their representatives, of which the PLC is an all-encompassing indicator. The analysis is also able to point out factors that may reduce such efficiency, offering at the same time a more controlled testing ground than cross-country analyses, with a lower risk of omitting relevant institutional variables.

References

Akhmedov, A., & Zhuravskaya, E. (2004). Opportunistic political cycles: test in a young democracy setting. *The quarterly journal of economics*, *119*(4), 1301-1338.

Arachi, G., & Filippini, C. (2002). Fiscal Decentralisation and the Autonomy of the Local Governments in Italy.

Arulampalam, W., Dasgupta, S., Dhillon, A., & Dutta, B. (2009). Electoral goals and centre-state transfers in India. *Journal of Development Economics*, 88, 103-119.

Baskaran, T., Min, B., & Uppal, Y. (2015). Election cycles and electricity provision: Evidence from a quasi-experiment with Indian special elections. *Journal of Public Economics*, *126*, 64-73.

Benito, B., Bastida, F., & Vicente, C. (2013). Municipal elections and cultural expenditure. *Journal of Cultural Economics*, *37*, 3-32.

Bernheim, B. D., & Whinston, M. D. (1986). Common agency. *Econometrica: Journal of the Econometric Society*, 923-942.

Besley, T., Persson, T., and Sturm, D. (2010). Political Competition, Policy and Growth: Theory and Evidence from the United States. *Review of Economic Studies*, 77: 1329–1352.

Blais, A., & Nadeau, R. (1992). The electoral budget cycle. *Public choice*, *74*(4), 389-403.

Bordignon, M., & Turati, G. (2009). Bailing out expectations and public health expenditure. *Journal of Health Economics*, *28*(2), 305-321.

Brechler, J., and Geršl, A. (2014). Political legislation cycle in the Czech Republic. *Constitutional Political Economy,* 25: 137-153.

Brennan, G. and Buchanan, J. M. (1980). *The power to tax. Analytical foundations of a fiscal constitution*. Cambridge, Cambridge University Press.

Brosio, G., & Piperno, S. (2007). Assessing regional and local government expenditure needs in Italy: Small achievements and big prospective issues. In J. Kim & J. Lotz (Eds.), *Measuring Local Government Expenditure Needs*. The Copenhagen Workshop, 2007.

Brosio, G., & Piperno, S. (2010). Conditional intergovernmental transfers in Italy after the constitutional reform of 2001. In J. Kim, J. Lotz, & N. J. Mau (Eds.),

General Grants Versus Earmarked Grants: Theory and Practice. The Copenhagen Workshop 2009. Korea Institute of Public Finance.

Cameron, A. C., and Trivedi, P. K. (2013). *Regression analysis of count data.* Cambridge, Cambridge University Press.

Dasgupta, S., Dhillon, A., & Dutta, B. (2001). Electoral goals and centre-state transfers in India. *processed, Indian Statistical Institute, New Delhi*.

Dattilo, M. and Padovano F. (2024). The cycle of decrees: Evidence from the Italian Parliament. *Condorcet Center for Political Economy Working Paper ccr, 2024-*.

De Haan, J., and Klomp, J. (2013). Conditional political budget cycles: a review of recent evidence. *Public Choice*, 157: 387-410.

Dixit, A., Grossman, G. M., & Helpman, E. (1997). Common agency and coordination: General theory and application to government policy making. *Journal of political economy*, *105*(4), 752-769.

Drazen, A., & Eslava, M. (2010). Electoral manipulation via voter-friendly spending: Theory and evidence. *Journal of development economics*, *92*(1), 39-52.

Foucault, M., Madies, T., & Paty, S. (2008). Public spending interactions and local politics. Empirical evidence from French municipalities. *Public Choice*, *137*, 57-80.

Franzese, R. J. (2010). The Multiple Effects of Multiple Policymakers: Veto Actors Bargaining in Common Pools. *Rivista Italiana di Scienza Politica* 40: 341-70.

Giarda, D. P. (2005). *Decentralization and intergovernmental fiscal relations in Italy: a review of past and recent trends*. Università Cattolica del Sacro Cuore.

Goodspeed, T. J. (2002). Bailouts in a federation. *International Tax and Public Finance*, 9: 409–421.

Gratton, G., Holden, R., & Kolotilin, A. (2018). When to drop a bombshell. *The Review of Economic Studies*, *85*(4), 2139-2172.

Gratton, G., Guiso, L., Michelacci, C., & Morelli, M. (2021). From Weber to Kafka: Political instability and the overproduction of laws. *American Economic Review*, *111*(9), 2964-3003.

Kovats, L. (2009). Do elections set the pace? A quantitative assessment of the timing of European legislation. *Journal of European Public Policy*, *16*(2), 239-255.

Lagona, F., and Padovano, F. (2008). The political legislation cycle. *Public Choice*, 134: 201-229.

Lagona, F., Maruotti, A., and Padovano, F. (2015). Multilevel multivariate modelling of legislative count data, with a hidden Markov chain. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 178: 705-723.

Lagona, F., and Padovano, F. (2021). How does legislative behavior change when the country becomes democratic? The case of South Korea. *European Journal of Political Economy*, 69: 102-126.

Padovano, F. (2012). The drivers of interregional policy choices: Evidence from Italy. *European Journal of Political Economy*, *28*(3), 324-340.

Padovano, F. (2014). Distribution of transfers and soft budget spending behaviors: evidence from Italian regions. *Public Choice* 161: 11–29

Padovano, F., and Gavoille, N. (2017). Legislative cycles in a semipresidential system. *Journal of Institutional and Theoretical Economics* 173: 470-498.

Padovano, F., and Petrarca, I. (2012). A theory of cyclical production of laws and decrees. *Centre Condorcet for Political Economy Working Paper* ccr9-12.

Padovano, F., and Sy, Y. (2023). Conditional Political legislation cycles. *Condorcet Center for Political Economy Working Paper* 2023-02-ccr.

Padovano, F., and Sy, Y. (2024). Political Legislation Cycles in the Italian Regions. *Condorcet Center for Political Economy Working Paper* 2024-02-ccr.

Padovano, F., and Vesselova, O. (2024). Political legislation cycles in Ukraine. *Condorcet Center for Political Economy Working Paper* 2024-ccr.

Persson, T., Roland, G., and Tabellini, G. (1997). Separation of powers and political accountability. *Quarterly Journal of Economics*, 112: 1163-1202.

Persson, T., Roland, G., and Tabellini, G. (2000). Comparative politics and public finance. *Journal of Political Economy*, 108: 1121-1161.

Persson, T. and Tabellini, G. (2003). The Economic effects of constitutions. Boston, MIT Press.

Rodden J., and Eskeland G., (Eds.) (2003). *Fiscal decentralization and the challenge of hard budget constraint*. MIT Press.

Rogoff, K, 1990. Equilibrium political budget cycles, *American Economic Review* 80: 21-36.

Rogoff, K., & Siebert, A. (1988). Elections and Macroeoconomic Policy Cycles" en Review of Economic Studies, 55.

Sakurai, S. N., & Menezes-Filho, N. (2011). Opportunistic and partisan election cycles in Brazil: new evidence at the municipal level. *Public Choice*, *148*, 233-247.

Shi, M., and Svensson, J. (2006). Political budget cycles: Do they differ across countries and why? *Journal of Public Economics*, 90: 1367-1389.

Solé-Ollé, A. and Soribas-Navarro, P. (2008). The effects of partisan alignment on the allocation of intergovernmental transfers. Differences-in-differences estimates for Spain, *Journal of Public Economics* 92: 2302-2319.

Stigler G., 1971, The Theory of Economic Regulation. *Bell Journal of Economics and Management Science*, 2: 3-21

Sy, Y. (2024). The database of comparative political legislation cycles (1975-2010s) . *Condorcet Center for Political Economy Working Paper ccr, 2024.*

Veiga, L. G., & Veiga, F. J. (2007). Political business cycles at the municipal level. *Public choice,* 131, 45-64.

Willumsen, D. M., Stecker, C., & Goetz, K. H. (2018). The electoral connection in staggered parliaments: Evidence from Australia, France, Germany and Japan. *European journal of political research*, *57*(3), 759-780.

Table 1. Summary statistics, dependent variable

Region	Obersvations (months)	Sum of laws	Mean	Median	SD	Variance	Min	Max
Abruzzo	276	1180	4	3	5	23	0	34
Basilicata	276	906	3	2	3	12	0	24
Bolzano	288	524	2	1	2	4	0	10
Calabria	276	992	4	3	4	13	0	17
Campania	276	629	2	2	3	8	0	14
Emilia-Romagna	276	606	2	1	3	7	0	15
Friuli-Venezia Giulia	235	537	2	2	2	4	0	10
Lazio	276	558	2	1	2	6	0	13
Liguria	276	865	3	3	3	10	0	23
Lombardy	276	720	3	2	3	7	0	17
Marche	276	816	3	2	3	7	0	14
Molise	275	678	2	2	3	7	0	15
Piedmont	276	725	3	2	2	6	0	16
Puglia	276	932	3	2	4	13	0	22
Sardinia	222	487	2	2	2	4	0	13
Sicily	257	493	2	2	2	4	0	12
Tuscany	276	1377	5	4	4	16	0	28
Trento	288	434	2	1	2	3	0	11
Umbria	276	581	2	1	3	7	0	20
Valle d'Aosta	300	799	3	2	3	9	0	26
Veneto	276	843	3	2	3	9	0	18

Table 2. Summary statistics, Transfer Dependency

Region	Statute	Observations (months)	Mean	Median	SD	Variance	Min	Max
Abruzzo	RSO	264	0,85	0,56	0,56	0,31	0,24	2,18
Basilicata	RSO	264	0,99	1,01	0,41	0,17	0,33	1,83
Calabria	RSO	250	0,73	0,58	0,6	0,37	0,34	3,16
Campania	RSO	250	0,59	0,49	0,43	0,18	0,23	2,01
Emilia-Romagna	RSO	242	0,25	0,13	0,18	0,03	0,08	0,63
Lazio	RSO	264	0,27	0,21	0,22	0,05	0,06	1,03
Liguria	RSO	250	0,51	0,4	0,28	0,08	0,2	1,34
Lombardy	RSO	264	0,21	0,15	0,14	0,02	0,06	0,58
Marche	RSO	249	0,38	0,32	0,21	0,05	0,16	0,99
Molise	RSO	264	0,99	0,84	0,42	0,17	0,38	2,01
Piedmont	RSO	234	0,24	0,23	0,08	0,01	0,15	0,44
Puglia	RSO	251	0,75	0,65	0,45	0,2	0,18	2,21
Tuscany	RSO	250	0,28	0,23	0,16	0,03	0,11	0,83
Umbria	RSO	233	0,41	0,33	0,35	0,12	0,11	1,52
Veneto	RSO	250	0,31	0,26	0,18	0,03	0,11	0,83
	Total RSO	3 779	0,52	0,36	0,42	0,18	0,06	3,16
Bolzano	RSS	264	0,37	0,39	0,17	0,03	0,11	0,63
Friuli-Venezia Giulia	RSS	223	0,24	0,24	0,12	0,02	0,08	0,7
Trento	RSS	264	0,23	0,21	0,11	0,01	0,11	0,56
Valle d'Aosta	RSS	264	0,39	0,21	0,38	0,15	0,09	1,43
	Northern RSS	1 015	0,31	0,23	0,24	0,06	0,08	1,43
Sardinia	RSS	210	0,54	0,51	0,34	0,12	0,21	1,72
Sicily	RSS	245	1,07	1,04	0,31	0,09	0,43	1,74
	Island RSS	455	0,81	0,78	0,42	0,17	0,21	1,74
	Total RSS	1 470	0,47	0,31	0,39	0,15	0,08	1,74
	Italy	5 249	0,50	0,36	0,43	0,18	0,06	3,16

Table 3. Summary statistics, Ideology and political variables

Region	Historical Stability		Alignment effect	Left		Right	
		Number of Months	Years	Number of Months	Years	Number of months	Years
Abruzzo	Swing	63%	2001-2011 (VIII-IV) ; 2014-2019 (X-XI) ; 2022-2024 (XII)	32%	2005-2008 (VIII) ; 2014-2018 (X)	68%	2000-2005 (VII) ; 2009-2014 (IX) ; 2019-2024 (XI-XII)
Basilicata	Swing	43%	2000-2001 (VII) ; 2006-2008 (VIII) ; 2013-2019 (XIV-XV) ; 2022-2024 (XII)	79%	2000-2019 (VII-X)	21%	2019-2024 (XI-XII)
Bolzano	Almost	46%	1999-2001 (VII) ; 2006-2008 (XIII) ; 2013-2019 (XIV-XV) ; 2022-2024 (XVII)	80%	1999-2018 (XII-XV)	20%	2019-2024 (XVI-XVII)
Calabria	Swing	58%	2001-2011 (VII-IX) ; 2015-2020 (X)	53%	2005-2009 (XIII)	47%	2000-2005 (VII) ; 2010-2014 (IX)
Campania	Almost	42%	2000-2001 (VII) ; 2006-2011 (XIII-IX) ; 2015-2020 (X)	75%	2000-2010 (VII-VIII)	25%	2010-2015 (IX)
Emilia-Romagna	Stable	43%	2000-2001 (VII) ; 2006-2008 (VIII) ; 2013-2020 (IX-X)	100%	2000-2020 (VII-XI)	0%	
Friuli-Venezia Giulia	Swing	62%	2006-2011 (IX-X) ; 2013-2019 (XI-XII) ; 2022-2023 (XIII)	50%	2003-2008 (IX) ; 2013-2018 (XI)	50%	2008-2013 (X) ; 2018-2023 (XII-XIII)
Lazio	Swing	62%	2001-2008 (VII-VIII) ; 2010-2011 ; 2013-2021 (X-XI)	63%	2005-2008 (VIII) ; 2013-2022 (X-XI)	37%	2000-2005 (VII) ; 2010-2013 (IX)
Liguria	Swing	46%	2001-2008 (VII-VIII) ; 2013-2019 (IX-X)	50%	2005-2015 (VIII-IX)	50%	2000-2005 (VII) ; 2015-2020 (X)
Lombardy	Stable	44%	2001-2006 (VII-VIII) ; 2013-2015 (X) ; 2018-2019 (XI)	0%		100%	2000-2023 (VII-XI)
Marche	Stable	46%	2000-2001 (VII) ; 2006-2008 (VIII) ; 2013-2020 (IX-X)	100%	2000-2020 (VII-X)	0%	
Molise	Swing	71%	2001-2006 (VIII) ; 2008-2011 (IX) ; 2013-2019 (XI-XII) ; 2022-2023 (XII)	29%	2011-2018 (X-XI)	71%	2001-2011 (VIII-IX) ; 2018-2023 (XII)
Piedmont	Swing	59%	2001-2011 (VII-VIII-IX) ; 2014-2018 (X)	52%	2005-2010 (VIII) ; 2014-2019 (X)	48%	2000-2005 (VII) ; 2010-2014 (IX)
Puglia	Almost	59%	2001-2010 (VII-VIII) ; 2013-2020 (IX-X)	76%	2005-2020 (VIII-X)	24%	2000-2005 (VII)
Sardinia	Swing	54%	2006-2011 (XIII-XIV) ; 2014-2019 (XV) ; 2022-2024 (XVI)	49%	2004-2009 (XIII) ; 2014-2019 (XV)	51%	2009-2014 (XIV) ; 2019-2024 (XV-XVI)
Sicily	Almost	67%	2001-2006 (XIII) ; 2008-2011 (XV) ; 2013-2019 (XVI)	24%	2012-2017 (XVI)	76%	2001-2012 (XIII-XV) ; 2017-2022 (XVII)
Tuscany	Stable	46%	2000-2001 (VII) ; 2006-2008 (VIII) ; 2013-2020 (IX-X)	100%	2000-2020 (VII-XI)	0%	
Trento	Almost	47%	1999-2001 (XII) ; 2006-2008 (XIII-XIV) ; 2013-2019 (XIV-XV) ; 2022-2024 (XVI-XVII)	79%	1999-2018 (XII-XV)	21%	2018-2024 (XVI-XVII)
Umbria	Stable	44%	2000-2001 (VII) ; 2006-2008 (VIII) ; 2013-2018 (IX-X)	100%	2000-2019 (VII-X)	0%	
Valle d'Aosta	Swing	63%	1998-2001 (XI) ; 2006-2011 (XII-XIII) ; 2013-2021 (XIV-XVI)	73%	1998-2008 (XI-XII) ; 2013-2018 (XIV) ; 2020-2023 (XV-XVI)	27%	2008-2013 (XIII) ; 2018-2019 (XV)
Veneto	Stable	47%	2001-2006 (VII-VIII) ; 2008-2011 (XIII-IX) ; 2018-2019 (X)	0%		100%	2000-2020 (VII-XI)

Table 4. Test of Proposition 1

Dependent variable: Monthly counts of regional law			
Cycle length	3 months	6 months	12 months
Model	(1)	(2)	(3)
Startlegi15	0.74***	0.76***	0.76***
	(0.02)	(0.03)	(0.03)
EndlegiX (X=3, 6, 12)	0.80***	1.15***	1.10**
	(0.05)	(0.05)	(0.04)
Budget	2.30***	2.31***	2.32***
	(0.11)	(0.11)	(0.11)
Early	0.71***	0.66***	0.64***
	(0.06)	(0.06)	(0.06)
Majm	2.18***	2.18***	2.20***
	(0.42)	(0.42)	(0.42)
Overdispersion	0.68***	0.68***	0.68***
	(0.02)	(0.02)	(0.02)
Constant	1.67***	1.61***	1.59***
	(0.19)	(0.19)	(0.19)
Observations	5,392	5,392	5,392
Loglikelihood	-11373	-11374	-11375
χ^2	465.8	463.7	461.5
AIC	22760.065	22762.141	22764.367

*Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

Table 5. Test of Proposition 1 with control variables

Dependent variable: Monthly counts of regional laws			
Cycle length	3 months	6 months	12 months
Model	(4)	(5)	(6)
Startlegi15	0.75***	0.77***	0.78***
	(0.03)	(0.03)	(0.03)
EndlegiX (X=3, 6, 12)	0.79***	1.12**	1.10**
	(0.06)	(0.06)	(0.04)
Budget	2.41***	2.42***	2.43***
	(0.12)	(0.12)	(0.12)
Early	0.69***	0.64***	0.62***
	(0.06)	(0.06)	(0.06)
Majm	2.12***	2.06***	2.07***
	(0.47)	(0.46)	(0.46)
Young population (14 and under)	0.98	0.98	0.98
	(0.02)	(0.02)	(0.02)
Elderly population (65 and more)	1.04***	1.04***	1.04***
	(0.01)	(0.01)	(0.01)
Urbanization level	1.44***	1.44***	1.43***
	(0.14)	(0.14)	(0.14)
GDP	1.00***	1.00***	1.00***
	(0.00)	(0.00)	(0.00)
Overdispersion	0.61***	0.61***	0.61***
	(0.02)	(0.02)	(0.02)
Constant	1.07	1.13	1.10
	(0.59)	(0.62)	(0.60)
Observations	4,306	4,306	4,306
Loglikelihood	-9174	-9176	-9176
χ^2	482.1	476.7	477.1
AIC	18369.472	18374.858	18374.546

*Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

Table 6. Test of proposition 2 with Transfer dependency

Dependent variable: Monthly counts of regional laws			
Cycle length	3 months	6 months	12 months
Model	(7)	(8)	(9)
Startlegi15	0.75***	0.77***	0.78***
	(0.03)	(0.03)	(0.03)
EndlegiX (X=3, 6, 12)	0.79***	1.13**	1.10**
	(0.06)	(0.06)	(0.05)
Budget	2.40***	2.42***	2.43***
	(0.12)	(0.12)	(0.12)
Early	0.69***	0.64***	0.62***
	(0.06)	(0.06)	(0.06)
Majm	2.59***	2.51***	2.52***
	(0.56)	(0.54)	(0.55)
Elderly population (65 and more)	1.04***	1.04***	1.04***
	(0.01)	(0.01)	(0.01)
Urbanization level	1.34***	1.34***	1.34***
	(0.12)	(0.12)	(0.12)
Transfer dependency	1.09**	1.09**	1.10**
	(0.05)	(0.05)	(0.05)
Overdispersion	0.62***	0.62***	0.62***
	(0.02)	(0.02)	(0.02)
Constant	0.58**	0.59**	0.59**
	(0.13)	(0.13)	(0.13)
Observations	4,306	4,306	4,306
Loglikelihood	-9183	-9185	-9185
χ^2	464.5	459.6	460.1
AIC	18385.079	18389.989	18389.515

*Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

Table 7. Test of proposition 2 with Transfer dependency by Statute of the Region Dummies for the 15 RSOs, all 5 RSSs are grouped together.

Dependent variable: Monthly counts of regional laws			
Cycle length	3 months	6 months	12 months
Model	(10)	(11)	(12)
Startlegi15	0.74***	0.76***	0.77***
	(0.03)	(0.03)	(0.03)
Budget	2.32***	2.34***	2.35***
	(0.11)	(0.11)	(0.11)
Early	0.69***	0.64***	0.62***
	(0.06)	(0.06)	(0.06)
Majm	1.45*	1.40	1.39
	(0.30)	(0.29)	(0.29)
Elderly population (65 and more)	1.03***	1.03***	1.03***
	(0.01)	(0.01)	(0.01)
Transfer dependency	1.12***	1.13***	1.13***
	(0.05)	(0.05)	(0.05)
1. EndlegiX (X=3, 6, 12) * RSO	0.87*	1.18***	1.12***
	(0.07)	(0.07)	(0.05)
1. EndlegiX (X=3, 6, 12) * RSS	0.32***	0.74***	0.78***
	(0.05)	(0.07)	(0.05)
Overdispersion	0.61***	0.62***	0.62***
	(0.02)	(0.02)	(0.02)
Constant	1.09	1.11	1.10
	(0.21)	(0.21)	(0.21)
Observations	4,786	4,786	4,786
Loglikelihood	-10021	-10032	-10033
χ^2	585.1	561.6	559.8
AIC	20063.212	20086.695	20088.531

*Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

Table 8. Test of proposition 2 with Transfer dependency by Statute of the Region Dummies for the 15 RSOs and the 5 RSSs are separated.

Dependent variable: Monthly counts of regional laws			
Cycle length	3 months	6 months	12 months
Model	(13)	(14)	(15)
Startlegi15	0.74***	0.76***	0.77***
	(0.03)	(0.03)	(0.03)
Budget	2.32***	2.34***	2.35***
	(0.11)	(0.11)	(0.11)
Early	0.69***	0.64***	0.61***
	(0.06)	(0.06)	(0.06)
Majm	1.83***	1.79***	1.76**
	(0.41)	(0.40)	(0.39)
Elderly population (65 and more)	1.03***	1.03***	1.03***
	(0.01)	(0.01)	(0.01)
Transfer dependency	1.11**	1.12**	1.12***
	(0.05)	(0.05)	(0.05)
1.EndlegiX (X=3, 6, 12) * RSO	0.86*	1.17***	1.12**
	(0.07)	(0.07)	(0.05)
1. EndlegiX (X=3, 6, 12) * Friuli-Venezia Giulia	0.55	0.73	0.83
	(0.20)	(0.17)	(0.14)
1. EndlegiX (X=3, 6, 12) * Sardinia	0.57	0.65*	0.93
	(0.21)	(0.16)	(0.16)
1. EndlegiX (X=3, 6, 12) * Sicily	0.28***	0.72	0.82
	(0.12)	(0.17)	(0.13)
1. EndlegiX (X=3, 6, 12) * Valle d'Aosta	0.05***	0.78	0.74**
	(0.04)	(0.15)	(0.10)
1. EndlegiX (X=3, 6, 12) * Trento	0.41**	0.72	0.63***
	(0.15)	(0.16)	(0.10)
1. EndlegiX (X=3, 6, 12) * Bolzano	0.24***	0.82	0.81
	(0.10)	(0.18)	(0.13)
Overdispersion	0.61***	0.61***	0.61***
	(0.02)	(0.02)	(0.02)
Constant	0.96	0.96	0.97
	(0.20)	(0.20)	(0.20)
Observations	4,786	4,786	4,786
Loglikelihood	-10000	-10021	-10020
χ^2	626.5	584.3	586.0
AIC	20041.742	20083.94	20082.291

*Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

Table 9. Test of proposition 2 with Transfer dependency and Geographic dummies (sample limited to the 15 RSOs)

Dependent variable: Monthly counts of regional laws			
Cycle length	3 months	6 months	12 months
Model	(16)	(17)	(18)
Startlegi15	0.73***	0.75***	0.76***
	(0.03)	(0.03)	(0.03)
Budget	2.44***	2.45***	2.46***
	(0.14)	(0.14)	(0.14)
Early	0.65***	0.61***	0.59***
	(0.07)	(0.06)	(0.06)
Majm	2.48***	2.33***	2.32***
	(0.76)	(0.71)	(0.71)
Elderly population (65 and more)	1.07***	1.07***	1.06***
	(0.01)	(0.01)	(0.01)
Urbanization level	1.78***	1.76***	1.75***
	(0.20)	(0.20)	(0.20)
Transfer Dependency	0.96	0.97	0.97
	(0.06)	(0.06)	(0.06)
1. EndlegiX (X=3, 6, 12) * Center	0.98	1.30**	1.23**
	(0.15)	(0.14)	(0.10)
1. EndlegiX (X=3, 6, 12) * North	0.67***	0.90	0.96
	(0.10)	(0.09)	(0.07)
1. EndlegiX (X=3, 6, 12) * South	1.11	1.53***	1.38***
	(0.15)	(0.15)	(0.11)
Overdispersion	0.62***	0.62***	0.62***
	(0.03)	(0.03)	(0.03)
Constant	0.32***	0.33***	0.33***
	(0.10)	(0.10)	(0.10)
Observations	3,393	3,393	3,393
Loglikelihood	-7370	-7367	-7368
χ^2	421.8	427.8	425.9
AIC	14768.723	14762.72	14764.631

*Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

Table 10. Test of the impact of Voters turnout on the PLC (sample limited to the 15 RSOs)

Dependent variable: Monthly counts of regional laws			
Cycle length	3 months	6 months	12 months
Model	(19)	(20)	(21)
Startlegi15	0.74***	0.77***	0.77***
	(0.03)	(0.03)	(0.04)
EndlegiX (X=3, 6, 12)	0.87*	1.20***	1.15***
	(0.07)	(0.07)	(0.06)
Budget	2.42***	2.43***	2.45***
	(0.14)	(0.14)	(0.14)
Early	0.66***	0.61***	0.58***
	(0.07)	(0.06)	(0.06)
Majm	1.64	1.36	1.28
	(0.90)	(0.75)	(0.70)
Elderly population (65 and more)	1.04***	1.04***	1.04***
	(0.01)	(0.01)	(0.01)
Urbanization level	1.39***	1.37***	1.37***
	(0.15)	(0.15)	(0.15)
Transfer dependency	1.15***	1.15***	1.15***
	(0.06)	(0.06)	(0.06)
lturnout	1.00	1.00**	1.00**
	(0.00)	(0.00)	(0.00)
Overdispersion	0.62***	0.62***	0.62***
	(0.03)	(0.03)	(0.03)
Constant	0.84	0.96	1.01
	(0.35)	(0.40)	(0.42)
Observations	3,180	3,180	3,180
Loglikelihood	-6978	-6974	-6975
χ^2	353.2	360.1	358.7
AIC	13977.452	13970.557	13971.983

*Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

Table 11. Test of the impact of Ideology on the PLC
(sample limited to the 15 RSOs)

Dependent variable: Monthly counts of regional laws			
Cycle length	3 months	6 months	12 months
Model	(22)	(23)	(24)
Startlegi15	0.73***	0.76***	0.76***
	(0.03)	(0.03)	(0.03)
Budget	2.44***	2.45***	2.46***
	(0.14)	(0.14)	(0.14)
Early	0.67***	0.63***	0.61***
	(0.07)	(0.06)	(0.06)
Majm	2.13**	2.01**	2.01**
	(0.66)	(0.62)	(0.62)
Elderly population (65 and more)	1.04***	1.03***	1.03***
	(0.01)	(0.01)	(0.01)
Urbanization level	1.37***	1.37***	1.37***
	(0.15)	(0.15)	(0.15)
Transfer dependency	1.19***	1.19***	1.19***
	(0.06)	(0.06)	(0.06)
1. EndlegiX (X=3, 6, 12) * Left	0.88	1.23***	1.18***
	(0.09)	(0.09)	(0.07)
1. EndlegiX (X=3, 6, 12) * Right	0.87	1.10	1.06
	(0.11)	(0.10)	(0.07)
Overdispersion	0.64***	0.64***	0.64***
	(0.03)	(0.03)	(0.03)
Constant	0.70	0.72	0.71
	(0.20)	(0.20)	(0.20)
Observations	3,392	3,392	3,392
Loglikelihood	-7395	-7392	-7392
χ^2	369.6	376.4	375.8
AIC	14813.865	14807.043	14807.613

*Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

Table 12. Test of the impact of the Alignment effect on the PLC (sample limited to the 15 RSOs)

Dependent variable: Monthly counts of regional laws			
Cycle length	3 months	6 months	12 months
Model	(25)	(26)	(27)
Startlegi15	0.73***	0.76***	0.76***
	(0.03)	(0.03)	(0.03)
Budget	2.44***	2.45***	2.46***
	(0.14)	(0.14)	(0.14)
Early	0.67***	0.62***	0.59***
	(0.07)	(0.06)	(0.06)
Majm	2.13**	2.02**	2.02**
	(0.66)	(0.62)	(0.62)
Elderly population (65 and more)	1.04***	1.03***	1.03***
	(0.01)	(0.01)	(0.01)
Urbanization level	1.38***	1.37***	1.38***
	(0.15)	(0.15)	(0.15)
Transfer dependency	1.19***	1.19***	1.20***
	(0.06)	(0.06)	(0.06)
1. EndlegiX (X=3, 6, 12) * Non-Aligned	0.89	1.16*	1.15**
	(0.10)	(0.09)	(0.07)
1. EndlegiX (X=3, 6, 12) * Aligned	0.86	1.20**	1.13*
	(0.10)	(0.10)	(0.07)
Overdispersion	0.64***	0.64***	0.64***
	(0.03)	(0.03)	(0.03)
Constant	0.69	0.71	0.70
	(0.19)	(0.20)	(0.20)
Observations	3393	3393	3393
Loglikelihood	-7396	-7393	-7394
χ^2	370.5	375.8	374.6
AIC	14815.955	14810.676	14811.841

*Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

Table 13. Test of the impact of the swing nature of the regional government on the PLC (sample limited to the 15 RSOs)

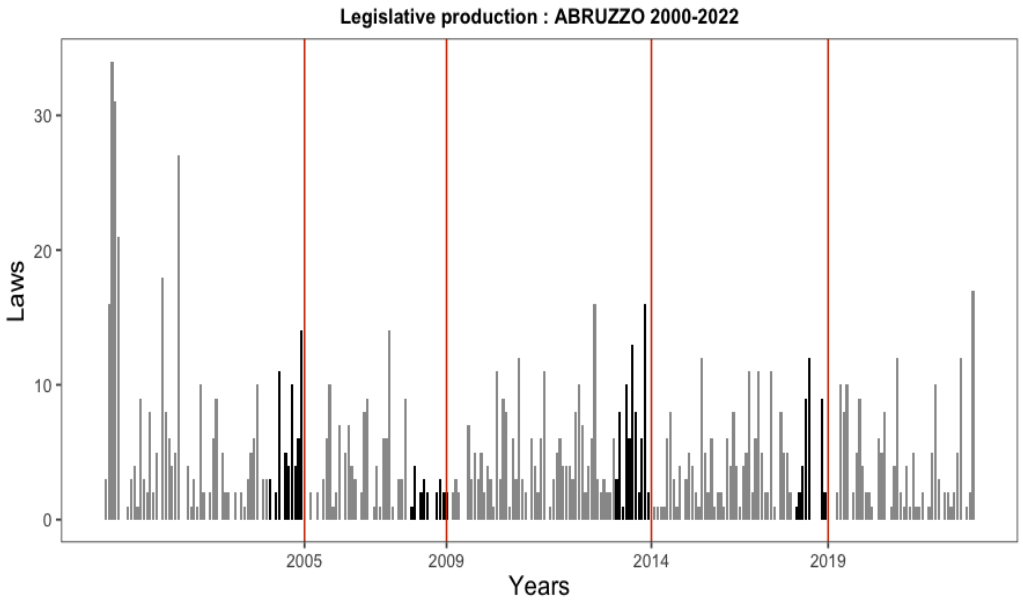
Dependent variable: Monthly counts of regional laws			
Cycle length	3 months	6 months	12 months
Model	(28)	(29)	(30)
Startlegi15	0.74***	0.76***	0.77***
	(0.03)	(0.03)	(0.03)
Budget	2.46***	2.46***	2.47***
	(0.14)	(0.14)	(0.14)
Early	0.66***	0.62***	0.60***
	(0.07)	(0.06)	(0.06)
Majm	2.01**	1.90**	1.89**
	(0.62)	(0.59)	(0.58)
Elderly population (65 and more)	1.03***	1.03***	1.03***
	(0.01)	(0.01)	(0.01)
Urbanization level	1.50***	1.51***	1.50***
	(0.18)	(0.18)	(0.18)
Transfer dependency	1.29***	1.30***	1.29***
	(0.07)	(0.07)	(0.07)
1.endlegi3#0b.stability1	0.90	1.22**	1.20**
	(0.12)	(0.11)	(0.09)
1.endlegi3#1.stability1	0.75*	0.99	0.87
	(0.12)	(0.11)	(0.07)
1.endlegi3#2.stability1	0.80*	1.11	1.12
	(0.11)	(0.11)	(0.09)
Overdispersion	0.63***	0.63***	0.63***
	(0.03)	(0.03)	(0.03)
Constant	0.85	0.87	0.86
	(0.24)	(0.25)	(0.24)
Observations	3,393	3,393	3,393
Loglikelihood	-7382	-7379	-7380
χ^2	397.7	404.7	403.3
AIC	14792.766	14785.77	14787.199

*Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

Table 14. Test of the impact of Voters turnout on the PLC
(sample limited to the 15 RSOs)

Dependent variable: Monthly counts of regional laws			
Cycle length	3 months	6 months	12 months
Model	(31)	(32)	(33)
Startlegi15	0.74***	0.77***	0.77***
	(0.03)	(0.03)	(0.04)
EndlegiX (X=3, 6, 12)	0.87*	1.20***	1.15***
	(0.07)	(0.07)	(0.06)
Budget	2.42***	2.43***	2.45***
	(0.14)	(0.14)	(0.14)
Early	0.66***	0.61***	0.58***
	(0.07)	(0.06)	(0.06)
Majm	1.64	1.36	1.28
	(0.90)	(0.75)	(0.70)
Elderly population (65 and more)	1.04***	1.04***	1.04***
	(0.01)	(0.01)	(0.01)
Urbanization level	1.39***	1.37***	1.37***
	(0.15)	(0.15)	(0.15)
Transfer dependency	1.15***	1.15***	1.15***
	(0.06)	(0.06)	(0.06)
lturnout	1.00	1.00**	1.00**
	(0.00)	(0.00)	(0.00)
Overdispersion	0.62***	0.62***	0.62***
	(0.03)	(0.03)	(0.03)
Constant	0.84	0.96	1.01
	(0.35)	(0.40)	(0.42)
Observations	3,180	3,180	3,180
Loglikelihood	-6978	-6974	-6975
χ^2	353.2	360.1	358.7
AIC	13977.452	13970.557	13971.983

*Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1*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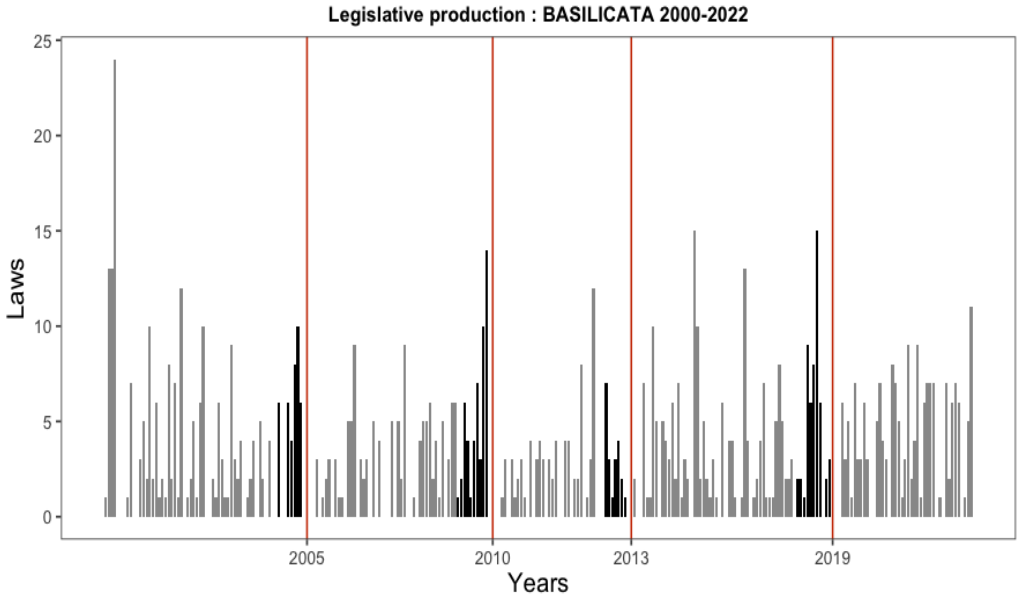
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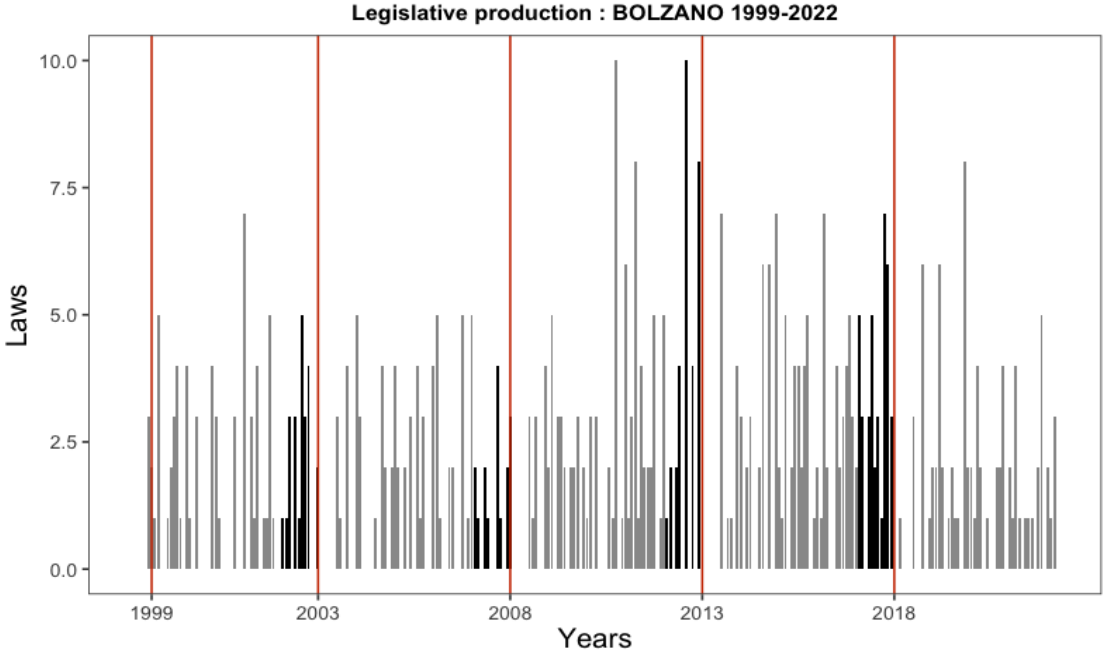
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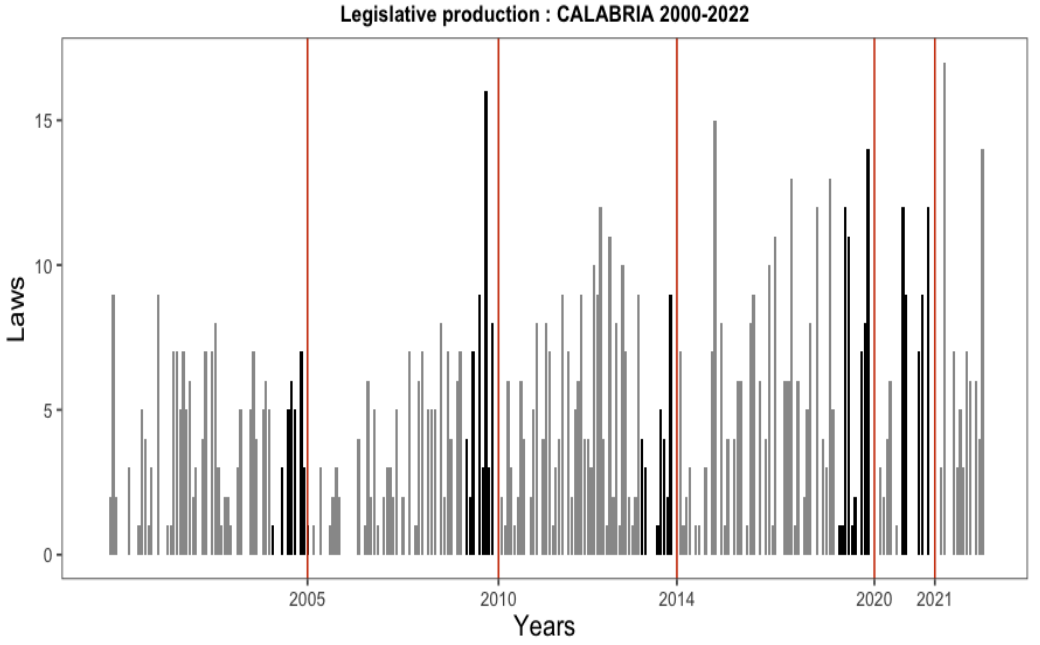
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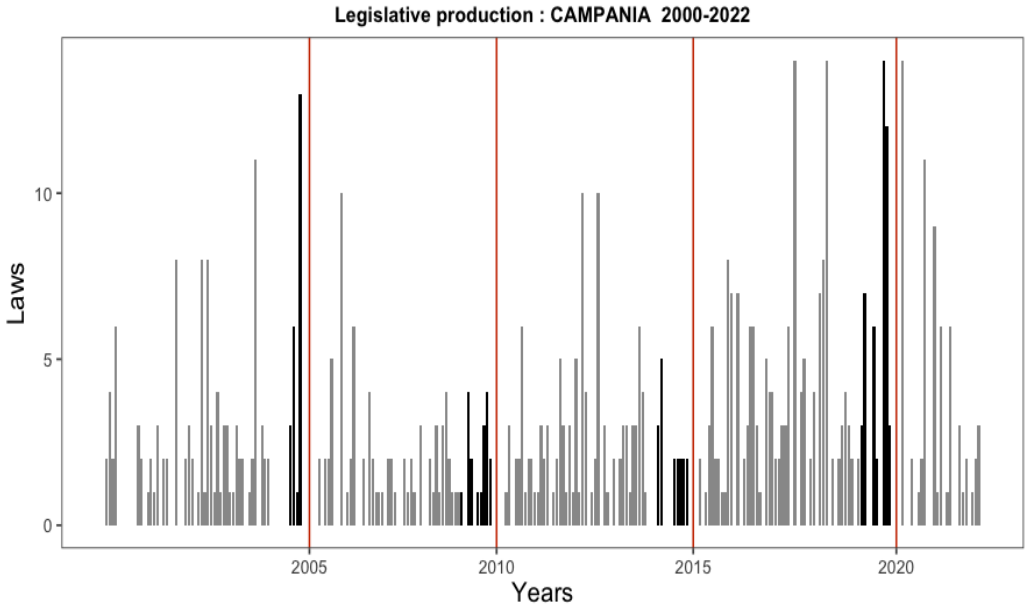
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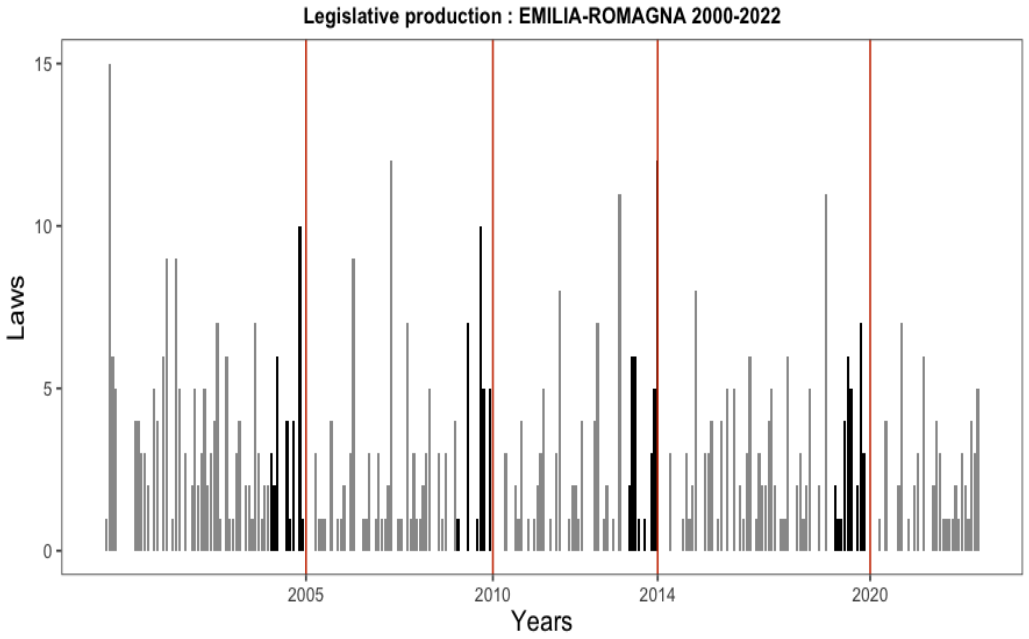
Years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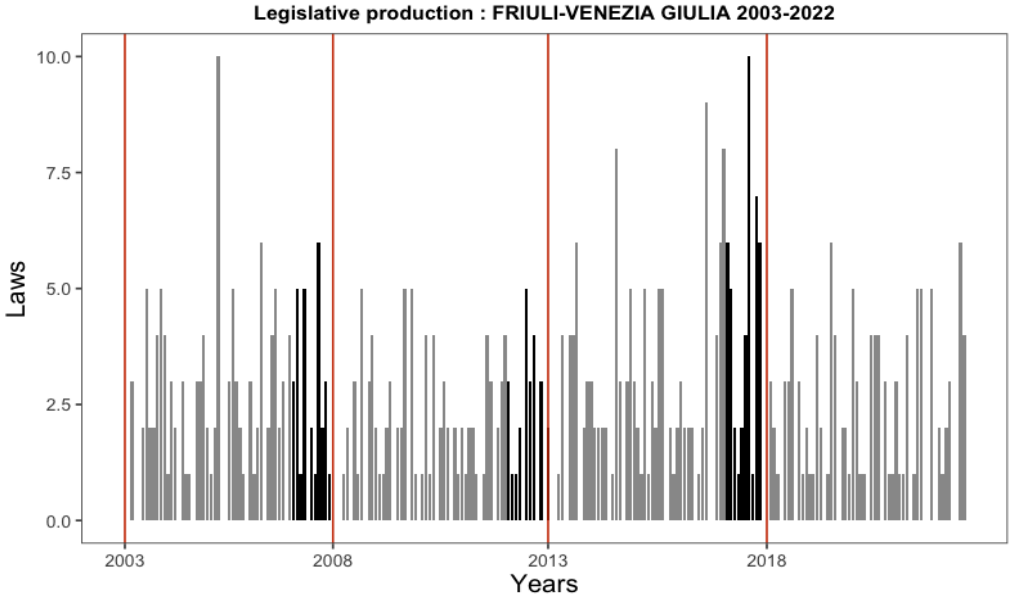
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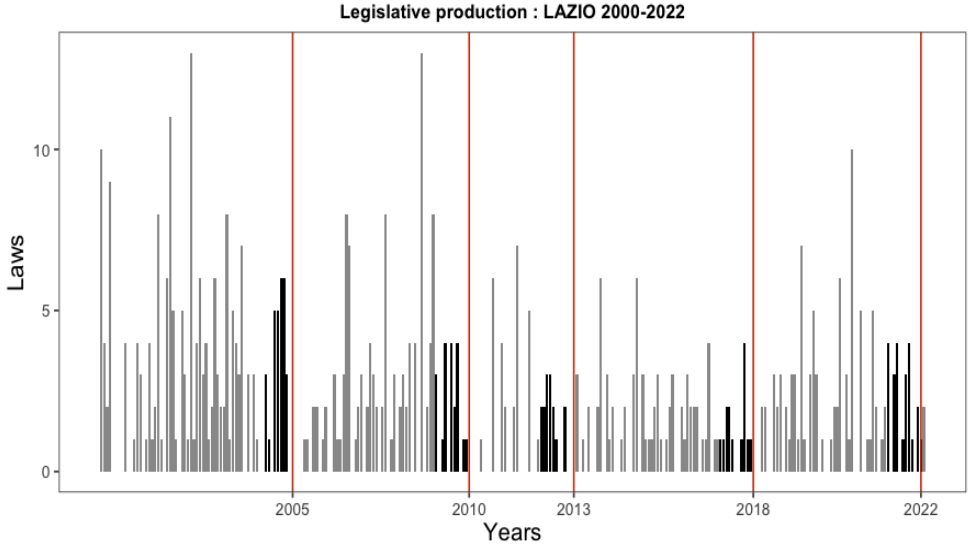
Years


Legislative production : LAZIO 2000-2022
Laws
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2005
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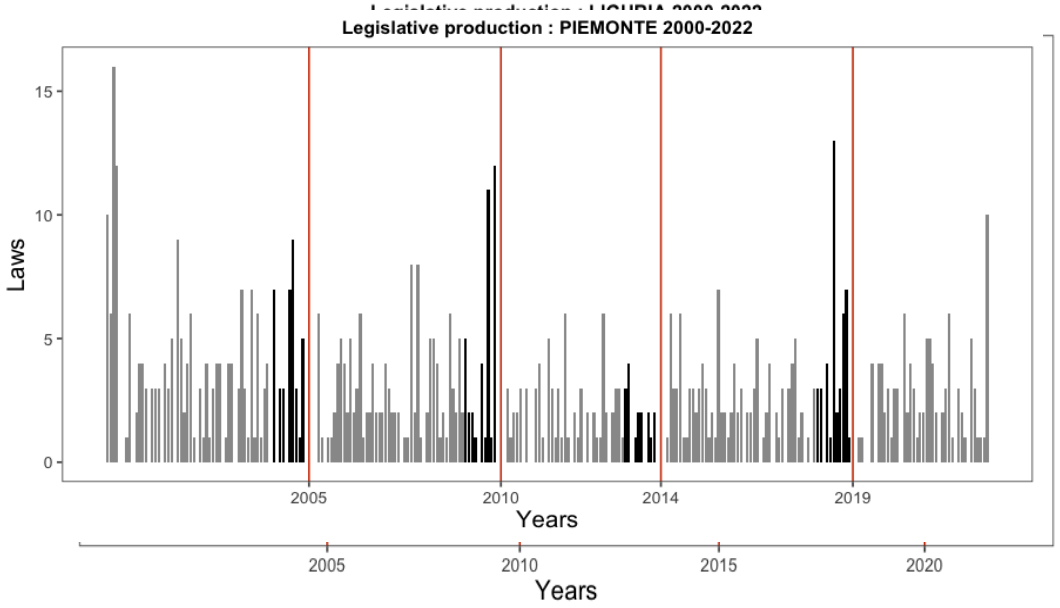
2013
2018
2022
Years


Legislative production : PIEMONTE 2000-2022
Laws
Years
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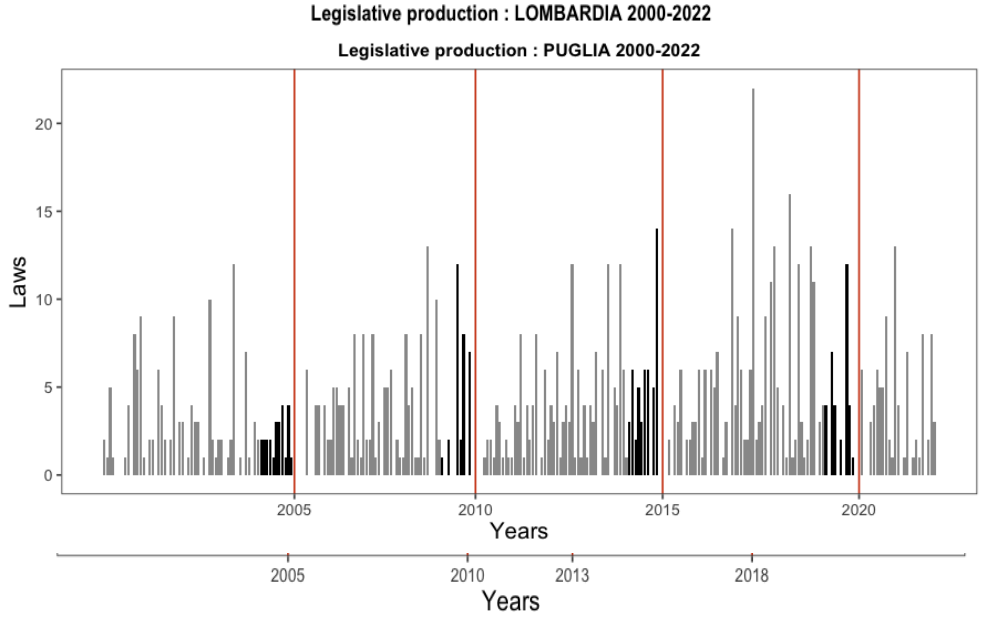
2020


Legislative production : LOMBARDIA 2000-2022
Legislative production : PUGLIA 2000-2022
Laws
Years
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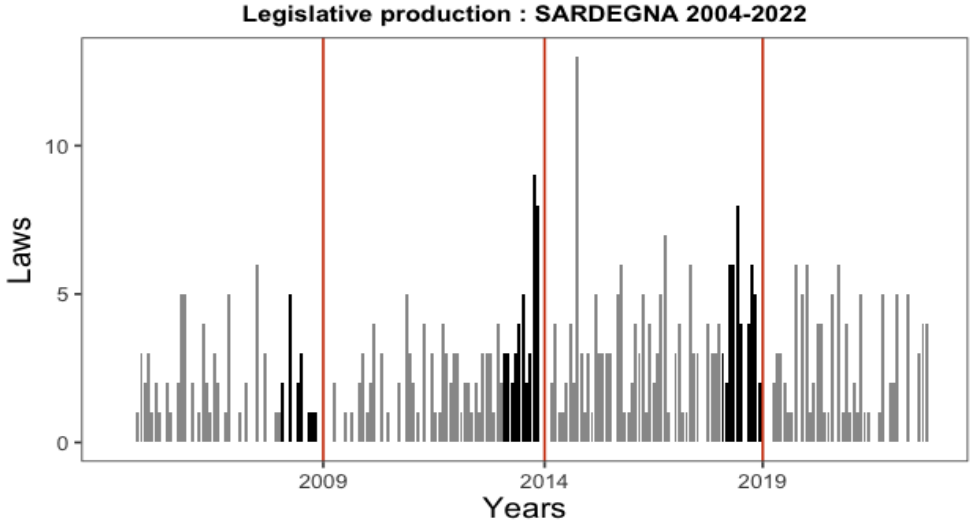
Legislative production : SARDEGNA 2004-2022
Laws
Years
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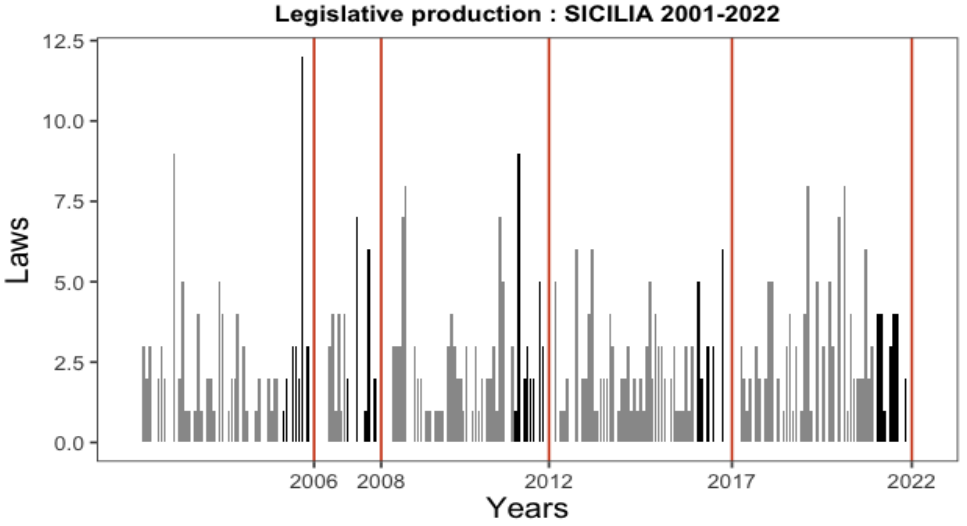
Legislative production : SICILIA 2001-2022
Laws
Years
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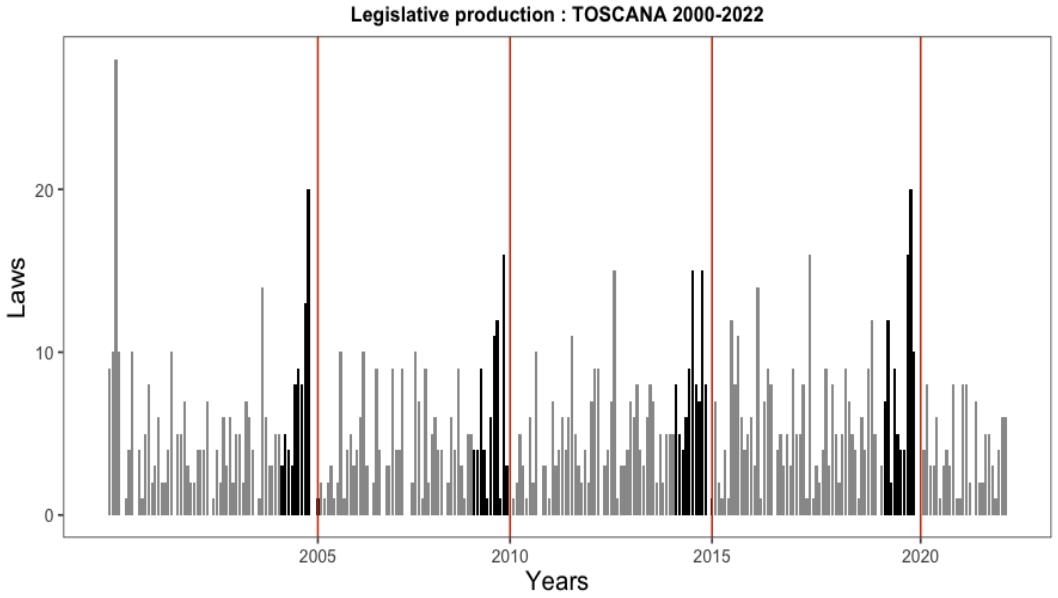
2012
2017
2022


Legislative production : TOSCANA 2000-2022
Laws
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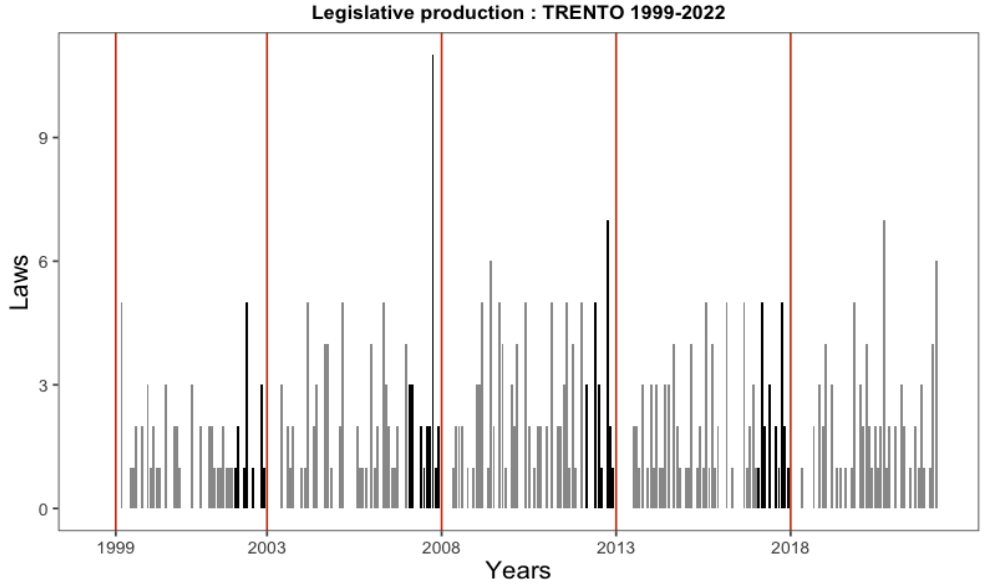
Years


Legislative production : TRENTO 1999-2022
Laws
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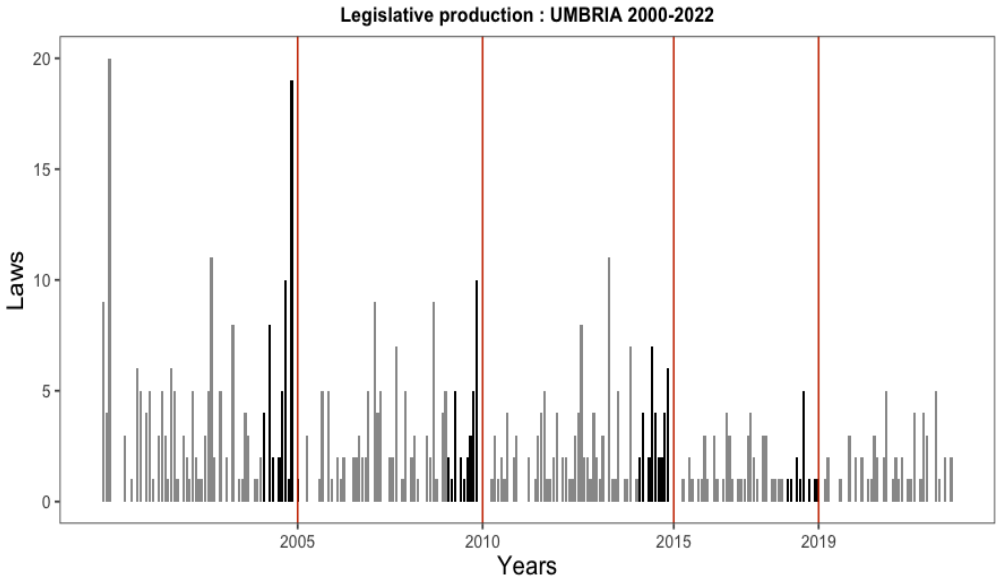
Years


Legislative production : UMBRIA 2000-2022
Laws
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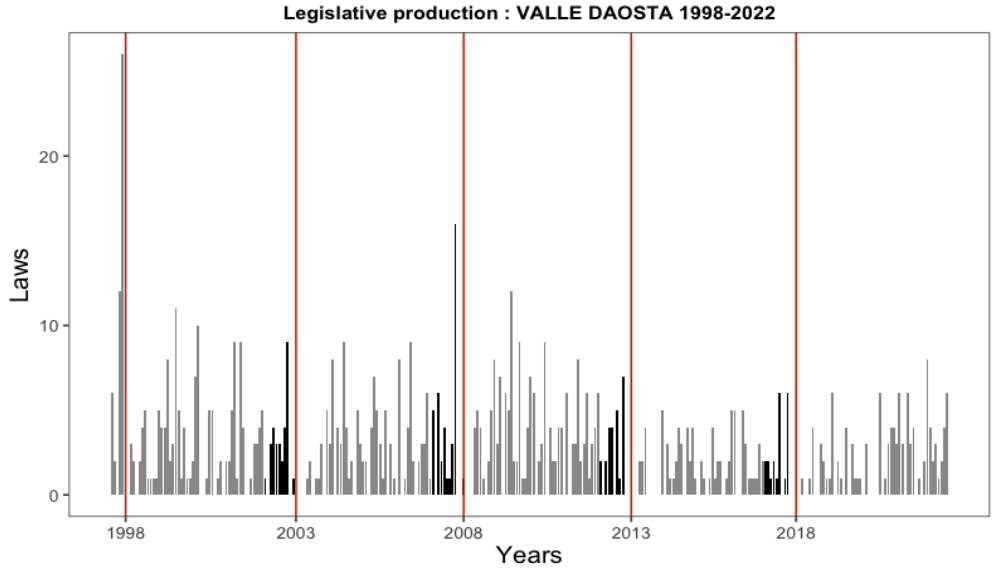
Years


Legislative production : VALLE DAOSTA 1998-2022
Laws
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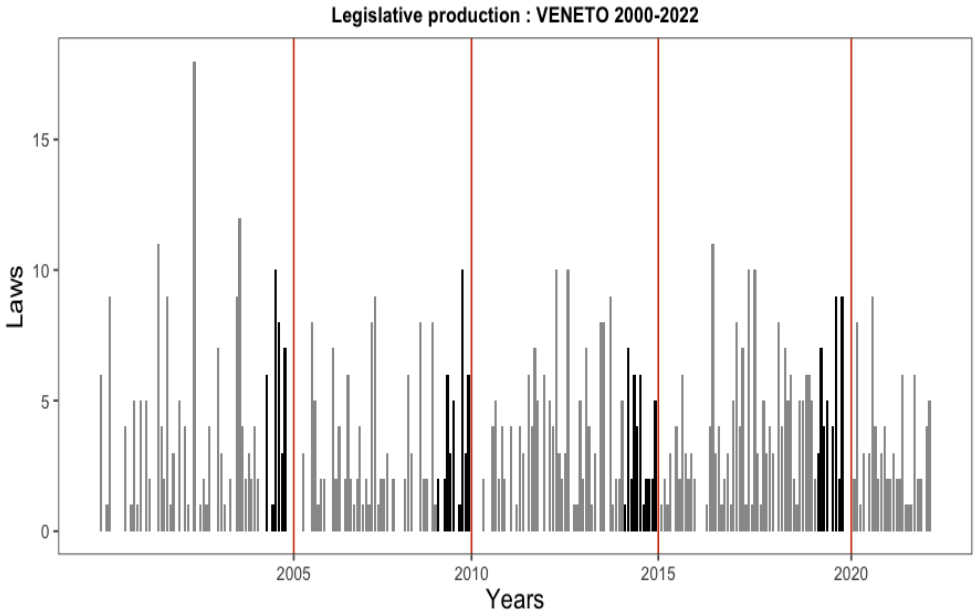
Years


Legislative production : VENETO 2000-2022
Laws
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2020
Years

Figure 2. Summary statistics, Transfer Dependency