Political Institutions and Regulation:
An Inquiry on the Impact of Electoral Systems on the Regulation of Entry[†]

Carlos Scartascini
Inter-American Development Bank [#]

ABSTRACT

The requirements and regulations for starting a company vary widely across the world. While in some countries companies can start operations in a few days and after spending a small amount of money, it takes more than a hundred days and hundreds of dollars to start a business in other parts of the world. Previous literature has found that the grabbing hand model of government (public choice theory), where regulation benefits politicians and bureaucrats, is the most appropriate approach to explain this divergence in the number and costs of regulations. In this paper, I find additional evidence on support of the grabbing hand model. Specifically, because single-member plurality voting systems increase the cost for politicians to respond to special interest, I find that single-member plurality-voting countries have lower entry regulations. This hypothesis is validated empirically in a sample of world countries.

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1. Introduction

The regulation of entry, the set of procedures that are necessary to fulfill in order to start a business, varies widely across the world. While starting a business in Canada requires following two procedures, waiting for two days, and paying three hundred dollars in fees, in the Dominican Republic it requires following twenty-one procedures, waiting for eighty days and paying more than eight thousand dollars. Overall, the monetary and monetized cost of starting a business fluctuates from two percent of GDP per capita in Canada to almost five hundred percent in the Dominican Republic.

A recent paper by Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2002) offers new evidence on the regulation of entry. Djankov, *et al* (2002) find that corruption and lack of political representation are highly correlated with entry regulations across the world. This empirical evidence supports the grabbing hand model (public choice theory) approach of regulation. Regulations are not exclusively designed to improve citizens welfare but they also respond to the private benefits of bureaucrats and politicians.

This paper complements and refines their findings, and provides additional support to the literature that links differences in electoral systems with economic outcomes. Looking at differences in political institutions and electoral systems, I find that countries with single-member plurality voting systems (only one legislator elected per district) have a lower number of entry regulations than countries that use proportional voting systems (more than one legislator elected per district). This result is explained by the different price for regulation that can be charged by legislators elected from each one of the electoral systems. Legislators from single-member plurality systems depend more

heavily on the constituency. Legislators elected in proportional systems rely more heavily on the party leadership for nomination and election. Consequently, legislators from proportional representation systems are more willing to exchange regulation for contributions than legislators from single member constituencies do.   This result is supported empirically in a large sample of world countries using proxies for the "degree of plurality" of the electoral system and the political particularism variables constructed by Seddon, *et al* (2002).[1] To preview the findings, while an entrepreneur would have to follow 7 procedures, wait for 19 days and spend more than 10 percent of GDP per capita in order to start a business in the average single-member plurality voting country; the same entrepreneur would have to follow 10 procedures, wait for more than 40 days and spend almost 20 percent of GDP per capita in the average proportional representation country.

By explaining some of the causes for the variance in the number and cost of entry regulations across countries, I provide an additional explanation to an empirical regularity described by Rogowski and Kayser (2002). In their paper, countries with plurality systems tend to present lower national price levels than countries with proportional representation. This paper links those results through entry regulations. Single-member plurality voting systems have fewer regulations and henceforth, lower restrictions on competition. It is reasonable to assume that those countries with lower restrictions will have lower prices.

The paper is organized as follows. Section 2 presents the current evidence regarding regulation of entry. Section 3 develops the relationship between electoral

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[1] The work on political particularism is particularly significant for the public choice literature because it provides additional insights on the electoral systems that are relevant to explain the political incentives of candidates.

systems and regulation of entry and the section 4 describes the empirical results. Finally, the last section presents some concluding remarks.

2. The Regulation of Entry

Startup firms have to comply with several regulations before starting operations. Firms usually have to comply with screening procedures, tax-related requirements, labor and social security-related requirements, safety and health requirements, and environmental-related requirements. Certifying marital status, having to register and pay fees at different ministries, passing several inspections and being scrutinized by different departments and bureaucrats, and waiting for obtaining approval from those government departments are very common practices across countries. Djankov, *et al* (2002) compiled regulatory entry data based on the legal requirements that need to be met before a business can officially open its doors (*procedures*), the official cost of meeting these requirements (*cost*), and the minimum time it takes to meet them if the government does not delay the process (*time*).[2] They also constructed a variable (*cost*+*time*) that reflects the monetary costs plus the monetized value of the entrepreneur's time. Because regulations differ not only across countries but also within a country, across industries, and across firm sizes, the authors focused on a "standardized" firm.[3] Data included in Table 1 shows the regulatory cost of entry aggregated at regional level. At this level of aggregation, the average number of procedures ranges from three (North America) to fourteen (South America) and the minimum number of days necessary to start a business ranges from three (North

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[2] The problem with using the "legal" or *de jure* instead of *de facto* regulation requirements and how to cope with it is addressed later in the paper.

[3] For specific information about the characteristics of the "standardized firm", see Djankov, *et al* (2002, p.7).

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America) to sixty-two (South America). The range of variation is even larger for the cost

of entry regulation in terms of GDP per capita, ranging from one percent in North

America to 142 percent in Central America and the Caribbean. In terms of individual

countries, Canada and Australia have the lowest number of regulations, and the

Dominican Republic the highest number.[4]   Rankings change however, when

considering the regulatory costs in time and monetary terms. Overall, when time is

monetized according to the value of the entrepreneur's time, New Zealand, Canada, and

the United Stated have the lowest regulatory cost of entry and the Dominican Republic

the highest.[5]

Table 1. *Entry regulations across the world.*

Region	Countries	Number of Procedures	Time (days)	Cost (% of GDP pc)	Cost+Time (% of GDP pc)
North America	2	3	3	1%	2%
Oceania	2	3	3	1%	2%
OECD	21	8	28	13%	24%
NW Europe	15	8	34	13%	26%
Middle East	2	10	48	38%	57%
Asia	9	10	51	26%	47%
Ex-Communist	10	11	53	27%	48%
Africa	13	12	61	66%	91%
S&E Europe	14	12	52	28%	48%
Central Am. & Carib.	4	12	47	142%	161%
South America	9	14	62	52%	77%
Latin America	12	14	60	85%	109%

Government regulations were traditionally explained by the existence of market

failures. In the case of entry regulation, governments try to reduce the failures by

screening new entrants and making sure a certain quality level of the products is

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[4] Data for the individual countries are included in Table 8 in the Appendix.

[5] Additional differences can be found by looking at the specific requirements. At this level, Mexico, Malawi and Romania have the highest environmental requirements; Brazil and Madagascar have the highest tax-related requirements; Bolivia has the highest labor-related requirements; and the Dominican Republic has the highest screening related requirements.

supplied to markets. Those regulations reduce market failures such as low quality products from fly-by-night operators and externalities such as pollution. Consequently, stricter regulations should be associated with socially superior outcomes.

The consumer-oriented model of government however, has been under close scrutiny for the last 30 years. Since the seminal work on public choice by Buchanan and Tullock and the literature on regulation initiated by Stigler (1971) and Peltzman (1976), the theory of regulation has evolved based on the assumption that politicians weigh the benefits and costs of regulation in terms of votes, and the regulatory equilibrium locates at the level of regulation at which political support is maximized. Their approach, applied to entry regulation, would imply that adding entry regulations would increase political support from the incumbent firms, because regulations increase the cost of entry for new firms, and decrease political support from voters, because the decrease in competition could produce increases in prices, decreases in quality, and a slower rate of product innovation.[6]

Djankov, *et al* (2002) compare the two hypotheses, the *helping hand* (consumer oriented) and the *grabbing hand* (public choice) theory of government. Under the first hypothesis, government intervention is designed to reduce market failures and increase the quality of the products being offered in the market. The second hypothesis implies that the main beneficiaries of the regulations are not the citizens of the country but the politicians, bureaucrats, and the incumbent firms. If government regulations respond to the *helping hand* theory, the evidence should indicate increases in quality standards. On

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[6] The approach taken in this paper, that assumes that politicians make decisions according to the political cost in terms of votes and support they cause, is neither new to this paper nor exclusive to regulatory policy. For example, Baldwin and Magee (2000) find out that congressional trade votes for NAFTA, GATT and the Fast-Track are highly correlated with the benefits and costs that each legislator faces for that vote. The likelihood of a favorable vote in favor of the trade agreements increased: (i) with the ratio of workers involved in export-oriented industries to workers involved in import-competing industries; and (ii) with the ratio of business political contribution to labor political contributions.

the other hand, if government regulations follow the *grabbing hand* theory, the evidence should indicate that firms and politicians benefit the most. In their empirical analysis, they find that quality standards do not increase along with regulations, but that regulations are highly correlated with the lack of political representation and corruption, two results associated with the *grabbing hand* theory.[7] Additionally, they find that regulations decrease competition, a result important for the model used in this paper.[8] In addition to the results presented in Djankov, *et al* (2002, p.24), the data show a high correlation between entry regulations and the "extent of distortive government subsidies"; that is, countries that introduce a large number of entry regulations also use subsidies as a tool to keep un-competitive firms artificially alive. These results suggest that the public choice approach, particularly political and electoral institutions, could provide a better explanation of entry regulations than a consumer oriented model.

Table 2 provides partial evidence of a potential relationship between electoral systems and entry regulations. According to the data, a start-up firm in a country that elects its representatives through proportional representation would have to follow 3 additional procedures, wait for 16 more days and spend U$S 600 more than a similar firm located in a country that uses plurality voting.

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[7] The authors find that compliance with international quality standards declines as the number of procedures rises, pollution levels do not fall with regulation levels, and the two measures of accidental poisoning are not lower in countries with more regulation.

[8] However, they do not find evidence that returns on assets increase with regulation. This unexpected result could be explained by two different hypotheses. First, if regulations are correlated with corruption, tax evasion and the size of the informal economy it would be very difficult to find reliable data on returns. Then, it is straightforward to assume that understatements on returns could increase with corruption, and henceforth, with regulation. Second, firms have a stronger case for lobbying if they don't show high profits. Again, in this case, firms could prefer understatements of profits or simply to pursue other strategies rather than standard profit maximization in order to capture the market.

Table 2. *Average Entry Regulations by Electoral System*

Electoral system	Number of Procedures	Time (days)	Cost (% of GDP pc)	Cost+Time (% of GDP pc)
Plurality System	8	36	42%	57%
Proportional Representation	11	52	45%	66%

3. Electoral Systems and the Regulation of Entry

Public choice theory assumes that politicians act on their own interest. When deciding public policies, politicians weigh the benefits and costs of their actions in terms of potential votes to be gained and lost. However, politicians do not act in a vacuum and they are constrained by political institutions. These political institutions affect the rules of the game, the number of players, the identity of players with veto and agenda setting power, among others, which shape the calculations politicians make when deciding on policies. Some recent work has provided evidence that political institutions affect public policies and economic outcomes. In the case of fiscal policy, Persson and Tabellini (1999) show that presidential countries present lower expenditure than parliamentary systems; Scartascini and Crain (2001) show that the degree of proportionality of the electoral system affects the size and the composition of public expenditures; and Bradbury and Crain (2001) show that the size of the chamber has an impact on public expenditures.[9] Interestingly, Rogowski and Kayser (2002) find empirical evidence that countries with plurality voting have lower national prices.

This paper follows the public choice tradition for explaining the differences in entry regulations across countries assuming that legislators objective is to maximize the chances of retaining office. In that case, the optimal strategy for the legislator is to maximize the chances of being nominated and the number of votes. The equilibrium

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[9] This new branch of literature is so vast that it would be difficult to mention all of the relevant work. Some recent surveys include Persson and Tabellini (2000a, 2000b) and McKenzie (2001).

strategy is the policy vector that equates marginal votes gained and lost from the regulatory policies. In a model where entry regulation creates barriers for competition, the political costs are given by the increases in prices and reduction in quality; the political benefits are determined by the campaign contributions and political support provided by the interest groups.[10] In this setting, electoral systems could be important if they modify the supply price of regulation. That is, electoral systems could have an impact if legislators are more willing to offer regulation in exchange for contributions under one electoral system than under another.

Electoral rules are important because they affect the organization of the groups that support the election of candidates, and consequently, they affect the mix of policies that favors specific groups to raise their chances of reelection. The groups that determine the election of candidates differ markedly under a single-member plurality system (only one legislator elected per district) versus a multi-member proportional representation system (more than one legislator elected per district). As is the case in the U.S., politicians respond to their local constituency to secure nomination under a regime of single-member districts and plurality rule. The sole representative of the district is ultimately responsible for the well-being of the people in the district. In these districts, policies are hardly ideological and a successful politician responds to the preferences of the median voter in his or her geographic district.

Politicians' strategies are different in regimes of multi-member districts and proportional representation. These systems are characterized by multiple parties and

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[10] These interest groups do not only consist of firms in the market. Some labor unions and professional organizations could also cater support for regulations even though those regulations could have a negative impact on consumers. Additionally, assuming that regulations increase product quality would not modify the results substantially. It is not considered in the text because Djankov, *et al* (2002) show empirically that entry regulations do not seem to affect product quality and quality standards.

consequently, are more ideologically oriented than two-party systems.[11] In multiple-

party systems, politicians respond to the party leadership's platform to increase their

chances of nomination. Electoral competition is directed toward being selected from a

party's list, and candidates need to be included in those lists in order to gain access to

the legislature. Only by following the party's platform can a candidate obtain a spot in

the party's list, what increases party discipline.[12] This process means that the cost to a

candidate for not serving the local constituency and following the party leadership is

lower under a proportional representation system with multi-member districts than in a

plurality, single-member district system. In multi-member districts, the fate of the

constituency depends on the joint effort of several representatives from different

parties.[13] In this context, problems of collective action arise where legislators find it

profitable to serve broad-based interest groups because the benefits surpass those from

helping the geographic constituency.[14] As a result, the mix of policies offered by

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[11] Adams (1996) finds evidence that platforms and policies are more ideologically diverse even in those cases where the number of parties is fixed and cannot accommodate to the proportionality of the electoral system. Moreover, political parties' preferred policies usually deviate from that of the median voter in proportional representation countries. Cox (1990) and (1990b) offer a detailed analysis on multi-candidate spatial competition.

[12] Most parties in multiple-party systems are highly undemocratic. Choice of candidates unrestricted to all party members is uncommon. The proportion is rarely more than a third of all members and sometimes is as small as 1 percent of the total number of members of the party. Representatives in the multiple-party system know that there is a big chance that they will not be able to face a next election if they defy the party line. As Gallaher, *et al.* (1992, p. 134) describe, "In Western Europe, self interest requires politicians to put the party first, last, and always. Outside the party there is no salvation, or at least no career path prospect".

[13] For example, 70 legislators from different parties represent the constituents of Provincia de Buenos Aires, Argentina. In this case, the ignorance of voters is very high and the cost for each representative for not serving the constituency is very low. On the other side, the cost of not serving the party is very high.

[14] As a further distinction, in a two-party system, constituents are able to hold their specific representative accountable. Under government coalitions, lines of responsibility are blurred and each party attempts to blame its partners for failures while taking credit itself for successes. Katz (1980) exposits this distinction.

legislators elected through plurality voting tend to differ from the policies selected by those politicians elected through proportional representation voting.[15]

A simple model of pre-election politics, where electoral promises are binding, could help to illustrate the discussion.[16] Let's consider the decision faced by a legislator who wants to maximize her chances of being reelected. In order to be reelected she has to ensure nomination and receive the largest amount of votes possible.[17] In this simplified model, the only variable the legislator controls is the number of regulations she can enact, R, that affect the level of prices, P, and the campaign contributions by interest groups, C. Both C and P are increasing functions in R. Additionally, campaign contributions increase the probability of nomination and election, and higher prices reduce that probability.

Therefore, the decision faced by the legislator is the following:

$$\underset{R}{Max} \quad N(C(R), P(R))\, V(C(R), P(R))$$

with

$$\frac{\partial N}{\partial C} > 0; \frac{\partial N}{\partial P} < 0; \frac{\partial V}{\partial C} > 0; \frac{\partial V}{\partial P} < 0; \frac{\partial C}{\partial R} > 0; \frac{\partial P}{\partial R} > 0$$

From the first order conditions, the supply price for services to the interest group can be derived; that is, the necessary increase in campaign contributions resulting from a marginal increase in regulation:

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[15] Stratmann and Baur (2002) find empirical evidence of different behaviors across legislators for Germany, where half of the parliamentary seats are awarded from single-member constituencies and the other half through proportional voting. The legislators elected from single-member constituencies tend to choose legislative committees that deal with geographically based affairs while the legislators elected by party lists tend to prefer those committees that deal with broad based policies and transfers.

[16] This is not the only model that could explain why electoral systems affect entry regulations. This simple model serves to exemplify only one of the channels. Additional discussion is provided later in the chapter.

[17] This model is very similar to the framework in Denzau and Munger (1986) and Bawn and Thies (2002)

$$\frac{\partial C}{\partial R} = \frac{-\left[\dfrac{\partial N}{\partial P}\dfrac{\partial P}{\partial R}V + \dfrac{\partial V}{\partial P}\dfrac{\partial P}{\partial R}N\right]}{\left[\dfrac{\partial N}{\partial C}V + \dfrac{\partial V}{\partial C}N\right]}$$

Then, if electoral systems have an impact on decisions about the number of regulations, it should be the case that, either

$$\left.\frac{\partial C}{\partial R}\right|_{PR} < \left.\frac{\partial C}{\partial R}\right|_{PL} \qquad \text{or} \qquad \left.\frac{\partial C}{\partial R}\right|_{PR} > \left.\frac{\partial C}{\partial R}\right|_{PL}$$

That is, the supply price of regulation could be higher in proportional representation systems or higher in plurality systems. The direction of the inequality is determined by a different impact of increases in prices and/or contributions on the nomination or vote functions. This differential impact is based on the different marginal benefit from contributions and different marginal cost of increases in prices for legislators that compete in each one of the systems.

Looking at the individual derivatives could help to determine the directions of the inequality:

1. $\dfrac{\partial N}{\partial P}$: The level of prices does not seem to be specifically relevant to determine the nomination chances of a candidate in the case of proportional representation system because voters inputs are low. On single-member plurality voting systems however, where voters have a close relationship with the nomination decision, the level of prices and the degree of competition could be used as a proxy for the quality of the legislator and henceforth, determine her chances of nomination.

2. $\dfrac{\partial V}{\partial P}$: With respect to the impact of prices on voting, because candidates from single-member constituencies are subject to a tighter control than candidates in

multi-member districts, it seems reasonable to think that the impact on voting patterns of higher prices will be more significant on single-member constituencies than in multi-member constituencies systems.   While a candidate in single-member constituencies has to respond to the constituency, a politician elected from a multi-member constituency finds easier to free-ride on its constituency by blaming her fellow legislators, some of whom would belong to a competing party. Therefore, it could be argued that prices could have a larger impact in plurality than in proportional systems.

3. $\frac{\partial N}{\partial C}$: Interest groups resources should be expected to have more impact on nomination under proportional representation. Under single-member plurality voting, the candidate's ability to win the district is crucial to the nomination process, because the party needs to win as many seats as possible. This requirement is not as stringent in proportional representation systems because the party could "hide" in the list some candidates as long as they provide funds that would help the list as a whole. The incentives embodied in the system leave parties free to respond to the preferences of their favored interest groups as to the ordering of the party list.

4. $\frac{\partial V}{\partial C}$: The sign in this case is not readily identifiable. It could be expected that resources have a larger impact on smaller districts and henceforth, the impact of contributions on votes could be higher in single-member than in multi-member systems. On the other hand, reputation and the individual record of the candidate have an important impact on voting in smaller districts, what is not as important in proportional representation systems.

According to the individual derivatives, there is some confidence to assume that the supply price for regulation would be higher for politicians elected in single-member constituencies compared to the supply price for politicians elected from multi-member constituencies.

$$\left.\frac{\partial C}{\partial R}\right|_{PR} < \left.\frac{\partial C}{\partial R}\right|_{PL}$$

Consequently, entry regulations should be more and more costly in proportional electoral systems than in simple plurality systems.[18] The results of this model do not only apply to increases in regulation but they also apply to interest group lobby for reductions in the burden for starting up companies. From a certain equilibrium of regulations and contributions, the total amount of contributions that the single-member constituency legislator would receive to reduce regulations would be lower than the amount required by the multi-member constituency legislator. This result is a consequence that while the legislator in the single-member constituency system would receive credit from her constituents from following the change, this will not be the case for the multi-member legislator. Summarizing, either because incumbent firms lobby legislators to increase regulations or because interest groups lobby for the lowering of entry restrictions, entry regulations would be lower in single-member plurality voting countries.[19]

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[18] This result seems to be reinforced by the other side of the equation. The demand for regulation seems to be higher for proportional representation systems given that a certain level of political donations buys more votes in the chamber elected through proportional representation than plurality voting. Under proportional voting, each dollar of support to the party almost surely ensures the vote of the whole group of legislators. In single-member systems, on the contrary, it would only buy the votes of the individual legislator.

[19] In addition to the mechanism mentioned in the paper, where campaign contributions have an important effect on regulation, other mechanisms could generate higher regulations in proportional representation than in single-member plurality voting countries. One example is the different potential for direct access of interest groups to the legislature. In the legislatures of countries that use proportional representation, it is common to find leaders from the labor unions, environmental organizations, industry groups, and so on. This regularity is explained by the

4. Empirical Results

The discussion in the previous section implies that the regulation of entry should be relatively lower in countries that use single-member plurality voting rules when compared to those countries that use multi-member proportional representation elections.[20] Therefore, it is expected that different variables that proxy the electoral system of a country would be significant to explain regulations once other determinants for regulation have been controlled for.

The model to test is very simple:

$$Entry\ Regulations = a + b_1\ Electoral\ System + b_2\ Corruption + b_3\ Log(GDPpc) + e$$

The dependent variable **Entry regulations** could include any of the four different measures of entry regulation available; that is, the log of the number of procedures, time, cost and cost+time, as they were defined previously.[21] However, regressions on the four variables will be used only sparsely, and the results will be generally provided for the log of *cost*+*time*. Cost+time is a more accurate measure of the total cost faced by the entrepreneur who wants to enter the market; therefore, a more accurate measure of the barriers to entry in the market that regulations impose.[22]

The electoral system variables used in the estimation include:

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different organization of support groups under each electoral system. In proportional representation systems coalitions are formed along demographically-based instead of geographically-based issues. As a consequence, representatives of the interest groups that favor entry regulations can gain easier access to seats in the legislature. While in a proportional representation system it is politically rational to support the policies that favor the interest group that elected the representative, in single-member plurality systems the legislators have to cater legislation that benefits the geographic district in order to survive politically.

[20] For simplicity, only the electoral system for the lower or unique legislative chamber is used.

[21] Logs are used because that is the strategy adopted by Djankov, *et al* (2002).

[22] Results do not change significantly by changing the measure of regulation used as dependent variable. The results are readily available from the author upon request.

Plurality system (PL) is a dummy variable that takes a value of 1 if every legislator is elected from single member constituencies and 0 otherwise.

SMC/SEATS is the ratio of legislators elected from single member constituencies to the total number of directly elected legislators. The range is 0 (for those countries without single member constituencies) to 1 (every legislator is elected from single member constituencies).

ADSL is a measure of district size. It is constructed as the ratio of the number of electoral districts divided by the number of directly elected legislators. Its theoretical range is from zero (that corresponds to an infinite number of legislators running in only one district) to one (every legislator running in single-member constituencies).

These variables have been selected because they capture different properties of the electoral system that proxy the pre-election politics model most accurately. PL allows a quick comparison across two different groups of countries –those with perfect plurality and those without it-; SMC/SEATS reveals a more accurate description of the degree of plurality of the electoral system; and ADSL provides additional insights on the relationship between the size of the district (or the degree of accountability to the constituents) and the regulation of entry.[23]

The control variables include:

Log of GDP per capita is the log of the GDP per capita in constant U.S. dollars. This variable controls for differences due to the degree of development in the country.

Corruption is the corruption perception index as provided by Transparency International.[24] According to the model in Djankov, *et al* (2002), those countries where

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[23] b_1 measures the proportional change in regulations when comparing a proportional system to a plurality system.

[24] The sign of the coefficient in the regression is expected to be negative because a low value in the corruption index means high corruption while a large value means low corruption.

corruption is higher should also present higher regulations. One on side, higher

regulations allow higher corruption because firms are willing to pay to avoid the

regulatory costs. On the other side, a more corrupt society creates opportunities for the

politicians to increase the number of regulations and henceforth, collect additional rents.

Results in Table 3 show that single-member plurality voting countries have a

lower number and less costly regulations. This result holds up for the different proxies of

the electoral system. Corruption remains highly significant and with the right sign; those

countries with higher corruption have more and more costly entry regulations.

Table 3. *Testing the impact of electoral systems on entry regulations*

Independent Variables	Log (Procedures)	Log (Procedures)	Log (Procedures)	Log (Time)	Log (Time)	Log (Time)
SMC/SEATS	-0.27 (0.11)**			-0.72 (0.20)***		
PL		-0.36 (0.11)***			-0.76 (0.21)***	
ADSL			-0.30 (0.13)**			-0.86 (0.22)***
Corruption	-0.20 (0.03)***	-0.17 (0.03)***	-0.20 (0.03)***	-0.26 (0.06)***	-0.22 (0.06)***	-0.25 (0.06)***
Log(GDPpc)	0.08 (0.05)	0.03 (0.05)	0.07 (0.05)	-0.03 (0.09)	-0.10 (0.10	-0.05 (0.09)
Adj. R^2	0.53	0.56	0.53	0.55	0.54	0.56
Observations	65	65	65	65	65	65

Note: *Std. Errors in parenthesis. *** indicates significance at the 1% level ** 5% level * 10% level*

Table 3 *cont*.

Independent Variables	Log (Cost)	Log (Cost)	Log (Cost)	Log (Cost+Time)	Log (Cost+Time)	Log (Cost+Time)
SMC/SEATS	-0.61 (0.29)**			-0.71 (0.22)***		
PL		-0.56 (0.31)*			-0.69 (0.23)***	
ADSL			-0.67 (0.33)**			-0.81 (0.24)***
Corruption	-0.23 (0.09)***	-0.20 (0.09)**	-0.23 (0.09)***	-0.23 (0.06)***	-0.20 (0.07)***	-0.22 (0.06)***
Log(GDPpc)	-0.21 (0.14)	-0.25 (0.15)*	-0.22 (0.14)	-0.16 (0.10)	-0.22 (0.11)**	-0.18 (0.10)*
Adj. R^2	0.42	0.41	0.42	0.56	0.54	0.56
Observations	65	65	65	65	65	65

Note: *Std. Errors in parenthesis. *** indicates significance at the 1% level ** 5% level * 10% level*

These results imply that after controlling for the impact of corruption and the degree of development, there are still substantial differences in entry regulations between the average proportional representation country and the average plurality country

Table 4. *Differences on regulation according to the electoral system in place.*

	Plurality system	Proportional system	Difference between PR and PL
Number of Procedures	7	10	3
Time (days)	19	41	22
Cost *(% of GDP pc)*	11	19	8
Cost+Time (% of GDP pc)	20	40	20

In addition to the electoral system, other political institutions, like the political regime and organization of the country should be considered and their importance evaluated empirically because the electoral systems are not the only institutions that could alter legislators' strategies. Therefore, a more complete model should be tested:

$$EntryRegulations = a + b_1 \ Electoral \ \ System + \Phi \ \textbf{PoliticalInstitutions} + \\ + \Psi \ \textbf{LegalOrigin} + b_2 \ Corruption + b_3 \ Log(GDPpc) + e$$

The vector of political institutions include:

Presidential country is a dummy that takes a value of 1 in those countries with a stronger executive branch that is not elected by the legislature. The importance of controlling for the type of regime is twofold. First, presidential regimes could have fewer regulations because of competition among candidates, and because presidents are held directly and separately accountable by the voters, as suggested by Persson and Tabellini (1999). Therefore, voters would identify increases in prices and decreases in quality, because barriers of entry generated by the regulations, as a consequence of

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presidential policies. Second, if the president can veto any regulation, then only those regulations with broad support will be approved.

Federal country is equal to 1 for federal countries and equal to zero for unitary countries. The net effect could be uncertain. On one side, additional layers of government could increase the size of the bureaucracy and the number of regulations. On the other hand, additional layers of government could impose a restraint on the lower level bureaucracies.

Bicameral country is a dummy variable equal to 1 for countries with two legislative chambers and zero for unicameral countries. Similarly to federal countries, it is not evident the expected sign *a priori*. On one hand, having two chambers could offer additional restraints to the lower house by increasing the necessary majority for passing regulations. On the other hand, and according to the rules of congress, it could bias the legislative bargaining towards higher regulations.

Seats in the lower chamber controls for the size of the legislature. In a two-party system, the size of the chamber could affect the number of regulations through instability and the potential for universalistic outcomes. In a multi-party system, even though each individual legislator does not have extensive bargaining power, legislature size could affect the degree of fractionalization within a party and the potential demand for additional regional regulations.

The vector of legal origin includes five dummy variables for the five possible legal origins represented in the sample: *British, French, German, Scandinavian,* and *Socialist*. These variables identify the legal origin of each Company Law or Commercial Code of each country. Legal origin has been viewed as a proxy for the government's proclivity to intervene in the economy and the stance of the law toward the security of property rights in a country. Because the same cultural and political conditions that determined the electoral systems could also be determining the number and costs of

regulations, including the legal origin in the regressions provides an additional check for the robustness of the results.

The results in Table 5 show that the electoral system variables remain highly significant even after controlling for other political institution. Neither the dummies for presidential, federal, and bicameral countries, nor the number of seats are significant. Corruption remains significant and with the expected sign. The electoral system is still significant to explain entry regulations even after controlling for the legal origin of the countries.

Table 5. *Electoral systems, political institutions and entry regulations*

Independent Variables	*Log (Cost+Time)*	*Log (Cost+Time)*	*Log (Cost+Time)*	*Log (Cost+Time)*	*Log (Cost+Time)*	*Log (Cost+Time)*
SMC/SEATS	-0.74	-0.68	-0.71	-0.75	-0.75	-0.44
	(0.22)***	(0.23)***	(0.22)***	(0.23)***	(0.25)***	(0.25)*
Presidential	-0.17				-0.16	
	(0.22)				(0.23)	
Federal		-0.09			-0.07	
		(0.20)			(0.22)	
Bicameral			-0.02		-0.02	
			(0.19)		(0.22)	
Seats (in 00s)				0.03	0.03	
				(0.06)	(0.06)	
British L.O.						-0.29
						(0.30)
French L.O.						0.42
						(0.23)*
German L.O.						0.85
						(0.38)**
Scandinavian L.O.						0.08
						(0.45)
Corruption	-0.24	-0.23	-0.23	-0.22	-0.23	-0.15
	(0.07)***	(0.06)***	(0.07)***	(0.07)***	(0.07)***	(0.07)**
Log(GDPpc)	-0.18	-0.15	-0.16	-0.18	-0.19	-0.31
	(0.10)*	(0.10)	(0.11)	(0.11)*	(0.12)	(0.10)***
Adj. R^2	0.55	0.55	0.55	0.55	0.53	0.62
Observations	65	65	65	65	65	65

Note: *Std. Errors in parenthesis. *** indicates significance at the 1% level ** 5% level * 10% level*

The results in Tables 3 and 5 show that electoral systems are highly significant to explain entry regulations in a large sample of world countries. These results, however, could be affected by the characteristics of the dependent variables. These variables, which are based on de jure instead of de facto information, could be influenced by corrupted practices and low quality of the bureaucracy.[25] Consequently, the data could not be adequately measuring the effective costs of regulation and consequently, the true entry barriers. In high corruption countries "anything could happen", and not even the sign of the error in the data can be estimated. On one hand, an inefficient bureaucracy can make legal requirements take longer and be more expensive (because missteps, wrong information, double filling, etc). On the other hand, a very corrupted bureaucracy could accelerate approval if bribed. Therefore, to avoid the bias induced by high corruption and low bureaucratic quality on the results, the regressions in Tables 3 and 5 are re-estimated on the group of countries with the lowest corruption and higher bureaucratic quality.[26]

Table 6 shows that similar results are valid even in this in this smaller sample. The electoral system is highly significant to explain entry regulations after controlling for legal origin and political institutions. The value of the coefficients seems to imply that the differences in regulation across electoral systems are even larger in this smaller sample. Corruption has the right sign but it is only significant in some of the regressions. It is important to remember that the variance of corruption is smaller for the sample considered here.

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[25] Djankov, *et al* (2002, pp.6-7) report examples where paying bribes or hiring "facilitators" could decrease substantially the amount of procedures and time necessary to start a firm.

[26] This rule includes those countries in the upper third of the distribution of corruption and those who scored 6 in the bureaucratic quality index. The complete list of countries is included in Table 9 in the Appendix. The results are robust to changes in the size and composition of the sample.

Table 6. *Electoral systems, legal origin and entry regulations*

Independent Variables	Log (Cost+Time)	Log (Cost+Time)	Log (Cost+Time)	Log (Cost+Time)
SMC/SEATS	-1.62	-1.43	-1.89	-1.68
	(0.37)***	(0.39)***	(0.49)***	(0.60)**
Pres			-0.01	-0.02
			(0.43)	(0.38)
Fed			-0.47	-0.32
			(0.40)	(0.40)
Bicam			0.43	-0.25
			(0.46)	(0.47)
Seats			0.09	0.11
			(0.12)	(0.13)
British L.O.		0.10		0.55
		(0.51)		(0.64)
French L.O.		1.06		1.41
		(0.53)*		(0.69)*
German L.O.		1.06		1.48
		(0.52)*		(0.63)**
Corruption	-0.41	-0.19	-0.33	-0.16
	(0.12)***	(0.13)	(0.15)**	(0.15)
Log(GDPpc)	0.48	0.19	0.44	0.23
	(0.29)	(0.30)	(0.33)	(0.34)
Adj. R^2	0.57	0.68	0.54	0.66
Observations	23	23	23	23

Note: *Std. Errors in parenthesis. *** indicates significance at the 1% level ** 5% level * 10% level*
Because the sample has no countries with socialist legal origin, Scandinavian L.O. has been dropped.

For additional insights on the works of the model, it is important to check whether the variables reported by Seddon, *et al* (2002) on political particularism provide additional explanations to the differences in entry regulations. These variables are particularly relevant because they deal with the incentives faced by the politician according to the electoral system in place. The particularism variables measure the degree to which politicians can further their careers by appealing to narrow constituencies, on one hand, or party constituencies, on the other. Following the work by Carey and Shugart (1995), Seddon, *et al* (2002) constructed three variables, ballot, pool and vote, and a composed index of particularism.

Ballot describes the relative strength of parties and citizens in shaping candidates' access to the ballot and a plausible chance to be elected. A code of 0 means that voters can only choose a party and cannot demonstrate a preference for any individual. Closed

list electoral systems are the most common type in this category. A code of 1 means that voters can choose among a limited set of candidates. A code of 2 means that voters can select from an unrestricted set of candidates.

Pool measures the extent to which a candidate can ride his party's reputation to electoral success. The variable takes a value of 0 if votes cast are pooled across the whole party to determine the allocation of seats, 1 if votes are pooled at the sub-party level, and 2 if votes cast for a candidate contribute only to that candidate's electoral success.

Vote measures limitations on the number of individuals that voters can support. Legislators will have a stronger incentive to please their voters constituencies where the number of votes is limited and they must convince voters to chose them only. The values range from 0 for a single vote for a party, 1 for multiple votes across candidates who may or may not have to be from the same party, and 2 for a single vote for a single candidate.

These three variables conform the index of **Particularism**. While particularistic systems are likely to complicate agreement because lower party discipline, they have an advantage in terms of representation and in generating the incentives for politicians to gather information on the preferences of their constituencies.

The results, as shown in Table 7 indicate that the particularism variables, as well as the electoral system variables, are highly significant to explain entry regulations.[27] The fact that citizens can choose from a larger set of candidates (open lists) instead of only choosing for a party (closed lists) and have the chance to vote for a specific candidate instead of a party list reduces entry regulations. From the results in the

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[27] The particularism variables have the added benefit of controlling for differences in electoral systems across chambers, and therefore, of measuring the degree of plurality of the legislative electoral system in its entirety.

second column, it seems apparent that the electoral system *per se*, captured by the variable pool, is more significant to explain entry regulations than whether the country uses closed or open lists and the number of votes per citizen. Additionally, the degree of plurality, as it is expressed by SMC/SEATS seems to be more significant than the discrete identification made by pool. Overall, the results seem to indicate that single-member plurality voting systems have lower regulations than proportional representation systems; among these, regulations should be lower in countries that use open instead of closed lists.

Table 7. *Electoral systems, particularism and entry regulations*

Independent Variables	Log (Cost+Time)	Log (Cost+Time)	Log (Cost+Time)	Log (Cost+Time)	Log (Cost+Time)	Log (Cost+Time)
SMC/SEATS			-0.99 (0.52)*	-1.27 (0.36)***	-2.16 (0.71)***	-1.33 (0.35)***
Particularism	-1.50 (0.36)***		-0.80 (0.50)			
Ballot		-0.94 (1.03)		-1.06 (0.48)**		
Pool		-0.49 (0.24)*			0.37 (0.40)	
Vote		-0.28 (0.55)				-0.56 (0.25)**
Corruption	-0.36 (0.12)***	-0.39 (0.15)**	-0.39 (0.12)***	-0.41 (0.11)***	-0.42 (0.12)***	-0.35 (0.11)***
Log(GDPpc)	0.85 (0.32)**	0.92 (0.37)**	0.71 (0.31)**	0.81 (0.30)***	0.40 (0.30)	0.64 (0.27)**
Adj. R²	0.57	0.52	0.62	0.66	0.58	0.66
Observations	22	22	22	22	22	22

Note: *Std. Errors in parenthesis. *** indicates significance at the 1% level ** 5% level * 10% level*

Summarizing, the evidence presented in Tables 3 to 7 seems to indicate that the electoral system is significant to explain the number and cost of entry regulations. Single-member plurality elections present lower regulations and these regulations are affected not only by the discrete change from one system to the other but also by the degree of plurality of the system. Additionally, the degree of particularism of the system,

has an explanatory role, not only according to whether legislators are elected in single or multi-member constituencies but also according to whether the latter are elected from closed or open lists and the number of individuals that voters can support.

5. Conclusions

Regulation of entry varies widely across countries. An entrepreneur in Canada has to follow two procedures and spend two days before opening her business. An entrepreneur in the Dominican Republic, on the other hand, has to follow 21 procedures and wait for 80 days before starting operations. Djankov, *et al* (2002) explain these divergences using the *grabbing hand* model. In this model, regulations are mostly used for politicians benefit and not exclusively for the benefit of consumers. More specifically, they find evidence that regulation increases with corruption. In highly corrupted countries, politicians introduce regulations in order to collect rents.

This paper shows that not only corruption is important to explain the number and cost of regulations but also the electoral system used to elect representatives to the legislative unique or lower chamber. The explanation of this result, which provides additional evidence in favor of the grabbing hand model, lies on the relative cost for a politician to cater regulation to interest groups. Politicians weigh the benefits from regulation (increases political support and campaign contributions) against the cost of regulation (increases prices and decreases votes), because entry regulations affect market competition with the consequent impact on the quality and price of goods brought to the market.

In a very simple model, I show that the price for regulation in terms of campaign contributions is lower for proportional representation candidates if we assume that in those electoral systems campaign contributions have a higher marginal benefit in terms of nomination or votes, and/or the political cost of increases in prices is lower than the

costs for the candidate elected in simple plurality systems. Empirically, I find that a dummy for single-member plurality systems and two proxies for the "degree of plurality", are statistically significant to explain the number and cost of regulations. Additionally, three variables of political particularism add explanatory value to the electoral system variables. Not only whether candidates are elected from single-member or multi-member constituencies is significant to explain entry regulations, but also the relative strength of parties and citizens in shaping candidates' access to the ballot (closed or open lists), and the number of individuals that voters can support.

By showing that electoral systems affect the number and cost of entry regulations, this paper increases the amount of evidence that links electoral systems to economic outcomes, and complements the results in Rogowski and Kayser (2002) regarding the relationship between electoral systems and prices.

Appendix

Table 8. *Regulations of entry across countries.*

Country	Procedures		Time		Cost			Cost+Time		
	Number	Rank	Days	Rank	US$	% of GDP pc	Rank	US$	% of GDP pc	Rank
Canada	2	1	2	1	315	1%	5	489	2%	3
Australia	2	2	2	2	530	2%	6	718	3%	5
New Zealand	3	3	3	3	91	1%	2	298	2%	2
Denmark	3	4	3	4	3731	10%	14	4178	11%	8
Ireland	3	5	16	9	2911	12%	17	4521	18%	10
United States	4	6	4	5	151	0%	1	521	2%	1
Norway	4	7	18	11	1753	5%	8	4427	12%	9
United Kingdom	5	8	4	6	301	1%	4	638	3%	4
Finland	5	9	24	33	352	1%	3	3266	11%	7
Israel	5	10	32	25	3505	21%	44	5609	34%	28
Zimbabwe	5	11	47	38	91	13%	21	223	32%	24
Sweden	6	12	13	7	765	3%	7	2318	8%	6
Jamaica	6	13	24	16	318	19%	35	480	28%	21
Zambia	6	14	29	22	235	60%	61	280	72%	54
Panama	7	15	15	8	998	31%	49	1192	37%	32
Switzerland	7	16	16	10	7844	17%	31	10755	24%	16
Singapore	7	17	22	12	3151	12%	19	5480	21%	13
Latvia	7	18	23	13	997	42%	51	1213	52%	47
Malaysia	7	19	42	34	1197	26%	47	1957	43%	39
Netherlands	8	20	31	24	5548	18%	33	9285	31%	23
Belgium	8	21	33	26	2963	10%	13	6881	23%	15
Hungary	8	22	39	31	4424	86%	63	5227	101%	61
Pakistan	8	23	50	42	178	35%	50	279	55%	51
Peru	8	24	83	62	466	20%	39	1245	53%	49
South Africa	9	25	26	17	329	8%	12	735	19%	11
Thailand	9	26	35	27	174	6%	10	554	20%	12
Austria	9	27	37	29	8607	27%	48	13276	42%	37
Tunisia	9	28	41	32	412	17%	30	803	34%	26
Slovenia	9	29	47	39	2340	21%	42	4432	40%	36

Uruguay	10	30	23	14	3072	49%	54	3643	59%	52
Bulgaria	10	31	27	19	204	14%	24	356	25%	19
Chile	10	32	28	21	670	13%	22	1243	24%	18
Germany,	10	33	42	45	4977	16%	28	10306	32%	25
Ghana	10	34	45	36	89	22%	45	163	40%	35
Lithuania	10	35	46	37	108	5%	9	470	24%	17
Czech Republic	10	36	65	55	421	8%	11	1754	34%	29
India	10	37	77	59	260	58%	59	399	89%	59
Japan	11	38	26	18	4913	12%	18	9314	22%	14
Egypt, Arab Rep.	11	39	51	43	1150	97%	64	1393	117%	64
Kenya	11	40	54	46	171	51%	55	243	72%	55
Armenia	11	41	55	47	116	13%	20	318	35%	30
Poland	11	42	58	50	900	25%	46	1721	49%	43
Spain	11	43	82	61	2939	17%	32	8511	50%	45
Indonesia	11	44	128	67	517	54%	57	1010	105%	63
Croatia	12	45	38	30	1847	45%	53	2471	60%	53
Portugal	12	46	76	58	2270	18%	34	6012	49%	44
Slovak Republic	12	47	89	64	592	15%	25	2042	50%	46
Korea, Rep.	13	48	27	20	1966	16%	29	3272	27%	20
Tanzania	13	49	29	23	631	335%	67	653	347%	67
Turkey	13	50	44	35	573	19%	37	1095	37%	33
Malawi	13	51	52	44	30	19%	36	62	40%	34
Morocco	13	52	57	49	289	21%	43	599	44%	40
Argentina	14	53	48	40	825	10%	15	2381	29%	22
Jordan	14	54	64	54	861	54%	56	1272	79%	57
Venezuela	14	55	104	66	341	11%	16	1677	52%	48
Greece	15	56	36	28	7414	59%	60	9236	73%	56
France	15	57	53	15	4141	14%	23	10280	36%	31
Brazil	15	58	63	53	902	20%	41	2031	45%	42
Mexico	15	59	67	56	2047	57%	58	3015	83%	58
Mali	16	60	59	51						
Italy	16	61	62	52	4039	20%	40	9042	45%	41
Ecuador	16	62	72	57	883	62%	62	1292	91%	60
Romania	16	63	97	65	194	15%	27	687	54%	50

Madagascar	17	64	152	69	103	43%	52	250	103%	62
Colombia	18	65	48	41	335	15%	26	769	34%	27
Mozambique	19	66	149	68	220	111%	65	338	171%	65
Russia	20	67	57	48	438	20%	38	942	43%	38
Bolivia	20	68	88	63	2538	266%	66	2874	301%	66
Dominican Rep.	21	69	80	60	8875	463%	68	9488	495%	68
Average	10.4		47.5		1728	40%		2999	59%	
Std. Dev.	4.6		31.8		2169	74%		3357	78%	
Median	10		44		717	18%		1342	40%	

Source: Djankov, *et al* (2002)

Table 9. *List of countries with low corruption and high bureaucratic quality*

Australia	France	Luxembourg	South Africa
Austria	Germany	Netherlands	Spain
Belgium	Iceland	New Zealand	Sweden
Canada	Ireland	Norway	Switzerland
Chile	Israel	Portugal	United Kingdom
Denmark	Japan	Singapore	United States
Finland			

Table 10. *Summary statistics*

Variable	Mean	Std. Dev.	Min	Max	Source
Procedures	10.11	4.37	2.00	20.00	DLLS
Time (days)	45.74	29.40	2.00	149.00	DLLS
Cost (% GDP pc)	0.33	0.54	0.00	3.35	DLLS
Cost+Time (% GDP pc)	0.52	0.58	0.02	3.47	DLLS
SMC/SEATS	0.34	0.42	0.00	1.00	IPU
PL	0.25	0.43	0.00	1.00	IPU
ADS	0.43	0.38	0.01	1.00	IPU
Particularism	0.92	0.61	0.00	2.00	SGPS
Ballot	0.72	0.43	0.00	2.00	SGPS
Pool	0.89	0.85	0.00	2.00	SGPS
Vote	1.16	0.78	0.00	2.00	SGPS
Presidential	0.58	0.50	0.00	1.00	PT,PSW
Federal	0.31	0.47	0.00	1.00	T, PC, PSW
Bicameral	0.54	0.50	0.00	1.00	CPE, PC
Seats	266.65	160.87	60.00	666.00	IPU
Corruption	5.10	2.39	1.70	10.00	TI
GDP pc	11366.91	12900.00	156.48	45496.00	WDI
British Legal Origin	0.31	0.47	0.00	1.00	GDN
French Legal Origin	0.37	0.49	0.00	1.00	GDN
German Legal Origin	0.08	0.27	0.00	1.00	GDN
Scandinavian Legal O.	0.06	0.24	0.00	1.00	GDN
Socialist Legal O.	0.18	0.39	0.00	1.00	GDN

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IPU: Inter-Parliamentary Union. 1977-1998. *Chronicle of Parliamentary Elections*. Geneva: International Centre for Parliamentary Documentation.

DLLS Djankov, *et al* (2002)

DPI: *Database of Political Institutions*. Downloadable from (*http://paradocs.pols.columbia.edu/datavine/MainFrameSet.jsp*)

GDN: Easterly, William. 2000. Database for Global Development Network. Downloadable from (*http://www.worldbank.org/research/growth/GDNdata.htm*)

PC: Henisz, Witold J. *Political Constraints*. Downloadable from (http://www-management.wharton.upenn.edu/henisz/)

PH: *Political Handbook*. Downloadable from (*http://paradocs.pols.columbia.edu/datavine/MainFrameSet.jsp*)

PT: Persson, Torsten and Guido Tabellini. 1999. The Size and Scope of Government:
         Comparative Politics with Rational Politicians. 1998 Marshall Lecture, *European Economic
         Review* 43:699-735. Downloadable from (*http://www.igier.uni-
         bocconi.it/en/data/comparative.htm*)
PSW: Derbyshire, J. Denis and Ian Derbyshire. (1996), Political Systems of the World, New York: St.
         Martin's Press
SGPS   Seddon, Jessica, Gaviria, Alejandro, Panizza, Ugo, and Ernesto Stein. 2002. Political
         Particularism Around the World. RES Working Paper #463, IADB.
WDI: World Bank. 1999. *World Development Indicators* [CD-Rom], Washington, DC.
T: Treisman, Daniel. 2000. The Causes of Corruption: A Cross-National Study, *Journal of Public
         Economics* 76: 399-457.
TI: Transparency International. Downloadable from (*http://www.transparency.org*)

Table 11. *Summary statistics for the countries with low corruption and high bureaucratic quality*

Variable	Mean	Std. Dev.	Min	Max	Source
Procedures	6.91	3.55	2.00	15.00	DLLS
Time (days)	25.78	21.83	2.00	82.00	DLLS
Cost (% GDP pc)	0.10	0.08	0.005	0.27	DLLS
Cost+Time (% GDP pc)	0.21	0.15	0.02	0.50	DLLS
SMC/SEATS	0.28	0.41	0.00	1.00	IPU
PL	0.20	0.41	0.00	1.00	IPU
ADS	0.37	0.37	0.01	1.67	IPU
Particularism	0.77	0.52	0.00	1.00	SGPS
Ballot	0.68	0.41	0.00	2.00	SGPS
Pool	0.61	0.77	0.00	2.00	SGPS
Vote	1.03	0.70	0.00	2.00	SGPS
Presidential	0.20	0.41	0.00	1.00	PT,PSW
Federal	0.32	0.48	0.00	1.00	T, PC, PSW
Bicameral	0.60	0.50	0.00	1.00	CPE, PC
Seats	262.28	181.17	60.00	666.00	IPU
Corruption	7.99	1.42	5.00	10.00	TI
GDP pc	27149	11493	3904	52675	WDI
British Legal Origin	0.36	0.49	0.00	1.00	GDN
French Legal Origin	0.28	0.46	0.00	1.00	GDN
German Legal Origin	0.16	0.37	0.00	1.00	GDN
Scandinavian Legal O.	0.20	0.41	0.00	1.00	GDN

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