

# “Oh dear! Oh dear! I shall be too late!” Popularity Gains as an Incentive to Legislate Frantically?

**Mamadou BOUKARI**

LEM UMR 9221 / [mamadou.boukari@ed.univ-lille1.fr](mailto:mamadou.boukari@ed.univ-lille1.fr)

**Daniel CAKPO-TOZO**

KPMG, Luxembourg / [daniel.cakpotozo@gmail.com](mailto:daniel.cakpotozo@gmail.com)

**Etienne FARVAQUE**

LEM UMR 9221 / [etienne.farvaque@univ-lille1.fr](mailto:etienne.farvaque@univ-lille1.fr)

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“Oh dear! Oh dear! I shall be too late!”

# Popularity Gains as an Incentive to Legislate Frantically?

Mamadou Boukari\*    Daniel Cakpo-Tozo<sup>†</sup>    Etienne Farvaque<sup>‡§</sup>

## Abstract

This paper analyzes the relations between the legal and regulatory production and the gains of popularity for the President and the Prime Minister in France. The findings indicate that the Executive’s popularity depends on legislative activism, creating reasons to legislate frantically, but also that the Executive has strong incentives to strategically set the legislative agenda, possibly timing landmark laws during honeymoon periods. Moreover, if Prime Ministers can benefit actions taken in the last months of their term, this is not true for Presidents. Our results also confirm the traditional view, according to which incumbents are always bestowed with favorable ratings when the economic situation is good.

*Keywords:* Political Legislation Cycle, Legal production, Regulation, Semi-presidential government system, Popularity

*JEL Classification:* D72, D78, K40.

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\*LEM - CNRS - Universités de Lille, Faculté des Sciences Economiques et Sociales, Bâtiment SH2, 59655 Villeneuve d’Ascq Cedex, France. Contact: mamadou.boukari@ed.univ-lille1.fr

<sup>†</sup>KPMG, Luxembourg. Contact: daniel.cakpotozo@gmail.com

<sup>‡</sup>LEM - CNRS - Universités de Lille, Faculté des Sciences Economiques et Sociales, Bâtiment SH2, 59655 Villeneuve d’Ascq Cedex, France and CIRANO, Québec, Canada. Contact: etienne.farvaque@univ-lille1.fr

<sup>§</sup>The authors are grateful to Stéphane Cottin for providing us with the legislative data, to Nicolas Gavaille for sharing some data, as well as to Aurélie Cassette, Abel François, Marcelin Joanis and Sonia Paty for useful comments on previous versions. None of the authors works or has worked for the Secrétariat Général du Gouvernement. This work should thus not be reported as representing the views of the Secrétariat Général du Gouvernement, nor of KPMG, and the usual disclaimer applies as well.

# 1 Introduction

A key characteristic in the definition of democracy is a continued responsiveness of the government to the preferences of the people (Dahl, 1971). In order to deliver public goods and services, the government needs to use resources and approve legislation. A basic question is then: what is the relation between legislative outcomes (i.e., the production of legal and regulatory texts) and government approval?

The Political Legislation Cycle theory predicts a peak of legislative production in the pre-electoral period, when the legislator focuses on voters' attention to be reelected (Lagona and Padovano, 2008; Brechler and Geršl, 2013; Padovano and Gavaille, 2017). This would lead to a serie of “last-minute” policy moves from the incumbent politician to signal its competence to the electorate (as in Manzoni and Penczynski, 2017).<sup>1</sup> However, it is also often assumed that a newly elected politician should act fast enough, to benefit from a “honeymoon” effect to enforce the reforms on which she has built her electoral platform. This is notably the position Alesina et al. (2006) defend. Hence, with short time periods between successive elections (as is typical in OECD countries - see Aidt and Dutta, 2007), politicians would have an incentive to act as frantically as the Lewis Carroll's White Rabbit character quoted in the title, and produce laws as often as they can, although with a concentration around election times. This can be destabilizing because, even if law is an essential element of democracy, its variability can also be detrimental (Cooper, 2017).

But does this activism pay off? In Manzoni and Penczynski (2017)'s framework, this could be the case, especially if the incumbent is a low-quality one and thus has a stronger incentive to skew the debate towards her own agenda. François and Navarro (2017), in an empirical analysis of the prospects for French MPs, show that several parliamentary activities, especially bill-initiation, have a positive effect on their probability of being re-elected. Their result confirms the one obtained, e.g., by Bowler (2010) for UK MPs, or by Däubler et al. (2016) for Belgium. Interestingly, as the latter show that the electoral

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<sup>1</sup>Manzoni and Penczynski (2017) propose a two-period electoral campaign model with two policy issues. In their model, an incumbent competes against a possibly competent challenger. They show that, due to information asymmetry, the incumbent can strategically release her statement early on the campaign trail and signal the importance of her signature issue to the voters.

reward is larger if a bill is initiated closer from the election, it confirms that strategic considerations are present in MPs behavior.

However, in a presidential, or semi-presidential, system, it can be legitimately claimed that the legislative agenda is dominated by the Executive. Padovano and Gavaille (2017) show that, in the French case - which is a typical case in point, as Shugart (2005) explains, the legislative production cycle is clearly aligned with the Presidential one, and is even amplified when the two elections (Legislative and Presidential) coincide. But, does this pay off for the Executive? To our knowledge, this question has not been addressed.

The contribution of the present article is thus to analyze the relations between the legal and regulatory production and the gains for the Executive. We assess these gains in terms of the popularity each member of the Executive (i.e., the President and the Prime Minister) benefits from, taking into account the electoral cycle. The literature on popularity functions is quite extensive<sup>2</sup>, although Kirchgässner (2016) argues that the main results generally confirm what Nannestad and Paldam (1994) noticed some twenty years ago. That is, popularity is strongly influenced by the economic context, although estimated coefficients vary considerably between countries and time periods. Our analysis is thus at the cross-roads of the one on determinants of politicians' popularity and of the one on Political Legislation Cycle, and aims at connecting these two strands of analysis<sup>3</sup>.

A distinct feature of this work is that we make use of a unique database, assembled by the Secrétariat Général du Gouvernement (France's Prime Minister Cabinet), which consists in a precise monthly count of the number of words published in the Journal Officiel every month, and sorted by domains of legislation. This has an advantage, compared with the extant literature, as it not only contains acts (i.e., laws voted by the Parliament, often based on the Executive's initiative), but also decrees and other regulation (with the exception of nominative appointments - related to the promotion of civil servants for example, and thus not necessarily reflecting a real policy decision). In other words,

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<sup>2</sup>See Berlemann and Enkelmann (2014) for a review, and Villalobos and Vaughn (2009) for the relation between public opinion and politicians' behavior.

<sup>3</sup>One could also draw a link with the literature on agendas and how governments define their priorities (see Baumgartner and Jones (2009) and Jones and Baumgartner (2005), respectively). However, we here focus more on how the public perceives the outcome of this process than on the process influencing governments' decisions itself.

the data used in this study is related to the Executive's decisions (to publish a certain legal text, to explain its enforcement rules, etc.), while the literature generally focuses on legislative (i.e., Parliament) activity.

Using monthly data over the period 1990M7-2010M12 for popularity of the French President and Prime Minister, and for the enacted legal and regulatory production, we confirm that legislative activism is related to the electoral cycle, and show that it benefits more the President than the Prime Minister. However, we also show that a honeymoon effect is present, as beginning-of-term legislation tends to improve the politicians' popularity, but, interestingly, that it differs along the domains that law covers. Finally, if last-minute publication of legal and regulatory texts impacts popularity, it does so with differentiated effects (the Prime Minister not being impacted, while the President is). Our results also confirm the traditional view, according to which incumbents are always bestowed with favorable ratings when the economic situation is good (Nannestad and Paldam, 1994).

These findings thus indicate that popularity depends on legal and regulatory production, creating reasons to legislate frantically for a politician aiming at reelection and wanting to keep her popularity high enough. They also indicate that the Executive has strong incentives to strategically set the legislative agenda, possibly timing landmark texts during honeymoon periods, and more specific ones in the last months of their term, depending on the tone of the campaign. These results thus give an empirical support to Manzonni and Penczynski (2017)'s theoretical argument.

In order to explain the links between the above theoretical concepts and our operationalization of the various variables, as well as our research design and methodology, we proceed as follows. In the next section, we discuss the literature linking politicians' incentives to produce legislation in a timely manner. In section 3, we describe the institutional context and present the data. Section 4 presents the empirical model and discusses the results, while Section 5 concludes.

## 2 Theory: Time and Legal and Regulatory Production in a Presidential System

For a politician, time is both a constraint and a resource. An agenda-setter may appear in a good position to manage the clock, although she has to deal with the fact that, in a Presidential system, elections intervene at exogenously fixed dates, and will impose a constraint on her too. As a consequence, as stated by Fleischer (2013), time is both an external condition (i.e., a constraint to be dealt with) and an internalized feature of organizational behavior (i.e., a resource to be managed). Several studies have looked at how legislative actors integrate time as a constraint on their behavior (see, e.g., Doring, 1995), but time is more generally considered as a resource for the agenda-setter. That is, time is part of the strategy deployed by an agenda-setter to select an issue (Jones and Baumgartner, 2005), to which she comes up with an ad-hoc solution. As a consequence, timing is crucial and feeds the dynamics of policy (and, in particular, legal and regulatory) processes.

Schedler and Santiso (1998) also insist on the strategic use of time in democratic processes, citing in particular sequencing and rhythm as “susceptible to strategic calculation”, while Gibson (1999) develops a theory of political timing. He argues that the timing of political “events” over which politicians have some discretion is non-random, inducing that politicians do attempt to influence the timing of events in such a way as to maximize the political benefits or minimize the political costs for themselves.<sup>4</sup> Gibson (1999) considers four behavioral hypotheses, which will distinguish the way discretion will be exercised by politicians, and the resulting timing of events. Gibson (1999) labels these behaviors as “packaging, splitting, highlighting, and phasing”. In the present study, we will particularly insist on the last one, which best summarizes the strategic use of the legal and regulatory production process by the agenda-setters we will consider (i.e., the President and the Prime Minister in a Presidential system).

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<sup>4</sup>In a different context, the issue has been shown to be important by Durante and Zhuravskaya (2017).

Lagona and Padovano (2008) look further at the incentives of politicians, building their case upon the economic theory of legislation. According to the latter, any legal text redistributes property rights, even though it does not apparently touch on economic issues (taxation, spending, etc.). This means that legal and regulatory outcomes will be supported by some parts of the constituency, and opposed by others. Hence, according to this line of thought, politicians will supply pieces of legislation when doing so has the highest political return. As a consequence, time will be an essential part of the politician's reasoning, and the dynamics of the supply of legislation should follow a specific pattern, the one suggested by the political business cycle theory. In other words, the production of laws should be concentrated at the end of the legislature, when voters bring most attention, and where it is most important for a politician to signal herself. Of course, as stated by Lagona and Padovano (2008), several factors will be taken into account by the agenda-setter, and it appears that the larger the government support in Parliament and the more stable it is, the more legislative production should be located at the end of the (expected) length of the legislature.

Are these effects larger in Presidential systems? Cella et al. (2017) look at how constitutional structures shape politicians' behavior through the different incentive schemes at work, comparing Parliamentary and Presidential systems. They show that the Parliament responds to the incentive scheme better in Presidential systems, due to less uncertainty that legislators face over their term limit. The leeway is thus stronger for the agenda-setter(s) in Presidential systems, and their influence on the legislative process larger. As a consequence, their degree of accountability will be larger for the voters, and their popularity levels more related to the production of laws than in other systems.<sup>5</sup>

All in all, then, several lessons emerge from the literature reviewed. First, time matters in political economy analysis. Second, economic and electoral incentives converge to induce a pattern of legal production that conforms with the political business cycle, i.e., more production should be realized towards the (expected) end of a mandate. Third, this

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<sup>5</sup>Of course, this does not mean that timing is not an issue in Westminster-type systems, as John and Ward (2001), for example, reveal, showing that some transfers can be strategically targeted in a context with endogenous elections.



pattern should be even more present in Presidential systems, and voters should take into account the production of legal texts when they vote in favor, or sanction, the President and the Prime Minister.

A potential counter-argument could be that legislators (i.e., deputies or senators) should be the ones considered, and thus sanctioned, by voters, as they are the official producers of laws. However, our dataset of legal texts is larger than only laws produced by legislators, as it makes use of the publication record of legal texts, including laws, decrees and other legal texts necessary to implement and / or enforce any voted law. These texts can be promoted and thus published by the Executive when it suits better her own agenda. It is true that, sometimes, deputies are bill-initiators, an activity that François and Navarro (2017) show as having a positive effect on the respective MPs' probability of running again and staying in office. However, Boelaert et al. (2017) show that the Executive is often acting behind some bills officially promoted by deputies (which, de facto, shows the strong hand of the Executive, and, aside of this, reinforces the role of agencies in the whole legislative process (Villalobos, 2013)). Moreover, as Gavaille (2017) shows that, for French deputies, even “ghost” deputies (i.e., deputies who do not have any official recorded activity over a whole year, in his definition) can be reelected. This also characterizes Italian deputies, who act in a strong Parliamentary system, see Marino and Diodati, 2017). Hence, it is safe to proceed, and look at how the popularity of Executive leaders is related to the pattern of legal and regulatory production.

### **3 Institutional context and data**

The current political system in France originated in the constitution of Oct 4, 1958. It consists in a semi-Presidential system with two Executive heads, the President and the Prime Minister, and two chambers at the legislative branch, the National Assembly and the Senate (the latter being the upper chamber). The President is the head of the state. 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. Since 2002, he is elected for five

years.<sup>6</sup> Unlike in the United States, there is no limit to the number of mandates for the President. He appoints (and, de facto, can dismiss) the Prime Minister, who is accountable before the National Assembly, and leads the government. Modifications of the government can either be related to the firing by the President of a Prime Minister (or to a voluntary dismissal of the latter), or to a change by the Prime Minister in the ministers belonging to the government (“remaniement ministériel”). Finally, the legislative output is a joint production of the government and the two legislative chambers, but the Executive can strongly influence the legislative agenda (Boelaert et al., 2017).

Our data set for the legal and regulatory output is a unique compilation, that has been carried out by the Secrétariat Général du Gouvernement, of the whole set of legal texts produced each month, with observations covering a period that spans from 1990M7 until 2010M12. The compilation was part of a project designed to quantify the production and nature of the produced law, in particular to analyze the (destabilizing) effects of the inflation of legal texts. Unfortunately, the project and the collection of the corresponding data have been discontinued after 2010M12. To our knowledge, this dataset has never been used, although it contains unique features: (i) it measures the variation of the number of articles and words in each type of legal text produced by the Government and the National Assembly (i.e., it not only contains the laws but also their “textes d’application” - e.g., decrees, the lower level texts that permit the enforcement of the principles adopted in the law and whose date of publication depends on the Executive’s will) and (ii) the texts are attributed to one of the “codes” that compose the French legal arsenal (e.g., the “code rural”, “code civil”, “code des impôts”). We will make use of the two dimensions in what follows, to assess if the electorate considers only the whole amount of texts, or if some domains of the law attract more attention. One can think, for example, that modifications of the texts surrounding the regulations of a gavage farm (in the “code rural”) are less important for the general public than, e.g., modifications of the immigration law, or the tax code, especially if the Executive decides to issue such a text during the electoral campaign, for example. Figure 1 displays the total legal and regulatory production over

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<sup>6</sup>Previously, the president’s term length was of seven years.

our sample period, from which we deduce the number of monthly legal texts that have been created by merging categories and by computing the monthly production of legal texts during the 246 months that are included in the dataset.

**Insert figure 1 about here**

More precisely, in the empirical analysis, we consider first the global monthly variation of articles in the legal texts and, second, the monthly variation of articles for several legal codes (economy, budget, pensions, defense, internal affairs, labor/employment, justice, health, agriculture and environment). Some codes could not be considered due to a very small number of observations (i.e., very few changes), and have thus been regrouped with others, related, to form larger relevant domains. For example, we have grouped social security and military pensions, to form a larger category of legal texts, designed as pensions. Our regroupment is described in the Appendix. It has to be noted that the measurement of the legal texts changes is the changes in the number of articles for each legal text in each category. As a consequence, this variable can take negative values, in particular in cases of a repeal of the law (deletion of some articles).

Since we aim at assessing the impact of legal and regulatory production on the government heads' degree of approval, and since the government can act opportunistically, the indicator to be chosen as measuring this independent variable should exhibit two properties: first, it must give information about the magnitude of the distortion, and second, since the governments differ in their time in office, it must wash out potential size effects. We thus compute the following indicators:

$$PLP_{x,t} = \frac{| \text{Sample Mean} - \text{Monthly Production}_{x,t} |}{\sum_{t=0}^T \text{Monthly Production}_t} \quad (1)$$

where  $PLP$  is the Percent deviation of Legal texts Production, per month and per Prime Minister;  $x$  is the legal domain considered, and  $T$  the duration of the government. The sample mean is computed over the whole sample period for the total legislative production (and for specific domains when these are considered). We also create a dummy variable, *Repeal*, which takes the value 1 in case of a repeal of the law (that is, a negative

number of changes), and 0 otherwise. In addition, we compute an interaction variable as follows:

$$Unknit_{x,t} = PLP_{x,t} * Repeal_{x,t} \quad (2)$$

$Unknit_{x,t}$  is a variable designed to capture the fact that the electorate’s attention could be influenced by the decision by the President or the Prime Minister to undo decisions taken by previous governments.

Then, in order to assess if the timing of legal and regulatory production has an impact, we differentiate the honeymoon period from the “last-minute” period. We thus interact the monthly legislative production with, first, a count variable  $H$  (for “honeymoon”) defined over the first three months of a Prime Minister and President’s term and that attributes a decreasing weight to each of the first three months. In other words, the variable takes the value of 3 in the first month of each term, 2 in the second, and 1 in the third month, receiving a value of 0 thereafter.<sup>7</sup> Concerning the last minute effects, they are captured by a discrete variable, named  $last\_months$ , attributing an increasing weight to each of the last twelve months before presidential elections for the President, and an increasing weight to each of the last three months before the dismissal of a Prime Minister. Hence,  $last\_months$  receives a value equal to 12, twelve months before the presidential election, and 3 before the dismissal of a Prime Minister, and then declines by one unit each month up to the end of the period, and takes a value 0 during the other periods. Note that the asymmetry between the honeymoon and last-minute effects is due to the importance attributed to the “100 days” at the beginning of a politician’s term, and to account for the electoral campaign period. Moreover, Presidents and Prime Ministers do not have the same horizon for the last-minute effect variable, reflecting the greater uncertainty in a Prime Minister’s mandate (as the President’s decides when to fire a Prime Minister).

We analyze the link between the legislative outcomes and the popularity of the two heads of the Executive branch. The dependent variables we consider are thus the President and the Prime Minister approval rates. These were obtained from Kantar Sofres.<sup>8</sup> We

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<sup>7</sup>For an exemple of the use of this type of discrete variable, see, e.g., Veiga and Veiga (2004).

<sup>8</sup>In about the last four decades, the Kantar Sofres has periodically asked respondents whether they approve or disapprove of the incumbent Executive’s handling of its job. <http://www.tns-sofres.com/cotes->

calculate the popularity index for each of the two heads of the Executive, where the index is a ratio of the percentages approving the Executive to the sum of the percentages disapproving and the undecided.<sup>9</sup> A plot of the popularity index series and the evolution of the unemployment rate and GDP growth, two of economic variables found to effect the popularity of executives in the literature, is presented in Figure 2 and Figure 3. It appears from Figure 2 that approval ratings tend to decrease during the first years of the term before increasing a few months before the electoral deadline. This is in line with the conventional wisdom, which recognizes the existence of (un)popularity cycles.

**Insert figure 2 about here**

**Insert figure 3 about here**

The Prime Minister is under the authority of the President. However, France has known several episodes during which the President has faced a Prime Minister coming from another side of the political spectrum. Such episodes are called “cohabitation”, and are de facto periods of divided government. They arise when there is a discrepancy between the presidential election and the deputies’ one, if legislative elections are won by a party belonging to the opposite side of the political spectrum than the President’s. If his party loses the legislative elections, the President must select a Prime Minister of the winning party (or one able to form a governing majority). In such occasions, the Prime Minister becomes the principal head of the Executive. As for periods of divided governments in the United States, one can expect that such periods slow the legislative process, and production of legal texts (Rogers, 2005), as the internal fighting inside the Executive branch conducts to a gridlock (see, e.g., Alesina and Rosenthal, 1995, Coleman, 1999, or Bowling and Ferguson, 2001).<sup>10</sup> This is taken into account by the dummy variable “cohabitation” (equal to 1 in such periods, 0 otherwise). This specification helps us to test

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de-popularites#field\_accordeondataviz-president.

<sup>9</sup>Including the undecided in the denominator is a way to account for the fact that the number of respondents declaring they neither approve nor disapprove tend to decrease over time. Not considering them does not change the thrust of our results, as the series are strongly correlated.

<sup>10</sup>Krehbiel’s (1998) view of the gridlock, that it is generated by internal feudings inside the Congress, does not depend on the presence of a divided government. Such a view is famously contested by Cox and McCubbins (2005). The debate is not yet settled but, compared to the French case, both views tend to put political parties (not the Executive) at the forefront of the agenda-setting game.

the responsibility hypothesis. For instance, it will allow checking whether the President is held partially or totally responsible for the economic situation during cohabitation.

Another important variable of our dataset is the support each Prime Minister can benefit from inside the National Assembly. If the Prime Minister only holds a short majority, or is a minority leader, the production of legal texts could be slowed. We thus use, for each legislature (i.e., for the length of a deputy’s mandate), a measure of support using the deputies’ names and the party to which they belong. Data comes from the Assemblée nationale website.<sup>11</sup> Five legislatures took place during our period of study (the ninth - part of-, tenth, eleventh, twelfth and thirteenth - part of -). We create a variable that measures the length of the term of each of these legislatures. The following figure displays the different political parties for each of these terms and points out the different majority of parties who run the Assembly, and can support the government’s legal agenda.

**Insert figure 4 about here**

## 4 Empirical evidence

### 4.1 Method

In this subsection, we describe the specifications of the equations used to explain approval ratings. According to the existing literature, popularity is modelled as a function of economic, political and personal characteristics. Therefore, our initial specifications are:

$$\left\{ \begin{array}{l} Pop\_PM_t = \alpha_0 + \alpha_1 conf_{PM,t-1} + \alpha_2 seats1st + \alpha_3 cohab_t + \alpha_4 unemp_{t-1} \\ \quad + \alpha_5 tcpib_{t-1} + \alpha_6 PLP_{t-1} + \alpha_7 H_t + \alpha_8 lastmonths\_PM_t + \varepsilon_t \\ Pop\_PR_t = \beta_0 + \beta_1 conf_{PR,t-1} + \beta_2 seats1st + \beta_3 cohab_t + \beta_4 unemp_{t-1} \\ \quad + \beta_5 tcpib_{t-1} + \beta_6 PLP_{t-1} + \beta_7 H_t + \beta_8 lastmonths_t + v_t \end{array} \right. \quad (3)$$

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<sup>11</sup><http://www.assemblee-nationale.fr/>.

where  $Pop\_PR$  is the popularity index of the President and  $Pop\_PM$  the one of the Prime Minister. In both equations, we introduce the lagged approval rate in order to take into account the degree of opinion persistence.

The variable  $seats1st$  is the parliamentary seat share of the Prime Minister's party. For an executive to act, it first needs to pass laws in the assembly. Thus, this variable is used to assess the willingness of the electorate to deliver a majority to the government. Nonetheless, the executive heads are differently evaluated in case of cohabitation. Thus, the sign of the variables  $seats1st$  and  $cohabitation$  are not fully known ex-ante. Therefore, the sign of  $\alpha_2$  and  $\alpha_3$  (respectively  $\beta_2$  and  $\beta_3$ ) has to be settled empirically.

According to the conventional wisdom, the main channel through which politicians obtain popular support is by delivering (or being considered as responsible for) economic performance. This link relies on the reward-punishment hypothesis proposed by Goodhart and Bhansali (1970). According to this assumption, voters examine the economic record of the incumbent, essentially relying on two major indicators of economic performance: unemployment and inflation. They then reward (or punish) the incumbent in direct proportion of her success in keeping either or both of these economic undesirables at relatively low levels. In short, it is hypothesized that governing parties gain support as unemployment and inflation fall, and lose support as they rise. In other words, there should be a negative relationship between government support, on the one hand, and unemployment and inflation, on the other hand ( $\alpha_4 < 0$ ;  $\beta_4 < 0$ ). However, as inflation has been kept under control, and was essentially stable at a very low level (2% or less) during our sample period in France, we do not include it in our regressions. Instead, we include the unemployment rate and the GDP growth rate. As voters tend to reward incumbents when the economy is in a good shape, we expect economic growth to have a positive impact on the executive appraisal ( $\alpha_5 > 0$ ;  $\beta_5 > 0$ ).<sup>12</sup>

Regarding the legal and regulatory production ( $PLP$ ), we hypothesize that the executive's likelihood of appealing to the public should be positively correlated with the popularity of her policy proposal. As stated above, this makes the agenda setting more

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<sup>12</sup>Needless to say, we use instantaneous, not revised, data in our estimates.

important for a rational policymaker. In what follows, we consider specifications which add a number of interaction variables between the percent legislative production, the honeymoon effect, and the last months variable in both equations, and separate the analysis, looking first at the whole production of legal texts, and then at the production by sub-domains. As such, we control for the issue salience, which may differ from period to period along the political cycle.

We now turn to our estimation strategy. Besides the stationarity analysis, it is also important to study the time series structure, testing if our dependent variables follow an ARIMA process. Since our variables are stationary, then they can only follow ARMA processes. We apply the Box-Jenkins methodology for model selection. Autocorrelations and partial correlations of popularity indexes suggest autoregressive processes of order one, AR(1).

Our analysis relies on a two-equation system (see equation 3), which could be estimated by the seemingly unrelated regression (SUR) method with AR components. Several previous studies of popularity functions also make use of the SUR methodology (see, e.g., Veiga and Veiga 2004; Auberger 2011; Fox 2009). This is relevant, as one can expect that any unexpected disturbance in a particular month will simultaneously affect the President and the Prime Minister. Thus, the error terms in the two equations will be contemporaneously correlated. However, we here face a potential problem of endogeneity as regards the independent variable *PLP*. In order to cope with this problem, we use the Generalized Method of Moments estimator. GMM estimation is based upon the assumption that the disturbances in the equations are uncorrelated with a set of instrumental variables. In our estimations, the set of instrumental variables of each equation includes all exogenous right-hand side variables of both equations and two-period lag values of *PLP*. The Hansen test of over-identifying restrictions allowed us to accept the validity of these variables as instruments.

The residual correlation coefficient at the bottom of Results' tables indicates that there is non negligible correlation between the error terms of the estimations for the Prime Minister and the President. Thus, it was appropriate to estimate the equation as



a system.

Tables 3 and table 4 display the econometric results. In table 3, we present different specifications using total legislation production. In model 1, we consider standard economic determinants of popularity controlling for honeymoon effects. In model 2, we add last months of terms instead of honeymoon periods. Honeymoon and last months indicators are simultaneously introduced in column 3. From columns 4 to 8, we add to the preceding our variable of interest (the legislative production) and its interactions with honeymoon and last months indicators. Precisely, column 6 contains interactions with honeymoon indicators while column 7 contains interactions with last months. The complete model is presented in column 8. In addition, we run the complete model over specific legislation as shown in Table 4.

## 4.2 Standard determinants of Executive popularity

As can be seen from Table 3, a first result suggests that the Prime Minister's approval rating is relatively persistent over time. The coefficient regarding the first lag is about 0.23 and is strongly statistically significant (at the 1% level). However, this is not the case for the President's approval rating, as the lagged level of popularity is not significant. Another important difference between the two heads of the French Executive is that, with respect to the standard economic variables that influence popularity, only the President's popularity is influenced by unemployment and GDP growth (respectively) in our framework. As can be inferred from Table 3, an increase by 1 percentage point of the unemployment rate reduces the approval rating of the President by 5.23 percentage points (Model 7). Although this result differs from the ones obtained by, e.g., Lewis-Beck (1980) (who shows a significant and negative influence of unemployment figures on both the President's and Prime Minister's popularity over the 1960-1978 period), it stands in line with the most recent estimates provided by Gerstlé and François (2011) - who show a significant negative influence of unemployment on the President's popularity (over the 2007-2010 period, i.e., the end of our the period under review here).

An important political variable is the share of support the political agenda of the

Executive can benefit from inside the Assembly. On this point, it can be noticed that the share of MPs belonging to the Prime Minister’s majority negatively influences the popularity of both Executive heads. However, although the coefficient is not significant for the Prime Minister, it is strongly significant in the President’s popularity equation. This result confirms the semi-presidential nature of the regime, and the point made by Cella et al. (2017) about the nature of responsibility in this type of regime. The result thus stands in line with the responsibility hypothesis, as it means that voters penalize the President, whom they consider as accountable in this type of regime: voters gave the President a majority to run his programme, and he is even more considered accountable as the size of the majority is large.<sup>13</sup>

Our estimates also reveal that cohabitation periods benefit to both heads of the Executive, but they clearly are more beneficial to the Prime Minister than to the President. This result is interesting because, although the Prime Minister *de facto* can be considered as leading the agenda, which could induce the electorate to scapegoate her (this is the perspective adopted, for example, by Auberger (2011)), it is also often recognized that exercising power with a President who is a declared opponent is a more complex exercise, acknowledged by voters. Hence, our estimates tend to favor the second interpretation, with the Prime Minister benefiting, in terms of popularity, from cohabitation episodes, a result that confirms the one obtained by Padovano and Gavaille (2017). As for the size of the effects, it appears that, everything being equal, cohabitation increases by about 4% the President’s popularity, and about 20% for the Prime Minister’s one (see Model 8 in Table 3). All in all, then, this first set of results reveals that the degree of accountability is higher for the President than for the Prime Minister.

The literature on executives’ popularity highlights the existence of a pattern: during the first months of their term, heads of state or government tend to benefit from a relatively high level of approval before the “honeymoon” ends and their popular appeal begins to wane (Mueller, 1973). In the French institutional context, given that the President nominates (and thus, if only sometimes implicitly, can dismiss) the Prime Minister,

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<sup>13</sup>We ran regressions using a dummy variable “majority” instead of the share of MPs. The results are qualitatively similar and are available upon request.

discrepancies are generated between their respective terms. Hence, as described above, we introduce two “honeymoon” variables, one for the President and the other for the Prime Minister, defined with regard to each of their respective beginning of term. The results, as can be seen in Table 3 , indicate that the honeymoon effect benefits both the Prime Minister and the President, with a higher weight for the latter. This probably reflects the strong personalization effect of the President’s office in France, elected by universal suffrage, while the Prime Minister is appointed by the President. Finally, for both, the last months of their mandates weigh negatively on the popularity levels, revealing a “fatigue” from the electorate that translates into an erosion of both political capital.

### **4.3 When (and who) does it pay to legislate?**

We now turn to our main variable of interest, namely the legal and regulatory production. As Table 3 shows, the variable itself (defined as the Percent deviation of Legislative Production per month and per Prime Minister) does not influence the two approval ratings we consider by itself. Hence, it seems that legislating, by itself, does nothing to improve popularity (although the coefficient is positive, it is not significant). However, when considered in interaction with the timing of the political cycle, in particular during the beginning of the terms, there is a significant and positive effect. In model 6, for instance, a 1 percent increase in legislative output during the honeymoon period tends to increase the popularity of the Prime Minister and the President by, approximately 1% on average. As the average popularity level stands below 50% (see Table 1), such a gain is not to be neglected. This is even more so for the President, as the coefficient related to the interaction of the two variables is smaller in his case with, on average, a lower popularity (see Table 1 and Figure 2). Hence, if legal activism pays off, it mostly does so in the beginning of a mandate and is more beneficial to the Prime Minister.

The pattern is less obvious when we look at last-minute policies. As models 7 and 8 show, the coefficient on the interaction between the legal and regulatory production and the last-months of a mandate is not significant in the case of the President, but changes sign in the case of the Prime Minister (compare model 7 to model 8 in 3 ). Looking

at the marginal effects, however, allows clarifying the results.<sup>14</sup> The right side panel of Figure 6 confirms the non-significance of the “last-minute” production of legal texts on a President’s popularity. However, the left side panel illustrates how the last-minute’s marginal effect is increasing with legal production in the case of the Prime Minister. Hence, while the honeymoon effect has a similar - positive - impact for both heads of the French Executive (see Figure 5), the pattern is clearly different for the last-minute measures (Figure 6). On average, the Prime Minister does benefit from a late production of legal texts (although the marginal impact is inferior to the honeymoon period). It thus appears from our results that the electorate does not punish late-activism. Acting late may be considered as a signal of competence, or as a bold-headed attempt to enforce one’s agenda<sup>15</sup>, and is rewarded by the public.

**Insert figure 5 about here**

**Insert figure 6 about here**

According to the Political Legislation Cycle theory, a peak of legislative production is to be expected in the pre-electoral period, when politicians want to send fresh signals to the electorate. Our results show that voters are not unaware of these incentives, and tend to reward a politician that acts early on, while late policies do not help a lagging politician to improve her popularity records. The nuance we bring is that, in the French case, i.e., a semi-Presidential regime with a strong President and a (relatively) weak Prime Minister, the latter will be rewarded if she implements late-minute policies. The difference comes from the built-in fragility of the Prime Minister in this type of regime, who can be fired by the President at will, and whose last-minute decisions can be considered as signaling some “valence”, a move that can be appreciated positively by voters (Gouret and Rossignol, 2016).

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<sup>14</sup>To be precise, we plot the marginal effects of honeymoon (Figure 5) and of last months effects (figure 6) both for the Prime Minister and the President, on the basis of the results presented in column 8 of Table 3.

<sup>15</sup>Unfortunately, our data forbids exploring further these possibilities, to disentangle which interpretation should be favored, and we thus have to leave this as a future research avenue.

## 4.4 Splitting legal production by domains

Individuals can be assumed to prefer (and thus to give higher approval ratings to) Executive whose stances on important issues are in accordance with their own. We can here explore this dimension because, as explained above, our dataset is classified by specific codes of law. This allows analyzing if popularity ratings vary according to the dimension along which policymakers legislate, and especially if the time pattern perceived above differs by domain. Given that some domains have been barely touched upon during the period under review, we regroup some legal codes in larger domains, as explained in the Appendix. The specific domains we consider are the following: pensions, immigration, justice, internal affairs, defense, agriculture, environment, economy, taxation and labor. Even with these groupings, however, it has to be signalled that some domains remain characterized by a smaller number of legal production (as can be inferred from Table 1), which may induce less precise estimates. Keeping this in mind, as the results in Table 4 reveal, separating out the different domains does not modify the results related to the standard determinants of popularity. In particular, they provide strong support in favor of the reward-punishment hypothesis, with unemployment having a larger negative impact on the President’s approval rating, while GDP growth only affects the Prime Minister’s.

An interesting result emerging here is that, for the Prime Minister, splitting the analysis by domains reveals that the variable  $Unknit_{x,t}$  (designed to capture the decisions to undo decisions taken by previous governments by repealing part(s) of the legal apparatus) is now significant and positive, but only for the domain covering Taxation issues (see 4, column 10). Here again, the data does not allow disentangling the potential competing explanations for the result, which may be due to the signal of valence we signalled above, or to the fact that French voters are fiscal conservatives (Peltzman, 1992).<sup>16</sup> that reward any simplification of the tax code. For the President,  $Unknit_{x,t}$  is also sometimes significant, with a negative impact on popularity in the domains of Internal Affairs and

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<sup>16</sup>The positive impact of the repeal of tax laws is in line with Geys and Vermeir (2008) who hypothesize that tax policy should have dual and significant effects insofar as both the level and structure of the tax burden will impact upon presidential approval. They determine, based on data from 1959 through 2006, that presidential approval declines in response to increases in both the deficit and tax burden; moreover, ‘turbulence’ in the structure of taxation exerts an ‘independent and negative effect’.

Agriculture, and a positive one for Pensions and Justice. Here, the interpretation we would favor is that, by his position in the French institutional system, the President is the warrant of Justice, which could explain both the positive coefficient in this domain and, also, the negative one for Internal Affairs, as the latter may be taken as trying to exert an influence in the judicial area which is negatively considered by the electorate).

Otherwise, looking at timing effects, they are apparently less clear. Looking at the marginal effects, however, permits to have a clearer view. Figure 7 displays the marginal effects for both heads of the Executive, and its inspection confirms that early legal and regulatory production globally tends to increase their popularity. This is not the case for last-minute policies, the effects of which by domain are illustrated in figure 8, with the solid sloping line indicating that legal texts, when produced during the last months before elections, generally tend to reduce the approval ratings of both leaders.

**Insert figure 7 about here**

**Insert figure 8 about here**

This set of results also points to a better understanding of the erosion of the political capital a politician suffers from during her mandate: if the newly appointed benefits from some sympathy from the electorate, by acting, the policymaker can only create winners and losers from changes in the law, or reveal his way of acting, and this can explain the fall in popularity. The last-minute effect can appear as some window-dressing, and its impact is reduced, compared to the beginning of mandate actions.

## **5 Conclusion**

Few studies have analyzed the effects of noneconomic conditions on executive approval in France. We contribute to the literature by bringing together two literatures: the ones on legislative political cycles and economic voting, as well as the one related to timing management of issues by agenda setters. In this paper, we model French Executive approval as a function of economic performance and of the timing of a politician's action (here defined as the production of legal texts). Empirically, we have jointly estimated

equations explaining French Executive heads (i.e., the President and the Prime Minister) approval ratings. Our results confirm long held notions about the role of the economic situation, particularly as regards the negative impact of unemployment on popularity, although this is particularly true of the President’s popularity, compared to the Prime Minister’s.

We also assess the impact of the production of legal texts on the popularity of the French President and Prime Minister. We find that this production positively influences the Executive approval, on average. Then, this effect is contrasted according to the timing of issuance of these texts. While the literature on legislative political cycles (LPC) indicates that higher legislative activism should be expected when an election looms, our results allow going further and deeper in the analysis of the timing of the production of legal texts, revealing its impact on popularity. The landscape brought about by our results is one where policymakers’ incentives are supportive of the LPC, as there is a popularity premium in legislating. However, the premium is even stronger when legal production is combined to the honeymoon effect, rather than to a “last-minute policy” effect. We also show that the domain of activism is not indifferent, and in particular that a President should refrain from modifying the legal texts in the domain of justice, as this may be considered as interfering.

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Figure 1: Legislative production

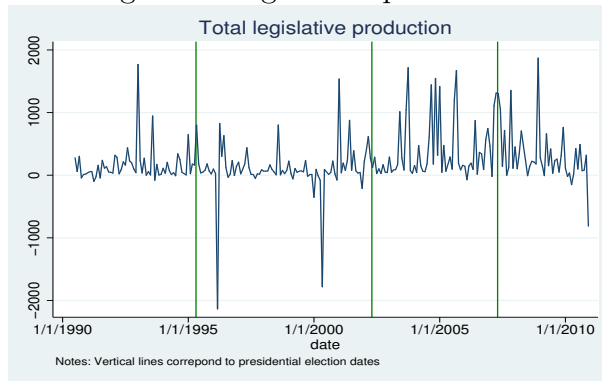


Figure 2: Popularity indexes

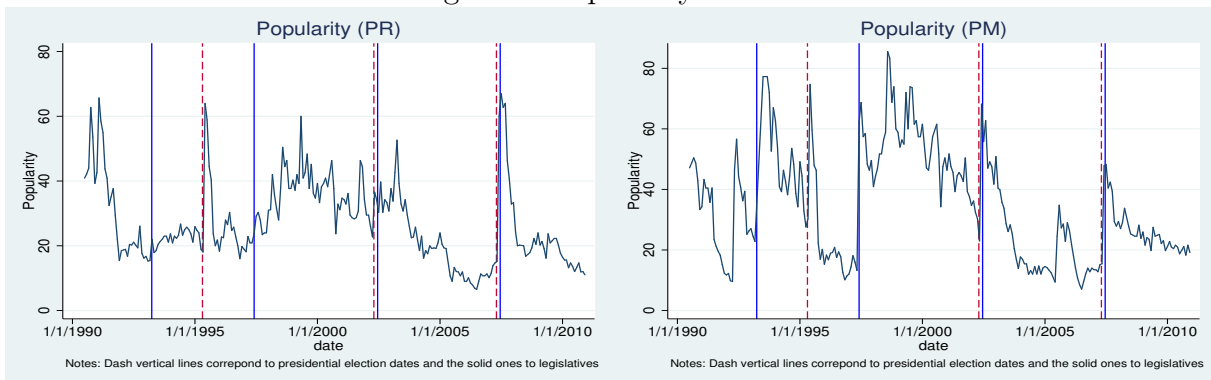


Figure 3: GDP growth and Unemployment rate



Table 1: Descriptive statistics of dependent and standard variables

Variable	Obs	Mean	Std. Dev.	Min	Max
PM	215	46.835	13.496	17	73
PR	215	42.037	10.531	16	65
Share of PM's deputies	215	51.571	7.658	44.541	63.258
Cohabitation	215	.363	.482	0	1
Unemployment rate	215	9.508	1.092	7.5	11.3
GDP growth	215	.417	.521	-1.71	1.307

Table 2: Descriptive statistics of the percent legislative production

Variable	Obs	Mean	Std. Dev.	Min	Max
Percent legis production (Total)	215	.488	2.942	.001	27.304
Percent legis production (Pensions)	215	.06	.281	.002	1.872
Percent legis production (Immig)	215	.013	.021	0	.065
Percent legis production (Justice)	215	.222	.66	.012	4.475
Percent legis production (IntAff)	215	.279	1.296	.013	8.651
Percent legis production (Defense)	215	.183	.775	.003	5.185
Percent legis production (Agri)	215	.107	.414	.005	2.765
Percent legis production (Env)	215	.211	1.04	0	6.932
Percent legis production (Eco)	215	.425	2.235	.011	14.87
Percent legis production (Labor)	215	.08	.448	.004	2.978
Percent legis production (Tax)	215	.789	4.079	.007	27.156

Figure 4: Parties and Majority description in French Legislature, from June 1990 to December 2010.

Legislatures	IX	Elections	X	Elections	XI	Elections	XII	Elections	XIII
Dates		.03/93		.05-06/97		.06/02		.06/07	
	S		RPR		S		UDF		UMP
	UDC		UDF		RCV		UMP		NC
	C		C		C		S		GDR
	RPR		S		DL		C		SRC
	UDF		NI		RPR		NI		NI
	NI				UDF-Alliance				
					NI				
The pink specifies a left-side coalition with majority in the Assembly.									
The blue specifies a right-side coalition with majority in the Assembly.									
	C	Communistes			RCV	Radical Citoyen Vert			
	CR	Centre Républicain			RPR	Rassemblement Pour la République			
	DL	Démocratie Libérale			S	Socialistes			
	FN	Front National			SRC	Socialiste Radical et Citoyen			
	GDR	Gauche Démocrate et Républicaine			UDC	Union Du Centre			
	NC	Nouveau Centre			UDF	Union pour la Démocratie Française			
	NI	If they are not registered in any group			UMP	Union pour un Mouvement Populaire			

Table 3: Determinants of Executive's popularity (All domains)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	M1	M2	M3	M4	M5	M6	M7	M8
<b>Equation: Prime Minister</b>								
Popularity lagged (PM)	0.244*** (0.0780)	0.278*** (0.0765)	0.225*** (0.0768)	0.225*** (0.0765)	0.226*** (0.0766)	0.210*** (0.0764)	0.207*** (0.0764)	0.227*** (0.0758)
Share of PM's deputies	-0.214 (0.178)	-0.314* (0.171)	-0.199 (0.190)	-0.168 (0.190)	-0.155 (0.188)	-0.162 (0.173)	-0.123 (0.172)	-0.133 (0.168)
Cohabitation	19.97*** (4.467)	18.05*** (4.065)	21.15*** (4.658)	21.72*** (4.674)	21.88*** (4.639)	21.43*** (4.140)	22.22*** (4.096)	20.83*** (3.994)
Unemployment rate	-0.586 (0.980)	-0.830 (0.979)	-0.280 (0.988)	-0.312 (0.987)	-0.380 (0.978)	-0.685 (0.900)	-0.524 (0.909)	-0.664 (0.884)
GDP growth	-2.187 (2.658)	-1.117 (2.079)	-2.977 (2.654)	-3.027 (2.660)	-2.788 (2.631)	-3.181 (2.240)	-3.611 (2.239)	-3.361 (2.188)
Honeymoon_PM	6.668** (3.086)		6.464* (3.299)	6.614** (3.313)	6.352* (3.294)	6.045* (3.086)	6.562** (3.108)	6.286** (3.177)
Last months (PM)		-8.043*** (2.001)	-7.585*** (2.114)	-8.093*** (2.017)	-8.069*** (2.036)	-7.372*** (1.941)	-7.327*** (1.934)	-7.754*** (1.860)
Percent legis production				0.195 (0.174)	0.195 (0.173)	0.122 (0.125)	1.320*** (0.327)	-3.480*** (1.142)
Honeymoon_PM*						1.274** (0.639)		4.408*** (1.143)
Percent legis production								
Last month (PM)*							-1.162*** (0.379)	3.612*** (1.148)
Percent legis production								
Repeal					-4.759** (2.300)	-3.984* (2.337)	-3.748 (2.340)	-4.454* (2.387)
Unknit					57.36** (25.09)	52.68* (27.34)	50.59* (27.16)	55.96** (28.44)
_cons	36.45** (16.13)	44.73*** (15.47)	34.51** (16.82)	32.98* (16.84)	32.89** (16.58)	36.70** (15.17)	32.98** (15.22)	34.89** (14.83)
<b>Equation: President</b>								
Popularity lagged (PR)	0.0254 (0.0515)	0.0393 (0.0623)	0.0789 (0.0521)	0.0754 (0.0526)	0.0732 (0.0528)	0.0713 (0.0531)	0.0704 (0.0517)	0.0727 (0.0541)
Share of PM's deputies	-0.741*** (0.134)	-0.733*** (0.148)	-0.668*** (0.137)	-0.657*** (0.137)	-0.629*** (0.136)	-0.641*** (0.137)	-0.674*** (0.135)	-0.642*** (0.136)
Cohabitation	1.653 (1.692)	3.987* (2.064)	4.592** (1.914)	4.756** (1.897)	4.955*** (1.888)	4.246** (1.784)	3.875** (1.756)	4.018** (1.750)
Unemployment rate	-5.067*** (0.740)	-5.141*** (0.773)	-4.755*** (0.750)	-4.779*** (0.743)	-4.718*** (0.729)	-5.175*** (0.695)	-5.234*** (0.736)	-5.151*** (0.719)
GDP growth	3.764*** (0.961)	2.959*** (1.058)	3.297*** (1.028)	3.329*** (1.024)	3.236*** (1.017)	3.103*** (0.986)	3.151*** (0.982)	2.942*** (0.971)
Honeymoon_PR	13.84*** (4.638)		12.23*** (4.335)	12.18*** (4.339)	12.57*** (4.270)	11.70** (5.514)	14.55*** (4.441)	10.49* (5.560)

Last months to presid elec	-0.851***	-0.889***	-0.885***	-0.872***	-0.830***	-0.902**	-0.873**
	(0.209)	(0.190)	(0.191)	(0.193)	(0.203)	(0.360)	(0.357)
Percent legis production			0.107	0.114	0.0736	0.0867	0.0669
			(0.134)	(0.135)	(0.101)	(0.113)	(0.0975)
Honeymoon_PR*					0.954**		1.037**
Percent legis production					(0.414)		(0.423)
Last month to presid elec*						1.460	1.165
Percent legis production						(6.049)	(5.988)
Repeal				1.470	2.010	2.029	1.603
				(2.845)	(2.913)	(2.899)	(2.864)
Unknit				18.22	19.28	18.68	19.72
				(38.40)	(37.49)	(37.01)	(36.84)
_cons	110.3***	110.4***	101.8***	101.4***	99.09***	104.4***	106.7***
	(13.00)	(13.13)	(13.33)	(13.37)	(13.05)	(12.72)	(13.05)
Sample Size	225	225	215	215	215	215	215
J-stat	4.34	7.39	3.31	3.40	3.35	3.99	6.62
Hansen P	0.23	0.12	0.35	0.33	0.34	0.26	0.25
Residual Correlation	0.45	0.45	0.42	0.44	0.44	0.44	0.42

Standard errors in parentheses. Significance levels: \* p<.1, \*\* p<.05, \*\*\* p<.01

The legislative production considered is relative to all domains

Table 4: Determinants of Prime Minister's popularity (specific domains)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Pensions	Immig	Justice	Int_Aff	Defense	Agri	Env	Eco	Labor	Tax
<b>Equation: Prime Minister</b>										
Popularity lagged (PM)	0.17** (0.08)	0.24*** (0.08)	0.17** (0.08)	0.19** (0.07)	0.19** (0.07)	0.16** (0.08)	0.19** (0.08)	0.19** (0.07)	0.19** (0.07)	0.18** (0.07)
Share of PM's deputies	-0.02 (0.17)	-0.21 (0.22)	0.00 (0.17)	-0.01 (0.17)	-0.01 (0.17)	0.04 (0.17)	-0.02 (0.17)	-0.00 (0.17)	-0.03 (0.17)	0.01 (0.17)
Cohabitation	26.00*** (3.85)	18.43*** (4.70)	25.81*** (3.79)	26.43*** (4.00)	25.77*** (3.89)	27.19*** (3.89)	25.37*** (3.95)	25.72*** (3.94)	25.24*** (3.88)	25.86*** (3.90)
Unemployment rate	-0.75 (0.89)	-1.08 (0.98)	-0.58 (0.91)	-0.53 (0.90)	-0.59 (0.89)	-0.97 (0.92)	-0.68 (0.89)	-0.60 (0.89)	-0.71 (0.87)	-0.55 (0.89)
GDP growth	-5.07** (2.08)	-2.18 (2.73)	-4.64** (2.05)	-5.13** (2.07)	-4.87** (2.07)	-4.76** (2.06)	-4.70** (2.14)	-4.79** (2.13)	-4.51** (1.97)	-4.80** (2.06)
Honeymoon_PM	7.22*** (2.56)	4.90 (3.35)	7.21*** (2.73)	7.53*** (2.56)	7.22*** (2.63)	7.24*** (2.62)	7.20*** (2.68)	7.13*** (2.55)	7.10*** (2.57)	7.20*** (2.53)
Last months (PM)	-7.51*** (1.87)	-10.58** (4.55)	-7.46*** (1.91)	-8.44*** (1.91)	-8.04*** (1.91)	-8.13*** (1.77)	-8.02*** (1.86)	-8.02*** (1.90)	-7.86*** (1.86)	-7.88*** (1.85)
Percent legis production	0.10 (0.07)	-1.04** (0.43)	6.52 (4.60)	0.87 (0.82)	2.21 (1.73)	14.71* (8.60)	1.52 (1.21)	1.39 (0.96)	2.95 (7.27)	0.69 (0.45)
Honeymoon_PM*	0.04 (0.03)	0.78 (1.59)	0.22 (2.55)	1.48*** (0.34)	2.16** (0.87)	-2.65 (5.02)	1.63** (0.65)	0.33 (0.53)	3.94 (3.69)	0.24 (0.23)
Percent legis prod	0.01 (0.08)	0.07* (0.04)	-0.04 (0.11)	0.07 (0.05)	0.05 (0.06)	-0.10 (0.13)	0.05 (0.05)	-0.03 (0.08)	0.06 (0.07)	0.01 (0.07)
Last month (PM)*	-3.76 (2.78)	14.67 (105.05)	-4.35 (3.15)	-0.12 (4.56)	-4.07 (5.67)	1.55 (4.60)	-0.32 (4.18)	1.66 (2.69)	1.93 (3.85)	-7.68** (3.03)
Percent legis production										
Repeal										
Unknit	1.68		27.61	13.70	59.11	-291.90*	79.55	1.02*	0.21	67.07**



	(1.50)	(35.29)	(51.92)	(57.09)	(173.05)	(57.11)	(0.53)	(3.70)	(34.17)
_cons	29.64*	44.24***	26.23*	26.51*	29.05*	28.26*	26.77*	29.26*	25.98*
	(15.43)	(16.60)	(15.62)	(15.47)	(15.61)	(15.31)	(15.28)	(15.04)	(15.28)
<b>Equation: President</b>									
Popularity lagged (PR)	0.05	0.08	0.05	0.06	0.06	0.06	0.06	0.07	0.06
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Share of PM's deputies	-0.65***	-0.72***	-0.56***	-0.55***	-0.60***	-0.59***	-0.58***	-0.57***	-0.55***
	(0.14)	(0.17)	(0.13)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Cohabitation	6.58***	3.12*	6.36***	7.60***	7.00***	6.64***	6.69***	6.78***	6.62***
	(1.66)	(1.78)	(1.68)	(1.74)	(1.68)	(1.68)	(1.69)	(1.73)	(1.70)
Unemployment rate	-5.72***	-5.15***	-5.59***	-5.31***	-5.91***	-5.56***	-5.60***	-5.55***	-5.55***
	(0.80)	(0.71)	(0.82)	(0.80)	(0.81)	(0.80)	(0.80)	(0.80)	(0.79)
GDP growth	2.65***	3.01**	3.01***	2.33***	2.83***	3.12***	2.59***	2.66***	2.50***
	(0.86)	(1.45)	(0.88)	(0.89)	(0.89)	(0.98)	(0.94)	(0.95)	(0.90)
Honeymoon_PR	11.31*	10.22	10.75*	11.44*	9.86*	11.56**	11.20*	11.26*	11.26*
	(6.14)	(6.38)	(6.04)	(5.85)	(5.58)	(5.89)	(5.98)	(5.89)	(5.87)
Last months to presid elec	-1.33***	-0.92***	0.30	-1.45***	-2.38***	-2.00***	-0.22	-2.77***	32.10***
	(0.31)	(0.20)	(0.35)	(0.34)	(0.73)	(0.67)	(0.20)	(0.87)	(11.58)
Percent legis production	0.08***	-0.69*	3.99***	1.67***	3.04***	4.61**	0.81*	3.86	0.58***
	(0.03)	(0.38)	(1.28)	(0.62)	(1.04)	(1.91)	(0.42)	(2.49)	(0.20)
Honeymoon_PR*	0.02	2.67*	0.56	0.48	0.95	1.51	0.36	1.44	0.13
	(0.04)	(1.59)	(1.55)	(0.78)	(1.27)	(2.59)	(0.48)	(2.25)	(0.25)
Percent legis prod	0.13		-8.53***	7.69***	27.41**	18.47**	-12.27***	265.95**	-226.25***
Last month to presid elec*	(0.08)		(3.15)	(2.88)	(11.33)	(8.96)	(4.53)	(106.28)	(80.16)
Percent legis production	-3.32	2.84	-10.98***	6.75**	-9.43***	5.32	-1.66	1.43	-3.00
Repeal	(2.34)	(96.10)	(2.91)	(3.42)	(3.05)	(4.19)	(2.44)	(2.92)	(5.55)
Unknit	3.10***		61.50**	-82.98***	111.28*	-364.23***	0.75*	2.17	65.73

	(0.92)	(25.80)	(24.69)	(59.43)	(137.68)	(78.14)	(0.45)	(2.18)	(55.04)
_cons	109.22***	109.77***	103.70***	99.82***	101.28***	109.08***	104.49***	104.62***	103.36***
	(13.98)	(13.07)	(14.19)	(14.04)	(14.20)	(14.08)	(14.14)	(14.03)	(14.08)
Sample Size	215	215	215	215	215	215	215	215	215
J-stat	11.68	8.76	9.85	9.18	10.91	10.22	9.93	11.33	10.96
Hansen P	0.23	0.07	0.36	0.42	0.28	0.33	0.36	0.25	0.28
Residual Correlation	0.42	0.41	0.42	0.43	0.42	0.41	0.42	0.42	0.42

Standard errors in parentheses. Significance levels: \* p<.1, \*\* p<.05, \*\*\* p<.01

Figure 5: Honeymoon marginal effects (All domains)

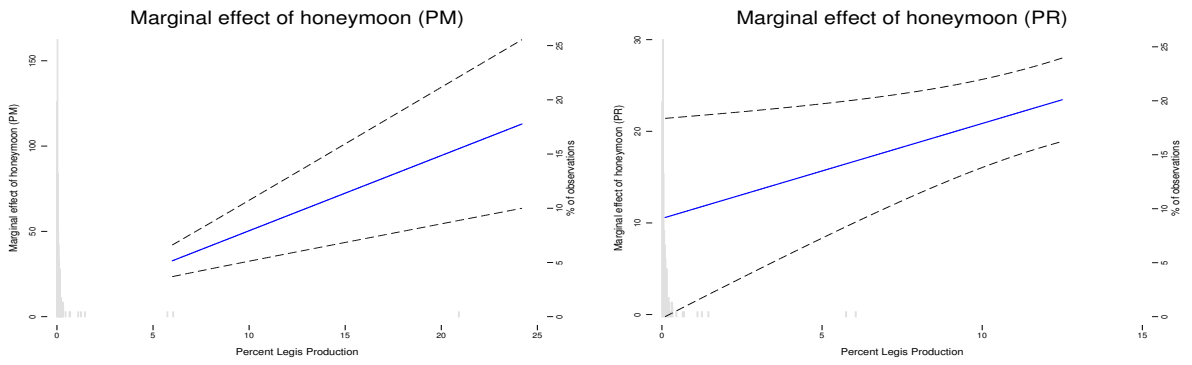


Figure 6: Last minute policies (All domains)

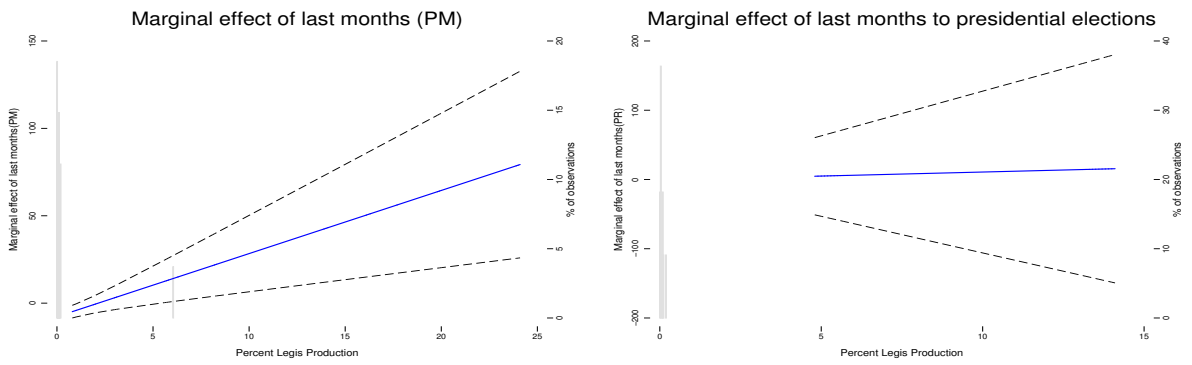


Figure 7: Honeymoon effects (Specific domains)

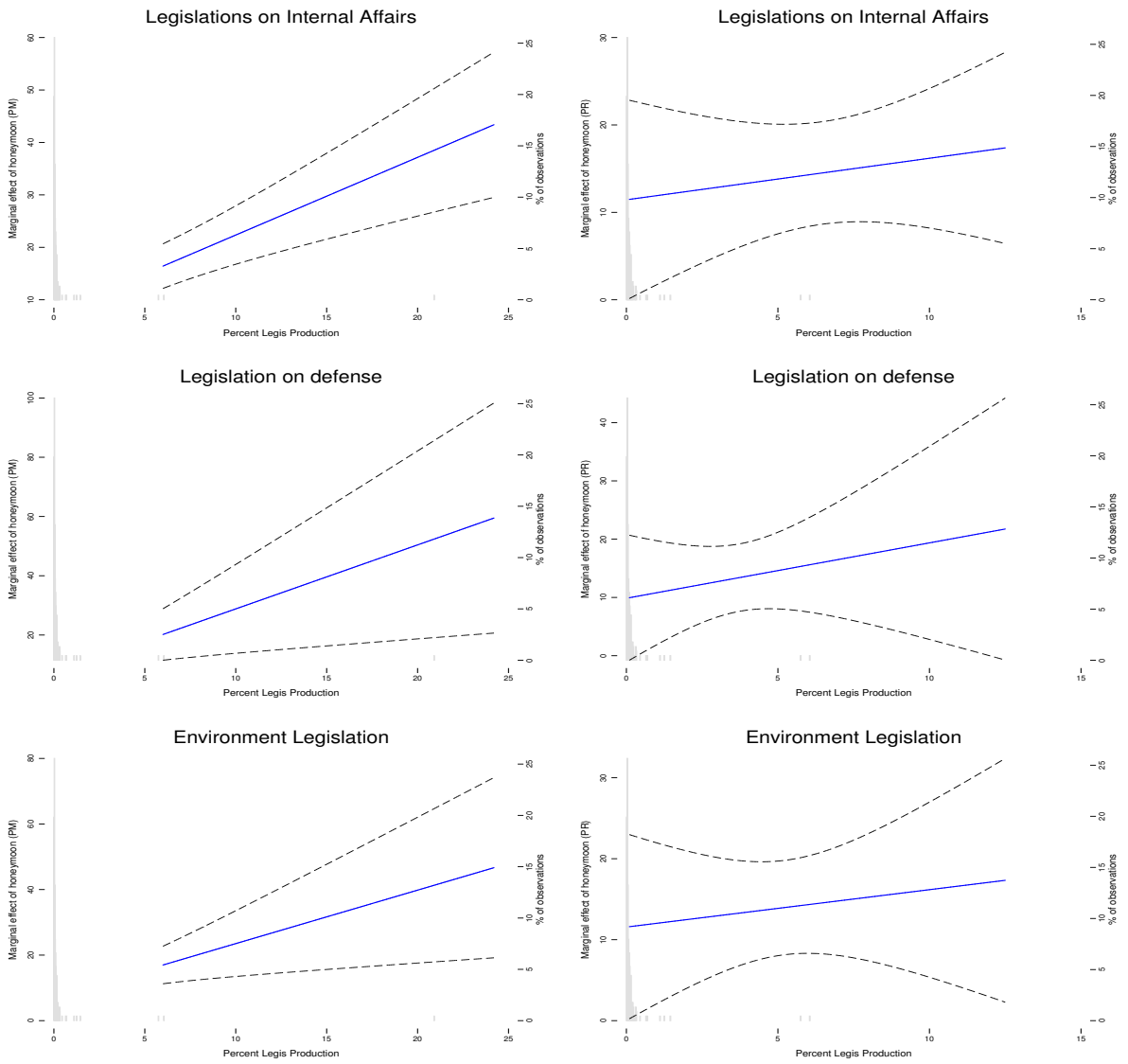
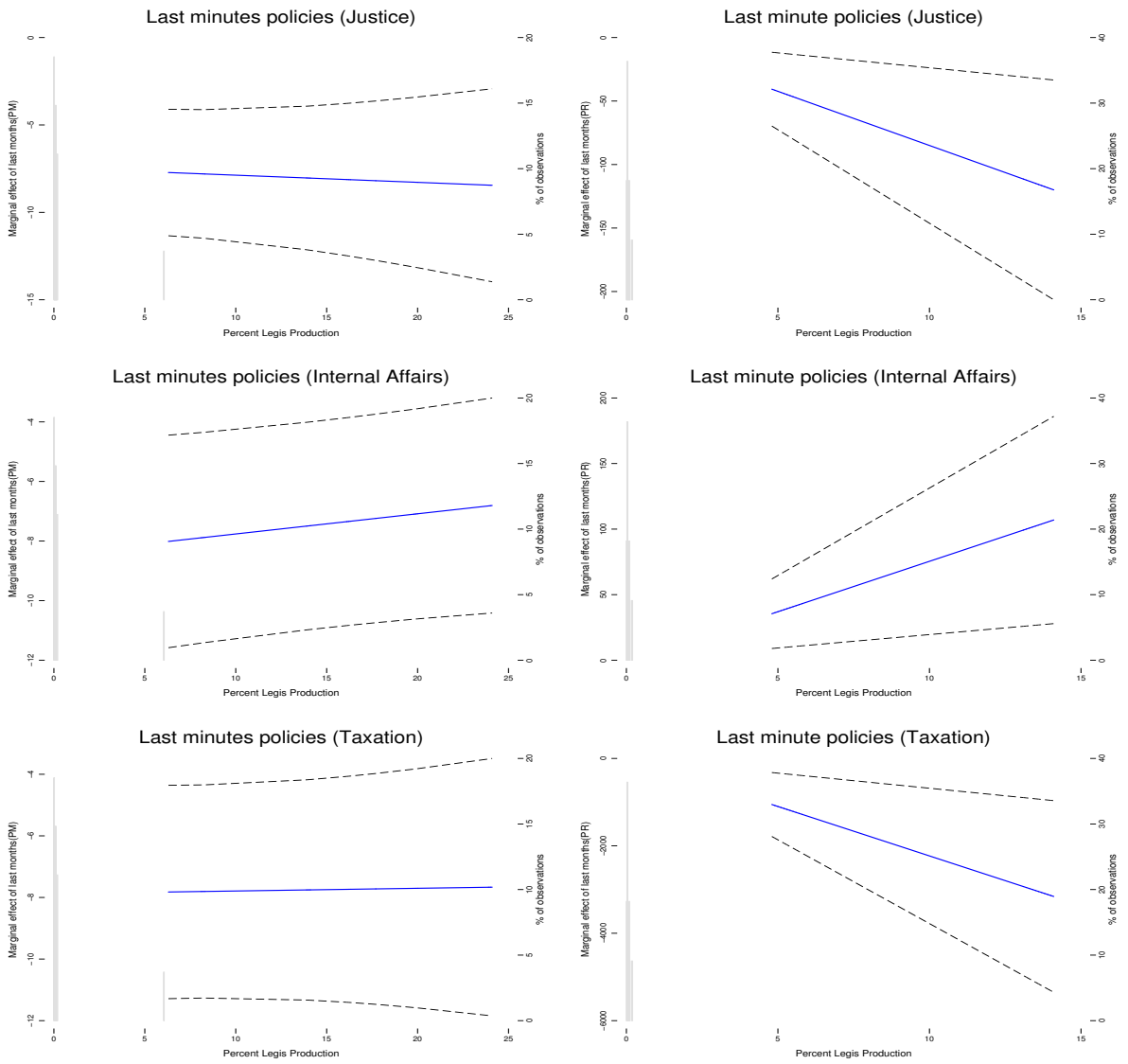


Figure 8: Last minute policies (Specific domains)



## Appendix

### A List of categories of laws included

This is the list of categories of laws that have been included in our monthly count of laws variable:

Code	Domain
Code de la sécurité sociale	Pensions
Code des pensions civiles, militaires et retraite	
Code des pensions et retraite des marins français	
Code de l'emploi	Labor
Code du travail	
Code des impôts	Taxation
Code de justice militaire	Defense
Code de défense	
Code de l'environnement	Environment
Code la construction et de l'habitation	
Code de l'urbanisme	
Code de l'intérieur	Internal Affairs
Code électoral	
Code des communes	
Code de la santé	Health
Code la famille et de l'aide sociale	
Code la mutualité	
Code pénal	Justice
Code civil	
Code du commerce	
Code disciplinaire et pénal de la marine marchande	
Code de justice administrative	
Code de procédure civile	
Code de procédure pénale	
Code rural et de la pêche maritime	Agriculture
Code forestier	
Code Economie	Economy
Code d'entrée, séjour des étrangers et droit d'asile	Immigration
Code de la jeunesse et des sports	
Code de la culture	Culture
Code de l'éducation	Education