

**INSTITUTIONAL INCONSISTENCY AND POLITICAL INSTABILITY:
POLITY DURATION, 1800-2000**

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This paper examines how political institutional structures affect political instability. We classify polities as autocracies or democracies based on three institutional dimensions: election of the executive, constraints on executive decision-making authority, and extent of political participation. Autocracies are defined as political systems lacking an elected executive, constraints on executive power, and extensive and effective political participation. Democracies, in turn, are systems possessing an elected executive, constraints on executive power, and extensive and effective political participation. We hypothesize that strongly autocratic and strongly democratic regimes will exhibit the greatest stability resulting from self-enforcing equilibria, whereby the maintenance of a polity's institutional structure is in the interest of political elites, whether through autocratic or democratic control. Institutionally inconsistent regimes (those exhibiting a mix of institutional characteristics of both democracy and autocracy) lack these self-enforcing characteristics and are expected to be shorter-lived. Using a log-logistic duration model we estimate polity survival time ratios. Institutionally consistent polities are significantly more stable than institutionally inconsistent polities. The least stable political systems are dictatorships with large degrees of political participation. The most unstable configuration for elected polities is a where the executive is highly constrained, but the electorate is very small.

* A replication dataset and Stata do-files, and an online appendix containing the results of several alternative models may be downloaded from <http://...>

1. Introduction

Whether or not a country's political system is likely to endure has important consequences for the relations between the country and other countries, as well as for the living conditions of the country's citizens. In this paper we aim to improve scholarly knowledge of political stability by examining the survival of political institutions in a broad array of settings. We identify which constellations of political institutions (autocratic, democratic, and inconsistent) are most durable, and which are most likely to change or collapse. In doing so, we provide new and innovative insights on the sources of political stability and instability.

The combination of autocratic and democratic institutions in the same polity creates a difficult mix. A number of studies have demonstrated that consistent polities (i.e., consistent democracies and consistent autocracies) are the most stable political systems (Eckstein 1973; Gurr 1974; Sanhueza 1999). We posit that both democratic and autocratic stability depend on self-enforcing equilibria, such that the maintenance of a polity's institutional structure is in the interest of political officials, whether through autocratic or democratic control. Where such equilibria are lacking, instability will follow. Using this theoretical structure we hypothesize that purely autocratic and purely democratic regimes will exhibit the greatest stability.

Collapsing a multidimensional concept such as democracy into a single dimension limits our understanding of the workings of specific political institutions. Creating a simple dichotomous democracy/autocracy distinction is even worse. By disaggregating or unpacking such a measure, we can better differentiate one institutional arrangement from another. Not only can we differentiate among autocracies, democracies, and institutionally inconsistent

polities, we can also differentiate across distinct varieties of inconsistent polities, thereby providing additional insight into the consequences of different political institutions.

Eckstein (1973) and Gurr (1974) suggest that institutions can be grouped into distinct dimensions. Important dimensions are the regulation of executive recruitment, the extent of the franchise, and the nature of those institutions that provide checks and balances between the branches of government. Apart from Gurr (1974), previous studies of the durability of political regimes have employed dichotomous or unidimensional indicators of regime type. For example in their seminal *Democracy and Development*, Przeworski et al. (2000, 30–36) classify a wide range of countries according to whether or not they fulfill a set of criteria defining democracy. They use this dichotomous classification to evaluate factors assumed to be related to democratic and autocratic stability. However, if inconsistent regime types are less stable than consistent regime types, there are limits to how much information can be yielded from a dichotomous classification. The regimes Przeworski et al. classify as democratic are relatively heterogeneous, and differences between regimes in durability that they attribute to their explanatory variables may instead be due to differences in institutional configuration. Moreover, under their definition of democracy, many of the regimes we classify as inconsistent are classified as non-democratic. Hence, their estimate of the stability of an autocracy is also likely to be contaminated by the unstable inconsistent regimes. This in turn may affect the inferences they draw regarding their explanatory variables.

Employing a non-binary, but unidimensional, indicator such as the Polity Democracy index (Jagers and Gurr 1995) avoids the above-mentioned problems, but raises a new question. Why are regimes with intermediate scores along such an index particularly unstable? This question cannot be easily answered, since in contrast to the endpoints of the scale, which are respectively fairly homogenous democracies and autocracies, the intermediate regimes are

very heterogeneous. Hence, in this paper, we return to the original multidimensional concept of authority developed by Eckstein (1973) and Gurr (1974). We retest their hypothesis that inconsistent (or incoherent) institutions are less stable, and find that this largely accounts for the lower stability of these intermediate regimes.

The paper proceeds as follows. We first provide a theoretical argument for why consistent polity types are the most stable and justify this empirically by comparing consistent polity survival rates with those of inconsistent polities. Using an event history model we assess the relative hazards of regime collapse, accounting for different institutional structures. We show that our conclusions also hold using Przeworski et al.'s (2000) definition of regime type and regime change. By examining the underlying cofactors associated with regime duration and political instability, we advance scholarly understanding of those institutional structures that lead to political instability.

2. Institutional Consistency and Inconsistency

Studies by Gurr (1974), Muller and Weede (1990), and Sanhueza (1999) suggest consistent democracies and autocracies are the most stable polity types.¹ By consistency we mean a set of institutions that are mutually reinforcing. For both democracies and autocracies these reinforcing institutions bolster one another, thereby serving to perpetuate the regime.

¹ Keep in mind that we are focusing on the duration of different regimes (i.e., how long these regimes last). We are not examining the duration of leaders in different institutional environments (Londregan and Poole 1990; Bienen and van de Walle 1992; Bueno de Mesquita et al. 2003).

We turn to the microfoundations of different institutional arrangements to understand the reinforcing nature of different institutional arrangements. Our theory rests on a single assumption: *a political executive's primary incentive is to maximize his/her current and future power and authority*. To better understand how this assumption plays into the various institutional constellations, we begin with autocracies.

What makes an ideal autocracy stable? In short, it is an institutional arrangement that hinders competing elites' access to political power. A small elite ascribes or designates an autocrat to a position of complete control without political challenge to his/her authority from another political body or from civil society. The loss of such control typically means complete exclusion from political positions in the future. The power maximization incentive ensures that the autocrat jealously guards his/her power and authority. Such a system is characterized by a narrow concentration of substantial power.² Our argument hinges on how political institutions affect the distribution of authority in a system of governance, not on other institutional trappings of autocracy.

An ideal autocracy concentrates power in the executive's hands, thereby restricting potential challengers' access to channels of political power. When executive authority is limited by another institution, potential challengers to the autocrat have access to power. Without access to such channels or an institutional base, the expected costs of challenging an autocratic regime outweigh the expected benefits of capturing the narrow base of power. This exclusion stabilizes the political system. Opening up alternative channels of power – either

² Unlike Geddes (1999), who divides autocracies into four categories (monarchies, personalist strongmen, military juntas, and single-party dictatorships), we do not differentiate among different types of autocracy (Peceny, Beer, and Sanchez-Terry 2002).

through the empowerment of competing institutions opening up the recruitment of the executive, or increasing the number of individuals involved in the executive designation process – all give the opposition a better base from which to demand further decentralization of power.

Hence, the autocrat has strong incentives not to give up power along any of these dimensions, and will try to ensure that the cost of challenging the authority of the regime is high enough to discourage further challenges. The system is self-enforcing in that an autocrat's interest in maximizing and prolonging authority serves to sustain the autocratic political institutions.

Bueno de Mesquita et al. (2003) conclude that autocrats tend to remain in power longer than leaders in democracies, but that does not mean that autocracies as a regime type are more stable than democracies. The principal problem faced by autocracies is succession. Do autocracies survive the demise of the dictator? Monarchies to a degree solve this problem with the principle of primogeniture. Indeed, some autocratic non-monarchies (e.g., present day North Korea and Syria) have employed this practice. Even cases of familial regicide tend to only affect the duration of the monarch, not the monarchy. As long as an autocracy institutionally solves the succession problem, the executive's quest for ultimate authority serves to eliminate or curtail the emergence of competing institutional bases of authority.

The same motivation regarding the maximization of current and future power and authority serves to maintain stability in an ideal democracy as well. Yet, this seems to be an anomaly – democratic polities are durable, democratic leaders are not (Bueno de Mesquita et al. 2003). Why does an incumbent who has lost an election accept defeat instead of undermining the democratic process to retain power? The reason is that democratic institutions ensure that power and authority are diffuse, thereby making the costs of accepting the defeat

plus the expected gains from the next election exceed the expected gains from subverting the regime. Przeworski (1991, 30-31) formally models such a democratic equilibrium, concluding: “Democracy will evoke generalized compliance, it will be self-enforcing, when all the relevant political forces have some specific minimum probability of doing well under the particular system of institutions.” In other words, there is more to gain in the long-run by preserving the power-diffusing democratic institutions than by undermining or subverting them. Hence, the system is self-enforcing.

Weingast (1997) extends Przeworski’s model by incorporating the role of the citizenry. In Przeworski’s model, democratic stability depends on the compliance of tomorrow’s incumbents. Weingast (1997, 255), however, concludes that “restrictions on governing elites can only be binding if there exists a citizen consensus to react against tomorrow’s incumbents if they attempt to rig elections.” As democracy becomes an established aspect of civil society, the cumulative value of compliance for elites increases. In this way, democratic institutions such as elections, limited executive authority, and institutionalized participation all reinforce one another. Furthermore, constitutional restrictions help raise the costs of subverting democratic institutions and ensure that the “stakes of political battles” are kept low (Przeworski 1991, 36). Citizen consensus in support of constitutional restrictions further raises the cost of subverting an election result (Weingast 1997). Diamond (1994, 3) summarizes this general point nicely: “Elites choose democracy instrumentally because they perceive that the costs of attempting to suppress their political opponents exceed the costs of tolerating them (and engaging them in constitutionally regulated competition).”

Institutionally inconsistent political systems are not self-enforcing. Authority is not sufficiently diffuse to ensure that the democratic process is not subverted or challenged. Elites in such a system are tempted to garner more power for themselves and thereby compete with

one another, creating an inherently unstable system. Looking across each of the dimensions of institutional inconsistency, the source of instability becomes evident. Boris Yeltsin's stand in front of the Soviet Duma against the authority of the Soviet Communist Party serves as an example of political instability involving competition between a designated executive and a parliament that had some authority to check the executive. Unlike ideal autocracies, institutionally inconsistent regimes lack the degree of concentration of power and authority that provides stability. But power is sufficiently concentrated to induce groups or individuals to challenge the executive's authority in order to grab power. Furthermore, unlike ideal democracies, institutionally inconsistent regimes lack the incentives for individuals to work to maintain a system of democratic institutions. In this way, institutionally inconsistent polities are not self-enforcing.

This discussion suggests there are two stable equilibria³ resulting from the constellation of a polity's institutional framework:

The Democratic ideal type is characterized by executive recruitment through regulated, open, and competitive elections; executive parity with a parliament or other political body; and open and competitive participation. In Figure 1 the three dimensions of authority (executive

³ Polities that are precisely equal on all dimensions ([0.5, 0.5, 0.5]) are in a knife-edge equilibrium. In such a situation, no actor would have anything to gain from changing this institutional setup. Yet, this situation is not stable. Any minor perturbation is likely to lead to further changes. For instance, an exogenously induced minor increase in the constraints on the executive in such a polity is likely to lead to a demand for increased participation, and further changes will follow pushing the polity towards the democratic ideal point.

recruitment by open and competitive executive recruitment, limited executive authority, and open and competitive participation) position an ideal democracy at the upper-back-right corner of the cube.

Figure 1 about here

The Autocratic ideal type is characterized by executive recruitment through regulated, but non-open (closed) executive recruitment; unconstrained executive authority; and extremely restricted and/or non-competitive participation. We are agnostic concerning what kind of competitiveness of executive recruitment this ideal type requires. Such systems include both autocracies and kingdoms. Figure 1 shows a triad of consistent autocratic institutions positioned at the front-lower-left corner of the cube, consisting of designation or ascription of the executive, unlimited executive authority, and suppressed and/or restricted participation.

A polity that is neither an ideal Democracy nor an ideal Autocracy is an Inconsistent polity. Institutional consistency is present at all points in and on the cube aside from the regions immediately around the two respective vertices $(1, 1, 1)$ and $(0, 0, 0)$ defining ideal Democracies and ideal Autocracies. Any movement away from these two vertices results in institutional inconsistency. Cases of institutional inconsistency worth noting are located at all other vertices on the cube represented in Figure 1: $(1, 0, 0)$, $(1, 1, 0)$, $(0, 0, 1)$, $(0, 1, 1)$, $(1, 0, 1)$ and $(0, 1, 0)$.⁴ Every one of these vertices possesses extreme forms of two of the three

⁴ Our concept of Inconsistent polities is similar in many respects to Levitsky and Way's (2003) concept of Competitive Authoritarian regimes. For instance, with one partial exception, all 12 of the Competitive Authoritarian regimes analyzed by Levitsky and Way (2003) that experienced an incumbent crisis are coded under our framework as Inconsistent polities at the time of this incumbent crisis.

dimensions of political authority that conflict with the third, and thereby exhibits institutional inconsistency. Institutional inconsistency comes in several varieties – one in which the executive is elected and constrained, but public participation is suppressed or restricted, another in which the executive is elected through broad political participation, but with unlimited authority (an extreme form of “Delegative Democracy” [O’Donnell 1994]), and still another in which executives are recruited by designation or ascription and are unconstrained, but participation is institutionalized. Indeed, myriad inconsistent institutional patterns are possible.

Based on the above discussion of reinforcing political institutions, we present two propositions regarding a comparison of these institutional arrangements:

Proposition 1: *Ideal type polities are more likely to endure than Inconsistent polities (those exhibiting institutional inconsistency with respect to executive recruitment, participation, and executive constraints), ceteris paribus.*

Proposition 2: *The greater the degree of institutional consistency along all three dimensions, the greater the propensity for a polity to survive, ceteris paribus.*

3. Empirical Assessment of the Propositions

Indices of democracy to some extent identify ideal polity types by aggregating across different political dimensions. To assess the degree to which a polity is democratic or autocratic, Gurr devised both a democracy scale and an autocracy scale. In the original Polity dataset (Gurr 1974), polities are seen as fully democratic if they have executive recruitment through competitive elections, executive-legislative parity, and institutionalized participation.

Consistent autocracies have executive recruitment through ascription, designation, or a combination thereof; unlimited executive authority; and suppressed participation.⁵

3.1 Operationalization of the Three Dimensions

The Polity dataset characterizes political systems using a set of six indicators (Gurr 1974, 1485; Marshall and Jaggers 2000, 13–14). The dataset has information on all countries with a population over 500,000 for the 1800–2000 period. Following Gurr, we group these indicators to form three variables describing systems along three authority dimensions. We normalize each of these variables to range from 0 (maximum concentration of power) to 1 (minimum concentration).

The first dimension is the regulation of *Executive Recruitment*, and is based on three indicators: “Regulation of Chief Executive Recruitment” (XRREG), “Competitiveness of Executive Recruitment” (XRCOMP), and “Openness of Executive Recruitment” (XROPEN). We code polities with succession through ‘Ascription’ (succession by birthright), ‘Designation’ (informal competition within an elite), or a combination thereof, as the most concentrated (0). Competitive election represents the other extreme on this dimension, and is coded 1, while dual systems where ascriptive and elective rulers co-exist are coded as 0.5.⁶

⁵ Gurr (1974) considered two additional dimensions: ‘Centralization’ and ‘Directiveness’. The indicators for these dimensions are no longer updated in the Polity dataset, and do not form part of the Democracy and Autocracy indexes introduced in Polity II (Jaggers and Gurr 1995).

⁶ More details on the coding in the Polity dataset can be found in the online appendix and Marshall and Jaggers (2000, 20).

The second dimension characterizes the *constraints on the executive* and is based on a single indicator “Decision Constraints on the Chief Executive” (XCONST). The third dimension concerns *political participation*. Rather than using Gurr’s participation index, we base our measure on the Polyarchy dataset (Vanhanen 2000). There are several problems with the Polity participation index. First, the components of the index are overly subjective. Second, the criterion for coding a polity as having regulated and competitive participation ignores aspects of enfranchisement that to some extent serve to define modern democracy. For instance, a polity that prohibits women, ethnic minorities, or non-property owners from voting is often regarded as having the same level of participation as a polity that grants voting rights to all adults. Third, the Polity coding scheme classifies a large share of the polities as ‘factional’ systems. Indeed up to forty percent of all polities fit this description. In polities with “factional” participation, there is a “pattern of intense, often violent competition between ‘in’ and ‘out’ factions, who hold power *seriatim* and repress their opponents: participatory activity is high, even though some groups are temporary” (Gurr 1974, 1486). The problem is that factionalism does not assess the institutional configuration of a country, but rather is an outcome of an institutional arrangement.⁷

Vanhanen’s (2000) dataset contains two indicators: “Participation” and “Competition”. These two indicators are coded at every election or as a consequence of a non-democratic event that alters the government, such as a coup. Participation is the percentage of the population that

⁷ Since factional polities are inherently violent, any examination of civil war using the Polity scales of democracy and autocracy suffers from an endogeneity problem. Disaggregating the institutions that go into the Polity measures of regime type and using a different measure of political participation is one way to address this endogeneity problem.

voted in the most recent election. Competition is the percentage of the valid vote won by all parties except the plurality winner or winning electoral alliance. After a coup both of these indicators are coded as 0. The competition indicator is useful to parse out polities with very high electoral participation, but in which there was no credible alternative to the ruling party. Vanhanen multiplies Participation and Competition to create his composite measure of democracy. This, however, is not an entirely satisfactory operationalization of democratic participation, since (i) it is biased in favor of extremely fragmented party systems – political systems with many political parties are considered more democratic than systems with few parties and (ii) it underestimates some democratic qualities in semi-democratic societies, especially in the 19th century. We find it controversial, for example, to argue that the Netherlands is considerably more democratic than the United States simply because the largest party in the Netherlands regularly wins a much smaller percentage of the popular vote than does its counterpart in the United States.⁸ Hence, we modify Vanhanen’s composite measure slightly. If the percentage of the valid vote won by the plurality winner is less than 70%, we use the Participation component without modification. If the percentage is higher than 70%, we multiply participation by [competition/30%].⁹ Thus, we have a better measure of the extent to

⁸ In contrast, we do not find it completely off the mark to claim that the Netherlands should score higher than the United States because of its significantly higher level of voter turnout.

⁹ The exact location of the threshold beyond which we deem competition to be insufficient is to some extent arbitrary. However, it corresponds with the two-thirds or three-fourths extraordinary majorities commonly required for constitutional reforms. Majorities of 70% or beyond may then be in a position to remove the opposition permanently. We multiply the

which an election has a decisive impact on the selection of the executive. If there is no real choice, the election does not really play a noteworthy role in the selection of the executive.

All shifts in participation are not equivalent in terms of their significance for the level of democracy in a country. A change from 5% to 15% of the population voting is a much more significant shift than is a change from 70% to 85%. To account for this nonlinearity, we take the natural logarithm of Participation (before we multiply it by Vanhanen's Competition measure in those instances of limited competition).¹⁰

We also create a unidimensional measure of democracy called SIP (Scalar Index of Politics). SIP is the average of the scores along the three dimensions, and also ranges from 0 to 1. This measure affords us the ability to compare our definition of regimes to others such as Przeworski et al. (2000) for our analysis of duration of regimes.

3.2 *Definition of Polity Change*

We define a *polity change* as any change in indicators that results in either: (1) a movement from one category to another in the Executive dimension (i.e., between ascription/designation, dual ascriptive/elective, and elective), (2) a change of at least two units in the Executive Constraints dimension, or (3) a 100% increase or 50% decrease in the Participation dimension (in the log-transformed variable, this is a change of 0.69 in either direction from the original level). Doubling the number of citizens with voting rights qualifies as a minimum change

participation index with [competition/30%] to ensure that participation is increasingly discounted as competition is reduced from this threshold and beyond.

¹⁰ All observations were given an additional percentage point before transformation, in order to avoid mathematically undefined terms, shifting the range from the original [0, 100] to [1,101].

along the Participation dimension.¹¹ The creation or dissolution of states is also defined as a polity change. Thus we define a *polity* as a political system between two polity changes. We also report results from analyses where we use Przeworski et al.'s (2000, 28–33) definition of democracy and change between democracy and non-democracy.

3.3 Operationalization of Ideal Polity Types

Our three variables (Executive Recruitment, Executive Constraints, and Participation) feature different dimensions of governance that we portray in a cube as seen in Figure 1. The coding on these three dimensions gives a unique location in the cube with coordinates. For example, a polity with dual ascriptive and elective executives, intermediate constraints, and intermediate participation is located near the center of the cube (i.e., Inconsistent). The ideal types are defined as the Autocratic and the Democratic corners – polities that are coded with either 0 or 1 on all three dimensions.

The ideal types also include polities that are close to the corners. As the cube in Figure 1 defines a space, we can examine distances within this space. In order to classify a regime as either Ideal or Inconsistent, we calculate the distance from the point given by the polity's coordinates to the eight corners and the midpoint of the cube. A regime is defined as Democratic or Autocratic if it is closer to either of the ideal type corners of the cube than to the other corners or the midpoint.

¹¹ Our definition is a simplification of Gurr's 'major change' (Gurr 1974, 1489) which distinguishes between minor and major changes. We employ this definition instead of Gurr's in order to increase transparency and to avoid ad hoc decisions.

The Democratic ideal type will hence include observations that are closer to the corner [1,1,1]. Since it is the distance from the democratic corner that defines the ideal type, scores close to 1 on one of the dimensions to some extent offset low scores on the other dimensions. The autocratic ideal type includes all polities that are closer to the autocratic corner than any of the other reference points. All polities that are not coded as Autocratic or Democratic are coded as Inconsistent. For the 1800-2000 and 1900-2000 periods the respective distribution of the three types of polities were as follows: Autocratic (43%, 39%), Democratic (14%, 17%), and Inconsistent (43%, 44%).¹²

4. Statistical Model

To assess the stability of different polity types, we investigate differences in their survival times – the time between the polity changes (see Section 3.2) that mark the start or end of a polity (Box-Steffensmeier and Jones 2004). One would suspect that the survival time of a particular set of political institutions is dependent on how long the institutions have existed: such that institutions become consolidated over time. However, the duration dependence of polities is unlikely to be strictly monotonic in this way. Political entrepreneurs are not going to construct a system of government that is expected to fail immediately. The implication is that the potentially most unstable institutions (given the environment) are never created. Furthermore, to the extent that the actors who created the institutions later occupy positions of power, they may feel committed to support “their” institutions for some time. The critical test of a democratic or quasi-democratic institutional setup is often the first election after its

¹² Consistent with the Polity project’s coding decision, we code regimes that are in a transition period or are occupied by a foreign power as “missing” (see the on-line appendix).

creation, which typically occurs four or five years later. Hence, we would expect the hazard function to be non-monotonic, such that the hazard of regime collapse initially increases and then, as consolidation mechanisms come into play, the hazard declines. We therefore use the log-logistic distribution in our analyses.¹³

In the log-logistic model, the hazard function is

$$h(t) = \frac{\lambda^{\frac{1}{\gamma}} t^{\frac{1}{\gamma}-1}}{\gamma \left(1 + (\lambda t)^{\frac{1}{\gamma}} \right)}$$

where $\lambda = e^{-x_j\beta}$ and the scale parameter γ is estimated from the data (see StataCorp. 2005, 231). An estimate of $\gamma < 1$ indicates that the hazard function is non-monotonic (i.e., initially increasing and subsequently decreasing).

5. Control Variables

Many of the polities observed last for several decades. We include control variables that change significantly over such time spans, such as economic growth rates and gross domestic product (GDP) per capita. To provide a more precise coding of these variables, we divided each period of polity duration into annual segments (e.g., 1960, 1961, etc.). All of these segments were coded as censored observations if there was no polity change during the time segment. If there was a regime change in a year, we entered two observations for the country,

¹³ We also estimated the models reported below with two other distribution functions. The estimates obtained for the core variables of interest are remarkably robust to the choice of distribution function (see the online appendix).

one for the polity that ended, and one for the polity that subsequently started.¹⁴ We split the period at the day of regime change as coded in Polity 4d (Marshall and Jaggers 2003). The control variables were then coded for each segment.

Since we are comparing polities that date back to the eighteenth century (a few of which were already several centuries old by then) with polities formed in the late twentieth century, it is unreasonable to assume that the hazard of polity change has not varied over this period. The rate of social transformation has increased dramatically over the past two centuries and improvements in communication technology and infrastructure have hastened the pace with which new political ideas are disseminated, assimilated, and implemented. Hence, we expect average survival time to have decreased considerably from the early nineteenth century to the late twentieth century (and the hazard rate to have increased). We developed a categorical variable, created by dividing the two centuries under observation into five 40-year historical periods. The first of these five periods includes the set of *ancien régimes* that were in existence prior to 1800.

Presumably, a certain regime type is likely to be more stable when it is surrounded by similar regimes (Gleditsch 2002). We control for the impact of political neighborhood by adding a variable measuring the average ‘political distance’ from each polity’s location in the

¹⁴ These two observations then have a total duration of one year, except if there was a transitional period between the two polities [as defined by Polity 3d (McLaughlin et al. 1998) and 4d (Marshall and Jaggers 2003)], in which case the duration of the transition period was excluded from the dataset.

polity space (see Figure 1) and the polity locations of its neighbors.¹⁵ A political neighborhood consists of all contiguous countries with either a common border or less than 150 nautical miles of water between them. For countries without contiguous neighbors (i.e., isolated islands), we assign the average political distance from that country to all countries in the world as the value for the Political Neighborhood variable. The variable was normalized to range from 0 (completely similar) to 1 (completely different).

We control for economic development with $\ln(\text{GDP per capita})$, in constant 1995 dollars per capita and we control for economic growth through the change in GDP per capita from one year to the next. (Przeworski et al. 2000; Sanhueza 1999).¹⁶ The Economic Development variable was lagged in the same manner as the Economic Growth variable to reduce potential endogeneity bias.

¹⁵ For instance, an ideal autocracy (0,0,0) with one neighbor that is an autocracy without strong executive constraints (1,0,0) and another that is an ideal democracy (1,1,1) has a one unit distance from the inconsistent autocracy and $\sqrt{3}$ distance from the democracy (resulting in a normalized average of 0.79).

¹⁶ GDP per capita data were drawn from three sources. We use World Bank data for the period 1960 to 2000 (World Bank 2000), Penn World Tables, v5.6 (Summers and Heston 1991) for 1950 to 1959, and Maddison (1995) for the years 1900–1949. The three datasets refer to different baseline years for calculating constant dollar figures, and are based on different methods of measurement. To counter these differences, we calculate the average ratio in the three first overlapping years per country for both overlaps, and use this ratio to adjust the numbers.

Finally, we coded a variable denoting whether the polity was the first one after independence (First Polity in Country). In newly independent countries most institutions are embryonic, not only the institutions regulating executive recruitment, executive constraints, and participation. Consolidating political institutions may take more time in such an environment than in older countries (Hegre et al. 2001).

6. Comparing the Estimated Survival Time of Polity Types

In this section, we present evidence that Inconsistent polities are less stable overall than the consistent Autocratic and Democratic ideal types. Table 1 reports the results from the log-logistic regression estimation of a model with indicator variables for the three polity groups (Autocratic, Democratic, Inconsistent), with historical periods as the only control variables. The baseline category consists of the internally inconsistent polity types, reflecting that we want to test the hypothesis that the self-reinforcing polities are more stable than the Inconsistent polities. All estimates are reported in time-ratio form: their interpretation is the ratio of the estimated median survival time for an observation with the given characteristic relative to the survival time for the baseline case. For example, in the case of a dichotomous indicator variable, a reported estimate of 2 means that a polity that has that characteristic is estimated to survive for twice as long as one that does not have that characteristic.

Table 1 about here

The results are in line with our expectations and buttress the findings of Gurr (1974), Sanhueza (1999), and Hegre et al. (2001). Both Autocracies and Democracies are more stable than the internally Inconsistent polities. In this model, Inconsistent polities during the 1800–1840 period are the baseline. Hence, controlling for historical period differences in institutional

change rates, Autocracies are estimated to have a median survival time that is 1.7 times longer than that of the Inconsistent polities. Democracies are estimated to survive 3.8 times longer than their Inconsistent counterparts. We also report the 95% confidence intervals for these estimates, which confirm that we can confidently rank the polity types in terms of stability. Democracies are significantly more durable than Autocracies, which in turn are significantly more durable than Inconsistent polities. These findings provide substantial support for Proposition 1. Both ideal polity types (Democracies, Autocracies) are significantly more likely to endure than the Inconsistent types.

The period indicators have estimates in the predicted direction: polities existing in the second and third periods (1840–1919) are likely to last about half as long as the baseline (1800-1839), and polities existing in the last two periods (1920–2000) can only expect to survive for one-third as long as the early nineteenth century polities.¹⁷

In Table 2 (Model 2) we conduct analysis comparable to that in Table 1, with the exception that we incorporate several additional control variables (discussed in Section 5) into the model, and limit the analysis to the 1900-2000 period.¹⁸ The results continue to be robust,

¹⁷ Our main results hold if we omit this control variable. The time ratio relative to the baseline for Democracies is reduced to 3.4, but is still significantly longer than that of Autocracies (1.7). The differences in failure rates in the twentieth century are statistically insignificant. We therefore omit the period variable in the analyses involving the Twentieth Century only (i.e. those years for which we have economic data).

¹⁸ All regressions where we include economic controls are limited to the 1900-2000 period, as cross-national coverage for GDP is very thin for the 1800s.

providing strong support for Proposition 1. The difference in estimated survival times between Autocracies, Democracies, and Inconsistent polities are of similar magnitude when controlling for these other factors, and are still statistically significant. Autocracies/Kingdoms may expect to live 1.9 times longer than the Inconsistent polities while Democracies survive 3.6 times as long as their Inconsistent counterparts. In sum, the results presented in Tables 1 and 2 confirm those reported by Gurr (1974), and provide powerful support for our theoretical argument regarding institutional consistency.

Table 2 about here

With regard to our control variables, five findings are noteworthy. First, the effect of Economic Development (i.e., GDP per capita) is curvilinear: polities in countries with GDP per capita lower than the mean (approximately \$1,000 per capita in 1995 US dollars) are estimated to be slightly more stable than those in countries at the mean. However, most of the differences in estimated survival time stem from wealthy countries also being very stable. Similar to the findings of Lipset (1959), Burkhart and Lewis-Beck (1994), Przeworski et al. (2000) and others, the higher a polity's GDP per capita, the longer it survives. Second, the time ratio estimate for Political Neighborhood is 0.35, indicating that a polity surrounded by polities diametrically different from itself (in terms of our typology) is likely to expire three times as fast as an identical polity geographically located among comparable polities. Third, the estimate for First Polity in Country is 1.6, signifying the expected duration of the political institutions of newly independent countries is considerably higher than that of polities in comparable, older, countries. We will return to this finding below. Fourth, polity duration is dependent on Economic Growth in the five years preceding the observation. Increasing the growth rate by one unit (roughly a 1% annual growth rate) increases the estimated survival

time by 8%. Fifth, the period indicator variables continue to suggest that polities became significantly less durable as the twentieth century evolved.

To test the robustness of our results, we apply a different index of democracy. We use the coding criteria developed by Przeworski, Alvarez, Cheibub, and, Limongi (2000) (PACL) to define and specify polity types and transitions. Table 2 presents the results from these analyses comparing our SIP measure and the PACL index. Model 3 replicates model 2, but the temporal domain is restricted to the 1950–90 period to correspond to the temporal domain of the PACL data. Model 4 shows that PACL’s finding that non-democracies are more stable than democracies holds in our analysis, but it is not statistically significant.¹⁹ This result contrasts with Model 3, but not surprising: since PACL have a strict definition of democracy and a dichotomous coding, they do not code changes within the non-democracy category, only changes that happen to take polities over to the democracy side of their single threshold. The results for our control variables are roughly the same when using the PACL indicator.

In Model 5 (see Table 2) we investigate whether information on consistency can improve our ability to predict the duration of the PACL polities. We do this by including the unidimensional, continuous SIP measure of democracy and the interaction term between it and the PACL dichotomous measure of democracy/non-democracy. Adding these terms significantly improves the goodness-of-fit of the model – the log likelihood increases by 3.83 points. The estimate for the interaction term (in time ratio metric) is significantly less than 1.

¹⁹ In their dynamic probit analysis (Przeworski et al. 2000, 124), the constant term is much lower in the ‘transitions to democracy’ equation than in the ‘transitions to dictatorship’ category. This means that the baseline probability of transitions to democracy is considerably lower.

This means that the expected duration for non-democracies decreases as the SIP score increases from 0 – in other words, PACL non-democracies are clearly more stable when they are close to what we have defined as consistent autocracy. Conversely, the estimate for the interaction term means that PACL democracies are much more stable when they are close to what we have defined as consistent democracy.²⁰ In sum, information on polity consistency greatly improves our understanding of the duration of polities.

7. Inconsistency and the Stability of Ideal Polity Types

In this section we investigate in greater detail the importance of consistency for stability in the Autocratic and Democratic ideal types. Proposition 2 posited that the greater the degree of institutional consistency along all three dimensions, the greater the propensity for a polity to survive. To evaluate this proposition, we divided the 716 polities in the 1900–2000 period into two subgroups: those with open and competitive executive recruitment; and those with recruitment through designation, ascription, and dual systems (i.e., systems where designated and elected executives co-exist). Most Democracies fall in the first group and most Autocracies fall in the second. We regard Inconsistent polities with elective executive recruitment as quasi-democracies, and those without as quasi-autocracies.

7.1 Polities with Open and Competitive Executive Recruitment

Since all the polities we define as democracies and quasi-democracies are homogenous in terms of the form of executive recruitment, in this analysis we focus on the Executive

²⁰ A plot of the predicted time ratios for PACL democracies and non-democracies can be found in the online appendix.

Constraints and Participation dimensions.²¹ We treat the Executive Constraints variable as ordinal, thereby assuming the relationship between Executive Constraints and the hazard of failure is monotonic and linear. The Participation variable measures the logarithm of the share of the population voting with the modifications regarding competitiveness described previously, and is treated as an interval variable. To minimize collinearity when creating the interaction term, we centered the two variables by subtracting the mean of all observations from every observation.

We estimated a log-logistic regression model for the democratic/quasi-democratic subsample, with the recoded Participation and Constraints variables and the interaction terms. The results from this analysis are reported in Table 3 (Model 6). The parameter estimates for all three terms are positive, and the interaction term is significant. Since the variables, Participation and Constraints, are centered at their means, the interpretation of the effect of these variables is: what happens to the estimated survival time when one of them is increased by one unit from the mean and the other is kept constant at the mean.

Table 3 about here

In Table 4, for polities with open and competitive executive recruitment we provide the predicted median survival time with selected values for the Participation and Constraints variable based on these estimates. Using the Participation and Constraints variables we group the polities into four mutually exclusive groups and calculate the estimated median polity duration for the sixteen combinations of values. We also report how many observations in the sample are located in each cell, to avoid drawing inferences from outside the sample.

Table 4 about here

²¹ Non-democracies will be examined below.

One useful exercise is to compare the duration of different archetypal political systems represented by the vertices in Figure 1. The most consistent polity with open and competitive executive recruitment (elections) is the one with maximum constraints and maximum participation (coordinates 1,1,1). This institutional arrangement is estimated to stay unchanged for 31 years.²² The most unstable configuration for elective polities is where the executive is highly constrained, but the electorate is very small (1,1,0). Such polities are estimated to last for only 0.8 years. There are no actual cases of polities with a high level of participation, but with weak executive constraints (0,1,1). In general, there are very few cases of elected polities with no executive constraints. Moreover, it is evident from Table 4 that as the three institutional dimensions move towards an ideal democracy, a polity becomes more stable.²³ These results strongly support Proposition 2.

With regard to the control variables, the estimate for the political neighborhood variable has the same magnitude for polities with open and competitive executive recruitment as for the

²² This is the estimated duration for a newly created polity observed in 1995, with GDP per capita set at its mean, and all of the other control variables set to 0. Since most institutionally consistent democracies have a high GDP per capita and have existed for many years, their actual estimated survival time is much longer than 31 years.

²³ It appears in the table that low-constraints and low-participation polities (0,1,0) are relatively stable, with an estimated duration of nine years. But note that there is only one polity of this type in the sample (Ecuador from June 1970 to February 1972, following the *autogolpe* of President José María Velasco Ibarra, who was later deposed by a military coup), and its duration was less than two years. Such anomalies are unavoidable with linear models.

full sample, but the coefficient is not significant for the sub-sample. Being the first polity after independence in the country has no effect on elective polities' chances of survival.

7.2 *Polities with Closed Executive Recruitment*

We also estimated a log-logistic regression model for the closed executive recruitment sub-sample, including polities that have executives recruited through designation or ascription, or polities with dual executives. Since polities with closed executive recruitment are not homogenous in terms of their form of executive recruitment, they may be inconsistent along all three dimensions of the cube. We coded recruitment type as a binary variable: dual systems or designation/ascription. Designation/ascription, the ideal Autocratic type, is the baseline. We first estimated a model with a three-way interaction term between the three dimensions, all two-way interactions, and the main terms. We removed insignificant terms to arrive at the model reported in Table 3 (see Model 7).²⁴

The Participation*Constraints interactive term is larger than one and significant, implying that the two variables reinforce each other when they are close to the autocratic ideal point (coordinates 0,0,0 in the cube portrayed in Figure 1). Both the Participation and Constraints main terms are less than one. The greater the constraints on the executive and the more extensive the level of participation are, the shorter the life of an Autocracy with a designated executive. The expected survival time for polities with executives recruited by designation or ascription are reported in Table 5a, and provide results in line with Proposition 1; consistent Autocracies are the most durable. Proposition 2 is also supported; the expected survival time drops as the values for either Participation or Constraints decrease. However, the importance of

²⁴ The results for the variables we retain remain robust across estimations.

consistency along both dimensions is less important than for polities with open and competitive executive recruitment. Indeed, the incidence of non-elected polities with constrained executives is extremely rare. In general, the consistent autocracies have an expected survival of ten years, whereas inconsistent autocracies cannot expect to survive for more than four to five years.

The least stable kingdoms and dictatorships are those with large degrees of participation. Yugoslavia and Belarusia serve as instructive examples:

Milosevic sincerely believed he could win 70 percent of the vote in the election that eventually landed him in the Hague. He had not learned from earlier manifestations of people power in Slovakia and Croatia (where all it took to bring down semi-autocratic rule was to win the elections, not to take to the streets)... (One exception was Belarusian leader Alyaksandr Lukashenka... With his own re-election campaign approaching in 2001, Lukashenka specifically instructed his political apparatus to take care that the “Yugoslav scenario” not be replicated in Belarus.) (Silitski 2005).

Tables 5a and 5b about here

The estimates for the dual polities are less conclusive, although the general distribution of the incidence of different types of polities presented in Table 5b is similar to the pattern found among the elected polities. For the dual polities, the interaction term Dual*Participation is higher than 1 and significant, and the Dual main term is less than one. Table 5b shows that the most stable polities of this type have high constraints and high participation. The overall expected duration is lower than for the designated polities, reflecting that all of these polities are inconsistent in terms of how the executive is recruited.

The dual polities category includes a number of late nineteenth century European monarchies (e.g., Germany 1871–1918) and twentieth century polities with elected executives

coexisting with non-elected ones (e.g., present-day Bahrain and the United Arab Emirates). It is not obvious that all of these polities should be grouped with other polities with closed executive recruitment, since a few of them transformed seamlessly into polities with open and competitive executive recruitment. Unfortunately, the Polity dataset does not allow us to distinguish between different types of dual systems.

The estimates for the control variables in Model 7 are different from those obtained for the polities with open and competitive executive recruitment – non-elected polities survive under different conditions than elected ones. The relationship between Economic Development and polity survival is positive and significant, but clearly smaller in magnitude than for elected polities. Growth is positive in both Model 6 and Model 7, but significant only in Model 7. The drop in significance in Model 6 is due to the reduction in the number of cases. Both elected and non-elected polities are more likely to fail when surrounded by different types of regimes. Again, the relationship is not statistically significant for elected polities (Model 6).

In contrast to the elected sub-sample, First Polity in Country is positive and significant for the non-elected polities. Autocracies formed just after independence are relatively stable, whereas autocratic institutions introduced after other polities are relatively short-lived. Evidently, civil society plays a role here. In a democracy, civil society plays a critical role in terms of political participation in maintaining and re-enforcing the institutional structure. Democracies have the added advantage of the legitimizing role of civil society to further enhance political stability. In an institutionally consistent autocracy, there is no role for the public to play. However, if the public has played a role in the past, it will expect to continue to play a role, and this shortens the polity's expected duration.

8. Conclusion

The results presented in this paper provide broad confirmation of our general theory, based on Eckstein (1973) and Gurr (1974), regarding institutional inconsistency and consistency. Institutional reinforcement greatly enhances regime stability. Our analysis provides conclusive evidence of the significantly greater levels of stability enjoyed by Democracies and Autocracies compared to their Inconsistent counterparts. Overall, the general conclusions of Gurr (1974) hold when employing a more appropriate statistical model, controlling for potentially confounding factors, and extending the analysis to include the third wave of democratization.

Our findings provide three important lessons for studies of democratization and of democratic survival more generally. First, Inconsistent polity types are on average far more vulnerable to polity change than are Consistent polities (be they Autocracies or Democracies). Thus scholars concerned with such vitally important factors as why a democracy survives or fails should take account of consistency both when constructing their dataset of democracies as well as when examining the determinants (e.g., level of economic development, political culture, presidential vs. parliamentary government, two party vs. multiparty system, unified vs. divided government, extent of civil violence) of democratic breakdown. Our theory and results stress the differences between ideal polities (whether Democracies or Autocracies) and institutionally Inconsistent polities. Indeed our results demonstrate that these three categories are distinct. Thus, an analysis that fails to take these distinct polity types into consideration may conclude that a factor is important/unimportant, when in actuality the interpretation is more nuanced. For example, our results show that the estimated survival rates of autocracies and democracies reported in Przeworski et al. (2000) are altered when including information

on the extent to which their regime types are consistent. Our analysis also demonstrates that consistency along all three dimensions is necessary for a polity to be maximally stable.

Our empirical analysis demonstrates that inconsistent polities are short-lived, but cannot inform us about what types of institutions follow them. We have argued that an executive in a largely autocratic but inconsistent polity has a strong incentive to remove alternative channels of power. Likewise, most actors in a near-ideal democracy have joint interest in diffusing authority. The implication of this is that inconsistent polities will have a tendency to change toward the nearest consistent ideal type. This tendency will be stronger the closer the polity is to one of the vertices. We show that this expectation holds up well in [author, 2005]. In the very long run, however, our results show that the consistent democracies are considerably more stable than consistent autocracies. This implies a long-term global trend toward more democratization.²⁵

Second, our findings indicate that the difference between institutional consistency/inconsistency is equally, if not more, important in terms of explaining political stability than many of the literature's standard set of explanatory variables (level of economic development, economic growth, political neighborhood). This is particularly the case among democracies.

Third, not only do we observe a tremendous differentiation between consistent and inconsistent polities, we also find that different types of inconsistencies are more durable than others. Most unstable of all are political systems with elected executive, extensive executive constraints, but extremely limited participation. Their estimated duration is less than a year.

²⁵ See Levitsky and Way (2003) for a discussion of the factors that influence whether changes result in the Inconsistent polity becoming a Democracy or a Autocracy.

The pressures for expanding the franchise are profound in such situations and they generally move towards institutionally consistent democracy.

The least durable kingdoms or dictatorships were those with a high degree of political participation. Such polities tend to revolution or evolve towards consistent authoritarianism.

Regimes with elected executives but with no constraints are very rare and are generally not durable. The mirror image is evident for non-elected polities where highly constrained executives are rarely evident. Indeed, there seems to be a general tendency for elected executives to be constrained and those unelected to be unconstrained institutionally.

Fourth, these results provide greater insight as to why inconsistent polities have more civil wars (e.g., Hegre et al. 2001; Fearon and Laitin 2003). This is due not only to the idea that such polities are more prone to the political expression of grievances, but that they have weak institutions for addressing challenges to the authority of the regime (Hegre et al. 2001). We have demonstrated here that political stability is anchored in institutional consistency. Political instability stems from an institutional structure that invites challenges to executive authority. Both Autocracies and Democracies exhibit institutional consistency that is self-enforcing. Democracies have the added advantage of bringing in civil society to ensure further stability.

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Figure 1. Authority Dimensions and Ideal Polity Types

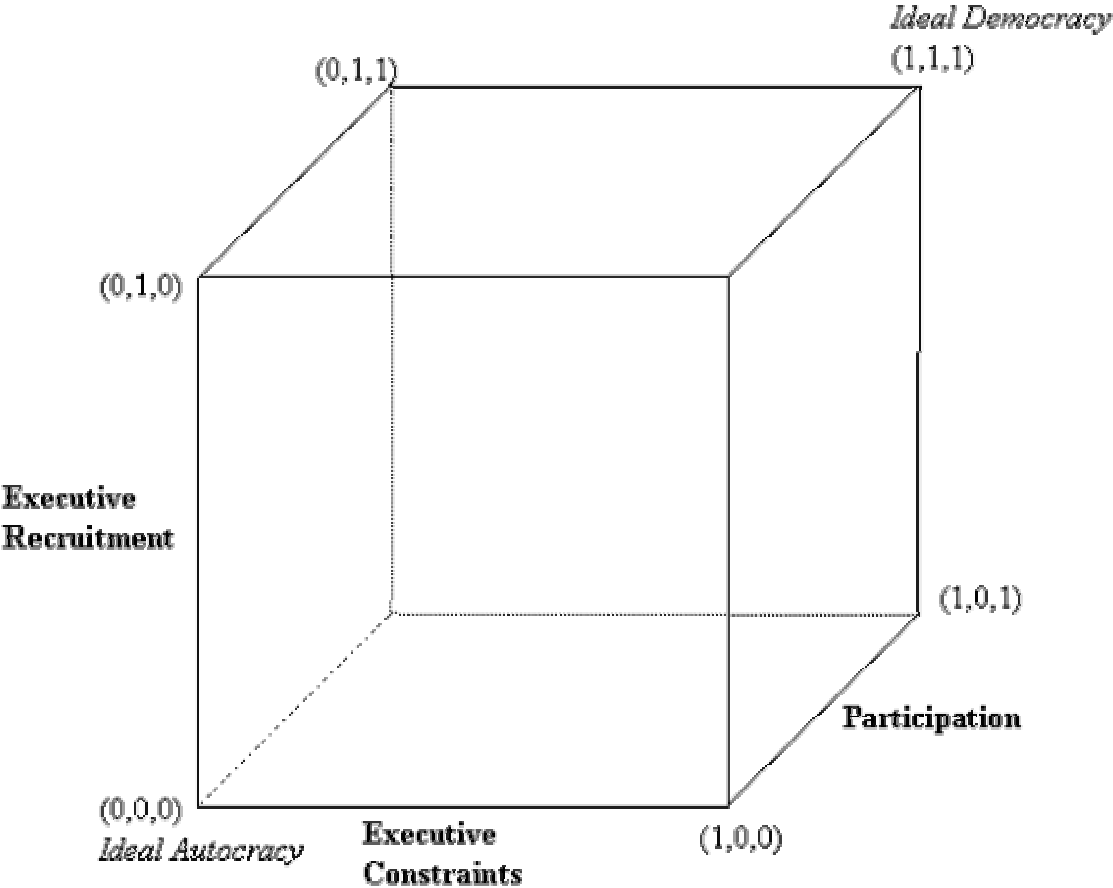


Table 1. Log-logistic Regression Estimates of Polity Survival Time Ratios, 1800–2000

Variable	Category	Model 1
Polity Type	Inconsistent	(ref. cat.)
	Autocracy	1.65*** (1.41, 1.93)
	Democracy	3.78*** (2.83, 5.04)
Period	1800–1839	(ref. cat.)
	1840–1879	0.56* (0.33, 0.95)
	1880–1919	0.48** (0.29, 0.79)
	1920–1959	0.33*** (0.21, 0.52)
	1960–2000	0.31*** (0.20, 0.49)
Gamma		0.71*** (0.68, 0.75)
	Log likelihood constant-only model	-1792.02
	Log likelihood full model	-1709.47
	Number of polities	1,144
	Number of failures	985

*: $p < 0.05$. **: $p < 0.01$. ***: $p < 0.0005$. The p -values refer to two-sided tests of the hypothesis that the time ratio is different from 1 [i.e. that $\ln(\text{time ratio}) < 0$ or $\ln(\text{gamma}) < 0$]. The standard errors were estimated using the Huber/White sandwich estimator.

Table 2. Log-logistic Regression Estimates of Different Polity Types' Survival Time-Ratios, 1900–2000

Polity Type	Model 2 1900–2000	Model 3 1950–1990	Model 4 Przeworski et al. definition 1950–1990	Model 5 Przeworski et al. definition 1950–1990
Inconsistent	(ref. cat.)	(ref. cat.)		
Autocracy/Kingdom	1.85*** (1.52, 2.26)	2.27*** (1.74, 2.96)		
Democracy	3.61*** (2.71, 4.82)	4.37*** (3.02, 6.32)		
PACL Democracy			(ref. cat.)	(ref. cat.)
PACL Non-Democracy			2.23 (0.85, 5.87)	2.92 (0.64, 13.38)
SIP				19.38 (0.61, 618.37)
PACL Non-Democracy * SIP				0.0058* (0.000061, 0.56)
Economic Development	1.27*** (1.17, 1.39)	1.27*** (1.14, 1.41)	1.72** (1.16, 2.57)	1.52 (0.997, 2.32)
Economic Development ²	1.16*** (1.10, 1.23)	1.13** (1.054, 1.21)	1.54** (1.14, 2.07)	1.41* (1.073, 1.85)
Economic Growth	1.018* (1.0023, 1.035)	1.010 (0.986, 1.035)	1.0059 (0.920, 1.10)	1.012 (0.926, 1.11)
Political Neighborhood	0.35*** (0.22, 0.58)	0.21*** (0.11, 0.41)	0.063** (0.013, 0.32)	0.081** (0.018, 0.37)
First Polity in Country	1.62* (1.10, 2.39)	1.81** (1.19, 2.78)	7.40** (2.28, 24.03)	6.79** (2.05, 22.45)
Period 1900–1919	(ref. cat.)			
Period 1920–1959	0.58 (0.30, 1.13)	1.09 (0.80, 1.48)		
Period 1960–2000	0.54 (0.28, 1.038)	(ref. cat.)		
Gamma	0.65*** (0.60, 0.70)	0.66*** (0.59, 0.73)	1.45* (1.014, 2.07)	1.40 (0.987, 1.99)
Log likelihood constant-only model	-985.69	-580.01	-238.41	-238.41
log likelihood	-895.28	-520.00	-213.09	-209.25
Number of polities	716	443	203	203
Number of failures	555	313	69	69

*: $p < 0.05$. **: $p < 0.01$. ***: $p < 0.0005$. 95% Confidence intervals for the time ratio in parentheses. The baseline category is the Inconsistent polity type. The p -values refer to two-sided tests of the hypothesis that $\ln(\text{Time ratio}) > 0$. The standard errors were estimated using the Huber/White sandwich estimator.

Table 3. Log-logistic Regression Estimates of Polity Survival Time-Ratios, 1900–2000

Polity Characteristics	Model 6: Only Polities with Open and Competitive Executive Recruitment	Model 7: Only Polities with Closed Executive Recruitment
Participation	1.25* (1.0020, 1.55)	0.88 (0.77, 1.0012)
Constraints	0.88 (0.75, 1.042)	0.94 (0.86, 1.027)
Dual (elected and designated or ascribed)		0.85 (0.60, 1.19)
Participation*Constraints	1.24*** (1.12, 1.36)	1.058* (1.0013, 1.12)
Dual (elected and designated or ascribed)* Participation		1.25* (1.0035, 1.55)
Economic Development	1.31** (1.11, 1.55)	1.14* (1.020, 1.26)
Economic Development ²	1.16** (1.050, 1.28)	1.086* (1.013, 1.16)
Economic Growth	1.016 (0.971, 1.06)	1.019* (1.0030, 1.036)
Political Neighborhood	0.46 (0.18, 1.17)	0.52* (0.30, 0.916)
First Polity in Country	1.071 (0.54, 2.12)	2.04*** (1.39, 3.00)
Gamma	0.65*** (0.57, 0.73)	0.62*** (0.56, 0.68)
Log likelihood (constant-only model)	-315.42	-661.02
log likelihood (model with all variables)	-247.98	-628.95
Number of polities	218	498
Number of failures	144	412

*: $p < 0.05$. **: $p < 0.01$. ***: $p < 0.0005$. 95% Confidence intervals for the time ratio in parentheses. The baseline polity has mean Participation and mean Constraints. The p -values reported refer to two-sided tests of H_0 : Time ratio = 1.

Table 4. Estimated Survival Times Relative to Baseline for Polities with Open and Competitive Executive Recruitment, 1900-2000

Share of population participating in elections	Constraints			
	1	2-3	4-5	6-7
<=1%	8.9 (1)	4.0 (8)	1.8 (3)	0.8 (9)
5% (1%-7%)	5.1 (0)	4.6 (2)	4.1 (2)	3.7 (5)
10% (7%-30%)	4.1 (0)	4.9 (13)	5.8 (14)	7.0 (39)
50% (30%-)	2.4 (0)	5.6 (6)	13.1 (19)	31.0 (44)

Survival times are estimated at the mean for all other covariates.

The figures in parentheses are the number of observations that fall within the ranges given in the column and row headers.

Table 5a. Estimated Median Survival Times for Polities with Designated or Ascribed

Executive: 1900–2000

Share of population participating in elections	Constraints			
	1	2–3	4–5	6–7
0% (<=1%)	10.1 (86)	7.7 (52)	5.8 (2)	4.4 (2)
5% (1%–7%)	6.5 (19)	5.9 (46)	5.4 (1)	4.9 (1)
10% (7%–30%)	5.3 (17)	5.3 (37)	5.2 (4)	5.1 (0)
50% (30%–)	3.4 (3)	4.0 (16)	4.7 (2)	5.6 (0)

Table 5b. Estimated Median Survival Times for Polities with Dual Executive: 1900–2000

Share of population participating in elections	Constraints			
	1	2–3	4–5	6–7
0% (<=1%)	6.4 (6)	4.9 (9)	3.7 (5)	2.8 (4)
5% (1%–7%)	5.9 (1)	5.3 (14)	4.9 (3)	4.4 (5)
10% (7%–30%)	5.6 (0)	5.5 (24)	5.5 (19)	5.4 (9)
50% (30%–)	5.1 (0)	6.1 (6)	7.2 (5)	8.5 (13)