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

Mamadou Boukari

LEM (UMR 9221, Université de Lille et CNRS)

Etienne Farvaque

*LEM (UMR 9221, Université de Lille et CNRS) et Cirano
(Québec, Canada)*

Daniel Cakpo-Tozo

KPMG

Abstract

The paper analyzes the relations between the legal and regulatory production and the gains of popularity for the President and the Prime Minister in France. Using the GMM system estimation, we show 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 improves.

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Contact: Mamadou Boukari - mamadou.boukari@univ-lille.fr, Etienne Farvaque - etienne.farvaque@univ-lille.fr, Daniel Cakpo-Tozo - daniel.cakpotozo@gmail.com

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Abstract

The paper analyzes the relations between the legal and regulatory production and the gains of popularity for the President and the Prime Minister in France. Using the GMM system estimation, we show 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 improves.

Keywords: Legal production, Regulation, Semi-presidential government system, Popularity, France.

JEL Classification: D72, D78, K40.

1 Introduction

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 Manzonni and Penczynski, 2017). 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, 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).

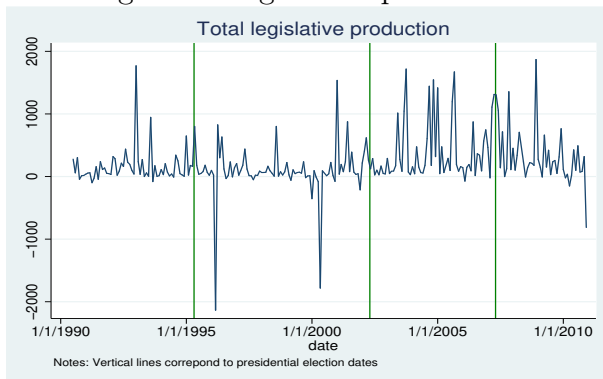
But does activism pay off? We analyze the relations between the legal and regulatory production and the Executive’s popularity gains in France.

2 Institutional context and data

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 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.¹

Figure 1: Legislative production



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). 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:

¹Our database includes a monthly count of the four types of legislation existing in France: laws, ‘ordonnances’, decrees and ‘arrêtés’. Law shows the total number of laws that have been promulgated and published in the official record. Even though laws are supposed to be produced mainly by representatives, it has been shown that their activity is more than strongly influenced by the Executive’s agenda (see, e.g., Boelaert et al., 2017), justifying our choice to consider the full set of texts.

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

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.

We interact the monthly legislative production with 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. 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. Concerning the last minute effects, they are captured by a discrete variable, named *last_months*, attributing a decreasing weight to each of the last twelve months before presidential elections for the President, and a decreasing 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. The asymmetry between the two agenda effects is due to the importance attributed to the “first 100 days” of a politician’s term, and to account for the electoral campaign length. 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).²

The dependent variables are the President and the Prime Minister approval rates, obtained from Kantar Sofres.³ The popularity index for each of the two heads of the Executive is a ratio of the percentages approving the Executive to the sum of the percentages disapproving and the undecided.⁴ 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.

²If the President can call an snap election to take advantage of an electoral opportunity, then the variable measuring electoral cycle is endogenous. But, the only case in point is President Chirac, who called for legislative election one year before it was scheduled in 1997. Here, we consider the electoral cycle taking as our reference point the presidential election. Therefore, our results do not suffer from this type endogeneity problem.

³See: http://www.tns-sofres.com/cotes-de-popularites#field_accordeondataviz-president.

⁴Including 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.

Figure 2: Popularity indexes

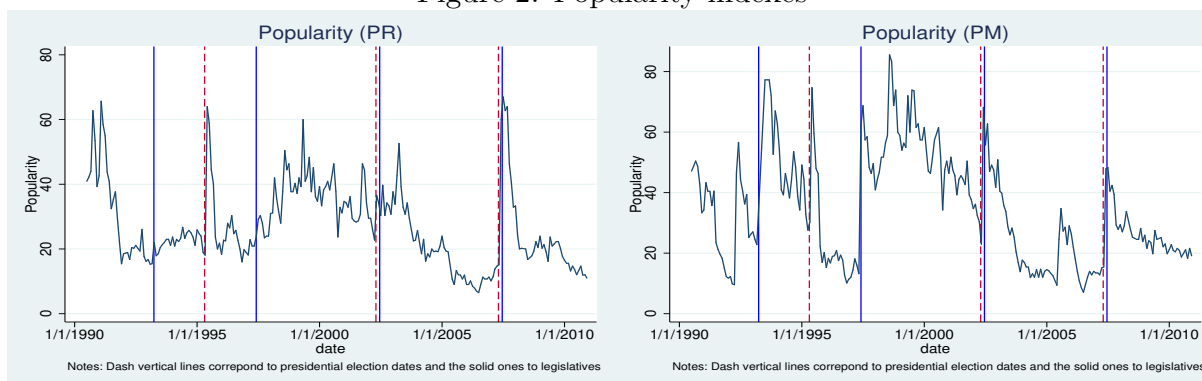
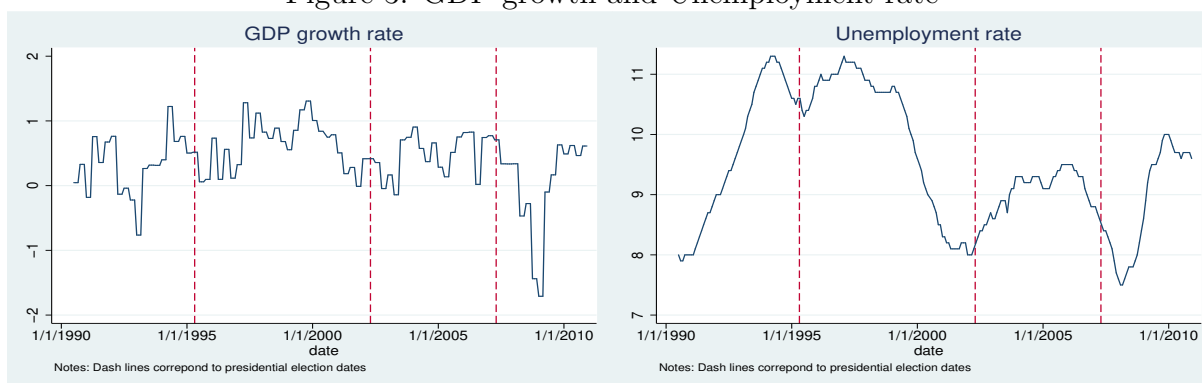


Figure 3: GDP growth and Unemployment rate



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). This is taken into account by the dummy variable “cohabitation” (equal to 1 in such periods, 0 otherwise). This helps us to test the responsibility hypothesis. Another important variable of our dataset is the support each Prime Minister can benefit from inside the National Assembly. We measure support using the deputies’ names and the party to which they belong. Data comes from the Assemblée nationale website.⁵ Five legislatures took place during our period of study.

⁵<http://www.assemblee-nationale.fr/>.

3 Empirical evidence

3.1 Model

Our initial specifications are:

$$\begin{cases} Pop_PM_t = \alpha_0 + \alpha_1 Pop_{PM,t-1} + \alpha_2 cohab_t + \alpha_3 unemp_{t-1} \\ \quad + \alpha_4 HCI_t + \alpha_5 PLP_{t-1} + \alpha_6 H_t + \alpha_7 lastmonths_PM_t + \varepsilon_t \\ Pop_PR_t = \beta_0 + \beta_1 Pop_{PR,t-1} + \beta_2 seats1st + \beta_3 cohab_t + \beta_4 unemp_{t-1} \\ \quad + \beta_5 HCI_t + \beta_6 PLP_{t-1} + \beta_7 H_t + \beta_8 lastmonths_t + v_t \end{cases} \quad (3)$$

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.

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, essentially assessed by two indicators: unemployment and inflation (e.g., Norpoth 1984; Lewis-Beck et al. 2008). There should be a negative relationship between government support, on the one hand, and unemployment and inflation, on the other hand. 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 with a one period lag. As voters tend to reward incumbents when the economy is in a good shape, we expect unemployment to have a negative impact on the executive appraisal ($\alpha_3 < 0$; $\beta_4 < 0$). In addition, we introduce the Households Confidence Index (HCI) as measured by the INSEE. This variable picks up the impact of many concerns of voters, in particular the purchasing power. We expect a positive correlation between this index and the popularity indexes ($\alpha_4 > 0$; $\beta_5 > 0$). For the dependent variables and the economic factors (Unemployment rate and Household Confidence Index), we run the stationarity test. The results indicate that the popularity indexes are stationary in level while Unemployment rate and Household Confidence Index are stationary in first difference (see Table B.3).

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 important for a rational policymaker. 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.

In terms of estimation strategy, besides 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. 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*. Hansen test of over-identifying restrictions allowed us to accept the validity of these instruments.⁶

3.2 Results

In table 1, 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 our variable of interest (the legislative production) and its interactions with honeymoon and last months indicators. Finally, the preceding model is augmented with the variables repeal and unknit. In addition, we run the complete model over specific legislation as shown in Table 2.

A first result suggests that the Prime Minister's approval rating is relatively persistent over time. The coefficient regarding the first lag is about 0.24 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 less significant, when it is. 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 in our framework. As can be inferred from Table 1, an increase by 1 percentage point of the unemployment rate reduces the approval rating of the President by 2 to almost 3 percentage points (Model 2). 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 is 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 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. It can be noticed that the share of MPs belonging to the Prime Minister's majority negatively influences the popularity of the president. As the coefficient of this variable is not significant for the Prime Minister, we exclude it from regressions. However, it is strongly significant in the President's popularity equation. This

⁶The 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.

Table 1: Determinants of Executive's popularity (All domains)

	(1)	(2)	(3)	(4)
	M1	M2	M3	M4
Equation: Prime Minister				
Popularity lagged (PM)	0.244*** (0.0732)	0.261*** (0.0655)	0.243*** (0.0642)	0.234*** (0.0640)
Cohabitation	17.56*** (4.676)	16.39*** (3.587)	18.68*** (3.515)	18.93*** (3.490)
Household Confidence Index	0.257 (0.165)	0.256** (0.120)	0.204* (0.117)	0.201* (0.114)
Percent legis production		-3.207*** (1.208)	-3.274*** (1.179)	-3.527*** (1.129)
Honeymoon_PM	6.702** (3.129)	4.123 (2.711)	4.755* (2.720)	4.376* (2.648)
Honeymoon_PM*		4.039*** (1.203)	4.115*** (1.193)	4.397*** (1.134)
Percent legis production				
Last months (PM)	-7.491*** (2.140)	-8.040*** (1.875)	-7.898*** (1.718)	-8.280*** (1.725)
Last month (PM)*				
Percent legis production		3.333*** (1.214)	3.385*** (1.182)	3.646*** (1.131)
Repeal			-7.164*** (2.306)	-6.715*** (2.145)
Unknit			79.41*** (25.24)	85.61*** (22.00)
_cons	-5.950 (16.01)	-5.747 (11.49)	-0.300 (11.00)	0.338 (10.76)
Equation: President				
Popularity lagged (PR)	0.0828* (0.0467)	0.0810* (0.0469)	0.0607 (0.0463)	
Cohabitation	-3.111 (2.016)	-3.540* (2.038)	-2.823 (1.907)	-3.494* (1.879)
Household Confidence Index	0.610*** (0.0667)	0.610*** (0.0657)	0.622*** (0.0659)	0.623*** (0.0625)
Percent legis production		-0.00485 (0.0629)	-0.00531 (0.0555)	-0.00406 (0.0517)
Share of PM's deputies	-0.551*** (0.117)	-0.570*** (0.120)	-0.538*** (0.0932)	-0.594*** (0.0942)
Unemployment rate	-2.595*** (0.625)	-2.807*** (0.621)	-2.861*** (0.546)	-2.996*** (0.548)
Honeymoon_PR	9.881** (4.358)	9.511* (5.458)	8.483 (5.232)	6.540 (5.403)
Honeymoon_PR*				
Percent legis production		0.756* (0.391)	0.889** (0.366)	0.961** (0.399)
Last months to presid elec	-0.682*** (0.184)	-0.678** (0.340)	-0.682** (0.341)	-0.624* (0.329)
Last month to presid elec*				
Percent legis production		0.687 (5.378)	0.417 (5.577)	-0.250 (5.969)
Repeal			-1.871 (2.352)	
Unknit			33.09 (27.57)	
_cons	16.78 (12.02)	19.75 (12.07)	17.61 (10.88)	23.68** (10.59)
Sample Size	215	215	215	215
J-stat	10.96	16.82	20.87	19.71
Hansen P	0.14	0.16	0.18	0.29
Residual Correlation	0.40	0.41	0.41	0.41

Standard errors in parentheses. Significance level: * p<.1, ** p<.05, *** p<.01
The legislative production considered is relative to all domains.

result confirms the semi-presidential nature of the regime and is in line with the responsibility

hypothesis, as 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.

Our estimates also reveal that cohabitation periods are more beneficial to the Prime Minister than to the President. This is interesting because, although the Prime Minister can be considered as leading the agenda, which could induce the electorate to scapegoate her, it is also often recognized that exercising power with a President who is a declared opponent is a more complex exercise, acknowledged by voters. The second interpretation is favored here, a result that confirms the one obtained by Padovano and Gavaille (2017). 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.

Concerning the “honeymoon” variables, the results indicate that the honeymoon effect benefits both the Prime Minister and the President.⁷ Symetrically, for both, the last months of their mandates weigh negatively and strongly on the popularity levels, revealing a “fatigue” from the electorate that translates into an erosion of both political capital.

We also find that the Households Confidence Index has a significantly positive effect on the approval ratings of the French Executive with a larger (and more significant) impact for the President. For example, when the Households confidence increases by 1%, this raises the President and the Prime Minister popularity by respectively 0.2 and 0.7%.

We now turn to our main variable of interest, namely the legal and regulatory production. As Table 1 shows, the variable itself (defined as the Percent deviation of Legislative Production per month and per Prime Minister) does not influence the president’s approval rating. Hence, it seems that legislating, by itself, does nothing to improve her popularity (the coefficient is negative and nonsignificant). 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 2, for instance, a 1 percent increase in legislative output during the honeymoon period tends to increase the popularity of the President by, approximately 0.8%, on average. As the average popularity level stands below 50% (see Table 1), such a gain is not to be neglected. This is especially 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). Things are different for the Prime Minister, as legislating is, for her, weighing negatively and significantly, except in the honeymoon period. Hence, if legal activism pays off, it mostly does so for the Prime Minister at the beginning of her term.

The pattern is less obvious when we look at last-minute policies. As models 2 and 3 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 (see Table 1). Looking at the marginal effects allows clarifying the results.⁸ The right side panel of Figure 5 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, as the honeymoon

⁷Although the coefficients are different in the two equations and could lead one to think that the effect is stronger for the President, a Wald test does not reject the equality of coefficients.

⁸Precisely, we plot the marginal effects of honeymoon (Figure 4) and of last months effects (figure 5) both for the Prime Minister and the President, on the basis of the results presented in column 2 of Table 1.

effect has a similar - positive - impact for both heads of the French Executive (see Figure 4), the pattern is clearly different for the last-minute measures (Figure 5). 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 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 agenda⁹, and is rewarded by the public.

Figure 4: Honeymoon marginal effects (All domains)

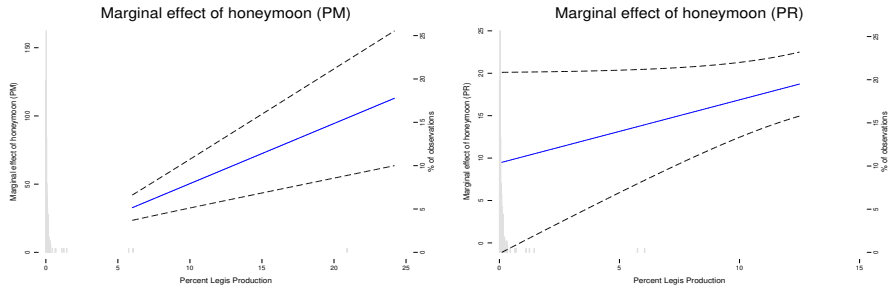
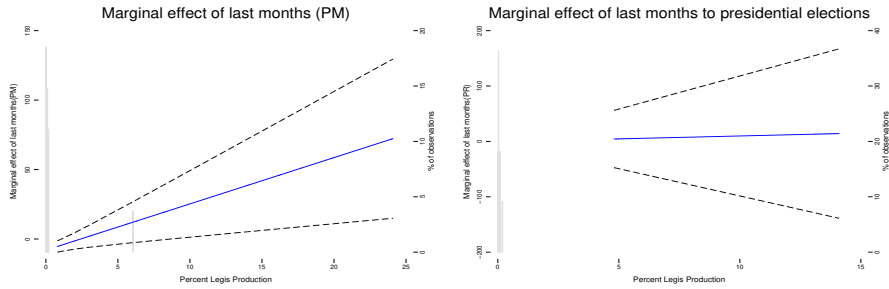


Figure 5: Last minute policies (All domains)



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, 2019).

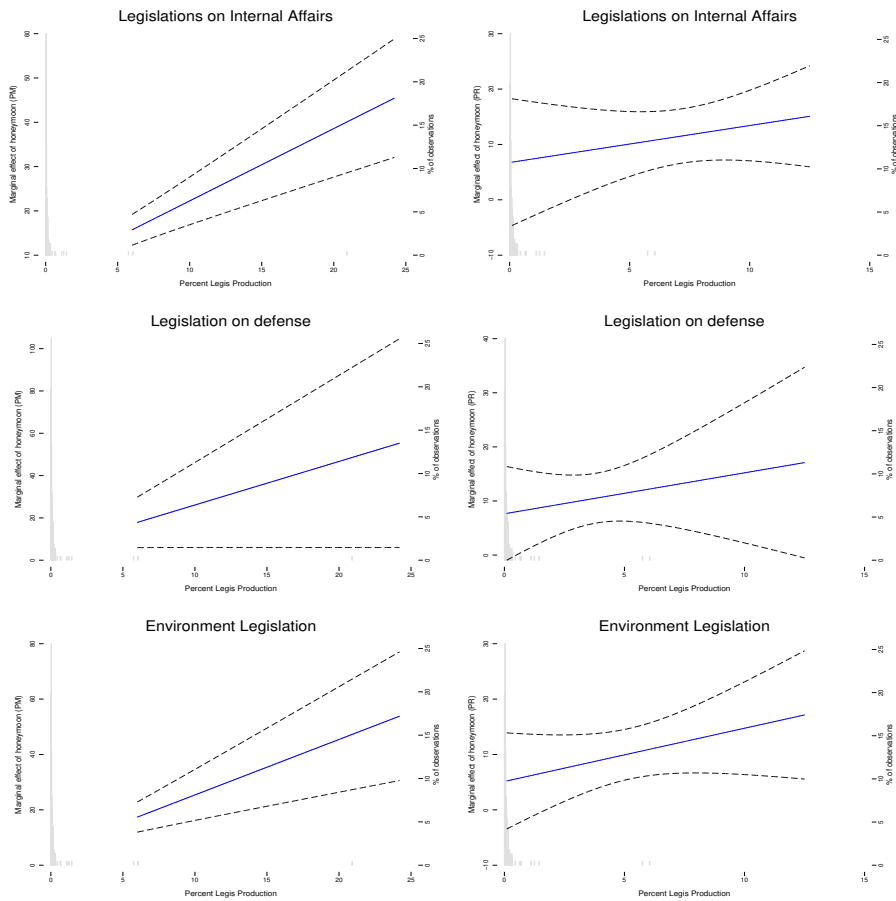
Individuals can be assumed to prefer (and thus to give higher approval ratings to) Executive whose stances on important issues are in accordance with their own. We can here explore this dimension because, as explained above, our dataset is classified by specific codes of law. The specific domains we consider are the following: pensions, justice, internal affairs, defense,

⁹Unfortunately, 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.

agriculture, environment, economy, taxation and labor. Results reveal that 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.

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 generally positive, although not often significant, except for the domains covering Pensions, Economic issues and Taxation (see Table 2, columns 1, 7 and 9). For the President, $Unknit_{x,t}$ is also sometimes significant, with a strong negative impact on popularity in the domains of Internal Affairs and Agriculture, and a positive one for Pensions and Justice. 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.

Figure 6: Honeymoon effects (Specific domains)



Otherwise, looking at timing effects, they are less clear. Looking at the marginal effects, however, permits to have a clearer view. Figure 6 displays the marginal effects for both

Table 2: Determinants of Executive's popularity (specific domains)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Pensions	Justice	Int_Aff	Defense	Agri	Env	Eco	Labor	Tax
Equation: Prime Minister									
Popularity lagged (PM)	0.23*** (0.07)	0.22*** (0.07)	0.24*** (0.07)	0.24*** (0.07)	0.22*** (0.07)	0.25*** (0.07)	0.25*** (0.07)	0.24*** (0.07)	0.23*** (0.07)
Cohabitation	19.22*** (3.28)	19.06*** (3.21)	18.96*** (3.35)	18.47*** (3.30)	19.05*** (3.26)	17.63*** (3.24)	18.76*** (3.34)	18.53*** (3.20)	18.73*** (3.32)
Household Confidence Index	0.22* (0.11)	0.24** (0.12)	0.24** (0.12)	0.25** (0.12)	0.22* (0.11)	0.25** (0.11)	0.22* (0.11)	0.25** (0.12)	0.24** (0.12)
Percent legis production	0.08 (0.08)	5.97 (5.27)	0.06 (0.69)	1.54 (2.12)	10.20 (8.01)	0.20 (1.04)	0.60 (0.79)	0.10 (6.83)	0.37 (0.42)
Honeymoon_PM	5.71*** (1.73)	6.11*** (1.88)	6.39*** (1.94)	5.94*** (1.85)	5.98*** (1.89)	5.67*** (1.77)	5.75*** (1.72)	5.91*** (1.76)	5.55*** (1.70)
Honeymoon_PM*Percent legis prod	0.04 (0.04)	-0.06 (2.82)	1.61*** (0.31)	1.95* (1.09)	-1.11 (4.61)	1.97*** (0.53)	0.63 (0.42)	4.71 (3.44)	0.34 (0.22)
Last months (PM)	-8.37*** (1.75)	-8.41*** (1.81)	-9.11*** (1.81)	-9.06*** (1.78)	-8.71*** (1.59)	-8.87*** (1.66)	-8.69*** (1.71)	-8.66*** (1.71)	-8.73*** (1.67)
Last month (PM)* Percent legis production	0.03 (0.09)	-0.03 (0.13)	0.11** (0.04)	0.07 (0.07)	-0.05 (0.12)	0.10** (0.05)	0.03 (0.07)	0.10 (0.07)	0.06 (0.07)
Repeal	-5.68** (2.69)	-4.37 (2.84)	-0.75 (3.82)	-6.15 (4.69)	-2.69 (4.03)	-2.11 (3.68)	0.88 (2.27)	2.80 (4.04)	-7.87*** (2.05)
Unknit	2.64* (1.51)	30.63 (32.95)	5.03 (45.56)	65.51 (48.27)	-141.31 (133.39)	104.70* (54.01)	1.06** (0.49)	-0.16 (3.52)	63.49* (32.49)
_cons	-2.35 (10.57)	-4.55 (10.93)	-4.46 (11.33)	-5.82 (10.88)	-1.41 (10.54)	-5.88 (10.59)	-2.85 (10.83)	-5.53 (10.94)	-4.34 (11.02)
Equation: President									
Cohabitation	-1.28 (1.78)	-0.57 (1.90)	0.22 (1.93)	-0.99 (1.94)	-1.40 (1.90)	-1.84 (1.84)	-1.30 (1.89)	-1.23 (1.86)	-1.13 (1.86)
Household Confidence Index	0.58*** (0.07)	0.58*** (0.07)	0.55*** (0.07)	0.60*** (0.07)	0.59*** (0.07)	0.60*** (0.07)	0.58*** (0.07)	0.59*** (0.07)	0.58*** (0.07)
Percent legis production	0.06** (0.02)	3.06*** (1.08)	1.24** (0.51)	2.22*** (0.86)	2.69* (1.58)	1.52** (0.63)	0.54 (0.36)	2.33 (1.89)	0.41** (0.16)
Share of PM's deputies	-0.50*** (0.10)	-0.43*** (0.11)	-0.44*** (0.12)	-0.42*** (0.12)	-0.48*** (0.11)	-0.46*** (0.10)	-0.48*** (0.10)	-0.46*** (0.10)	-0.47*** (0.10)
Unemployment rate	-3.27*** (0.58)	-3.25*** (0.62)	-3.11*** (0.64)	-2.98*** (0.60)	-3.37*** (0.65)	-3.25*** (0.59)	-3.36*** (0.60)	-3.26*** (0.58)	-3.25*** (0.58)
Honeymoon_PR	5.43 (4.71)	6.29 (6.08)	6.36 (5.95)	7.47 (4.61)	3.83 (4.65)	4.57 (4.65)	5.98 (4.64)	4.80 (4.67)	5.55 (4.62)
Honeymoon_PR*Percent legis prod	0.03 (0.03)	0.93 (1.47)	0.69 (0.75)	0.76 (1.02)	3.47* (1.95)	1.02 (0.76)	0.49 (0.38)	2.62 (1.76)	0.22 (0.19)
Last months to presid elec	-1.02*** (0.29)	0.21 (0.40)	-1.07*** (0.32)	-1.80** (0.72)	-1.38** (0.68)	11.14* (5.70)	-0.15 (0.24)	-2.24*** (0.85)	23.29** (11.28)
Last month to presid elec* Percent legis production	0.13* (0.07)	-6.68** (3.22)	5.51* (2.85)	20.73* (11.67)	12.03 (9.37)	-127.95** (62.42)	-10.20** (4.59)	220.71** (108.85)	-164.62** (77.81)
Repeal	-7.02***	-11.04***	4.40	-9.00***	1.15	-0.98	-3.93**	-1.12	0.45

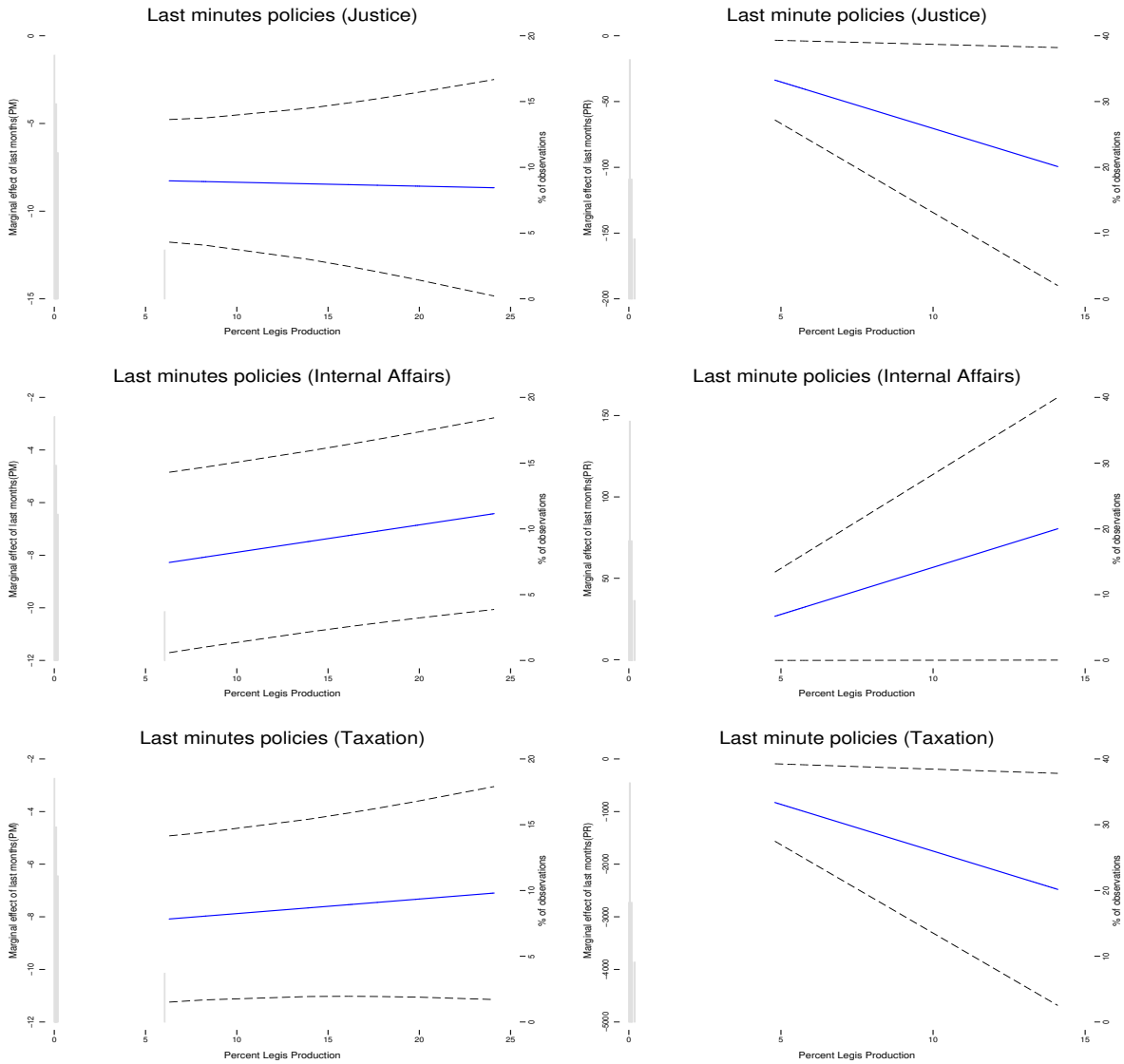
	(1.81)	(2.05)	(2.98)	(2.05)	(3.88)	(4.37)	(1.82)	(2.62)	(2.56)
Unknit	3.71***	66.58***	-63.14***	94.66*	-254.76**	21.81	0.69*	2.76	21.55
	(0.59)	(22.53)	(21.00)	(51.85)	(114.43)	(57.97)	(0.37)	(1.69)	(21.33)
_cons	25.09**	20.70*	22.82*	15.13	24.37**	21.02*	24.76**	22.04**	22.22**
	(10.85)	(11.79)	(12.19)	(11.83)	(11.34)	(10.92)	(11.21)	(10.97)	(11.04)
Sample Size	215	215	215	215	215	215	215	215	215
J-stat	21.04	17.37	16.93	20.50	22.94	23.41	20.33	20.81	20.68
Hansen P	0.28	0.18	0.20	0.15	0.12	0.18	0.31	0.29	0.30
Residual Correlation	0.42	0.41	0.42	0.40	0.42	0.42	0.41	0.42	0.41

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

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 7, 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 the president.

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.

Figure 7: Last minute policies (Specific domains)



3.3 Robustness test

The robustness of our results was checked in two ways. First, we checked if the results were sensitive to the inclusion of some additional explanatory variables. For example, we compute a variable called “Events”. This variable takes the value of 1 when the event is favorable to the Executive, and -1 in the contrary (protests, riots and strikes) and 0 in the calm periods. This variable is not significant in all our specifications and our previous results remain the same.¹⁰ Second, we use an alternative estimation strategy. We run the model using the Three Stage Least Squares method. The results are in the appendix (see Tables C.1 and C.2). Our main results concerning the honeymoon effect and the impact of legislative production are not substantially modified.

4 Conclusion

Few studies have analyzed the effects of noneconomic conditions on executive approval in France. 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). 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).

We also assess the impact of the production of legal texts on the popularity of the French President and Prime Minister, revealing that this production positively influences the Executive approval. This effect is contrasted according to the timing of issuance of these texts. 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 interferring.

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¹⁰Results are available upon request.

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Appendix

A List of categories of legal and regulation texts included

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

B Descriptive statistics and Unit root tests

Table B.1: Descriptive statistics of dependent and standard variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Popularity (PM)	215	46.835	13.496	17	73
Popularity (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
Household Confidence Index	215	102.056	9.583	81	126

Table B.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	5.963	28.078	.239	187.155
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

Table B.3: Unit root test results

Variables	Augmented Dickey-Fuller (ADF)			Phillips Perron (PP)		
	t-statistic	P-value	Exogenous	test stat	P-value	Exogenous
Popularity gain(PR)	-5.73	0	CT	-5.57	0	CT
Popularity gain(PM)	-4.86	0	N	-4.69	0	N
d(Unemployment rate)	-5.49	0	N	-21.64	0	N
d(Household Confidence Index)	-3.97	0	N	-3.96	0	N

Notes: CT indicates that the test includes both constant and trend terms and C implies that the test includes only constant terms. Further, the term N indicates that there is no exogenous term in the test. In order to take the first-order difference of the series, d is used as an operator. The lag in the ADF test is selected according to the Schwarz information criteria. The bandwidth in the Phillips-Perron test is automatically chosen according to the Newey-West estimator using the Bartlett kernel.

C Robustness checks

Table C.1: Determinants of Executive's popularity (All domains)

	(1)	(2)	(3)	(4)
	M1	M2	M3	M4
Equation: Prime Minister				
Popularity lagged (PM)	0.199*** (0.0591)	0.141** (0.0607)	0.140** (0.0601)	0.142** (0.0603)
Cohabitation	19.59*** (3.016)	21.22*** (3.062)	20.90*** (3.034)	20.95*** (3.037)
Household Confidence Index	0.248* (0.129)	0.235* (0.130)	0.270** (0.129)	0.264** (0.129)
Percent legis production		-2.510 (2.227)	-2.773 (2.209)	-2.787 (2.215)
Honeymoon_PM	6.354*** (1.432)	5.385*** (1.479)	5.160*** (1.468)	5.130*** (1.473)
Honeymoon_PM* Percent legis production		3.666* (2.062)	3.884* (2.045)	3.889* (2.051)
Last months (PM)	-5.720** (2.495)	-5.684** (2.566)	-5.854** (2.547)	-5.937** (2.556)
Last month (PM)* Percent legis production		2.630 (2.230)	2.892 (2.212)	2.906 (2.219)
Repeal			-5.863 (3.626)	-5.839* (3.312)
Unknit			75.30** (33.90)	53.12* (30.98)
_cons	-3.440 (12.54)	-0.976 (12.63)	-4.151 (12.56)	-3.453 (12.54)
Equation: President				
Popularity lagged (PR)	0.0195 (0.0468)	0.0517 (0.0462)	0.0482 (0.0460)	
Share of PM's deputies	-0.484*** (0.106)	-0.481*** (0.107)	-0.453*** (0.108)	-0.492*** (0.108)
Cohabitation	-5.531** (2.260)	-4.733** (2.326)	-4.734** (2.310)	-4.825** (2.336)
Unemployment rate	-2.628*** (0.634)	-2.635*** (0.634)	-2.566*** (0.631)	-2.620*** (0.638)
Household Confidence Index	0.742*** (0.0957)	0.696*** (0.0957)	0.708*** (0.0957)	0.703*** (0.0956)
Percent legis production		0.00556 (0.102)	0.0121 (0.102)	0.0121 (0.102)
Honeymoon_PR	7.151*** (2.385)	5.528** (2.672)	5.718** (2.658)	5.746** (2.689)
Honeymoon_PR* Percent legis production		0.978** (0.455)	0.974** (0.452)	0.916** (0.455)
Last months to presid elec	-0.203 (0.283)	-0.304 (0.422)	-0.280 (0.420)	-0.252 (0.421)
Last month to presid elec* Percent legis production		1.673 (6.622)	1.549 (6.580)	1.537 (6.669)
Repeal			-0.0373 (2.533)	
Unknit			38.30 (23.73)	
_cons	2.871 (14.70)	6.216 (14.44)	2.704 (14.48)	7.208 (14.52)
Observations	215	215	215	215
R ²	0.556	0.568	0.578	0.577

Standard errors in parentheses. Method: 3SLS

Significance level: * p<.1, ** p<.05, *** p<.01

The legislative production considered is relative to all domains.

Table C.2: Determinants of Executive's popularity (specific domains)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Pensions	Justice	Int_Aff	Defense	Agri	Env	Eco	Labor	Tax
Equation: Prime Minister									
Popularity lagged (PM)	0.14** (0.06)	0.14** (0.06)	0.14** (0.06)	0.14** (0.06)	0.11* (0.06)	0.14** (0.06)	0.14** (0.06)	0.14** (0.06)	0.14** (0.06)
Cohabitation	21.30*** (3.05)	21.52*** (3.02)	20.97*** (3.07)	21.71*** (3.03)	22.02*** (2.99)	21.33*** (3.02)	21.83*** (3.06)	21.41*** (3.05)	21.42*** (3.04)
Household Confidence Index	0.23* (0.13)	0.22* (0.13)	0.26** (0.13)	0.23* (0.13)	0.23* (0.13)	0.23* (0.13)	0.22* (0.13)	0.24* (0.13)	0.24* (0.13)
Honeymoon_PM	5.66*** (1.45)	5.47*** (1.52)	5.54*** (1.46)	5.52*** (1.46)	5.73*** (1.49)	5.67*** (1.45)	5.68*** (1.44)	5.70*** (1.44)	5.54*** (1.44)
Honeymoon_PM*Percent legis prod	0.04 (0.09)	2.41 (3.70)	1.85 (1.94)	2.69 (3.27)	-4.61 (5.64)	2.07 (2.46)	0.82 (1.14)	4.89 (7.43)	0.43 (0.63)
Last months (PM)	-6.50** (2.64)	-6.74** (2.66)	-7.05*** (2.62)	-6.63** (2.65)	-7.04*** (2.61)	-6.75** (2.63)	-6.99*** (2.62)	-6.72** (2.63)	-6.83*** (2.62)
Last month (Pm)* Percent legis production	0.01 (0.15)	0.05 (0.14)	0.09 (0.14)	0.07 (0.15)	-0.17 (0.13)	0.08 (0.15)	0.04 (0.15)	0.08 (0.19)	0.05 (0.15)
Percent legis production	0.09 (0.14)	2.58 (5.87)	0.12 (3.04)	1.11 (5.16)	17.80** (8.84)	0.60 (3.88)	0.54 (1.81)	0.73 (13.14)	0.33 (0.99)
Repeal	-4.49 (4.64)	-8.08 (8.45)	-3.08 (4.33)	-7.77 (8.18)	-0.23 (7.23)	1.42 (5.53)	2.51 (3.14)	4.00 (3.59)	-12.16 (8.66)
Unknit	1.45 (1.74)	56.08 (57.20)	54.33 (49.58)	79.09 (89.38)	-252.05 (274.29)	73.96 (115.53)	0.80 (1.08)	0.22 (5.24)	84.25 (62.16)
_cons	-0.80 (12.37)	0.56 (12.41)	-4.15 (12.73)	-0.67 (12.40)	-0.13 (12.33)	-1.55 (12.48)	-0.27 (12.47)	-2.31 (12.52)	-1.14 (12.39)
Equation: President									
Popularity lagged (PR)	0.03 (0.05)	0.03 (0.05)	0.05 (0.05)	0.04 (0.05)	0.04 (0.05)	0.04 (0.05)	0.05 (0.05)	0.05 (0.05)	0.05 (0.05)
Cohabitation	-3.86* (2.31)	-3.95* (2.33)	-3.55 (2.39)	-3.77 (2.31)	-3.98* (2.34)	-3.94* (2.33)	-3.86 (2.36)	-3.89* (2.36)	-4.13* (2.32)
Household Confidence Index	0.68*** (0.09)	0.67*** (0.09)	0.66*** (0.10)	0.70*** (0.09)	0.70*** (0.09)	0.69*** (0.09)	0.67*** (0.10)	0.69*** (0.10)	0.68*** (0.09)
Share of PM's deputies	-0.52*** (0.11)	-0.46*** (0.11)	-0.48*** (0.11)	-0.46*** (0.11)	-0.51*** (0.11)	-0.49*** (0.11)	-0.49*** (0.11)	-0.48*** (0.11)	-0.46*** (0.11)
Unemployment rate	-3.10*** (0.68)	-3.07*** (0.69)	-3.06*** (0.69)	-2.90*** (0.68)	-3.23*** (0.70)	-3.00*** (0.69)	-3.12*** (0.69)	-3.04*** (0.69)	-3.05*** (0.68)
Honeymoon_PR	5.05* (2.76)	4.60 (2.82)	5.08* (2.75)	3.83 (2.78)	4.62* (2.76)	4.95* (2.73)	4.88* (2.76)	4.81* (2.75)	4.82* (2.73)
Last months to presid elec	-0.62 (0.41)	0.50 (0.67)	-0.66 (0.43)	-1.29 (1.01)	-1.06 (0.88)	9.46 (8.68)	0.14 (0.43)	-1.59 (1.24)	21.96 (16.17)
Honeymoon_PR*Percent legis prod	0.04 (0.03)	1.38 (1.30)	0.86 (0.66)	1.48 (1.11)	3.15 (2.06)	1.00 (0.82)	0.56 (0.41)	2.53 (1.93)	0.26 (0.21)
Percent legis production	0.05* (0.03)	2.42** (1.19)	0.94 (0.62)	1.86* (1.01)	2.00 (1.90)	1.23 (0.76)	0.41 (0.42)	1.82 (2.14)	0.33* (0.19)
Last month to presid elec* Percent legis production	0.08	-5.78	5.24	18.21	13.08	-105.71	-8.39	182.34	-152.67

	(0.10)	(4.82)	(4.32)	(17.23)	(13.08)	(94.46)	(6.99)	(165.25)	(111.07)
Repeal	-3.76	-10.55*	4.62	-11.46**	6.89	6.71*	-1.68	1.69	-6.87
	(3.21)	(5.87)	(3.01)	(5.69)	(5.14)	(3.84)	(2.20)	(2.52)	(6.03)
Unknit	2.60**	64.81	-38.65	157.78**	-418.46**	-67.07	0.57	1.90	82.82*
	(1.22)	(39.82)	(34.56)	(61.97)	(196.09)	(81.00)	(0.75)	(2.89)	(43.29)
_cons	14.20	11.85	12.94	6.79	13.65	10.17	13.47	10.56	9.75
	(14.66)	(14.70)	(14.78)	(14.67)	(14.70)	(14.66)	(14.86)	(14.76)	(14.68)
Observations	215	215	215	215	215	215	215	215	215
R^2	0.582	0.582	0.581	0.581	0.591	0.581	0.582	0.581	0.583

Standard errors in parentheses. Significance levels: * $p < .1$, ** $p < .05$, *** $p < .01$. Method: 3SLS