

The Responsive Legislature: Public Opinion and Law Making in a Highly Disciplined Legislature

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This article analyses how institutional and contextual factors explain the approval of presidential initiatives – *presidential legislative success* – in highly disciplined and cartelized assemblies. Of particular importance is to test whether public opinion, the electoral cycle and the use of different institutional rules affect the approval of presidential initiatives in Congress. Using a multilevel Bayesian model of legislative success, I model bill approval rates at individual and aggregate levels. This strategy is extremely flexible, allowing us to disentangle the different institutional and contextual factors that determine the approval of presidential initiatives in the Argentine Congress.

In the last twenty years, the presumption that presidents obtain legislative benefits from ‘going public’ has gained increasing acceptance among American scholars.¹ According to this view, presidents can boost their bargaining power *vis-à-vis* Congress through plebiscitary appeals to the public. These contextual effects, it is argued, may help presidents overcome their party’s minority status in Congress and/or pass critical legislation when facing resistance from their own partisan supporters. Public opinion, therefore, interacts with formal institutional rules affecting the rate at which presidents can shape public policy.

By contrast, most comparative research on legislatures concentrates on explaining the effect of relatively stable institutional rules such as decrees, vetoes, committee rules, amendments, etc.² There is little comparative research, therefore, integrating these different contextual and institutional sources of presidential legislative strength. The emphasis on formal rules, moreover, leaves unexplained much of the national level

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¹ See Jon R. Bond, Richard Fleisher and B. Dan Wood, ‘The Marginal and Time-Varying Effect of Public Approval on Presidential Success in Congress’, *Journal of Politics*, 65 (2003), 92–110; Brandice Canes-Wrone, ‘The Public Presidency, Personal Approval Ratings, and Policy Making’, *Presidential Studies Quarterly*, 34 (2004), 477–92; Brandice Canes-Wrone and Scott de Marchi, ‘Presidential Approval and Legislative Success’, *Journal of Politics*, 64 (2002), 491–509; Samuel Kernell, *Going Public: New Strategies of Presidential Leadership* (Washington, D.C.: CQ Press, 1986). There is considerable disagreement, however, with respect to the magnitude of this effect.

² John Carey and Matthew Shugart, *Presidents and Assemblies: Constitutional Design and Electoral Dynamics* (New York: Cambridge University Press, 1992); Scott Morgenstern, ‘Explaining Legislative Politics in Latin America’, in Scott Morgenstern and Benito Nacif, eds, *Legislative Politics in Latin America* (New York: Cambridge University Press, 2002), pp. 413–46; Scott Morgenstern, *Patterns of Legislative Politics: Roll Call Voting in Latin America and the United States* (New York: Cambridge University Press, 2004); Gabriel Negretto, ‘Government Capacities and Policy Making by Decree in Latin America: The Cases of Brazil and Argentina’, *Comparative Political Studies*, 37 (2004), 531–62.

variation observed in the approval of presidential initiatives, given that congressional rules and procedures are relatively stable over time.

In particular, there are no studies of how public opinion affects legislative success in highly disciplined legislatures, such as those commonly found in Latin America. Given that representatives in these legislatures are unlikely to defect unilaterally in any given floor-vote, responsiveness to public opinion would presumably be more difficult and its effect on legislative success less pronounced.

Nevertheless, as this article will show, the approval of presidential initiatives in Argentina is extremely responsive to changes in the public mood in spite of the high level of party discipline that characterizes floor-votes in Congress.³ Most legislation that fails to be approved, however, dies in committee without ever being voted down by either chamber. High party discipline, therefore, is complemented by an extensive use of negative agenda power on the part of the majority party to prevent unpopular or divisive legislation from ever reaching the floor.⁴

The Argentine case provides some critical advantages for analysing the effect of public opinion on presidential legislative success. First, in contrast with the case of the United States where presidents lack the capacity to introduce legislation in Congress, the Argentine executive can propose legislation directly either to the House or to the Senate.⁵ Secondly, information on all legislation proposed to Congress is centralized by the office of Información Parlamentaria, which also tracks the congressional history of each bill, including information on bills that were never submitted to a floor-vote. It is possible, therefore, to measure precisely the approval rate of legislation that has been proposed by the president.

In order to explain legislative success, this article presents a statistical model estimating both the institutional and contextual factors that shape the law-making process. Using a multi-level Bayesian model of legislative productivity, I combine floor-level institutional variables and Congress-level contextual variables to test whether changes in the positive image of the president among voters affect legislative success rates in Argentina.

This article proceeds as follows: in the first section, I discuss procedural cartel theory (PCT), analyse the effect of public opinion on legislative productivity, and explain how the positive image of the president affects bill approval rates in cartelized

³ Mark P. Jones and Wonjae Hwang, 'Party Government in Presidential Democracies: Extending Cartel Theory Beyond the US Congress', *American Journal of Political Science*, 49 (2005), 267–82.

⁴ Gary W. Cox and Mathew D. McCubbins, *Setting the Agenda: Responsible Party Government in the US House of Representatives* (New York: Cambridge University Press, 2005). Notice that if the representatives are perfectly disciplined on the floor, ideal point estimates obtained from roll-call votes will not discriminate among different representatives of the cartel. Therefore, although the preferences of the representatives are crucial for explaining legislative success, these preferences are not directly observable to the researcher. To overcome this problem, Jones and Hwang code absentee votes as 'nay' votes, therefore adding some variance to the estimated preferences of representatives in the Argentine Congress. This, however, does not solve the most significant problem, which is that preferences about legislation that has been prevented from reaching the floor are never measured. Failure to get legislation approved, however, provides indirect information about the preferences of legislators.

⁵ Bills can be initiated by a senator, a deputy or the executive. The executive's decision to initiate legislation in the House or the Senate is based on strategic calculations resulting from the procedural advantages enjoyed by the initiating chamber. Records of all proposed legislation can be obtained from *Información Parlamentaria* (www.diputados.gov.ar). Most studies of presidential legislative success in the United States, by contrast, measure the publicly recorded position of the president with respect to particular bills introduced by legislators. This may lead to potential biases, given that public support for a particular bill does not immediately indicate that the president is committed to the proposed legislation (strategic position taking).

assemblies. In the second section, I provide stylized evidence of legislative productivity in Argentina and revisit the arguments explaining party discipline and presidential legislative success. The third section introduces a statistical model which captures the individual and aggregate dynamics of the president's legislative success. The modelling strategy is extremely flexible and allows us to combine different types of information, including individual-level data on each bill proposed by the executive, floor-level data on the law-making process, aggregate seat data, as well as public opinion data. While the model is used to study a single country, Argentina, it can be easily extended to estimate pooled data across many countries. I conclude in the fourth section and discuss some further implications for the study of the relationship between presidents and assemblies.

NEGATIVE AGENDA POWER, PUBLIC OPINION AND PRESIDENTIAL LEGISLATIVE SUCCESS

In *Setting the Agenda*, Cox and McCubbins steer the study of congressional law-making towards the analysis of negative agenda-setting power. The most significant theoretical innovation proposed by the authors is to centre their analysis on the mechanisms that allow majority leaders to prevent damaging legislation from reaching the floor rather than on the mechanisms used to enforce voting discipline. As presented by these authors, 'in the Cartel Agenda Model, we assume that the senior partners of the majority party (e.g., committee chairs) and groups of senior partners (e.g., the majority contingent on the Rules Committee) can block bills dealing with issues in their respective jurisdictions from reaching the floor agenda.'⁶ Under the cartel agenda model, legislation that is resisted by senior partners can be internally vetoed or blocked, guaranteeing the integrity of the majority block and preventing a depreciation of the party label. This insight is particularly relevant for the study of legislative productivity in Latin America, where high levels of party discipline are accompanied by low bill approval rates.

In most Latin American congresses, legislation resisted by the majority party is kept 'in the drawer' – *cajoneada* in the congressional jargon. Much of the legislation that is *cajoneada* originates in minority parties, but there is also a significant amount of legislation from the majority party that either has very low legislative priority or is unacceptable to senior partners of the majority cartel.⁷ Evidence of the reluctance to approve legislation, however, would not result in larger numbers of floor-vote defeats. Rather, it is reflected in variations in the approval rate for particular actors such as the executive, individual legislators or congressional factions.

While Cox and McCubbins give only scant attention to the effect of public opinion on legislative productivity, they recognize that 'presidents can raise the salience of certain bills by "going public", thus raising the cost to the house majority party of denying the bill consideration on the floor. In other words, even though the president does not have any formal power to set the House's agenda, he can make it electorally costly

⁶ Cox and McCubbins, *Setting the Agenda*, p. 41.

⁷ See Jones and Hwang, 'Party Government in Presidential Democracies'. The authors provide a similar argument, with governors taking the role of senior partners in charge of distinctive provincial delegations. Ideal point estimates obtained from floor-votes, however, fail to find support for voting differences across provincial delegations. This article shows that evidence of the preferences of senior partners should be observed in the agenda, rather than the vote. At the aggregate level, evidence of disagreement among senior partners should be visible in the variations in bill approval rates rather than in the nominal votes for particular pieces of legislation.

to block certain bills'.⁸ The presidential effect of going public, however, is only measured through an analysis of roll-rates for the majority party under divided government.⁹ Discrepancies between the preferences of presidents and senior congressional partners belonging to the majority party, however, should also become apparent in the variation on presidential legislative success, both under unified or divided government. Below I consider how public opinion, the share of seats controlled by the president's cartel, the capacity to allocate financial incentives and formal institutional resources affect the executive's legislative success.

Public Opinion

In order to explain why 'going public' constitutes an effective strategy for increasing the president's legislative success, we need to analyse how it affects the senior partners of the majority party under unified government or likely defectors under divided government. There are at least two different mechanisms that could lead legislators into being attentive to changes in public opinion. First, legislators might fear the electoral consequences of supporting executive initiatives opposed by the public, which the literature usually defines as retrospective electoral responsiveness.¹⁰ Even if the public is ill informed, legislators should expect opposition parties and factions within their own party to campaign on those issues, thus increasing the level of competitiveness of their electoral districts. In a legislature where individual representatives do not follow strict party discipline, legislators from more competitive districts would be wary of voting in favour of (against) unpopular (popular) presidential initiatives, fearing that the marginal decline in votes could lead to electoral defeat. In a cartelized Congress, such concerns would be vented within the cartel, forcing an increasing number of initiatives out of the agenda.¹¹ This responsiveness should be affected by different national, provincial and local electoral cycles, which need not coincide with each other. In fact, in many countries of Latin America, the election of local authorities does not coincide with the election of national authorities. Electoral concerns, therefore, are a permanent feature of congressional life, as described by Jones, Saiegh, Spiller and Tommasi in a recent article.¹²

A second mechanism is policy commitment or moral concerns by individual legislators within the cartel. While policy commitment or moral concerns are easily dismissed by most researchers, even the most superficial analysis of politics in Latin American congresses will find that legislators often resist the call to vote with the party when certain bills come to the floor. In Argentina, former President Raúl Alfonsín (whose party is the Union Cívica Radical (UCR)) faced substantive internal opposition when proposing an amnesty law that favoured mid-ranking and low-ranking officials from the 1976–83 dictatorship. A faction of the Peronist bloque, *el grupo de los 8*, separated from the party after Carlos S. Menem

⁸ Cox and McCubbins, *Setting the Agenda*, p. 226.

⁹ Cox and McCubbins, *Setting the Agenda*, p. 114.

¹⁰ Adam Przeworski, Susan C. Stokes and Bernard Manin, *Democracy, Accountability, and Representation* (New York: Cambridge University Press, 1999).

¹¹ A nice example can be found in the implementation of the value-added tax reform voted by the Argentine Congress. See Kent Eaton, 'Fiscal Policy Making in the Argentine Legislature', in Morgenstern and Nacif, eds, *Legislative Politics in Latin America*, pp. 287–314.

¹² Mark P. Jones, Sebastian Saiegh, Pablo T. Spiller and Mariano Tommasi, 'Amateur Legislators—Professional Politicians: The Consequences of Party-Centered Electoral Rules in a Federal System', *American Journal of Political Science*, 46 (2002), 356–69.

(whose party is the Partido Justicialista (PJ)) embraced its neoliberal reform strategy in the early 1990s. The scandal that followed the distribution of money to senators who voted for the Labour Reform Bill was critical to the dissolution of the Alianza in 2000 and facilitated the executive crisis of 2001. Different from the strategically motivated vote, senior partners reflect the retrospective evaluations of the public rather than respond to it. As members of the cartel declare their reluctance to vote with the party, the bill is pushed off the floor and the rate of approval of presidential initiatives declines.

Seats

Another explanation for variation in the rate of approval of presidential bills is the number of seats controlled by the executive's party. Seats are important for two different reasons: first, given that the approval of initiatives requires a simple majority of positive floor votes in the House and the Senate, the failure to control such a majority (divided government) will reduce the rate of approval of presidential initiatives. Secondly, larger numbers of seats reduce the power of minority partners of the cartel, who then find it difficult to threaten unilateral defection. Veto power within the cartel, therefore, declines as the president's party obtains super-majoritarian numbers of seats.

In the first case, unified vs. divided government, the presumption is that if the executive's party controls a majority of the seats its capacity to push forward legislation should increase. This conventional wisdom was challenged in the case of the United States fifteen years ago by Mayhew's well-known book *Divided We Govern*, which found no substantive decline in the approval of landmark legislation proposed by the American president under divided government.¹³ More recent research, however, has found moderate but statistically significant declines in legislation under a divided government in the United States.¹⁴

Under the cartel model, super-majorities also reduce the incentive of senior partners to defect. This should be the case given that if the majority cartel controls considerably more seats than the 50 per cent required for approving legislation, a defector risks voting together with the opposition on losing bills rather than preventing a shift on the status quo. The costs associated with exercising veto power on the part of senior partners of the cartel, therefore, increase together with the number of seats controlled by the president's party. This is also true under divided government, as slim majorities on the part of the opposition party can allow minority presidents to overcome their minority status by going public, deploying resources ('pork'), etc. This is the scenario described by Cox and McCubbins, where the majority party is rolled by a minority president who decides to go public.¹⁵

Pork

Another factor that affects legislative success is the capacity to deploy fiscal incentives (individual and collective) to broaden the support for particular bills. Some authors have argued convincingly that a legislator's support for presidential initiatives depends critically on the capacity to trade pork for landmark legislation and on the fiscal capacity of the

¹³ David Mayhew, *Divided We Govern: Party Control, Lawmaking, and Investigations, 1946–1990* (New Haven, Conn.: Yale University Press, 1991).

¹⁴ William Howell, Scott Adler, Charles Cameron and Charles Riemann, 'Divided Government and Legislative Productivity of Congress, 1945–1994', *Legislative Studies Quarterly*, 25 (2000), 285–312; Keith Krehbiel, *Pivotal Politics: A Theory of US Lawmaking* (Chicago: Chicago University Press, 1998).

¹⁵ Cox and McCubbins, *Setting the Agenda*, p. 114.

federal government to finance their electoral districts.¹⁶ The approval of presidential initiatives is therefore expected to increase with the capacity to introduce distributive amendments and with the disposable income of the federal government.¹⁷ These distributive amendments are introduced by the majority party at the committee level, thus limiting unexpected calls for amendments in the House and Senate. Favourable macroeconomic conditions should also facilitate the distribution of pork, although the positive externalities of a good economy are not restricted to pork and should positively influence public opinion in general.

Institutional Advantages

The capacity to enact bills by decree, by-passing Congress, is also presumed to facilitate the approval of presidential initiatives in Congress. Strategic calculations by senior partners should show that a compromise bill approved by Congress is better than accepting the president's most preferred outcome resulting from an executive decree.

EXPLAINING PRESIDENTIAL LEGISLATIVE SUCCESS IN ARGENTINA

Between 1983 and 2001, the Argentine Congress approved close to 51 per cent of the substantive legislation proposed by the president. Moreover, between a third and half of those bills had been heavily amended in committee.¹⁸

Figure 1 describes the effective approval rate of executive bills proposed in the Argentine Congress between 1983 and 2001.¹⁹ The variation in the rate of approval of presidential initiatives is far from insignificant, ranging from a high of almost 80 per cent in the first year of Raúl R. Alfonsín (1983–89) to a low of 20 per cent in the last year of Carlos S. Menem (1989–99).

Raúl R. Alfonsín initiated his presidency after the 1983 democratic transition with an extremely high bill approval rate. The legacy of the *multipartidaria*, leading to the first electoral defeat of the Peronists in forty years, gave Alfonsín enough political clout to overcome the UCR minority status in the Senate.²⁰ In spite of winning some congressional

¹⁶ Eaton, 'Fiscal Policy Making in the Argentine Legislature'.

¹⁷ Side payments could also be critical, as became clear with the bribery scandal in the Senate during De La Rúa's administration.

¹⁸ See Mariana Llanos, *Privatization and Democracy in Argentina: An Analysis of President–Congress Relations* (New York: Palgrave Macmillan, 2002). The data collected for this project also shows that at 58 per cent of presidential initiatives were also approved by at least one of the chambers.

¹⁹ The rate of approval of presidential initiatives when we control for procedural advantages at the floor level. In the model we describe in the third section, the effective approval rate is captured by the random intercept of the hierarchical model. Figure 1 plots the intercept of a dynamic hierarchical model using a time ticker over groups of twenty bills. See Appendix A. The bills under study include all significant legislation entered in Congress, and excludes formal bills such as requests to leave the country (official travel), bills to ratify co-operation and good will treaties, and confirmation of cabinet members in their posts.

²⁰ The *multipartidaria* was a committee created in Argentina in 1981 by the five most important political parties to negotiate the democratic transition process. The formation of the *multipartidaria* was instrumental in bringing light on a secret pact between the Peronist presidential candidate Italo A. Luder and the Military Junta. This secret pact was one of the most salient issues debated by the presidential candidates in the 1983 campaign, leading to the election of the UCR candidate Raúl R. Alfonsín.

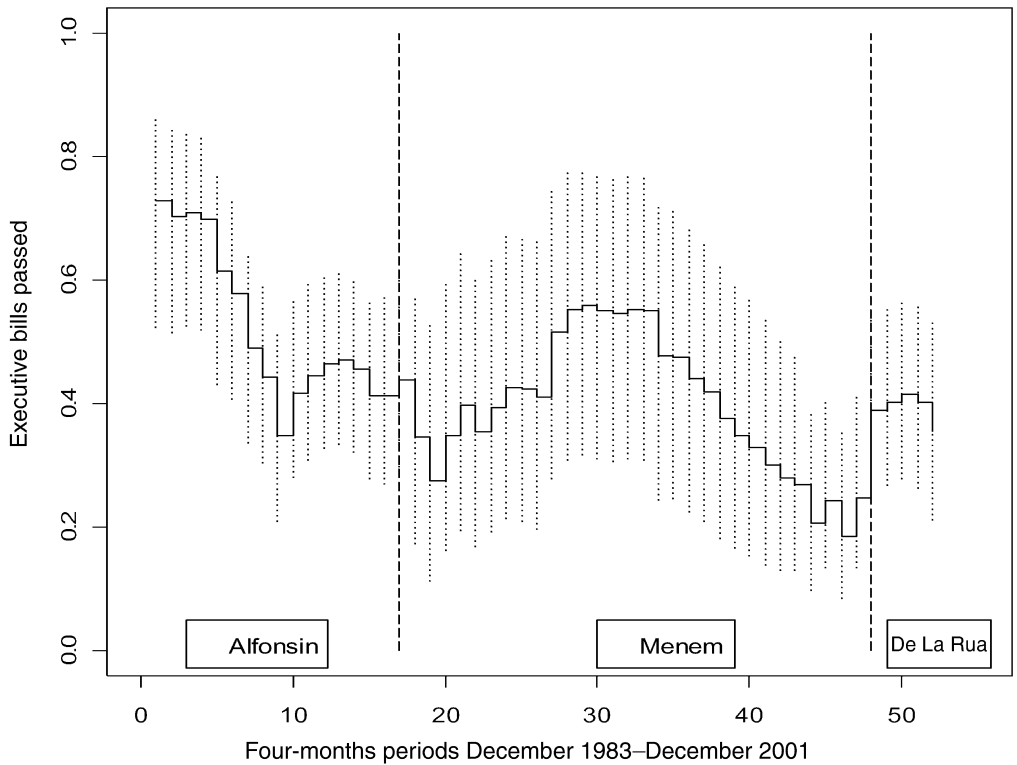


Fig. 1. Proportion of executive initiatives approved in the Argentine Congress: 1983–2001

Source: Dynamic Bayesian model estimated from Información Parlamentaria data. See Appendix A.

Note: Steps approximate four-month intervals with 95 per cent confidence interval around the cluster mean.

seats in the 1985 intermediate election, Alfonsín's bill approval rate dropped sharply towards the middle of his mandate.

By contrast, Carlos S. Menem's bill approval rates were consistently low early in his presidency until 1992, when the Convertibility economic plan seemed to tame inflation and the Menemist coalition became truly consolidated. Bill approval rates peaked a year later and remained consistently high until 1996, when they began to fall progressively until the election of Fernando De La Rúa (Alianza–UCR) in 1999. While having the lowest share of congressional seats of all three presidents, Fernando De La Rúa enjoyed bill approval rates close to 40 per cent, similar to those of Carlos S. Menem during his first six months in office.

During the same twenty-year period starting in 1983, and in spite of a substantial increase in the number of executive decrees enacted by the president, the House and Senate rules remained basically unchanged. The share of seats controlled by the president's party does not appear to explain much of the variation summarized in Figure 1 either.

As shown in Figure 2, Raúl Alfonsín and Fernando De La Rúa failed to control a majority of seats in Congress but still got between 30 per cent and 80 per cent of their proposed bills approved, in contrast with Carlos Menem who had only 20 to 60 per cent of his initiatives approved despite having control of Congress during most of his

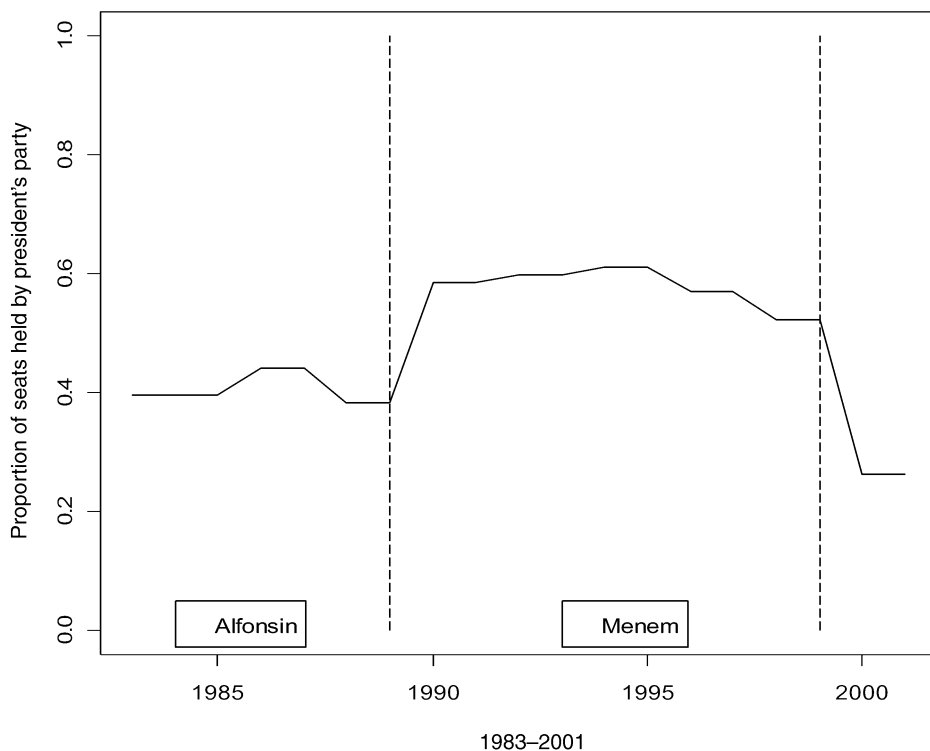


Fig. 2. Proportion of seats in House and Senate controlled by the president's party

Source: Ernesto Calvo and Maria Victoria Murillo, 'Who Delivers? Partisan Clients in the Argentine Electoral Market', *American Journal of Political Science*, 48 (2004), 742–57.

administration.²¹ During Carlos Menem's tenure in office, close to 35 per cent of presidential initiatives were enacted by decree, most of them under the umbrella of two special laws sanctioned by Congress after the hyperinflationary crises of 1989.

Carlos Menem's difficulties in getting his initiatives passed by Congress become even more baffling once we consider that the majority party has almost never lost a floor vote.²² High party discipline in the Argentine Congress, as explained by Jones and Hwang, has generally been sustained by the capacity of the majority cartel to exercise its negative agenda power, preventing controversial legislation from ever reaching the floor. Indeed,

²¹ In the Argentine case, however, Peronists have controlled a majority of the Senate since 1983. Therefore, it was enough for the Peronists to win the House to control the amendment and approval process entirely. The rate of approval of presidential initiatives could depend on the number of seats held by the incumbent president but it could also be affected by the number of lower chamber seats controlled by the Peronists, given that larger Peronist House minorities could lead to the approval of heavily amended presidential bills even under non-Peronist presidents. As a result, an increase in the number of executive seats could lead to an increase in the bills approved by Congress in a model of executive dominance, while, by contrast, an increase in the number of lower chamber Peronist seats increased the approval rate of amended presidential bills under non-Peronist executives. In the final section, I test both models and show that both are weak predictors of bill approval.

²² Jones and Hwang, 'Party Government in Presidential Democracies'.

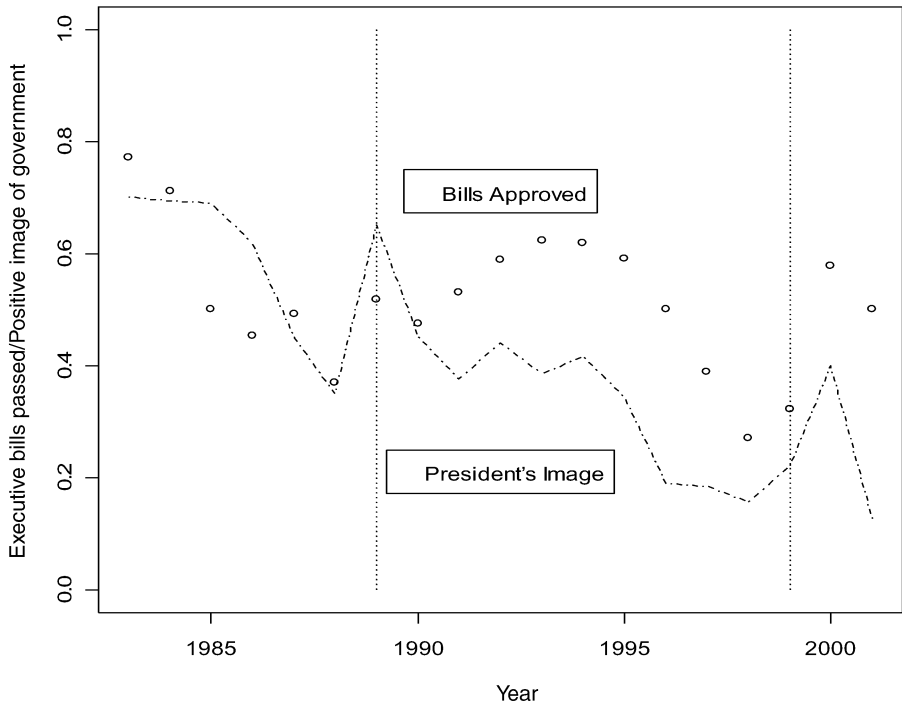


Fig. 3. Positive image of the president and proportion of presidential initiatives approved in Congress

Source: Presidential approval data provided by Nueva Mayoría (<http://www.nuevamayoria.com>). Proportion of bills approved estimated from original data provided by the Congressional Office of Información Parlamentaria (<http://www1.hcdn.gov.ar/dependencias/dip/>).

Note: $R = 0.585$.

the rate at which the majority cartel used its negative agenda power explains almost all of the variation in Figure 1, given that only a dozen initiatives were actually defeated by a floor vote.²³ Consistent with the findings of Jones and Hwang, therefore, the rate of approval of presidential initiatives can only be explained by how the majority cartel in Congress exercised its negative agenda power rather than being the result of how individual legislators voted.

As argued in the previous section, presidential legislative success is also affected by how changes in the public mood are effectively interpreted by the majority cartel, which reacts by pushing out of the agenda unpopular bills proposed by the president. A quick look at Figure 3 should at least intrigue readers and indicate that there could be a strong relationship between public opinion and bill productivity in the Argentine Congress. As may be observed, the positive image of the president shows a pattern similar to that seen in Figure 1.

²³ Most failed initiatives were never sent to committee and were never brought to the floor. Executive proposals that were rejected (*Rechazado*), withdrawn (*Retirado*), or filed without being considered (*Archivado*), add up to less than 1.5 per cent of all projects.

Peronist executives had comfortable majorities in the Senate and, since the chamber in which a bill is initiated has key procedural advantages,²⁴ starting a bill in the Senate should have provided Peronist executives with a measurable approval premium. Being able to control the amendment process should also have improved legislative success, given that the more controversial aspects of a bill could be toned down or eliminated altogether. The threat of decree promulgation could also provide a strategic advantage to the executive if representatives were to calculate that an amended bill approved by Congress would be better than the alternative legislation reflecting the president's policy preferences.

In the next section, I present a statistical model of legislative productivity to measure the effect of the four factors described above on presidential legislative success.

A STATISTICAL MODEL OF LEGISLATIVE PRODUCTIVITY

We can think of legislative productivity in Congress as being shaped by political processes at two different levels: First, at the *floor level*, where the approval of executive initiatives can be affected by how the executive, the majority and the minority cartels take advantage of Congress's procedural rules and bargain over policy alternatives. Presidents can push their agenda forward by exploiting critical institutional advantages, for example, entering legislation in a particular chamber or a particular session of Congress. Committees can work feasible commitments within the cartel and even with the executive, for example, if members of the cabinet can openly participate in committee. Similarly, the majority cartel can force legislation into more tightly controlled committees, force floor votes at the right time, and logroll critical legislation more efficiently as it controls more votes to approve amendments or new legislation.

Secondly, at the *aggregate level*, other contextual political processes affect voting. For example, individual voters have information about the overall policy intent of the president but know little about specific bills. Similarly, presidents build their bargaining reputation over time, as new bills provide information about the distance between their policy preferences and that of Congress representatives. Contextual factors should therefore affect the rate of approval of executive bills in Congress, beyond the variation explained by the access and deployment of floor and committee level resources.

If we had public opinion data on every bill, if the majority cartel voiced its aggregate policy preferences explicitly, and if we had individual level information on the status of the relationship between Congress and the executive for any given bill, we could pool together all the individual bill data and estimate a simple logistic model. However, the public often expresses vague preferences about executive initiatives, cartels generally remain silent regarding their preferences on particular bills, and the executive's reputation is built over time, forcing us to implement statistical models that capture separately the individual and the aggregate-level information we have.

The Model

A straightforward interpretation of our argument is to model the law-making process as a hierarchical process, where, at the individual level, we observe the approval of a bill rather

²⁴ Eduardo Aleman and George Tsebelis, 'The Origins of Presidential Conditional Agenda Setting Power in Latin America', *Latin American Research Review*, 40 (2005), 3–26; Eduardo Aleman and George Tsebelis, 'Presidential Conditional Agenda Setting Power in Latin America', *World Politics*, 57 (2005), 396–420.

than the true underlying preference that shapes the votes of the parties.²⁵ This individual level captures all the institutional factors that affect the approval of a particular bill. The mean bill approval rate across different congresses, however, is captured by a random intercept explained by other aggregate-level factors. These aggregate-level factors affect legislative productivity for all bills in a given year or period. We can describe this General Linear Multi-Level Model with the usual notation:

$$\begin{aligned}
 & y_{ik} \sim \text{Bern}(\theta_{ik}) \\
 & \ln\left[\frac{\theta_{ik}}{1 - \theta_{ik}}\right] = \alpha_k + \sum_t \beta_t X_{tik}, \quad i = 1, \dots, nk, \quad k = 1, \dots, K \\
 & \alpha_k \sim n\left(\sum_j \lambda_j Z_{jk}, \sigma_\alpha^2\right), \quad k = 1, \dots, K
 \end{aligned} \tag{1}$$

where y_{ik} is a dummy variable indicating whether the presidential initiative i was approved by Congress k , $\sum_t \beta_t X_{tik}$ describes the first-level set of parameters and explanatory variables for the individual level variation in bill approval, α_k is a random intercept capturing the mean bill approval rate for Congress k , and $\sum_j \lambda_j Z_{jk}$ is a set of parameters and variables explaining the aggregate level variation in approval rates. The first-level logistic equation explains the variation within Congress approval rates for individual bills. The second-level normal equation, by contrast, explains the across Congress variation in bill approval rates for each of the nineteen congressional periods.²⁶

In the Bayesian framework, external information about the parameters of interest can be incorporated as subjective priors or analysed as a function of objective second-level variables.²⁷ This prior information may take the form of subjective appreciations about the social process that generated the data or may be modelled as a function of ‘objective’ information at the aggregate level. In Bayesian analysis such prior information is referred to as ‘hyperparameters’. The congressional model proposed, therefore, used informative priors for the first-level hyperparameter $\{\alpha_k\}$ and uninformative priors for the second-level hyperparameters $\{\beta_t, \lambda_j, \sigma_\alpha^2\}$. It would also be possible to use informative priors to improve on estimates that use data measured with error, such as public opinion polls.²⁸

Taking advantage of Gelman and Pardoe’s model of explained variance, we can also compute separate adjusted R^2 values for each level of the model and distinguish the individual and aggregate effects shaping voting in Congress.²⁹ The model has been estimated using a Bayesian statistical package.³⁰

²⁵ The code and data to run this model may be requested from the author or downloaded from <http://calvo.polsci.uh.edu/code.htm>.

²⁶ Notice that the random intercept has been logistically transformed in the first level. Therefore, the second-level estimate of α should be interpreted as the log-odds mean bill approval ratio and the second-level equation follows a normal distribution.

²⁷ For a general introduction to Bayesian statistical models, see Andrew Gelman, John B. Carlin, Hal S. Stern and Donald B. Rubin. *Bayesian Data Analysis* (Boca Raton: Chapman & Hall, 2000).

²⁸ For example, to model confidence intervals around the mean presidential approval rating in the second-level equation.

²⁹ Andrew Gelman and Iain Pardoe, ‘Bayesian Measures of Explained Variance and Pooling in Multilevel (Hierarchical) Models’ (New York: Columbia University working paper, 2004).

³⁰ David Spiegelhalter, Andrew Thomas, Nicky Best and Dave Lunn, *WinBUGS User Manual 1.4* (Cambridge University, 2003), available at <http://www.mrc-bsu.cam.ac.uk/bugs>. All replication material can be found in <http://calvo.polsci.uh.edu/code.htm>.

The Data

Between 1983 and 2001, close to 130,000 public and private bills were formally proposed to Congress. Nearly 30,000 of those were substantive bills submitted by individual Representatives and close to 100,000 were private bills with only symbolic value. Among the 130,000 files we find 2,909 executive initiatives, of which 28 per cent inform Congress about the promulgation of an executive decree. The rate of approval of the remaining 2,049 initiatives is 70 per cent, which, however, includes a large number of formal requests with no substantive importance. Once we have eliminated from the sample those bills that (i) request authorization for the president to leave the country, (ii) request the confirmation of the presidential appointees,³¹ or (iii) request the ratification of good-will international treaties, we have 1,004 law initiatives, 52 per cent of which were approved by Congress during the 1983–2001 period.

Consistent with our earlier discussion, the model is used to test the effect of public opinion, the number of seats controlled by the party of the president, the distribution of ‘pork’ and other institutional factors that affect the approval of presidential initiatives. The dependent variable of the first-level model, the ‘bill was approved by the House and the Senate’, takes the value of 1 when an executive initiative is approved by Congress and 0 otherwise.³² The independent variables of the first level include a dummy variable which takes the value of 1 if the bill was initiated in the Senate, a dummy variable that takes the value of 1 if the president proposing the bill was Peronist, a dummy variable indicating if the bill was initiated in an ordinary session,³³ a variable indicating if the bill was introduced during the president’s first year in office,³⁴ a categorical variable describing the national, provincial, municipal or individual reach of the bill, a categorical variable describing whether the initiative proposed new general legislation, economic legislation or pork; and two ordinal variables measuring the number of House and Senate committees to which the initiative had been sent.³⁵

On the aggregate level, the dependent variable is the latent yearly rate of approval of presidential bills when we control for individual-level factors, which is the natural interpretation of the random intercept in our model.³⁶ The explanatory variables include

³¹ Unlike in the United States, the confirmation of presidential appointees in the Argentinian Congress is mostly a formal procedure.

³² The date the bill was initiated is used to indicate the congressional year (or period).

³³ Legislation can be initiated during ordinary congressional sessions or during extended sessions requested by the executive (*sesiones extraordinarias*).

³⁴ While the honeymoon variable should be considered an aggregate-level variable, it does not always coincide with the calendar year. For example, Carlos Menem took office in mid-July of 1989. For all other aggregate-level variables, I divided the year of 1989 into two separate years, but because the honeymoon variable includes legislation introduced in the first semester of 1990, it does not match all other aggregate-level variables. Adding a separate aggregate level in the model complicated the estimation unnecessarily. Therefore, honeymoon was included as a first-level variable.

³⁵ If the bill was initiated in the House and never made it to the Senate, the variable indicating the number of Senate committees was set to that year’s mean. Similarly, if the bill was initiated in the Senate and never made it to the House, the value of the number of House committees was set to that year’s mean. This adjustment is necessary to prevent the absence of information in the House or the Senate to bias the estimates of the model. I thank one of the anonymous reviewers for noticing a problem in the coding of this variable.

³⁶ As noted by an anonymous reviewer, the model specification is taking the effect of the first-level independent variables as fixed across years. An alternative specification could allow these estimates to vary by Congress, under the presumption that the slope of the relationship is also affected by contextual variables, as described by Bond, Fleisher and Wood, ‘The Marginal and Time-Varying Effect of Public Approval on Presidential Success in

the *log of the seats* held by the President's party in the House and the Senate, the *number of bills* proposed by the executive, the *number of executive decrees* during the congressional period, and the *positive image of the president* as reported by Mora y Araujo (1983–1988) and Nueva Mayoría (1988–2001).³⁷ Three alternative specifications were run: first, a fully Bayesian specification with 1,004 first-level observations and twenty aggregate-level observations, one for each different Congress (year).³⁸ Secondly, I run a fully Bayesian specification with 1,004 levels and eighty-six second-level observations.³⁹ Finally, I run a maximum likelihood specification of the model with eighty-six second-level observations and twenty third-level observations. The results of the second and third model are similar, therefore I present in the next section the results from only the first and third models.⁴⁰

The Results

Table 1 presents the results of the two alternative specifications described above. To simplify the interpretation of the results, I report in parentheses the standard errors of the parameters rather than the 80 per cent–20 per cent interval usually used for Bayesian specifications.

As shown in Table 1, the results from the two hierarchical specifications are similar, indicating that the estimates are robust.⁴¹ At the floor level, both models indicate that initiating a bill in the Senate increases the likelihood of its approval. A more intuitive interpretation of the magnitude of this procedural advantage is summarized in Figure 4, which describes the likelihood of approving a bill as a function of the increasing popularity of the executive, with lines describing bills entered in the House (dotted line) or the Senate (solid line). Figure 4 shows that legislative success is close to 30 per cent when bills are first entered in the House and the image of the president is very low. By contrast, a very high positive image increases legislative success to about 60 per cent when legislation starts in the House and about 80 per cent for the Senate. The models also show extra benefits

(Footnote continued)

Congress'. In that article, the authors find that the effect of public approval on legislative success is sporadic or episodic, and propose an alternative *frequentist* specification interacting public approval with partisanship (a variable measuring the degree of party polarization on the vote). Running an equivalent Bayesian specification for the Argentine Congress, however, did not detect time-varying effects. Two reasons that may influence such a non-finding are the shorter time-series run for the Argentine dataset and the high level of discipline in floor votes as described earlier.

³⁷ Other independent variables tested but not introduced in the final model include change in gross domestic product and a dummy indicating divided government. They were not introduced for theoretical reasons. When introduced in the model the results were not substantively or statistically significant. See Appendix A for a description of the variables and descriptive statistics. We also replicated these analyses using a variable measuring the positive image of the president's economic policy. The results can be requested from the author.

³⁸ As indicated in fn. 34, the Congress of 1989 was divided into two, due to the early resignation of Raúl R. Alfonsín. Therefore, there are nineteen Congresses but twenty aggregate-level observations.

³⁹ The periodic public opinion data is irregularly spaced over time. This does not constitute a problem for the analyses given that it is an independent variable. The expected first level variance of second and third models is higher, due to the smaller number of bills subject to treatment in each of the eighty-six periods.

⁴⁰ The fully Bayesian specification with eighty-six second-level observations can be requested from the author.

⁴¹ The results are robust to many different specifications including general linear models with logit and probit links, with and without random effects. As expected, the results presented in Table 1 provide the most conservative estimates.

TABLE 1 *Executive Bills Approved at Floor and Congress Levels*

First-level variables	Hierarchical models at aggregate level				
	(1) Three levels	(2) Two levels	Second-level variables	(3) Three levels	(4) Two levels
<i>PJ President</i>	0.185 (0.38)	-0.1127 (0.392)	<i>Favourable Public Opinion of the President</i>	1.97*** (0.768)	1.836*** (0.99)
<i>Honeymoon</i>	0.273 (0.287)	0.1798 (0.336)	<i>Incumbent Seats</i>	-0.3148 (0.383)	-0.1907 (0.423)
<i>Initiated in Senate</i>	1.185*** (0.317)	0.955*** (0.296)	<i>Number of Initiatives</i>	-0.0089 (0.0097)	-0.0028 (0.0077)
<i>Initiated in Session</i>	-0.042 (0.156)	-0.00135 (0.1215)	<i>Share of Provincial Spending</i>	1.09 (0.85)	0.91 (0.83)
<i>Initiated Senate × PJ President</i>	0.409 (0.374)	0.507 (0.354)	<i>Depress (Ratio to total Initiatives)</i>	-2.51* (1.51)	-1.784* (1.23)
<i>Senate Committees</i>	-0.156 (0.11)	-0.1504 (0.108)	Constant	0.0619 (1.23)	-
<i>House Committees</i>	0.048 (0.089)	0.045 (0.083)	Likelihood	-633.86	0.1074
<i>Target – Individual</i>	-	-0.169 (0.311)	Adj. R^2 (First Level)	0.000016 (0.012)	0.4821
<i>Target – Local</i>	0.766* (0.466)	0.215 (0.36)	Adj. R^2 (Second Level)	0.325 (0.133)	0.023
<i>Target – State</i>	-0.094 (0.363)	-0.2011 (0.327)	λ_a (Second Level)	1.044	0.9992
<i>Target – National</i>	0.2998 (0.291)	0.092 (0.285)	N (First Level)	86	20
<i>Type – Pork</i>	-	-0.055 (0.415)	N (Second Level)	20	-
<i>Type – Economic</i>	0.396 (0.298)	0.194 (0.43)	N (Third Level)	20	-
<i>Type – General</i>	0.217 (0.289)	0.077 -0.42			
Constant	0.062 (1.23)	-			

Note: To facilitate interpretation of the results, standard errors are reported in the second line instead of the 80/20 intervals usually used when presenting Bayesian models.
Significance is indicated by *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

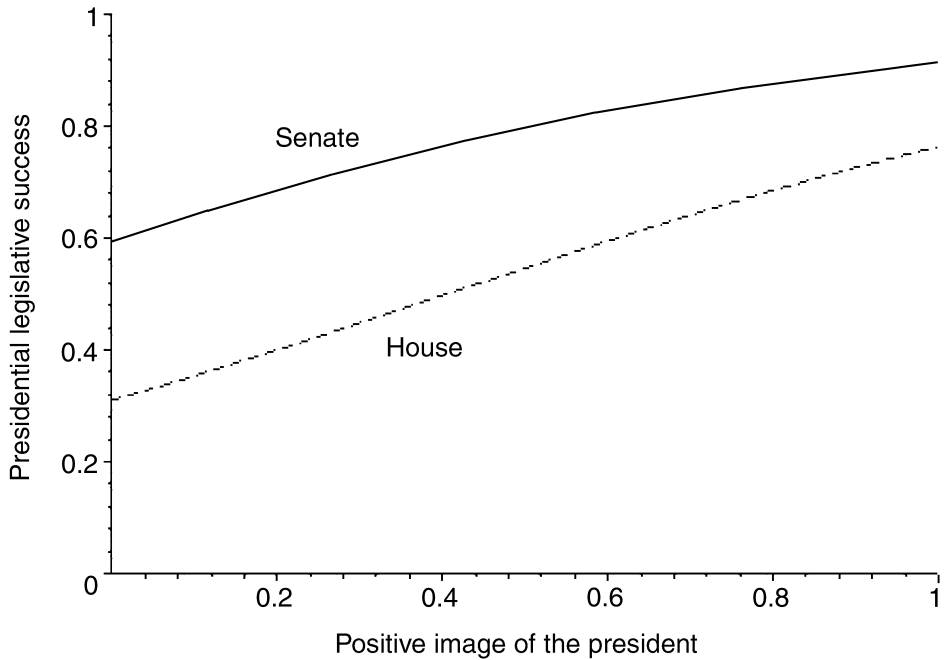


Fig. 4. Presidential initiatives approved in Congress and positive image of the president: House and Senate
 Note: Estimated from Model 4, Table 1.

for Peronist presidents and for Peronist presidents initiating legislation in the Senate, though these estimates do not reach statistical significance.

One of the most interesting results presented in Table 1 is the lack of statistically significant differences in the approval of different types of legislation.⁴² Contrary to the commonly held belief that pork legislation should enjoy higher approval rates, the difference among types of legislation does not achieve statistical significance and the sign is reversed. Legislation targeted to the local/municipal level, however, does seem to be approved at a higher rate in the model. Notice that in the Bayesian specification there is no need for a baseline category and, therefore, while the difference in the approval of legislation targeted to individuals and to municipal/local legislation is positive, this is not reflected in a statistically significant parameter Target-Local.

At the aggregate level all independent variables of the second level fall within the [0: 1] interval, therefore the magnitude of change explained by the estimated coefficients can be easily compared. At the aggregate level, the most significant variable affecting the congressional rate of approval of presidential initiatives is the positive image of the president among voters. The magnitude of this change is also significant, with unpopular

⁴² The classification of different types of legislation follows the design of Michelle Taylor-Robinson and Christopher Diaz, 'Who Gets Legislation Passed in a Marginal Legislature and is the Label Marginal Legislature Still Appropriate? A Study of the Honduran Congress', *Comparative Political Studies*, 32 (1999), 589–625.

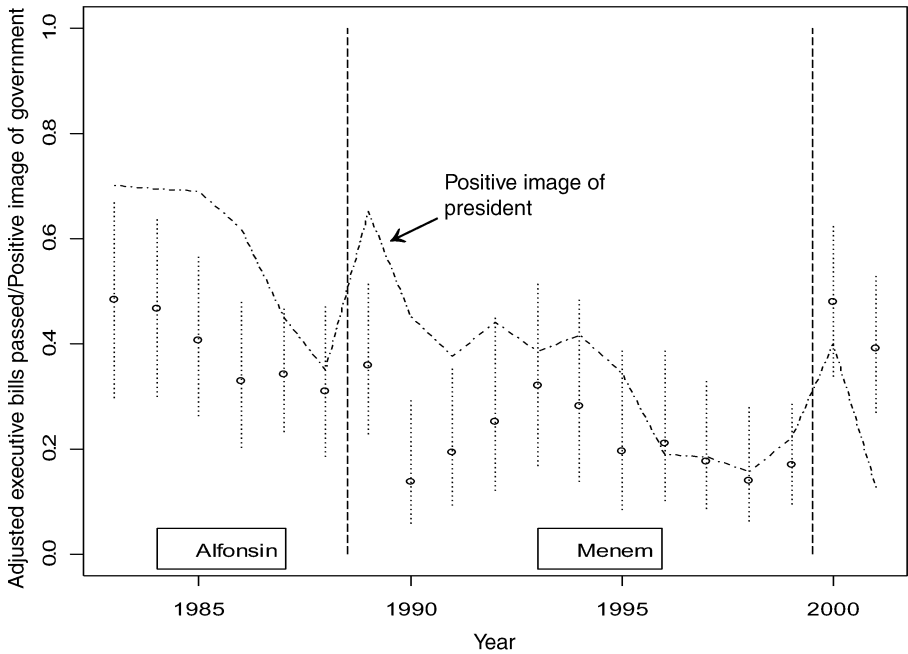


Fig. 5. Proportion of executive legislation approved in Congress and positive image of the president
 Note: Estimated from Model 2, Table 1. The figure shows annual data covering twenty congresses in the period 1983–2001. $R = 0.61$. Confidence intervals are plotted around the estimated alphas for legislative approval.

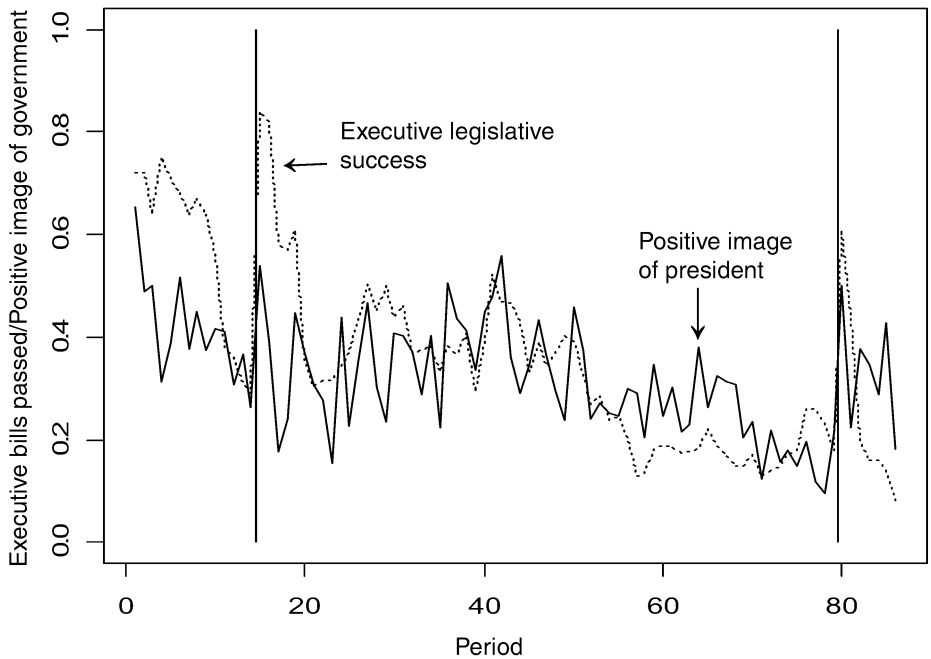


Fig. 6. Proportion of executive legislation approved and the positive image of the president, 1983–2001
 Note: Estimated from Model 1, Table 1. Confidence intervals for the estimated alphas are omitted to simplify visualization. The figure shows periodic data based on eighty-six observations between 1983 and 2001. $R = 0.64$.

presidents approving only about 44 per cent of their proposed legislation and popular presidents approving close to 80 per cent.⁴³

The negative relationship between decrees and approved initiatives in Congress also indicates that there are no strategic gains from a purported decree menace from the president. As it is possible to observe, the high negative coefficient indicates a very significant replacement effect between executive decrees and bill initiatives. In the particular case of Argentina, the share of seats supporting the president does not seem to provide any critical advantage. It is important to note that the Peronists never lost control of the Senate. Therefore, marginal changes in the number of House seats would not carry as much weight as change on congressional majorities. To conclude, evidence of an increase in legislative productivity as the result of an increase in provincial spending is weak. The estimates of public expenditures – share of provincial spending – however, were less robust to alternative specifications.

Using Gelman and Pardoe's R^2 estimate for hierarchical models, we can observe that the amount of variation explained by floor-level variables is small, the adjusted $R^2 \approx 0.11$. By contrast, the across-Congress variation in approval is extremely well explained by aggregate level factors, the adjusted $R^2 \approx 0.48$. The results show that we know little about the approval of individual bills at the floor level, but we have considerably more information about the aggregate behaviour of legislators in the Argentine Congress.

Taking full advantage of the hierarchical model, we can plot the adjusted mean of executive bills approved by Congress (α_k) against the change in public opinion in order to have a visual intuition of the relationship between legislative productivity and the public. As shown in Figure 5 and Figure 6, the approval of presidential initiatives in Congress closely follows changes in public opinion. We can also notice that the approval of presidential initiatives has become increasingly difficult over time, which explains the increasing reliance on executive decrees to enact law.

LEGISLATIVE PRODUCTIVITY, CARTELS AND PUBLIC OPINION

In the last few years, an increasing number of comparativists have turned their attention to congresses around the world, with a particular eye towards explaining vote discipline and spatial voting preferences among legislators. Such research has provided a wealth of information about the formal and informal rules that shape policy makers' preferences and their coalition-building strategies. The most provocative finding presented in this article, however, is that party discipline and spatial voting models may fail to predict legislative productivity in cartel-driven congresses. Whether a bill fails to be approved because it is killed by an undisciplined floor vote or because it was prevented from ever reaching the floor by a weary cartel may have limited relevance for explaining how frequently presidents get their initiatives approved. The analysis presented in this article shows that a cartelized assembly under nested electoral rules can still be responsive to changes in the public mood. This finding is consistent with the Erikson, Mackuen and Stimson macro-politics model, in which the properties of individual voters do not immediately translate into the properties of the electorate.⁴⁴ While the Argentine Representatives show a remarkable discipline in their

⁴³ With all values set to their means and presidential approval set to a low of 10 per cent or a high of 90 per cent.

⁴⁴ Robert S. Erikson, M. Mackuen and J. Stimson, *The Macro Polity* (New York: Cambridge University Press, 2002).

open floor voting strategies, the bill approval data studied in this article strongly suggests that the cartel is sensitive to the public mood when limiting the bill initiatives of the Argentine presidents. The fight within the cartel to prevent the passing of potentially damaging legislation may be, after all, just as efficient for promoting legislative responsiveness as an open floor vote by individually threatened and undisciplined legislators.

In explaining how the Argentine legislature responds to contextual political factors such as public opinion, this research also showed that there are methodological advantages to modelling the law-making process at both the individual and aggregate levels. At the individual level, the full stochastic nature of the individual law-making process is reflected by weak floor-level estimates. At the aggregate level, stronger patterns emerge – evidence of broad political processes shaping critical features of the law-making process.

By understanding the micro and macro variables that explain the approval of executive initiatives and comparing them with the processes that explain the approval of individual legislators' initiatives, future research should be able to determine whether congresses and executives can be responsive and held accountable in Latin America.

APPENDIX A: DESCRIPTION OF THE VARIABLES AND SOURCES

Sancion – A dummy variable taking the value of 1 if a bill initiative was approved by Congress, 0 otherwise.

Source: Información Parlamentaria, Honorable Congreso de la Nación, <http://www.diputados.gov.ar/proyectos>.

Initiated in Senate – A dummy variable taking the value of 1 if a bill was initiated in the Sesión Ordinaria, 0 otherwise. *Source:* Información Parlamentaria.

Initiated in Session – A dummy variable taking the value of 1 if a bill was initiated in the Senate, 0 otherwise. *Source:* Información Parlamentaria.

PJ President – A dummy variable taking the value of 1 if a bill initiative was proposed by a Peronist executive, 0 otherwise. *Source:* Información Parlamentaria.

Honeymoon – A dummy variable taking the value of 1 if a bill initiative was proposed during the first year of an administration, 0 otherwise. *Source:* Información Parlamentaria.

Senate Committees – An ordinal variable indicating the number of Senate committees reviewing a bill. *Source:* Información Parlamentaria.

House Committees – An ordinal variable indicating the number of House committees reviewing a bill. *Source:* Información Parlamentaria.

Target – A nominal variable indicating the target of the bill: 1 = Individual, 2 = Local/municipal, 3 = Provincial, 4 = National. Coded by the author.

Type – A nominal variable indicating the subject of the bill initiative: 1 = Pork, 2 = Economic policy, 3 = General legislation. Coded by the author.

Number of Bills – number of bill initiatives proposed in a period or congressional year. *Source:* Información Parlamentaria.

Favourable Opinion of the President – A variable indicating the public approval of the president. Measured as the percentage of voters with a positive image of the president. *Source:* Guillermo Molinelli, Valeria Palanza y Gisela Sin, *Congreso, Presidencia y Justicia en la Argentina* (Temas Grupo Editorial: Argentina, 1999) and Nueva Mayoría. Data provided by Eduardo Ovalle, <http://nuevamayoria.com/>.

Ratio of Decrees – Ratio of decrees over total legislation proposed by the president. *Source:* Información Parlamentaria.

Provincial Expenditure – Total provincial expenditure. *Source:* Provinfo, Ministerio del Interior. <http://www.mininterior.gov.ar/>.

Federal Expenditure – Total federal government expenditure. *Source:* Provinfo, Ministerio del Interior. <http://www.mininterior.gov.ar/>.