



WORKING PAPER 2016-01-ccr

Updated Paper N° 2013-02-ccr

formerly titled « The Dual Political Legislation Cycle in France »



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Legislative Cycles in Semipresidential Systems

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May 12, 2016

Abstract

The Political Legislation Cycle theory predicts a peak of legislative production in the pre-electoral period, when the legislator focuses on voters' welfare to be reelected. This paper tests the theory on the French semipresidential system, characterized by direct election of both the executive and the legislature. We use a dataset that encompasses all the approved voted legislation in France from 1959 to 2012 at a monthly rate, and find a dual cycle of the production of laws, connected to both the presidential and the legislative elections.

Word count:

Keywords: Political Legislation Cycle - Legislative production - Economic theory of legislation - Semipresidential government system - Hierarchical Poisson regression

JEL Classification: D72, C49, H61, H62.

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1 Introduction

The process of policy-making requires the approval of legislative acts to become effective. Any decision, from a declaration of war to a cut in a budget item, implies the use of a legislative instrument. The special interest group theory of government has long ago shown that, as a consequence of the redistribution of property rights, all laws are redistributive by nature, even when they are not directly related to the budget policy¹. This feature creates a link with another strand of literature based on the redistributive characteristics of policy decisions, namely the Political Budget Cycle literature, which claims that fiscal policies are sensitive to upcoming elections, because incumbents concentrate tax and spending decisions at the end of a legislature in order to increase their probability of being re-elected. Combining these two arguments, it follows that elections should affect the process of legislative production too. Intuitively, we should observe a peak of production of legislation towards the end of the mandate of either the executive or the legislative branch of government - or both. Such manipulation is the basis of the Political Legislation Cycle (PLC, ?).

By analyzing the French legislative production over more than half a century, this paper brings three main contributions. First, the French context allows testing the effects of at least two types of elections on the legislative production, i.e., the potential presence of a dual cycle. The mix of presidentialism and parliamentarism that defines the French institutional framework implies that the presidential and the legislative elections set the pace of political life in a similar way as the Presidential and Congressional elections do in the United States. As the two elections were held at different times and intervals before 2002, a dual cycle may occur: one connected to the legislative elections, as in the standard PLC literature, and a second cycle related to the presidential elections. Furthermore, we explore the impact of the constitutional reform of 2000 that synchronized the two electoral events.

Second, a direct consequence of the non-simultaneity of the presidential and legislative elections is the possibility to reach an odd situation, the so-called *cohabitation*, where the President and the prime minister are from two opposite political parties. This results in a sort of divided government or 'two-headed executive' (??). This situation occurred in three different occasions. The constitutional reform of 2000, which reduced the length of the presidential mandate from 7 to 5 years, effectively synchronized the presidential and the legislative elections, which started to be held in the same period since 2002. A *cohabitation* should thus become much less likely (although in principle not impossible). Our analysis allows to verify the impact of situations of *cohabitation* (and of the reform that made it unlikely to occur again) on legislative production and cycles.

Finally, by testing the PLC on a semipresidential system, this paper attempts to verify the

¹The economic theory of legislation (???) postulates that any law benefits a group of voters at the expense of all the others, even laws that are far from being explicitly related to finance or economics. To exemplify this point, the French Parliament voted a bill in 2010 making compulsory the installation of a smoke detector in every home. Behind the will to reduce the number of deaths due to fire, this law also proceeds to a transfer of wealth from the house owners to the smoke detector producers. If laws did not produce such effects, there would not be so many lobbyists in the neighbourhood of the parliaments.

generality of the PLC theory. Only a few cases have been studied so far, mainly based on Italian legislative data (??); more empirical evidence needs to be provided to have a better understanding of this phenomenon. Furthermore, ? shows that the French and the Italian institutional frameworks are at odds in matters of government’s discretion, with a rather strong executive branch with respect to the legislative in France, and the opposite situation in Italy. Because of these diametrically opposite setups, finding a similar pattern of legislative production consistent with the PLC theory also in the French case would strengthen the generality of the PLC theory.

To explore the French legislative production at the light of the PLC theory, we analyze a newly assembled dataset, which covers the first thirteen legislatures of the Vth Republic of France, from 1959 to 2012, on a monthly basis, providing a total of 639 periods. We focus on the production of legislation approved by the Parliament. Exploiting a hierarchical Poisson model, the results reveal the existence of a dual cycle of the production of laws in France, generated by both the presidential and the legislative elections. The President does not have a direct impact on the production of laws; rather, he relies on the government for that. This is consistent with the other finding that *cohabitation* does not quantitatively impact the legislative production. Lastly, the synchronization of the presidential and legislative elections merged the two cycles into one of greater magnitude equivalent to sum of the two.

The rest of the paper is organized as follows. Section 2 reviews the related literature. Section 3 briefly describes the French institutional context. Section 4 provides more details about the legislative process and presents the empirical hypotheses. Section 5 discusses the variables taken into account in the empirical analysis, which is provided in Section 6. Section 7 concludes.

2 Related Literature and Theoretical Background

? proposed the first conceptualization of the PLC. They consider the level of legislative ‘effort’ exerted by the different parties of a government coalition, a high effort being associated with a large number of passed bills. In periods free from electoral constraints, parties do not have sufficient incentives to compete for votes and collude in a rent-seeking oriented cartel. Implicitly they agree on a low ‘legislative effort’. As the election approaches, each member of the coalition has an incentive to break the cartel in order to gather a maximum of suffrages. This triggers the start of a competition among the coalition parties, leading to a high legislative effort and thus to a peak of legislative production in the pre-electoral period. A cycle emerges in the production of laws, following the same pattern as in the political budget cycle. The model provides further empirical restrictions, such as the presence of a peak of legislative production before the election only if the election is held at the expected date; and an increase of the magnitude of the cycle as the number of parties in the government coalition increases.

? extend this analysis, focusing not only on the timing of legislation production, but also on the choice of the legislative tools used by the government-legislator. In the line of ?, the government faces two types of voters: unorganized voters and pressure groups. To achieve its reelection, the government has two kinds of tools at its disposal: laws and decrees. Laws are assumed

to be common knowledge for all voters; on the other hand, only pressure groups are aware of the production of decrees. Another source of information asymmetry is the competence of the government, which is only self-observed. The resolution of the model implies that, in equilibrium, the government tends to produce more decrees in the first part of the mandate, favoring the interests of pressure groups in order to signal its competence and to ensure fundraising for the upcoming election. Then, in the second part of the mandate, the government focuses on the production of laws that are visible to all voters. Reelection is conditioned to the supply of a critical utility level to the voters. These two driving forces lead to the creation of two opposite cycles, with a peak of production of decrees at the beginning of the government mandate, and a peak of production of laws towards the end of the legislature. As we shall see below, the hypothesis underlying this theoretical model are met in the French case: the government has a perfect control of the legislative agenda and control the timing of the legislative process, allowing it to choose the type of legislative act to implement.

When tested on Italian data, ? find evidence of such opposite cycles, giving strong support to the PLC theory. With a different empirical model, ? point out a legislation cycle in the production of laws related to transfer expenditures, generated by legislative elections in the Czech Republic. In the vein of the PLC theory, ? observes such pattern at the European Parliament too, with a second parallel cycle being driven by the reallocation of the agenda power. Lastly, ? focus on the impact of staggered legislature in Germany and Japan. They show that the parliamentary activity of German Länders is also related to the electoral cycle of the other Länders.

Even if nothing in the theory limits the predictions to a parliamentary system, most of the empirical tests have analyzed the role of parties in parliamentarism legislatures. It would therefore be interesting to apply the model on a sample where the executive branch is institutionally more relevant, such as France's semipresidential system. Several attempts to model the French legislative production have been proposed (for instance ? and ?), but none has ever considered the conditioning role of elections. This paper aims at filling this gap, in the light of the PLC theoretical framework.

3 The French Institutional Context

The French Vth Republic was born in 1958 in the chaotic context of the Algerian crisis. The parliamentary system of the IVth Republic was plagued by parties struggles that resulted in government instability. The emergency of the situation and the institutional inability to provide a solution to Algeria's fight for independence lead the Parliament to allow General De Gaulle to write a new constitution. The resulting semipresidential system² makes France a unique institutional case (?).

The President is the key figure of the political system, even more so since 1962 with the election of the President via direct universal suffrage. Unlike in the United States, there is no limit to the

²'[...] a mix of a popularly elected and powerful presidency with a prime minister heading a cabinet subject to assembly confidence' (? , p.323). Before 1962, the President was elected by indirect suffrage.

number of mandates for the President. He appoints (and *de facto* can dismiss) the Prime Minister, who is accountable before the *Assemblée Nationale*, i.e. the legislative branch³. The President also has the power to dissolve the National Assembly, resulting in an early call of legislative elections.

The French Parliament is known as a 'weak legislature', dominated by the government (??). To avoid the instability of the IVth Republic, deputies are elected in a two-round majority system that limits the number of parties composing the National Assembly. This also prevents the creation of momentary and unstable coalitions between antagonist parties that may force the government to resign. Even when a single party obtains the majority of the seats (which is a common set up), a coalition is formed with the traditional allies of this party. For instance, historically, the successive center-right parties have always supported right-party governments. As an evidence of this coalition stability, since 1958, only the first Pompidou government has been brought down by a motion of censure⁴. In this respect, the President's power to dissolve the National Assembly is also an important dissuasive factor. Finally, the opposition does not have important institutional tools to contest the government policy (?).

The French executive branch is a quite powerful one. Using a 'veto players' approach, ? shows that the French government benefits of the most important leeway to pursue its policy. According to the statistics provided by the National Assembly website (*www.assemblee – nationale.fr*), more than 90% of the passed bills are proposed by the government, showing that the government controls the legislative outcomes. Moreover, the government holds an important agenda setting power, which allows it to control the timing of the legislative process, as well as the agenda setting of the Parliament (?). This feature makes the French context perfectly in accordance with the theoretical framework of ?.

The Constitution does not *de jure* establish a hierarchical link between the President and the Prime Minister. Positively, the Prime Minister is under the authority of the President. In three occasions, however, the President has faced a Prime Minister from a party opposite to his own; this is the so-called *cohabitation*. Such a situation mainly arises due to a difference of length between the presidential mandate (7 years until 2002, 5 years thereafter) and the deputies' mandate (5 years). The lack of synchronicity between the two elections creates the possibility that legislative elections be won by a party opposite to that of the incumbent President, especially because the legislative elections were then considered as 'mid-term' elections (?). If his party loses the legislative elections, the President must select a Prime Minister of the winning party, who will form a government benefitting of a supporting majority in the National Assembly. The Prime Minister thus becomes *de facto* the head of the executive. On the other hand, when a newly elected President faces a hostile National Assembly, the tradition is to dissolve the chamber in order to get a new legislative majority.

The *cohabitation* theoretically imposes limits to the government activity, and thus can be

³The *Sénat*, which is the second room, is not taken into account in the present analysis, as the Constitution gives the final word to the National Assembly in case of disagreement (see ? for instance)

⁴The conflict within the majority concerned the project to adopt the universal direct suffrage for the election of the President.

thought as a form of divided government (??). To minimize these limits, a political party needs to win both elections. This suggests that a dual cycle may emerge, one coinciding with the presidential election, the other with the legislative one.

4 The Legislative Production

Our analysis exploits a newly assembled dataset, specifically built for the purpose of this analysis. A detailed description of the database is available in ?. It covers the period from the first effective month of parliamentary activity of the Vth Republic, namely in January 1959, to the end of the XIIIth legislature, in March 2012. The frequency of the data is monthly, which results in a total of 639 observations. This ensures a high heterogeneity of contexts, with left-wing majorities following right-wing ones, single-governing parties coming right after coalition governments, as well as dissolutions of the National Assembly by the President, equivalent to an early call of the legislative election (see Figure 1). Such dissolutions occurred on five occasions, making the length of a legislature to vary from 14 (the IIIrd legislature, 1967-1968) to 60 months, the natural duration. This feature is of particular interest, as the PLC theories foresee that a cycle should not occur if the election fails to be held at the expected time, since the government cannot change its legislative strategy before unanticipated elections. The heterogeneity of contexts, combined with the characteristics and the stability of the institutions, provides an ideal case for empirically testing the PLC.

Directly derived from the ? theoretical model, we aim to test two main hypotheses:

Hypothesis 1: ceteris paribus, the production of laws reaches a low point in the first months after the appointment of a new government and attains a peak in the last months of a legislature when the legislative elections are held at the expected time.

The second hypothesis makes use of a special feature of the semipresidential system of France. As expressed above, the political life is cadenced by two national elections, the legislative and the presidential ones. Consequently, a second cycle should emerge in the production of laws, associated with the presidential elections:

Hypothesis 2: ceteris paribus, the production of laws reaches a low point in the first months after presidential elections and reaches a peak in the last months of a presidency when presidential elections are held at the expected time.

For each month, the total number of legislative acts that require a vote in the *Assemblée Nationale*, namely laws and *ordonnances*, is reported in Figure 2. An *ordonnance* consists in a momentary delegation of power from the Parliament to the government, which writes the text and directly submits it to the vote of the *Assemblée Nationale*. Figure 2 depicts the monthly legislative production for the full sample; the vertical lines represent the legislative and the presidential elections. The pattern of production is highly volatile, ranging from 0 to 90 laws per month. The maximum production in a month occurred in the very first month of the Vth Republic, January 1959. All these laws were actually *ordonnances*, as the context imposed the promulgation in emergency of specific laws. A downward shift in the average production of laws takes place in

President	De Gaulle											
Legislature	1			2			3			4		
Government	Debré 1			Pompidou			Pompidou 3			Pompidou 4		
Year	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1968

President	Giscard d'Estaing											
Legislature	4			5			6					
Government	Chaban-Delmas			Messmer			Chirac			Barre 2		
Year	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1979

President	Mitterrand											
Legislature	6			7			8			9		
Government	Maurroy 1 & 2			Maurroy 3			Fabius			Rocard 1 & 2		
Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1990

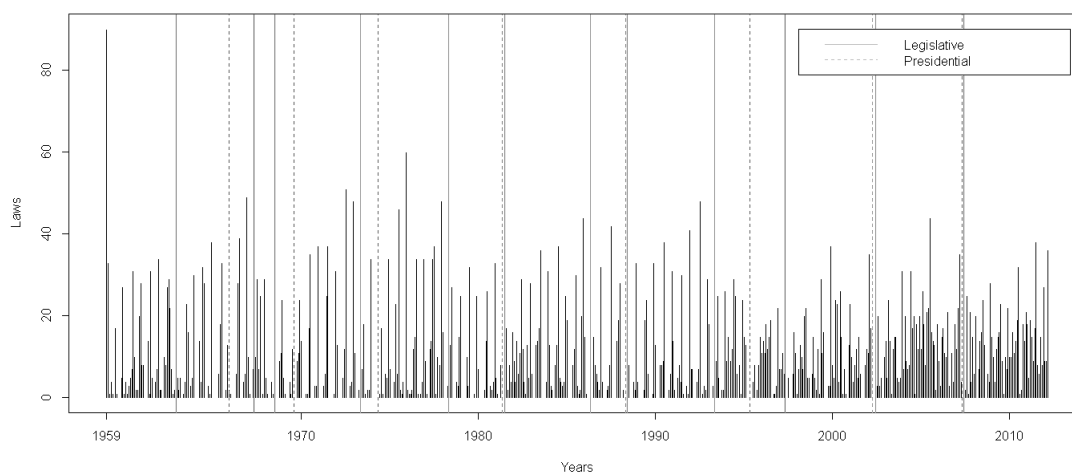
President	Chirac											
Legislature				10			11					
Government	Cresson			Balladur			Juppé 1 & 2			Jospin		
Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2001

President	Sarkozy											
Legislature				12			13					
Government	Raffarin 1 & 2			Raffarin 3			De Villepin			Fillon 3		
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012

Figure 1: Chronology of the Vth Republic

1995, when the parliamentary schedule shifted from two ordinary sessions per year (from October to December and from April to June) to a unique ordinary session (from October to June). Extraordinary sessions can be added to the ordinary sessions, when the political circumstances so require. Despite the name, such kind of session is quite common, as 60 extraordinary sessions have taken place between 1958 and 1995. Finally, the graph shows that the highest peaks of legislative production indeed occur towards the end of the legislatures, especially when the legislature lasts its natural length (for instance in 1967).

Figure 2: Monthly production of laws



Several reasons lead us to consider the total number of laws as the variable of interest⁵. First, as all laws are redistributive by nature (?), there is no reason to proceed to any selection of laws by ‘type’. Second, any disaggregation would require the evaluation of the analyst, inevitably involving discretion in the choice and application of the criteria, which would make the end results easily contestable⁶. And last, as suggested by ?, rejecting all the individually ‘insignificant’ legislation is not satisfactory, as such laws can turn out to have a significant impact when aggregated. Rejecting them as a whole would therefore be spurious. Furthermore, this paper limits the analysis to the cycle of approved *voted* legislation. Decrees are excluded from the sample because data about them are problematic. The point is that there are two types of decrees in France: ‘stand-alone decrees’ and ‘application decrees’. The latter are promulgated in order to specify the technical details of the voted laws. There is no way to sort the two types of decrees, except by proceeding to an individual check - a painstaking endeavor, since on average there are more than 230 decrees promulgated each month in the period under consideration. On the other hand, considering the total number of decrees would be spurious, since an increase in the number of voted laws implies an increase of decrees too, especially of the application type, thus opening the way to potentially misleading results.

⁵Transposition of European directives are however not taken into account.

⁶For instance, ? proposed a methodology for disentangling ‘important’ from ‘minor’ laws in the US. Reassessing Mayhew’s work with a different methodology, ? obtains different conclusions.

Figure 3 shows the production of laws per government according to the elapsed time since its appointment. ‘P’ and ‘L’ indicate respectively presidential and legislative elections held at the end of the government, when expected. Even if 34 governments have been officially in power over the sample, only 27 are considered in the analysis. The reason is that some governments lasted less than a month, in the in-between the presidential and the legislative elections, but remained in power in the same and with the same people format after the legislative election. Although officially these are reported as two distinct governments, we consider them as just one. The line on each square represents a simple regression of the total number of laws on the months elapsed since appointment of the government. The PLC theory suggests that we should observe a peak of legislative production in the period before a planned election. Considering both legislative and presidential elections, such a situation occurs 12 times (government Pompidou 2, Pompidou 3, Messmer 1, Barre 2, Barre 3, Fabius, Chirac 2, Bérégovoy, Balladur, Jospin, De Villepin, and Fillon 3). In 4 cases, an unambiguous positive trend is observable, while the regression line is quasi-horizontal in 5 cases. Three cases are left that feature a negative relationship, namely the Messmer 1, the Bérégovoy and the De Villepin governments. These three governments are indeed peculiar. The Messmer 1 government lasted only a few months between July 1972 and March 1973. The Bérégovoy government, in place between April 1992 and March 1993, was not supported by an absolute majority in the National Assembly. The last one is the De Villepin government, which lasted two years between 2005 and 2007. During this period, an overwhelming movement of popular protest opposed a proposed labor market reform, effectively paralyzing the entire activity of the government; eventually, internal squabbles between the prime minister (and future President) Nicolas Sarkozy, then Minister of the Interior, reinforced the stalemate (?). All in all, however, neither descriptive statistics nor simple univariate regressions are enough to reveal in a clear-cut way whether the French legislative production is sensitive to electoral concerns. A test of the full PLC theory is required.

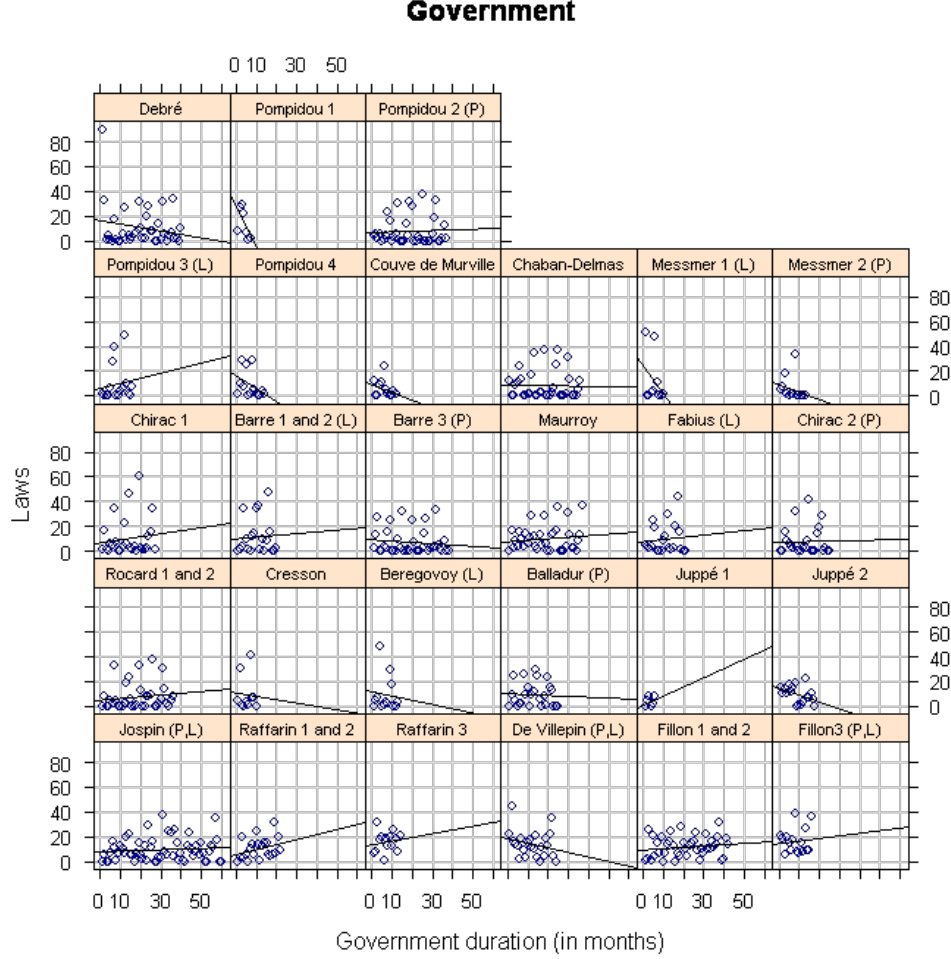
5 Description of the Variables

To respect the *ceteris paribus* conditions, two subsets of covariates are considered in the empirical model, as shown in Table 1: the PLC variables, directly derived from the theoretical model, and a set of controlling factors.

As for the first subset of covariates, the PLC theory predicts a low point of legislative production during the first months of activity of a government, and a peak of activity in the months preceding the elections, provided that the election time is known in advance. We use two dummies to check for this conditions: first, *STARTGOV* takes the value of 1 for the first six⁷ months of a new government and 0 otherwise. A negative sign is expected, as each government is expected to focus on the production of decrees to the detriment of voted legislation during this period. To capture the impact of legislative elections on the legislative strategy of the government, the variable

⁷In the following analysis, all the variables aiming at capturing the PLC are set to six months. We also implemented a twelve month period, without substantial impacts on the results. We however present the six-month specification results as it outperforms the twelve-month specification according to the AIC. Results with the latter specification are available upon request.

Figure 3: Legislative production per government



ENDLEGISL is introduced. This variable indicates the last six months of a legislature, when the end is known in advance. The natural end of the legislature, together with the natural end of the presidential mandate, represents the time horizon of the government. A dismissal of the government during the legislature is assumed to be unexpected and thus it is not taken into account, as the theory suggests. Two more variables are introduced in the model to check whether the semipresidential nature of the French institutions generates a dual cycle: *STARTPRES* is a dummy variable that captures the effect of the first six months of a newly elected President; *ENDPRES* takes the value 1 for the last six month of a presidential reaching its natural limit. If a dual cycle exists, the presidential cycle should affect the production of laws in the same way as the standard parliamentary legislative cycle.

The set of control variables proxies for phenomena that may have an impact on legislative production. Table 2 summarises the expected sign for each covariate. The first is derived from the war of attrition literature (?). *HM* measures the homogeneity of the governing coalition computed as $HM = \sum_{g=1}^G f_{gt}^2$, where f_{gt} is the share of seats held by each member of the governing coalition

Table 1: Summary statistics

	Observations	Mean	Median	Min	Max
LAWS	639	9.668	5	0	90
HM	639	0.33	0.35	0.12	0.54
HOLIDAY	639	0.323	0	0	1
COHAB	639	0.175	0	0	1
SESSION	639	0.502	1	0	1
REFORM	639	0.309	0	0	1
EXTRA	639	0.125	0	0	1
GDP	616	0.707	0.70	-7.6	11.40
NMIN	639	35.97	37	21	50
EXPPARL	639	5.806	5.964	2.20	9.51
EXPMIN	639	29.21	28.03	1	58.48
EXPPRIME	639	61.21	56.00	1	152
MEANAGE	639	51.48	51.74	48.67	55.36
ENA	639	6.365	6	1	14

in the *Assemblée Nationale*. A higher value indicates a higher homogeneity of the governing coalition, and if a single party has the majority the indicator is equal to 1. In this case the government is supposed to have more leeway to manipulate legislative outcomes. *HM* is therefore expected to be positively correlated with the production of legislation. *HOLIDAY* denotes the months during which no parliamentary session was held. The expected sign is unequivocally negative. *COHAB* captures the effect of the *cohabitation* on the production of laws. In line with the veto-players model, the greater tensions that characterize the activity of a divided government are expected to exert a negative impact on the production of laws. An alternative interpretation is that, in this situation, the Prime Minister receives the support of the National Assembly needed to implement his/her policy while the President does not have powerful means to oppose it⁸. If so, the *cohabitation* should not have an impact on the legislation production⁹. Our approach thus has the merit to provide a quantitative answer to this old political science debate (see ? for instance). In the same manner, *SESSION* takes the value 1 for the first half of the year, in order to control both for potential difference in the parliamentary sessions and seasonality. *REFORM* is a dummy variable taking the value 1 after September 1995, when, as explained in section 4, a reform changed the pace of these parliamentary session. *EXTRA* is a third dummy taking the value 1 for months during which an extraordinary session took place. As these sessions are used when the amount of parliamentary work requires extra-time, we expect a positive effect on the legislative output. To better represent the context in which the government operates, a macroeconomic indicator is also inserted into the model, to control for the impulse that the state of the economy gives to the legislative production. To this end we introduce the covariate *GDP*, which is the lagged quarterly GDP growth rate. A high GDP growth rate, synonym of good economic conditions, is expected to reduce the pressure on the government to introduce reforms and therefore the necessity to legislate. Conversely, a low or negative growth rate should urge the government to find solutions, increasing the legislative production. The lag is set to 8 months because it corresponds to the average length

⁸To this respect, the most famous example of technical presidential opposition to the government policy occurred in 1986, when President Mitterrand (left wing) refused to sign three *ordonnances* supported by the Prime Minister Chirac (right wing), making use of a point of the Constitution subject to interpretation.

⁹In the specific case of *cohabitation*, the government seeks 'election' at the presidential election, since the president is from the opposite political wing.

between the deposit of project of law and its vote.

Concerning the characteristics of the government *per se*, *NMIN* reports the number of ministers composing the government¹⁰. A larger number of ministers is more likely to imply an increase of legislative production, as each minister presumably aims at signalling his/her competence by fostering legislative initiatives. Other controls are suggested by the ‘quality of politicians’ literature (??). The experience of the government is proxied through four different variables. *EXPPARL* and *EXPMIN* are the average length (in years) spent by the ministers respectively on the benches of the Parliament (both *Assemblée Nationale* and *Sénat*) and in previous governments. A high level of experience implies a better knowledge of the various features of the legislative process, which should make the approval of laws easier. The parliamentary experience also implies the personal successes of government members in electoral contests, and so a better valence, since elections play the role of filters of competence (?). *EXPPRIME* is the experience that the prime minister gained during previous and present governments. As the leader of the executive branch, experience seems crucial to successfully implement policies. In line with the two previous variables, we expect a positive impact of *EXPPRIME* on the production of laws. The fourth experience variable is *MEANAGE*, which represents the average age of the members of the government. The impact of this variable is ambiguous. On the one hand, age can be interpreted as an overall proxy for experience; if so, its impact on legislative production should be positive. On the other hand, age can be negatively correlated with legislative activism, if we consider that motivation and energy decreases over the years while the attachment to the status quo possibly increases. *MEANAGE* and *EXPARL* are only mildly correlated ($\rho = 0.49$), so both can be considered together. Finally, *ENA* counts the number of ministers who graduated from the prestigious *École Nationale d’Administration*. The omnipresence of the énarques in the highest levels of the public administration led to the creation of the neologism *énarchie* applied to French politics. It is interesting to see what is their impact on the production of laws, if impact there is.

6 Empirical Analysis

The empirical model needs to take into account two specific issues. First, the outcome variable of interest is a count of events. The legislative production has a lower bound at zero and accepts only integers. There are also a number of extreme values, which result in a long tail at the right and hence skewness. To tackle the non-normal nature of the response, we assume that the legislative production follows a Poisson distribution. Second, the consideration of only the control variables described above may not yield satisfying results, as the political game obeys to rules that these variables cannot capture. The political context is likely to influence the expected outcome of the legislative production. As a result, the number of legislative acts over periods is not statistically independent, as assumed by a standard Poisson model. For instance, the legislative production is likely to depend on the legislative strategy of a specific government, violating the independence

¹⁰Ministers’ refer here to all their different types existing in French politics: ‘ministre d’État’, ‘ministre’, ‘ministre délégué’ and ‘secrétaire d’État’, as all are registered in the composition of the government promulgated by the President.

Table 2: Expected signs

	Expected sign
STARTGOV	-
ENDLEGISL	+
STARTPRES	-
ENDPRES	+
HM	+
HOLIDAY	-
COHAB	-
SESSION	+/-
REFORM	+/-
EXTRA	+
GDP	-
NMIN	+
EXPPARL	+
EXPMIN	+
EXPPRIME	+
MEANAGE	+/-
ENA	+/-

assumption. A model with a hierarchical structure can help to deal with this dependence, as well as potential overdispersion problems often encountered with standard Poisson model (?)¹¹. Such a latent structure implies that each level is a potential source of unexplained heterogeneity and allows departures from the intercept according to each hierarchical level. Four hierarchical levels are initially adopted:

$$Months \subset Governments \subset Legislatures \subset Presidency.$$

The legislative production count for months t is thus written y_{tglp} , denoting government g , legislature l and presidency p , with $t = 1...T_{glp}$, $g = 1...G_{lp}$ and $p = 1...P$. The hierarchical, multilevel structure of the model is characterized by the introduction of a set of random-effects. These random components allow for a departure from the expected number of voted laws, which is specific for each government, each legislature and each President. Hence, the model allows for different legislative strategies for different governments, considering, at the same time, the situation of the present legislature and the personal effect of the President on the production of laws. This modeling structure allows to represent the political context in which the legislature is enacted in the most comprehensive possible way. The model can be written as:

$$Y_{tglp} | \lambda_{tglp} \sim Poisson(\lambda_{tglp}) \quad (1)$$

with canonical parameter $\lambda_{tglp} = E[Y_{tglp} | x_{tglp}, \theta_{glp}, \phi_{lp}, \epsilon_p]$ modeled as follows:

$$\log(\lambda_{tglp}) = \beta X_{tglp} + \theta_{glp} + \phi_{lp} + \epsilon_p \quad (2)$$

with $\theta_{glp} \sim N(0, \sigma^2)$, $\phi_{lp} \sim (0, \rho^2)$, and $\epsilon_p \sim (0, \tau^2)$. X_{tglp} is the set of covariates, θ_{glp} stands for the government random effects, ϕ_{lp} represents the legislature effects and ϵ_p denotes the President effects. These random components allow for a

¹¹? shows that this log-normal mixture often surpasses the negative binomial model.

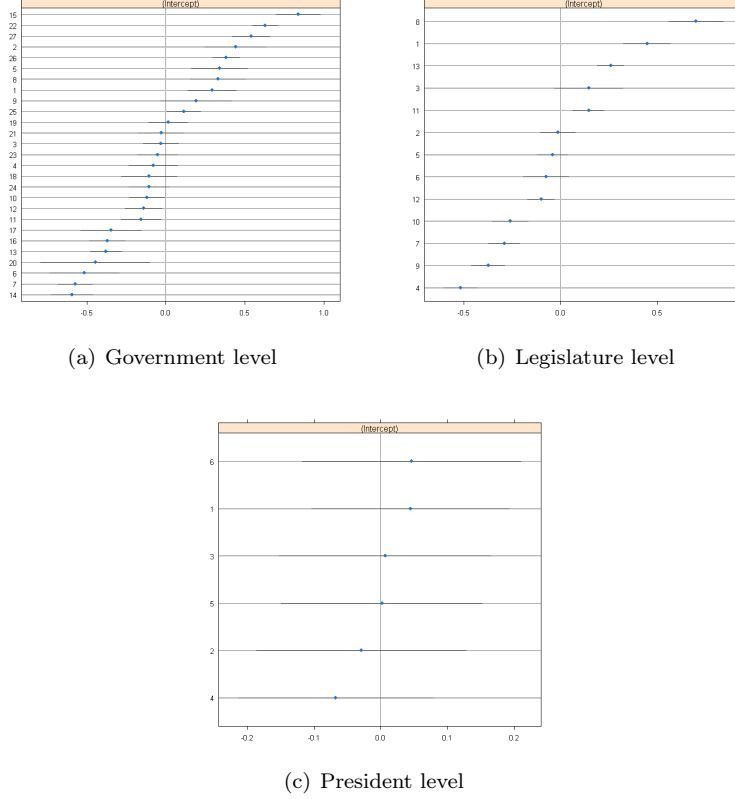
departure from the expected number of voted laws, which is specific for each government, each legislature and each President. To illustrate the mechanics of this specification, let us consider the case of the government led by De Villepin (2005-2007). The model allows this government to have a different expected number of voted laws with respect to the previous government, led by Raffarin. This departure is specific to the government, as both governments were in power under the same legislature and the same President. The government following De Villepin, which also differs in the expected legislative production, stood under a different legislature and a different President (in this case, Nicolas Sarkozy). Here, heterogeneity comes from 3 different sources: the specific characteristics of the government, the characteristics of the newly elected legislature and those of the President.

Table 3: Anova tests for hierarchical levels

Hierarchical levels	AIC	logLik	Anova (Pr(> Chisq))
Legislature	6754.0	-3361	-
Government, Legislature	6740.1	-3353	6.499e-05 ***
President, Government, Legislature	6742.1	-3353	0.9997

To assess the specification of the model, a series of caterpillar plots, showing the conditional modes of the random effects, are provided in Figures 4a-4c. The plots verify to what extent the random effects are likely to be different from 0. The horizontal bars represent the 95% prediction intervals with the levels of the grouping factor arranged in increasing order of the conditional mean. The result is unambiguous with respect to the legislation and the government: the 95% confidence zone does not encompass a 0 value for most of the legislatures and governments. This confirms that these two levels actually affect the legislative production. The President level, on the other hand, does not seem to be relevant for the model, as the prediction interval is never significantly different from 0. A battery of Anova tests confirms this observation (see Table 3). In a first step, a model with only the legislature as hierarchical level is compared to the same model with both the legislature and the government as grouping factors. The introduction of the second hierarchical level significantly improves the model. In a second step, the model with the two hierarchical levels is compared to the model with the presidential level as a third grouping factor. The Anova test rejects the relevance of the presidential level, as Figure 4c already suggested. This result confirms the view that the President sets the general course of the government action, namely what policies are to be implemented; it is then to the prime minister to choose the strategy to implement the policies chosen by the President (?). In other words, when to pass a given legislation through the National Assembly is, by and large, a decision of the government.

Figure 4: Caterpillar Plots



6.1 Regression results

The previous subsection suggests the adoption of a model specified as follows:

$$\begin{aligned}
 \log(\lambda_{tgl}) = & \beta_0 + \beta_1 ENDLEGI_{tgl} + \beta_2 STARTGOV_{tgl} + \beta_3 ENDPRES_{tgl} + \beta_4 STARTPRES_{tgl} \\
 & + \beta_5 HM_{tgl} + \beta_6 HOLIDAY_{tgl} + \beta_7 COHAB_{tgl} + \beta_8 REFORM_{tgl} \\
 & + \beta_9 SESSION_{tgl} + \beta_{10} EXTRA_{tgl} + \beta_{11} GDP_{tgl} + \beta_{12} NMIN_{tgl} \\
 & + \beta_{12} EXPPARL_{tgl} + \beta_{13} EXPMIN_{tgl} + \beta_{14} EXPPRIME_{tgl} \\
 & + \beta_{15} MEANAGE_{tgl} + \beta_{16} ENA_{tgl}.
 \end{aligned} \tag{3}$$

Estimation results are reported in Table 4. Data series reporting the quarterly GDP growth rate are available only since April 1960. The 8 months lag determines a starting point for the analysis on December 1960, which limits the total number of counts to 616 periods. Column 1 displays the results when the four PLC variables are omitted, while column two presents the results of the complete model. It is interesting to see that the AIC greatly decreases with the inclusion of the four PLC variables, underlining their relevance. The estimated coefficients are

significant and show the expected sign for those four variables: there is indeed a peak of legislative production before both presidential and legislative elections, associated with a legislative gap at the beginning of a presidency and during the first months after the appointment of a new government. Everything else equal, the legislative production increases by roughly 21% ($\exp(0.197)=1.217$) in the last six months of the legislature, while this increase reaches 11% during the 6 last months of the presidential mandate. This strongly confirms our two empirical hypotheses, namely that a dual cycle is generated according to both the presidential and the legislative elections.

Table 4: Main Regression Results

	<i>Dependent variable:</i>			
	LAWS			
	(1)	(2)	(3)	(4)
ENDLEGI	—	0.197*** (0.057)	0.281*** (0.056)	—
STARTGOV	—	−0.120*** (0.042)	−0.107*** (0.041)	−0.142*** (0.042)
ENDPRES	—	0.105* (0.059)	0.141** (0.058)	0.187*** (0.056)
STARTPRES	—	−0.680*** (0.075)	−0.692*** (0.075)	−0.658*** (0.076)
NOEND	—	—	—	−0.135 (0.088)
HM	0.319 (0.231)	0.373** (0.180)	0.457** (0.187)	0.346* (0.181)
HOLIDAY	−0.623*** (0.035)	−0.607*** (0.035)	—	−0.614*** (0.035)
COHAB	0.325 (0.223)	0.048 (0.149)	0.156 (0.142)	0.047 (0.158)
SESSION	−0.428*** (0.028)	−0.451*** (0.028)	−0.403*** (0.028)	−0.439*** (0.028)
REFORM	0.271* (0.164)	0.269*** (0.103)	0.445*** (0.097)	0.262** (0.110)
EXTRA	0.244*** (0.038)	0.306*** (0.038)	0.484*** (0.037)	0.306*** (0.038)
GDP	−0.062*** (0.015)	−0.054*** (0.015)	−0.046*** (0.015)	−0.058*** (0.015)
NMIN	0.042*** (0.010)	0.017** (0.008)	0.021*** (0.007)	0.018** (0.008)
MEANAGE	−0.007 (0.032)	−0.060** (0.028)	−0.112*** (0.029)	−0.062** (0.029)
EXPPARL	0.053 (0.037)	0.077*** (0.026)	0.084*** (0.025)	0.081*** (0.028)
EXPMIN	0.007** (0.003)	0.009*** (0.003)	0.011*** (0.003)	0.008*** (0.003)
EXPPRIME	0.001 (0.002)	−0.005*** (0.001)	−0.005*** (0.001)	−0.004*** (0.001)
ENA	−0.106*** (0.020)	−0.048*** (0.016)	−0.043*** (0.016)	−0.053*** (0.017)
Constant	1.128 (1.555)	4.661*** (1.328)	6.684*** (1.306)	4.742*** (1.383)
Observations	616	616	616	616
Log Likelihood	−4 162.006	−4 082.185	−4 242.436	−4 086.913
Akaike Inf. Crit.	8 356.012	8 204.370	8 522.871	8 213.826
Bayesian Inf. Crit.	8 426.784	8 292.835	8 606.913	8 302.291

Note:

*p<0.1; **p<0.05; ***p<0.01

As for the control variables, *HM* shows the expected positive sign. The production of laws

is easier when a more homogenous government faces a more fragmented opposition¹². Also, the number of ministers shows a significant positive impact on the production of laws, suggesting the presence of a signalling game also among the government members. Logically, there is a strong negative impact of holidays on the number of approved bills¹³. The *cohabitation* does not seem to have a real significant impact on the legislative production, even though the sign of the estimate is negative as expected. Such a result is consistent with the fact that the introduction of a presidential level in the hierarchical model is not relevant. This also lends empirical support to the idea that only the government is in charge of the ‘legislative strategy’, namely, of the choice of when to propose and to approve a law, which is directly relevant for the PLC. Concerning the organization of the parliamentary sessions, less legislative acts are produced in the first part of the year. The reform of 1995, which impacted the schedule of the plenary session increased the average monthly expected legislative outcome. Also, more laws on average are enacted during extraordinary sessions, as expected. The lagged GDP growth rate has a negative impact on the legislative output too. This suggests that during economic crises, when the GDP growth rate is low, the government feels obliged to introduce reforms and thus it legislates more.

As expected, a higher number of government members is associated with a higher legislative output. The results concerning the experience variables provide apparently contradicting results. A government composed of older ministers tends to produce fewer laws, suggesting that old age is correlated with reduced legislative activism. But at the opposite, the experience gained by the ministers in the parliament has a positive effect on the legislative outcome. A possible explanation is that parliamentary experience gives a better knowledge of the cogs of the legislative branch, which facilitates the legislative production. At the same time, the effect of ministerial experience is different at the government level (positive) and at the prime minister level (negative), although the coefficients are very close to 0 for both variables. A possible explanation is that cabinet ministers are more directly involved in making legislation pass through parliament than the prime minister. The prime minister in turn may use his/her experience as a way to be more efficient in the overall policy implementation, resulting in a lower amount of laws needed to satisfy voters. Lastly, a high number of *énarques* in the government is associated with a lower production of laws. Two possible explanations can be proposed. First, their high competence makes them more efficient in the policy making process, so that they do not need to produce a large amount of laws to achieve the reelection goal of the government. A more cynical explanation is that they are simply not extraordinarily competent¹⁴.

As a further robustness check, we run the same model but remove from the sample all the periods of holidays, during which the legislative production is 0¹⁵. The results obtained with this

¹²Alternatively, we used a simple dummy indicating whether a single party has the majority of seats in the Assembly. All the results remain basically unchanged under this alternative specification, and are available upon request.

¹³The expected number of laws during off months is not zero, due to the structure of the data. The counts of laws report the bills officially promulgated. Between the vote and the president’s signature, there can be a short delay (usually less than two weeks), which explains why in a very few cases some laws are approved while there is no parliamentary session.

¹⁴? show that having an *énarque* as the CEOs of private companies is correlated with a lower performance of a company.

¹⁵There are a few holiday months displaying a non-zero production, see footnote 13.

alternative specification are displayed in column 3 of Table 4. All the estimated coefficients keep the same sign as previously, and the four PLCs variables remain significant.

The dissolution of the National Assembly, provoking an early call of legislative elections, is assumed to be unexpected in our analysis. This is a realistic assumption since such events are generally driven by sudden political crises. The PLC theory predicts that a premature end of a legislature should not be associated to peaks of legislative production, as the government cannot modify the legislative strategy as elections approach (?). The same applies to governments that have resigned. We thus implement a placebo test to further assess the validity of our results. To do so, we substitute the variable *ENDLEGI* by the variable *NOEND*, which takes the value 1 during the last 6 months of all the governments that ended prematurely. This variable thus encompasses both governments that have been dismissed by the President and those that faced an early call of the legislative or presidential elections. To support the theory, *ENDGOV* should not have a significant impact on the legislative production, i.e., no peaks of legislative production should take place during this period. The results are provided in column 4 of Table 6. As expected, *NOEND* is not statistically significant, while all the other variables keep their signs. This result confirm that, in line with the PLC theory, only the occurrence of planned elections has a significant impact on the number of voted legislative acts¹⁶.

6.2 Alternative explanations

Before concluding that these results lend further support for the PLC theory, one must rule out possible problems of observational equivalency. A typical counterargument to the PLC theory is the so-called ‘rush to the end’ hypothesis, which suggests that the government may want to approve as many laws as possible before quitting power to avoid the risk that the unapproved laws decade with the end of the legislature. This would also result in a peak of legislative production, just like in the PLC theory. For the ‘rush to the end’ hypothesis to hold, the pace of the legislative process, from the proposal of the bill to the final vote, should be quicker as the elections draw near¹⁷. Table 5 provides details about this duration for the XIIth and XIIIth legislatures, the only two for which data about the timeline of legislation are available. The presidential elections were held in April 2007 and April 2012, both followed by legislative elections in June. The last two years of the legislatures do not show any acceleration of the legislative process. Concerning the XIIth legislature, even if there is a slight decrease of the average time needed to approve a law between 2006 and 2007, this value is still higher than that of 2003. The standard deviations lead to the same conclusion, as they remain in the same range for all the years of the legislature. The XIIIth legislature even shows an increase of the length of the legislative process through the years, and the average delay in 2012 is equal to the average delay of 2010. All in all, the pace of legislative production remained quite constant throughout the legislature, providing no evidence

¹⁶For completeness, we also performed the same test for unexpected presidential elections, despite the fact that it occurred only two times, in 1969 and 1974. Results show a decrease of the legislative activity before elections, essentially due to the events of 1968 preceding De Gaulle’s resignation in 1969.

¹⁷Projects of law (proposed by the government) that are not passed yet do not turn null and void as the legislatures ends, contrary to proposition of laws (proposed by deputies). There is no ‘wash-up’ period as for instance in the UK.

of a ‘rush to the end’ and corroborates the explanation provided by the PLC theory.

By the same topic, one might think that this peak of production is driven by the fact that developing a legislative text requires time. This would provide an alternative explanation to a potential peak of legislative production before the legislative elections: the rate of approval of laws before the end of a legislature mechanically increases because the texts are only achieved in this period. But observing a peak of legislative production not only by the end of the legislature, but also before presidential elections, which may occur in the middle of the legislature, excludes this explanation.

Finally, a similar argument may explain the period of low legislative production following the appointment of a new government. After its appointment, developing law proposals takes time, resulting in a lower amount of laws being approved. *A contrario*, this argument corroborates the theoretical assumption that the government controls the timing of the legislation process. If that was not the case, the continuity of the work of the Parliament should ensure a stable legislative production that should not be impacted by the nomination of a new government.

Table 5: Verification of the alternative explanation

	2002	2003	2004	2005	2006	2007
Laws	36	122	95	113	90	54
Average time to approve	8,86	7,14	10,6	10,46	10,72	8,62
max	41	37	38	48	48	43
min	1	0	0	0	0	1
SD	10,16	6,31	9,4	6,3	8,08	7,27
	2007	2008	2009	2010	2011	2012
Laws	60	102	84	122	116	39
Average time to approve	6,183	6,96	7,95	9,59	9,65	9,58
max	41	41	40	54	42	38
min	1	0	1	1	0	1
SD	7,209	7,77	5,83	7,92	7,69	9,35

6.3 Legislative cycles and government popularity

The PLC theory posits that governments increases its legislative outputs in the pre-electoral period in order to win the upcoming elections. It suggests that the magnitude of the cycle in the pre-electoral period may depend on the *ex ante* probability to win the elections¹⁸. If a government expects a clear victory, there is no need to increase the legislative output. Conversely, a governments expecting a close race may be tempted to use the legislative production more intensively to increase its reelection probability. To investigate this issue, we collected additional data about governments’ popularity poll results provided monthly since October 1978 by the TNS-Sofres institute¹⁹. The question of the poll is the following: "Do you completely trust, moderately trust, moderately distrust or completely distrust (name of the politician) for addressing problems that

¹⁸We thank an anonymous referee for suggesting us to study this link.

¹⁹<http://www.tns-sofres.com/cotes-de-popularites>.

France faces nowadays?". The series consists in the percentage of respondents who answered completely or moderately trust. To tackle the cohabitation issue, we used the popularity of the President in standard situation and the popularity of the Prime minister in cohabitation period, as he/she is *de facto* at the head of the executive during these periods and as such handle the legislative strategy. As the popularity of a government is tightly connected to its electoral perspective, we expect popular governments to have a lower legislative peak before elections compared to unpopular governments. To verify it, we estimate the same model as described in equation 3, but we introduce the measure of popularity as well as its interaction terms with *ENDLEGI* and *ENDPRES*. In Figure 5, we report the expected legislative output conditional on the popularity of the executive in the period before legislative elections on the right quadrant and in normal period on the left quadrant. First, note that the average legislative output is again higher in pre-election period. During non-electoral period, governments benefitting of a high popularity produce on average slightly more laws than governments with low-popularity. On the other hand, the higher the popularity, the lower the peak of legislative production before the legislative elections. This suggests that popular governments, hence more likely to be reelected, do not need to use the legislative tool, which is consistent with the PLC theory. Concerning the legislative cycle following the presidential elections, however, the results are more surprising. If the popularity of the executive does not affect the legislative outcome in non-electoral period, as can be seen in the left quadrant of Figure 6, the results concerning the pre-electoral period are the opposite of what is observed for the legislature cycle. More popular government are more likely to increase their legislative production before presidential elections. A possible explanation of this puzzle lies on the specific nature of the presidential election. It is symbolically the most important elections in France, but also the most competitive and the most personified elections, hence the most difficult to forecast. That might explain why popular governments do not want to miss any opportunity to maximize their reelection probability.

6.4 Synchronization of elections

Finally, the dataset allows to test for the effects of the constitutional reform of 2000 on the PLC. That reform shortened the presidential mandate from 7 to 5 years, resulting in the synchronization of the presidential and the legislative elections beginning with the year 2002. This should decrease the probability of occurrence of a new *cohabitation* since voters are unlikely to change their views in the span of one month. Furthermore this reform is supposed to put an end to the arrhythmia of the V^{th} Republic, whereby governments were actually in full power only in the interval between two national elections, that were usually a presidential and a legislative one, and not for five or seven years, the natural length of a legislature and of a presidential mandate respectively (?). This reform has fundamentally changed the strategies of the political parties (?), and *de facto* it precludes the possibility of a dual PLC. A possible consequence of the elimination of the dual cycle is an increase of the magnitude of the cycle generated by the electoral period. To verify this, the sample is divided in two subsamples. The first covers the 1959-2002 time interval, while the second encompasses the period since the first synchronous elections, namely from May 2002

Figure 5: Popularity and legislature cycle

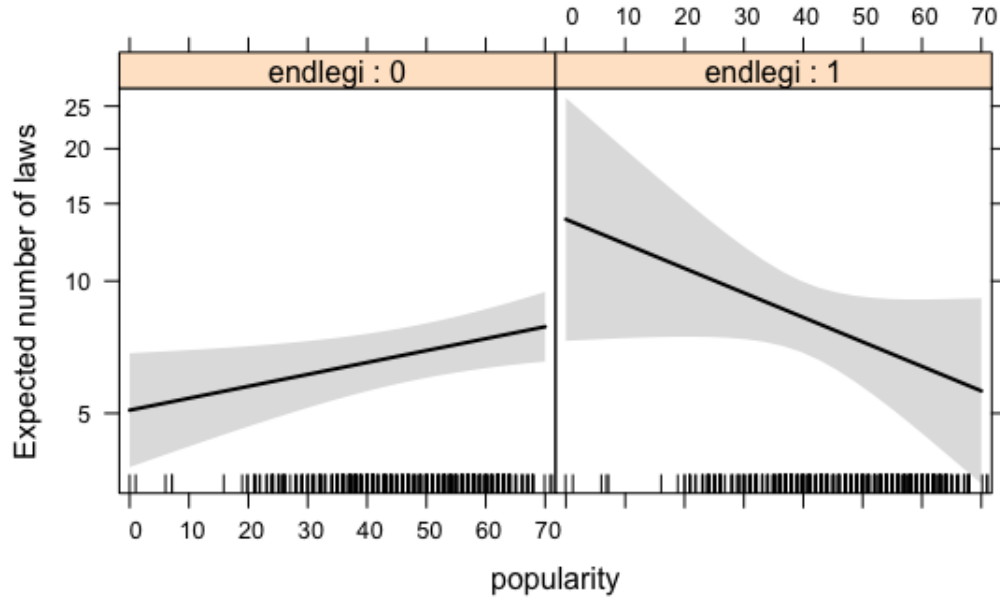
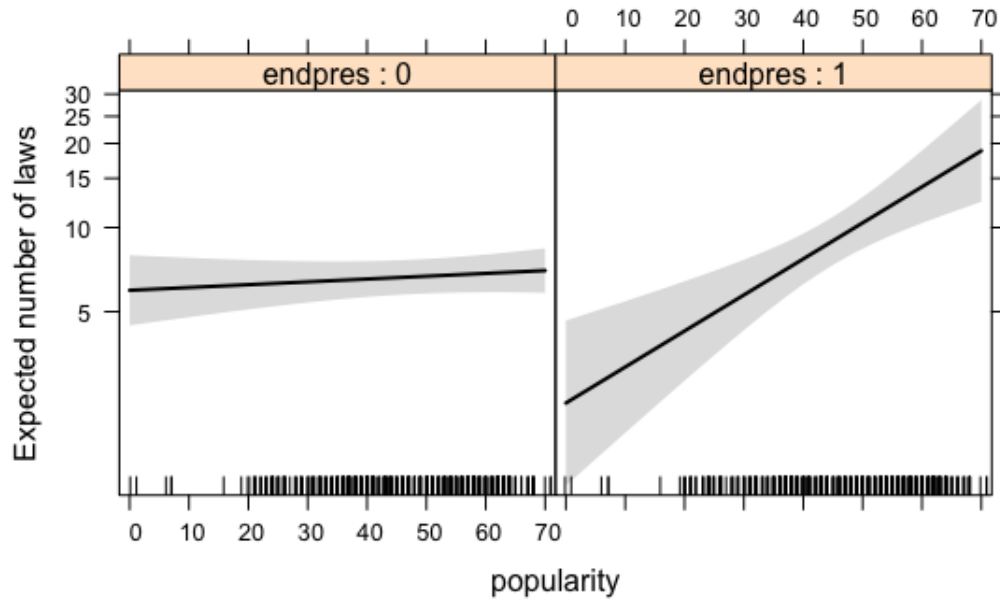


Figure 6: Popularity and presidential cycle



to 2012²⁰. If this second subsample is rather small and the results should be interpreted with

²⁰In 1981 and 1988, the presidential and the legislative elections occurred in the same period, due to the fact that Mitterrand used his power to dissolve the National Assembly right after his election in order to obtain a new

caution, the aim of this inquiry is to clear the field for further research.

The results are displayed in Table 7, using the same specification as in model 2, which was the best performing one. *ENDLEGI* and *ENDPRES* are merged for the 2002-2012 subsample. The coefficient of *ENDPRES* now appears much larger than before, suggesting that the manipulation of the legislative production is now greater than when there were two cycles. Contrary to one might have expected, the magnitude of the pre-election peak is about 25% ($\exp(0.222)=1.248$), which is lower than the peak driven by legislative elections alone before 2002. This suggests the preliminary results that merging the two cycles lead to a reduction of the magnitude of the cycle. Finally, the negative and very large coefficient of *HM* in the 2002-2012 subsample may seem very surprising compared with the previous regressions; it is likely due to the fact that this variable takes only two different values over the subsample, and is thus very imprecisely estimated.

7 Conclusion

This paper applies the PLC theory to the French case for the first time, using a newly assembled dataset that covers the monthly counts of legislative production from 1959 to 2012 and provides detailed characteristics about the composition of the governments as well as personal information about the ministers. France lends itself well to testing the hypotheses of the theoretical model of ?, since the government has an important leeway to implement its legislative strategy. The PLC theory claims that the production of laws significantly increases when elections draw near, in order to provide a sufficient level of utility to the voters in returns of their votes. We exploit the original context of the French institutions, in which two major elections set the pace of the political life: the legislative and the presidential elections.

The empirical analysis reveals the presence of a dual cycle, driven by both elections. *Ceteris paribus* and with respect to the average, the *Assemblée Nationale* votes 21% more laws during the last six months of a legislature when elections are held in the expected period, and 11% more laws during the last six months of presidential mandate. This phenomenon does not seem to come from a legislative ‘rush to the end’, giving more weight to the proposed PLC explanation. The popularity of the head of the executive plays a conditional role on the magnitude of the pre-election cycle. The constitutional reform of 2000, which synchronized the legislative and the presidential terms, effectively merged the two PLCs into one after this reform. The magnitude of this single cycle is equal to the magnitude of the previous dual cycle.

Another interesting finding concerns the role of the President. Even if the Constitution assigns the supreme importance to this role, the President does not directly affect the legislative production strategy; the choice of when to pass a given law remains at the discretion of the government. This may also explains why the *cohabitation*, a very specific trait of the French institutions, does not have a consequence on the legislative outcomes. The parallel with Italy is relevant in more than one feature. As demonstrated ?, France and Italy are the extreme ends of the classification of the

majority supporting him in the National Assembly.

Table 6: Synchronization of elections

	<i>Dependent variable:</i>	
	LAWS	
	Before 2002	After 2002
ENDPRES	0.136** (0.069)	0.222** (0.108)
STARTPRES	-0.612*** (0.091)	-0.443*** (0.136)
ENDLEGI	0.257*** (0.065)	—
STARTGOV	-0.252*** (0.051)	—
HG	0.501** (0.239)	0.870 (1.478)
HOLIDAY	-0.625*** (0.038)	-0.226** (0.100)
COHAB	-0.100 (0.161)	—
SESSION	-0.575*** (0.033)	-0.027 (0.063)
REFORM	0.223 (0.153)	—
EXTRA	0.392*** (0.044)	0.247*** (0.087)
GDP	-0.062*** (0.015)	-0.042 (0.067)
NMIN	0.003 (0.008)	0.018** (0.009)
MEANAGE	-0.060* (0.032)	0.070 (0.069)
EXPPARL	0.071** (0.028)	0.258*** (0.083)
EXPMIN	0.005* (0.003)	0.006 (0.006)
EXPPRIME	-0.004*** (0.002)	-0.005 (0.003)
ENA	-0.031 (0.020)	-0.075 (0.047)
Constant	5.176*** (1.511)	-3.658 (3.476)
Observations	497	118
Log Likelihood	-3 424.841	-594.400
Akaike Inf. Crit.	6 891.683	1 220.801
Bayesian Inf. Crit.	6 980.063	1 265.132

Note:

*p<0.1; **p<0.05; ***p<0.01

pressing on the executive branch. While the Italian government has to deal with many institutional and political counterpowers, the French one enjoys a much greater leeway. Observing a PLC in these two contexts suggests that such cycles are potentially observable in the full spectrum of the classification of the government proposed by Tsebelis, including full presidential system such that of the United States. This corroborates the generality of the PLC theories.

The present study raises various further research questions. The strategical use of legislation may be more or less efficient according to the political context. It would be interesting to study the drivers of the magnitude of the cycles. The topics of the additional legislative output is undoubtedly carefully selected by the government, and deserve to be investigated. To this respect, using the data provided by the Comparative Agenda Project (<http://www.comparativeagendas.info/>) seems particularly promising. Checking the timing of adoption of the ideologically motivated policies may allow to verify to what extent politicians are vote-seeking or office-seeking (?). Finally, the peak of legislation is driven by the desire for the government to keep the power. The link between the legislative activity and the electoral outcome needs to be uncovered.