

**The V-Dem Party Institutionalization Index:
A new global indicator (1900-2018)**

Draft v.7

April 26, 2020

Fernando Bizzarro¹
Harvard University

Allen Hicken
University of Michigan

Darin Self
Cornell University

Word Count: 9666

¹ Corresponding Author. E-mail: fbizzarroneto@g.harvard.edu. Department of Government, Harvard University. 1737 Cambridge Street, Cambridge MA. 02138.

Introduction

Political parties are ubiquitous in modern polities. They lie at the core of modern democracy (Schattschneider, 1977), and an increasing number of authoritarian regimes have also become party-based (Geddes et al., 2018; Magaloni and Kricheli, 2010; Svobik, 2012). Parties are also some of the most consequential political institutions, affecting regime survival (Bernhard et al., 2020; Mainwaring and Scully, 1995), economic outputs (Bizzarro et al., 2018; Gehlbach and Keefer, 2011; Rasmussen and Knutsen, 2019), and the likelihood of internal violent conflicts (Fjelde, 2010).

Despite this excellent work, one of the major challenges for the further advancement of the scholarship on political parties and their consequences has been the absence of good comparative data on the degree of institutionalization of political parties (Poguntke et al., 2016). Existing datasets have limited time and space coverage, and due to the intensive work involved in carefully collecting information on this topic, existing indicators tend to measure only one of the many dimensions on which parties and party systems vary (Tavits, 2013). Additionally, because the availability of good data on political parties could itself be a function of the nature of a party system, issues of data reliability and measurement error are always present – although often ignored.

In this article, we present a new country-level index of party institutionalization developed in the context of the Varieties of Democracy project (Coppedge, Gerring, Lindberg, Skaaning, Teorell, Altman, Bernhard, et al., 2019). The *V-Dem Party Institutionalization Index* stands out as the first global index on the issue, covering – as of May 2019 – 110 countries for a maximum of 119 years (1900-2018). It extends far beyond any existing indicator in terms of geographical coverage, timespan, and conceptual reach.

We propose a two-dimensional index, measuring: 1) the degree to which party organizations are “routinized”, 2) the extent to which voters and party elites value the party-label and program. Two features of the index are notable and unique. First, it consistently measures party institutionalization as

conceptualized in both democratic and autocratic party systems. Second, it takes advantage of the unique research design of the V-Dem project, employing state-of-the-art practices for cross-national data collection of political indicators (Coppedge, Gerring, Knutsen, et al., 2019). We argue that those features make the V-Dem Party Institutionalization Index the most empirically and theoretically robust measurement tool for the comparative analysis of parties and party systems available.

Party Institutionalization

Political parties are complex organizations. While there are minimalist definitions of political parties (Schumpeter, 1942), the examination of political parties as real world political organizations suggests that parties are complex, multi-faceted organizations that often defy simple definition or classification. While at the most basic level, every party is composed of political elites, engages in election activities, and manages political power (Katz, 1980; Key Jr., 1942), individual parties may invest more time and resources in developing one of those three basic facets. Parties with different emphases tend to be organized and behave very differently (Müller and Strom, 1999), which in turn shapes the political contexts in which they exist.²

Comparing such a variegated set of organizations is a complicated task. One way to approach this comparison is by asking about parties' degree of institutionalization. Although definitions of institutionalization vary from author to author, many of them derive from Huntington's (1968) or Panebianco's (1988) work and identify two dimensions to institutionalization: *routinization* and *value infusion*

² The ways in which parties vary in their character does not only impact democracies, as parties have increasingly been important actors in autocracies as well. In autocracies parties play a key role in ordering and mobilizing elites and mass-society, both in and outside the context of elections (Svolik, 2012).

(Bolleyer and Ruth, 2018; Levitsky, 2003; Randall and Svåsand, 2002). Within each dimension, we are interested in the party's relationship with both party elite, and with the voters.

Routinization refers to the extent to which parties constitute stable, permanent, autonomous institutions. In highly institutionalized parties the party's activities become regularized and the party organization is both stable and complex (Bolleyer and Ruth, 2018; Janda, 1980; Levitsky, 2003). Both party elite and voters expect the party to exist in perpetuity and understand the rules and norms that structure intra-party activities.

Value infusion involves the extent to which political elites, party members, and voters, assign intrinsic value to belonging to the party, and are sometimes willing to sacrifice their short-term objectives for the party's long term goals (Basedau and Stroh, 2008; Levitsky, 2003) Where institutionalization is high, parties are not mere personalist vehicles to an end, but embody meaningful, enduring connections between political actors and the party.

To summarize, consistent with the recent literature, we define party institutionalization as the extent to which parties build stable organizations (*routinization*), party followers develop lasting connections with the parties, and come to prioritize party interests in addition to their individual short-term interests (*value infusion*). As part of our conceptualization, we think about institutionalization less as a process – which implies a diachronic concept – but rather as a measure of the degree to which a party approximates an ideal type. The more similar the party is to this ideal type, the more institutionalized it is. Our ideal, type, however, assumes many of the characteristics authors like Huntington and Panebianco attributed to countries that experienced the “process of institutionalization”.³

³ While our focus is on party institutionalization, we acknowledge that party institutionalization also has important consequences for systemic institutionalization. The degree of institutionalization of the set of parties in one given polity contributes to the level of party *system* institutionalization. Hicken and Kuhonta (2015) treat party institutionalization as the central “internal dimension” of system institutionalization. Mainwaring and his co-authors (2018) go further as they separate party system institutionalization

Comparing Authoritarian and Democratic Parties

A significant portion of research on political regimes used to treat authoritarian and democratic regimes as categorically distinct. Yet, in many cases, the dividing line between the two regime types has become fuzzy (Levitsky and Way, 2010). Over time, authoritarian regimes have evolved to mimic or share institutional features with democracies, leading to greater difficulty in appropriately classifying cases that do not neatly fall into one category or the other (Geddes et al., 2018). A key institution that many modern authoritarian regimes share with their democratic counterparts is the political party.

In line with the previous argument, scholars have argued that parties in authoritarian and democratic regimes are fundamentally different and should not be compared (Kalyvas, 1996; Mainwaring and Scully, 1995; Sartori, 1976). At the root of this view is the perception that the fusion between party and state in authoritarian regimes – which violates core principles of democracy – qualitatively change parties' nature (Kalyvas, 1996). While parties in democracies are viewed as autonomous organizations that develop to advance the political objectives of separate groups of politicians, parties in autocracies are viewed as branches of the state apparatus, created to preserve the rule of an already established ruling elite. Given this perspective, it makes sense to treat the institutionalization of the former as qualitatively different from the institutionalization of the latter.

We agree with the spirit of this argument but adopt a much more moderate position. We argue treating democratic and autocratic parties as different species of organizations unnecessarily and unhelpfully treats autonomy from the State—one of the characteristics of routinization (Huntington, 1968; Levitsky, 2003; Randall and Svåsand, 2002)—as a dichotomous variable that correlates perfectly with regime type.

— i.e., the stability in the set of actors and in the patterns of competition among them – from party institutionalization, arguing that the latter works as a causal underpinning of the former.

Instead, we propose to treat autonomy analogously to how we treat territorial penetration or value infusion, i.e. as continuous subdimensions of institutionalization on which every party varies. We assume that political parties may be more or less autonomous from the State in both democracies and autocracies and that the more autonomous from the State a party is, the greater its degree of routinization and, consequently, its degree of institutionalization are.⁴ As we do so, we acknowledge that institutionalization may correlate with regime type but we clearly define the boundaries of each concept. Parties in autocracy might be, on average, less autonomous from the state than parties in democracy, yet they still institutionalize in many of the same ways in which democratic parties institutionalize. Both authoritarian and democratic parties' organizations may have routinized organizations and be valued by elites and citizens, thus sharing key features that are of interest to scholars of party development and behavior. Both democratic and authoritarian parties vary in the extent to which they have local branches, boast a strong nationalized party organization, appeal to voters via clientelistic or programmatic approaches, are more or less cohesive, and cultivate their distinct brand. In sum, we argue that once one treats autonomy as a subdimension of institutionalization, a single concept emerges naturally to compare parties across the regime divide.

There is another advantage to our approach: it offers a coherent way to measure party institutionalization longitudinally within countries that experience regime change. A growing body of literature has argued that party institutionalization can survive regime change (Hicken and Kuhonta, 2015; Loxton and Mainwaring, 2018). Authoritarian successor parties tend to “inherit” routinized organizations and value infused labels and rules, which then directly contribute to their success under democracy (Loxton, 2015). If scholars treated institutionalization under democracy and autocracy as qualitatively different, it would be impossible to use the same instruments to measure the concepts over time because

⁴ We define autonomy as analogous to “separation from the state apparatus”, not in terms of “strategic autonomy” (Levitsky, 2003, 22).

those would be different phenomena. By unifying institutionalization under autocracies and democracies, we can (below) develop a unified measure that captures the rich experiences of countries under both types of regimes.

The example of Mexico under the rule of the PRI serves as an illustration of these points. In the first two decades after the Mexican Revolution, leaders like Plutarco Calles and Lázaro Cárdenas built the PRI as a tool for the electoral mobilization of the Mexican urban and rural poor and as a commitment device that would put an end to years of warlordism and political instability (Magaloni, 2008; Osten, 2018). In a few words, they institutionalized a ruling party. To do so, they established a well-oiled machine linking voters, regional brokers, and national politicians that would organize presidential succession and sustain the PRI's elites' rule. While the PRI and the Mexican State had many important connections—especially through corporatist representation—the PRI also had its own organization, rules, and label. When Mexico transitioned to democracy in 2000, PRI leaders “inherited” this organization, rules, and label—and, in many ways, the linkages that it had with the Mexican state, particularly at the subnational level (Flores-Macías, 2018).

Similarly, a measure of party institutionalization that captures parties in both authoritarian and democratic regimes would allow the researcher to compare the implications of party institutionalization *across* authoritarian regimes. For example, compare the PRI to the KBL party organized by Ferdinand Marcos in the Philippines. The KBL was organized to serve as the regime's standard-bearer in elections in the late 1970s and early 1980s, but outside of those elections the party played no major role, and even during elections the KBL was an ephemeral alliance of convenience rather than a robust organization, separate from the state, with real value to its candidates and voters. We argue that the comparison between the PRI and KBL is a meaningful and interesting one, as is the comparison between these parties and parties in more democratic contexts.

Measuring Party Institutionalization

Appropriately measuring characteristics of political regimes is a major challenge for contemporary political science. Political institutions are multifaceted, sometimes internally contradictory, and are the product of a series of historically bounded processes. Finding valid and reliable ways to comparatively assess levels and changes in these institutions has inspired major research projects in the discipline for many years (Coppedge et al., 2011). Among those projects, a handful of them have focused on political parties and party systems, offering remarkably valuable data about parties' organizational characteristics and policy preferences, and about party systems' dynamics and stability (Kitschelt, 2014; Kollman et al., 2019; Mainwaring et al., 2017; Poguntke et al., 2016; Volkens et al., 2019).

All these efforts, however, have encountered important practical limits. Parties are the most widespread political institution in the world and they vary widely even within territorial units. Official sources of information about parties are rare. Autocracies have few incentives to publicize information about the ruling party. In democracies, the more intense separation between parties and the state usually leaves a large part of the burden for archiving and publicizing relevant data to the parties themselves, and making this information available is not typically a priority for those parties. Moreover, the availability of data about parties is most likely correlated with their degree of institutionalization – more institutionalized parties tend to be better at producing and systematically storing information – increasing the challenges for data collection efforts and hampering our ability to draw inferences from the data we do collect. These challenges have limited the available data about political parties to specific regions of the world or a limited set of indicators (Tavits, 2013).

One of the most valuable efforts to measure party characteristics is the Democratic Accountability

and Linkages Project (Kitschelt, 2014). DALP collected data on a variety of party characteristics across democracies between 2008 and 2009. Working from a similar conceptual frame as we do here, Bolleyer and Ruth (2018) use the DALP data to construct measures of routinization and value infusion for a set of countries in Latin America. The chief advantage of DALP is that it allows researchers to construct party-level measures of institutionalization. As discussed below, our measure of party institutionalization does not allow one to look at the features of individual parties.⁵ However, our proposed measure addressed three limitations of DALP-based measures. First, it is available from 1900-2018, as opposed to a single year. Second, it is available for democracies and (some) autocracies. Third, it takes advantage of V-Dem's advances in building indicators using expert-coded data.

V-Dem recruited a team of almost 3,000 experts to collaborate on a joint effort to code multiple regime characteristics (Coppedge, Gerring, Knutsen, et al., 2019). Those experts answered a set of questions in a survey designed to clearly and unambiguously delineate the characteristics of 5 dimensions of democracy (electoral, liberal, egalitarian, participatory, and deliberative) as well as of additional institutional characteristics of political regimes (sovereignty, governance, and, of course, political parties). This survey and the subsequent creation of the V-Dem dataset followed some of the most advanced techniques in the field of expert surveys, producing a set of 400+ indicators of regime characteristics.

Additionally, when asking about parties, V-Dem avoided concentrating on individual organizations and asked experts to provide “country-level” assessments. It asked about “the parties” or “the main parties” in each political system. This allowed for more efficient data collection, ensuring the availability of global data about party organizations. To do so, V-Dem's approach relies on coders' subjective perceptions of how the characteristics can be aggregated to provide an assessment of country-level party characteristics. The obvious cost of this approach is that we cannot tell which internal algorithms or weighting schemes

⁵ A new V-Dem project is collecting party level data, which would allow one to create party level measures using our approach.

individual coders used to produce their aggregate country scores for each indicator, though V-Dem offered guidance to coders in this regard. Nevertheless, since party-based measures introduce their own aggregation challenges, we argue that the benefits of this approach largely outweigh its costs.

Turning to the V-Dem survey itself, eleven questions in the survey concerned political parties. Variables were based on ordinal responses, with categories corresponding to gradations that delineated the degree to which a country reached a pre-defined ideal type. Coders' scores were then mapped into a continuous latent variable using a Bayesian IRT model. This Bayesian IRT model assumes that underneath the ordinal answers provided by coders, there is a latent continuous score for each country-year observation in each of the variables coded by V-Dem, which the ordinal answers reflect only imperfectly (Coppedge, Gerring, Knutsen, et al., 2019; Marquardt and Pemstein, 2018). The model then estimates how the ordinal answers can be translated to this underlying continuous dimension and with what certainty based both on scores offered by individual country-experts as well as the answers offered by coders coding multiple countries at the same time. To estimate certainty, V-Dem takes advantage of the fact that the output of the Bayesian IRT model is a distribution of values for the continuous latent score at each point in time. The point-estimate for each country-year observation, then, is the median of this distribution and the credible intervals reported in V-Dem's dataset include the central 70% of data in the distribution.

To illustrate, consider Figure 1. In the foreground, Figure 1 shows the evolution of the continuous scores for Brazil's contemporary democracy (1985-2018) in the question designed to measure the most common types of linkages between parties and their constituents. Experts on Brazil may recognize this trajectory since it reflects the findings of the current literature about the country, which identified increased emphasis on programmatic competition and linkages by national legislators (Hagopian et al., 2009) and the modernization of old clientelistic practices that reflect a more collectivist strategy even in areas where programmatic linkages have not penetrated (Nichter, 2018). In the background (lighter gray), Figure 1

shows how coders reported these changes. The general trend is positive, with coders indicating a move towards more programmatic linkages over time, which is reflected in the continuous measure. The difference in how coders code the timing of these changes might reflect differences in coders' thresholds between the categories (i.e., what one coder requires to call the main linkage type “programmatic” may be different from what other coders require), something that the model takes in consideration when estimating how answers reflect the underlying pattern (Coppedge, Gerring, Knutsen, et al., 2019; Marquardt and Pemstein, 2018).

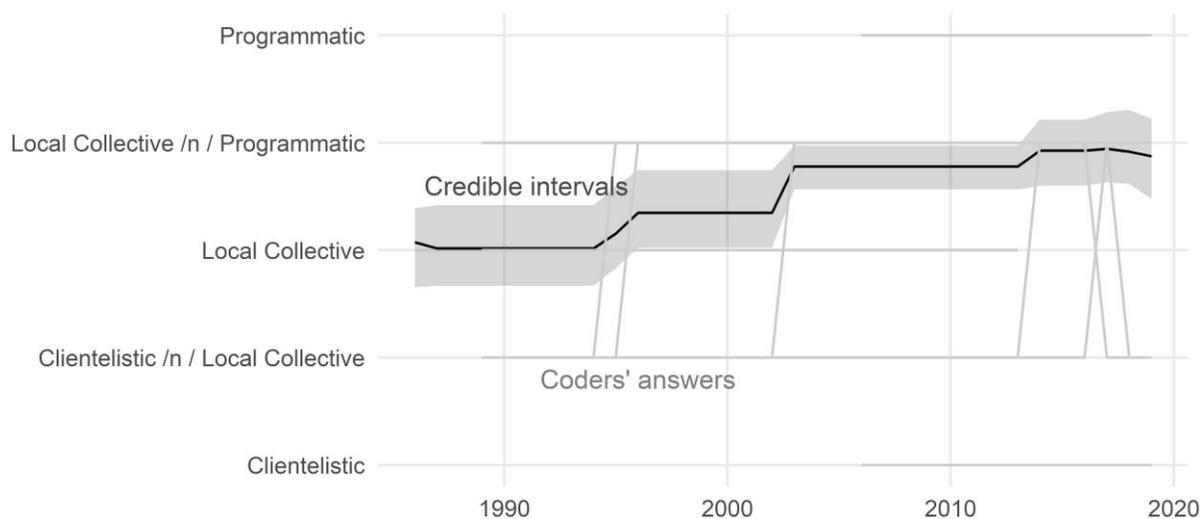


Figure 1. Coders' answers and point-estimates for Party Linkages in democratic Brazil (1985-2018)

To compare the institutionalization of parties, we concentrate on five variables and aggregate them to create our index of Party Institutionalization. Table 1 has the text of the questions (Coppedge, Gerring, Lindberg, Skaaning, Teorell, Altman, Andersson, et al., 2019) and descriptive statistics of their final continuous version. “Party Organizations” asks how many of the parties in a country have permanent

organizations, explicitly mentioning party personnel that carries out party activities outside of elections. “Party Branches” asks a similar question, focusing on a different type of political organization: local branches. It asks how many of the parties have permanent local branches, additional evidence of the materiality of the party organization. Those two variables are highly correlated with a third, “Distinct platforms”, that asked coders to provide information on how many of the parties in the system have publicly disseminated and distinct platforms. The structure of their answers is similar, varying from “none of the parties” to “all the parties”. Consistently, variation in the final continuous scores reflects variation from party systems in which none or few of the parties present these characteristics (lower scores) to party systems in which most or all the parties have national organizations, local branches, and publicly available and disseminated platforms.

We claim that these three questions provide an assessment of the scope of party institutionalization within a country. It is essentially asking the proportion of parties in a country that present a pre-determined set of characteristics that are associated with institutionalized parties – the presence of stable national and local organizations, and of a set of commitments that the party makes to a platform and label. They directly connect to the organizational routinization dimension of institutionalization discussed in the theoretical section, and they provide a sense of the proportion of the parties in each country that meet these theoretical expectations.

Table 1. Variables Included in the Index

Party organizations (v2psorgs)				
How many political parties for national-level office have permanent organizations?				
0: No parties.	1: Fewer than half.	2: About half.	3: More than half.	4: All parties.
Mean	Std. Dev.	Min.	Max.	N
0.31	1.50	-3.24	3.21	16853
Party branches (v2psprbrch)				
How many parties have permanent local party branches?				
0: No parties.	1: Fewer than half.	2: About half.	3: More than half.	4: All parties.

Mean	Std. Dev.	Min.	Max.	N
0.34	1.49	-3.19	3.54	16854
Distinct party platforms (v2psplats)				
How many political parties with representation in the national legislature or presidency have publicly available party platforms (manifestos) that are publicized and relatively distinct from one another?				
0: No parties. 1: Fewer than half. 2: About half. 3: More than half. 4: All parties.				
Mean	Std. Dev.	Min.	Max.	N
0.13	1.61	-3.16	3.35	16829
Legislative party cohesion (v2pscohesv)				
Is it normal for members of the legislature to vote with other members of their party on important bills?				
0: Not really. Many members are elected as independents and party discipline is very weak.				
1: More often than not. Members are more likely to vote with their parties than against them, but defections are common.				
2: Mostly. Members vote with their parties most of the time.				
3: Yes, absolutely. Members vote with their parties almost all the time.				
Mean	Std. Dev.	Min.	Max.	N
0.26	1.44	-3.69	2.56	16871
Party linkages (v2psprlnks)				
Among the major parties, what is the main or most common form of linkage to their constituents?				
0: Clientelistic. Constituents are rewarded with goods, cash, and/or jobs.				
1: Mixed clientelistic and local collective.				
2: Local collective. Constituents are rewarded with local collective goods, e.g., wells, toilets, markets, roads, bridges, and local development.				
3: Mixed local collective and policy/programmatic.				
4: Policy/programmatic. Constituents respond to a party's positions on national policies, general party programs, and visions for society.				
Mean	Std. Dev.	Min.	Max.	N
0.08	1.45	-3.21	3.51	16871

Source: Coppedge et al. (2019)

To learn more about levels of institutionalization we add two indicators to our index. They differ from the previous three indicators in two ways. First, they are not concerned with the reach of some characteristics within the party systems. Rather, coders were asked either to concentrate on “the major parties” or on legislators. Second, and more importantly, they allow coders to distinguish among variations in parties’ characteristics. We capture the degree to which political elites submit to parties’ position – our second theoretical dimension – with a question about the degree of legislative cohesion among party members (“Party Legislative Cohesion”). Answers varied from situations of absent party discipline in legislatures to situations of full discipline. The inclusion of this variable adds one important scope condition

to our index: there must be a functioning legislature. When there is no functioning legislature (also coded by V-Dem), we code this indicator as missing.

Finally, we include an indicator that aims at measuring variations in voter-party linkages. Although those linkages can vary dramatically (Kitschelt and Wilkinson, 2007), linkages between parties and voters are often placed along a continuum that ranges from individualistic to collective connections. Following Mancur Olson's (1965) pioneering discussion about the conditions under which individuals engage in collective enterprises – like parties – scholars have acknowledged that individuals do so when they receive goods that compensate for their time and energy commitment (Panebianco, 1988). Those goods are not only material goods, but they can also be immaterial or ideational. Generally, however, the discussion focuses on private, club, and public goods. Private or selective goods are targeted at specific individuals (clientelistic connections). Public goods are targeted at large social groups or even the whole population, are the most extreme end of the collective connection. Goods that target specific collective constituencies (club goods or group clientelism) are a kind of intermediate category and reflect a more transactional relationship between the party and society. The variable “Party Linkages” captures this variation.

This question is adapted from a similar question used in the Democratic Accountability and Linkages Project (Kitschelt, 2014). Given the discussion in the previous section, we treat programmatic linkages as a sign of greater party institutionalization (because they are more stable and long-term oriented), make “club” or “locally collective” goods sign intermediate linkages, and associate clientelistic connections with lower levels of party institutionalization. We acknowledge that clientelistic linkages can serve as foundations for lasting attachments to parties. Clientelistic networks can create and perpetuate loyalties that emerge from private goods distribution (Hicken, 2011). However, there are both theoretical and empirical reasons for treating clientelist connections as less institutionalized than programmatic ties. While there are some notable exceptions, given their nature, clientelist linkages tend to tie voters to candidates or party

factions, rather than to parties writ large, with negative consequences in terms of value infusion and organizational routinization. Moreover, clientelistic linkages are more transactional, producing a link between party and voter which can be broken should another party out-bid the other. Programmatic linkages, on the other hand, produce durable links characterized by values shared between voters and party that cannot simply be broken by a transaction. Additionally, there is a clear and positive empirical association between the Party Linkages indicator (with values ranging from low [predominantly clientelistic] to high [predominantly programmatic]) and the other indicators in the index. Correlations shown in Table A2 in Appendix A show positive correlations between Party Linkages and all other indicators included in the Index.

Together these five indicators capture central parts of the concept we want to measure. Collectively they indicate the proportion of the parties in the system that have routinized organizations and the extent to which the parties' long-term goals orient the behavior of elites and masses in a political system (value infusion). Additionally, the variables chosen are also internally consistent. Empirically they show positive associations, although they are differentiated enough to be treated individually as shown in Table A2 in the Appendix. Theoretically, they all tap into the same ideas of routinization and value infusion that have been the core of the concept of institutionalization since Huntington and Panebianco first formulated it.

Equally important, they resonate with existing realities and incorporate information about parties that are not time-bound. We do not use information on parties' finances or the number of members, for example, which are hard to measure cross-nationally and which may be less or more relevant to assessing the institutionalization of parties at different times and places. We concentrate on a consistent set of indicators to measure the routinization (the presence of national and local organizations, and a publicly

available platform) and incorporate variations in the degree of institutionalization that are not time-bound to measure value infusion: party-cohesion among elites and programmatic connections with voters.

In line with our theoretical treatment of the concept, we use an additive strategy to aggregate the indicators. This approach follows a “logic of substitutability”, in which lower values in one indicator can be compensated by higher values in the others (Coppedge, 2012). Consequently, countries where all parties are strongly institutionalized would score high in all our questions and will have high values in the Party Institutionalization Index. At the same time, countries scoring well in only some of the five indicators will still receive higher values than countries that receive low values in all. This strategy ensures greater variation in the final index, producing meaningful differentiation between the observations.⁶ Technically speaking, we first standardize all the five variables and add them to form the new index. We then convert the final index’s values to its cumulative density function. This operation bounds its values at 0 and 1.

Figure 2 depicts the operation.

Figure 2. Index Structure

$$\mathbf{PI\ Index} = \text{Organizations} + \text{Branches} + \text{Platforms} + \text{Leg. Cohesion} + \text{Linkages}$$

Party Institutionalization across the Globe

The first empirical test of our index is the alignment between the theory we developed and the data resulting from our empirical strategy. The values in the index should – to some degree – be consistent with our shared understanding of empirical reality. If our index suggested that the highest levels of Party

⁶ We strongly believe in substitutability, which motivates our choice of an additive index. However, we argue that the theoretical framework here discussed holds even under a different set of priors and an alternative aggregation procedure. In any case, we have created other versions of the index, using both a multiplicative form and factor analysis and results differ little across the different aggregation strategies.

Institutionalization in the world are found in some African or Middle Eastern countries, well-known for the fragility of their parties, readers would rightly question the value of this index.

We start by analyzing Figure 3, which has the yearly global average of our index. It tells a familiar story. Global average levels have increased over time (0.46 in 1900, 0.60 in 2018), reflecting the growing importance of parties as they spread across the world. Additionally, the little spike in the line after 1945 captures both the establishment of many authoritarian regimes with strong parties (mostly in the communist world), as well as the beginning of second-wave democracies.

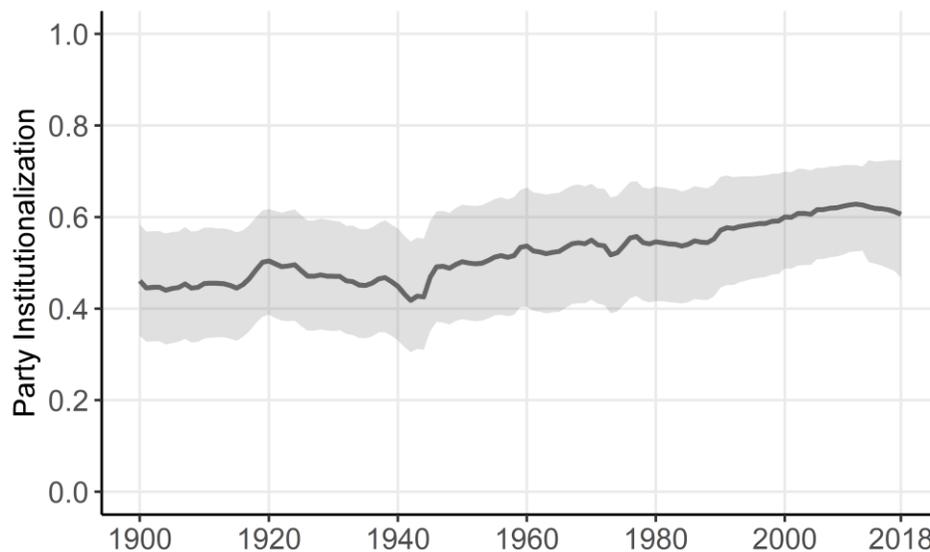


Figure 3. Global Average of the Party Institutionalization Index (1900–2018)

The line in Figure 3 is surrounded by a shaded area representing the aforementioned 70% High Posterior Density Interval extracted from the posterior distribution of this variable. The V-Dem measurement model estimates as its final product a distribution of the most likely values for a country-year observation. The median of this distribution is the point-estimate available in the V-Dem dataset and the bold line in Figure 2. The 70% HPD intervals serve as the confidence intervals for these estimates and are

reported here and in most other figures of this text (we do not report them when the figure would get too crowded). These intervals can be considered measures of uncertainty: they are an estimation of measurement error and can – and should – be incorporated in any causal inferential analysis using V-Dem data (Bizzarro et al., 2016). Besides the other features already introduced, measures of uncertainty are an additional component of the V-Dem dataset that makes it stand out among the existing indicators of political institutions.

Figure 4 breaks down averages by region. All regions experienced increased levels of party institutionalization in comparison to the beginning of the century, even the consolidated democracies in Western Europe, North America, and Oceania (West) – where some argue that parties have declined (Ignazi, 1996). The only region where levels of party institutionalization were lower in 2018 than in 1950 is Eastern Europe, where the collapse of the Communist regimes – usually backed by institutionalized parties – led to the emergence of multiparty democracies that had notoriously weaker parties, particularly during the 1990s (Grzymała-Busse, 2002).

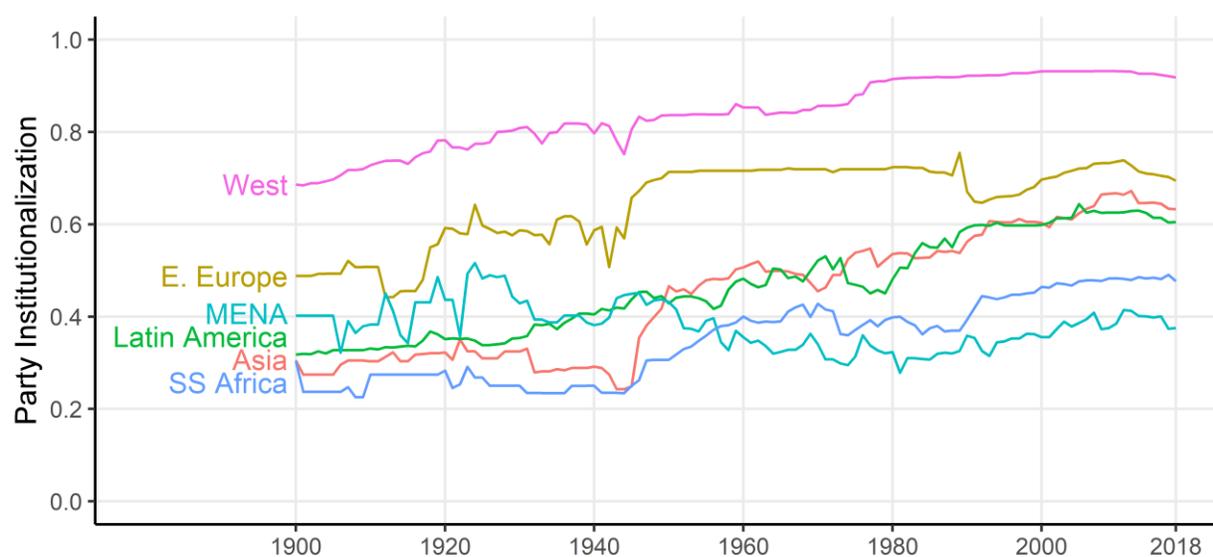


Figure 4. Regional Averages of Party Institutionalization (1900-2018)

Figure 5 offers further face validity to our index. We use Boix, Miller, and Rosatto's (2013) dichotomous regime classification to separate authoritarian from democratic regimes and plot the regime averages for our Index of Party Institutionalization for the 1900-2010 period. While the average level of institutionalization in democracies decreases between the early 20th century, when just a few democracies existed, and the end of the series, the average for autocracies increases, reflecting the rise of party-based authoritarian regimes, with some variation around the moments in which communist regimes emerged, and collapsed. (Though, overall, the changes over time are not large, and within the confidence intervals).

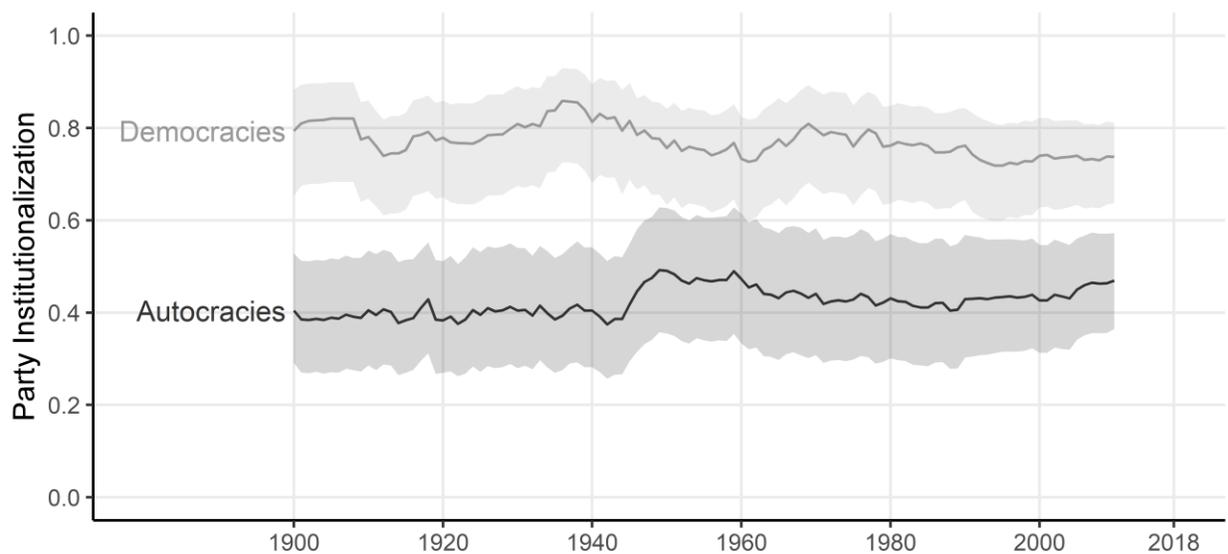


Figure 5. Regime Averages of Party institutionalization

We also compared our Index to Geddes, Wright, and Frantz (2014) regime typology (not shown). We collapsed all the categories where parties are mentioned (party, party-military, party-personal, party-military-personal) in one “party-based” regime characteristic and compared the average level of Party Institutionalization in country-years coded as such in the GWF dataset against years coded otherwise

(personal, military, oligarchy, monarchy, and their combinations). We found a statistically significant difference between the two means: on average, authoritarian regimes that are not party-based have scores in our Party Institutionalization Index 37% smaller than the cases of party-based authoritarianism in their sample.

Additional information about the association between regime type and levels of Party Institutionalization can be observed in Figure 6. It plots Party Institutionalization (y-axis) against the Polyarchy score (x-axis), V-Dem's main electoral democracy index (Teorell et al., 2019). As expected, there are both Autocracies and Democracies that score high in terms of Party Institutionalization. Interestingly, this is not the case at the opposite end of our index. While there are many authoritarian regimes with low levels of Party Institutionalization, the right-bottom corner of the graph is empty. Highly democratic countries tend also to have very institutionalized parties, though there is subnational variation within democracies with lower polyarchy scores.

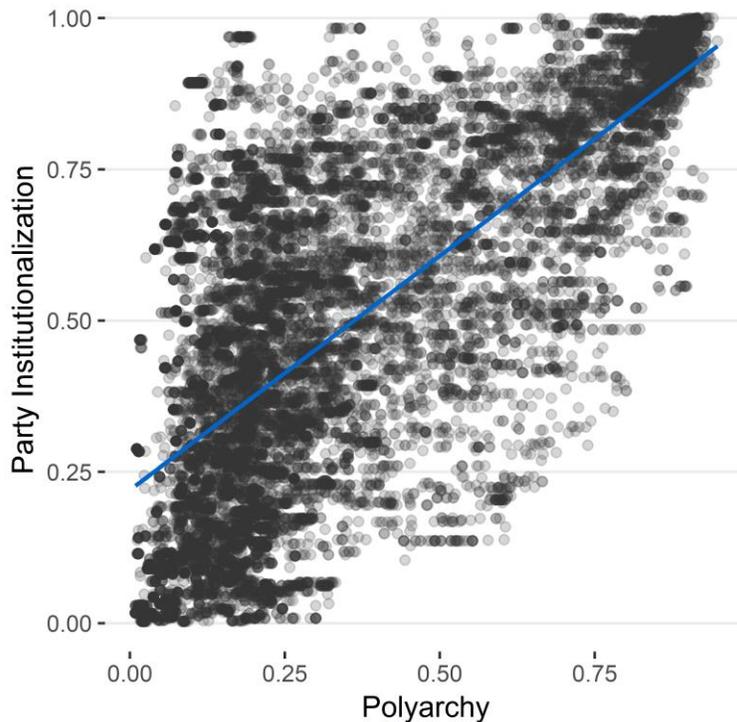


Figure 6. Party Institutionalization and Polyarchy

Party Institutionalization in Selected Countries

To provide additional illustrations of the V-Dem Party Institutionalization Index, we selected three sets of countries to explore in-depth. These explorations aim at clarifying the potential – and the limits – of our index, relying on our common knowledge about a set of familiar cases. We start by analyzing levels of Party Institutionalization in two (contemporary) democracies: Brazil and the United States. We then change our focus to authoritarian regimes and briefly analyze the scores of the Index for two authoritarian regimes: Taiwan under the KMT and Philippines under Marcos. Finally, we directly compare our index to countries for which three other existing indices that seek to measure Party Institutionalization have been measured. We take advantage of Basedau and Stroh's (2008) index of Party Institutionalization for a set of African countries and compare the scores they produce to the scores in our index. Similarly, we create a country-level party institutionalization measure using DALP (2014) data, building upon the discussion in Bolleyer and Ruth (2018). Finally, we briefly discuss how our index compares to the most widely-used proxy for institutionalization: party age. Consequently, this section provides an overview of how the index performs in different contexts and how it compares to alternative measures of the same concept already available.

Starting with the democratic regimes in Brazil and the United States (Figure 7), we are reminded that the countries experience major differences in the degree of their party institutionalization. While American parties are among the oldest in the world, scoring high in all the categories listed, Brazil is well-known for being a case of historically low-levels of party institutionalization (Mainwaring, 1999). These differences are captured very clearly in the index, with the United States consistently scoring much higher (yet, never at the maximum score) than Brazil on the Party Institutionalization Index. Additionally, the

index captures other historical dynamics in the countries that are worth mentioning given their contribution to elucidating the power of our index.

Starting with the United States, the data reveal a concave pattern. This should not come as a surprise to experts on American parties: the middle 1960s – the lowest point in the series – were times of ambiguous differentiation between Democrats and Republicans and lower levels of legislative cohesion – particularly as the contradictions between northern and southern Democrats became more salient (Poole and Rosenthal, 1997).

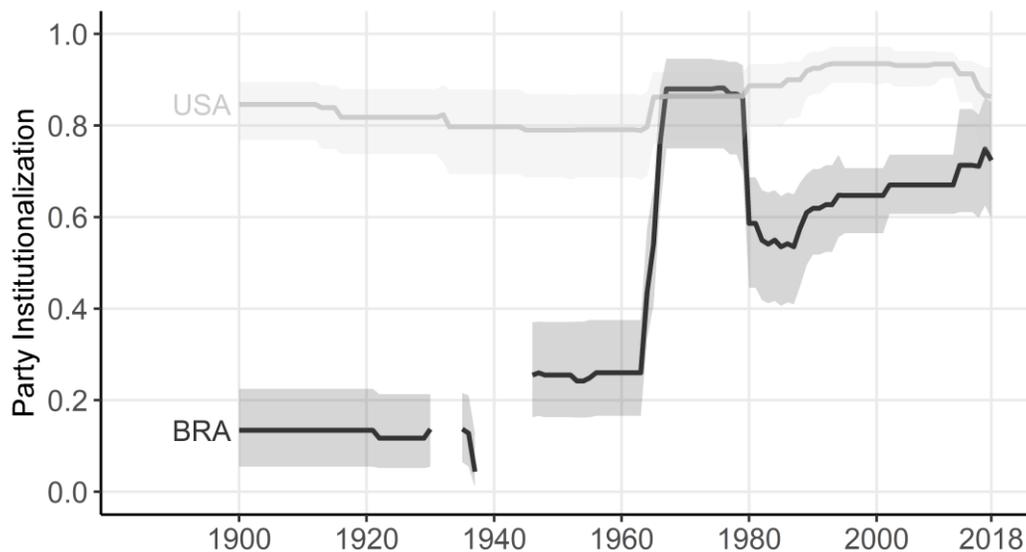


Figure 7. Party Institutionalization in Brazil and the US

Turning to Brazil, readers will notice that the index for Brazil reaches its highest levels under the period of Military Dictatorship (1964-1985).⁷ The Brazilian authoritarian regime was a kind of competitive authoritarianism *avant-la-lettre*, where a stable two-party system was established. The two parties had national organizations with regional penetration, had public and distinct platforms, and the levels of

⁷ The gaps in the line for Brazil indicate periods in which Congress had been closed by the Vargas dictatorship.

legislative cohesion were relatively high (Hagopian, 1996; Kinzo, 1988). They played no role in the selection of the country's president—who was selected by the Army—but were critical for the organization of legislative business and local elections. Brazilian parties during that period though, do score low on the linkages question (i.e., were predominantly clientelistic), a characteristic of Brazilian parties that is consistent across most of the twentieth century (Mainwaring, 1999).

If we move our analysis away from contemporary democracies and concentrate on authoritarian regimes, we again see how the V-Dem Party Institutionalization index captures the underlying dynamics of the countries we observe. We compare two countries where authoritarian experiences were sharply different. In Taiwan, the KMT developed into an institutionalized party that ruled for 50 years, outlasting both its founder, Sun Yat-sen, and his successor, Chiang Kai-shek. By contrast, after Marcos declared martial law in the Philippines in 1972 he initially dissolved political parties. In preparation for a return of legislative elections in 1978 Marcos organized the KBL party, a loose amalgam of local and national patronage seekers, which was always subordinate to Marcos and the ruling family (Hutchcroft and Rocamora, 2003). These differences in the routinization and value infusion of ruling parties are reflected in Figure 8 below—the level of institutionalization under Marcos is notably lower than in Taiwan under the KMT.

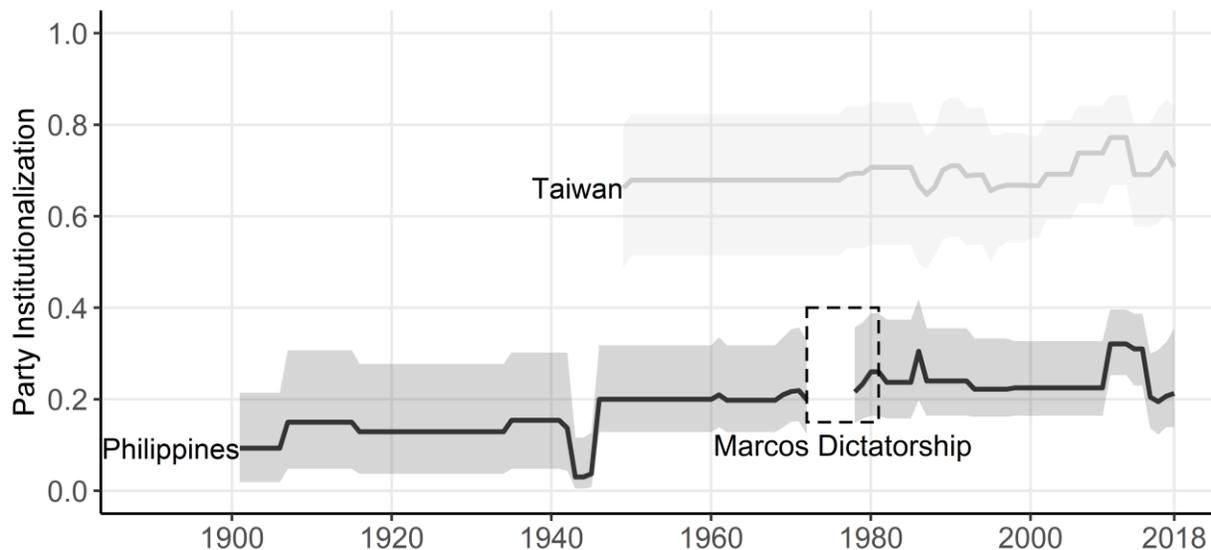


Figure 8. Party Institutionalization in Taiwan and the Philippines

Finally, we compare our index directly to other similar indices of party institutionalization to validate our new global index. In the first panel of Figure 9, we plot our index in the x-axis and Basedau and Stroh's (2008) scores on the y-axis for 9 African countries. In addition to making an important theoretical contribution to the discussion of party institutionalization, Basedau and Stroh also provide the coding rules and scores for an index of party institutionalization measured for some African countries. We compare the scores for the same 9 countries for which they built aggregate country-level indices of party institutionalization to the scores we estimate for the same countries in the year of 2006.⁸ The figure shows a close similarity ($r = 0.69$). Although the rank-order of the countries differ slightly (Tanzania and Ghana have the highest values in Basedau and Stroh's index, while in the V-Dem Index of Party Institutionalization they score only third and fourth; conversely, Botswana and Niger have the highest scores in our index and are placed third and fourth on theirs), the incorporation of V-Dem uncertainty estimates further demonstrates the similarities of the indices.

⁸ We rescaled Basedau and Stroh's index from its original 0 to 8 scale to a 0 to 1 scale to facilitate the comparison.

In the second panel of Figure 9 we, again, plot our index using V-Dem data in the x-axis but replace Basedau and Stroh's index with a country-level version of the index proposed by Bolleyer and Ruth (2018) that we created. Bolleyer and Ruth take advantage of three variables from the DALP (Kitschelt, 2014) Dataset to measure party institutionalization. They combine items *a1*, which asks coders about the presence of permanent local party offices, and *a3*, which asks about the existence of "parties' local intermediaries" (Kitschelt, 2014 [DALP Codebook, 19]), to measure routinization. Additionally, they use item *e4*, which asks about the "extent to which parties draw on and appeal to voters' long-term partisan loyalty" (Kitschelt, 2014 [DALP Codebook, 153]) to measure value infusion. Then, they normalize the indicators (so they vary between 0 and 1) and average them for each individual party, to build a party-level measure of institutionalization.

To compare our country-scores to their party-scores we created a weighted average across individual party scores for each country. We weighted each parties' scores by their vote shares in the last two legislative elections, trying to capture something similar to V-Dem's focus on "the main parties". We believe this is a sensible way to create a country-level index of Party Institutionalization from DALP Data, given the limitations of the data.

Curiously, the two indices are orthogonal to each other ($r = -0.14$), even though they are arguably measuring similar things and relying on similar sources of information (experts). The index we created based on DALP gives low scores to countries that are famous for high levels of institutionalization of their parties (like Sweden, that ends up with virtually the same score received by Brazil, 0.38 on a 0 to 1 scale) and gives high scores for countries known for their high levels of personalism (like the Philippines, that ends up having a score higher than the one observed to Australia; 0.51 and 0.49, respectively). We are stretching the DALP data beyond its capacity, but we do so on purpose. This provides additional evidence to support our claim that our index of Party Institutionalization based on V-Dem data is a useful tool for scholars who

try to measure country-level party institutionalization because the index directly assesses the dimension of interest, without requiring complicated aggregation rules.

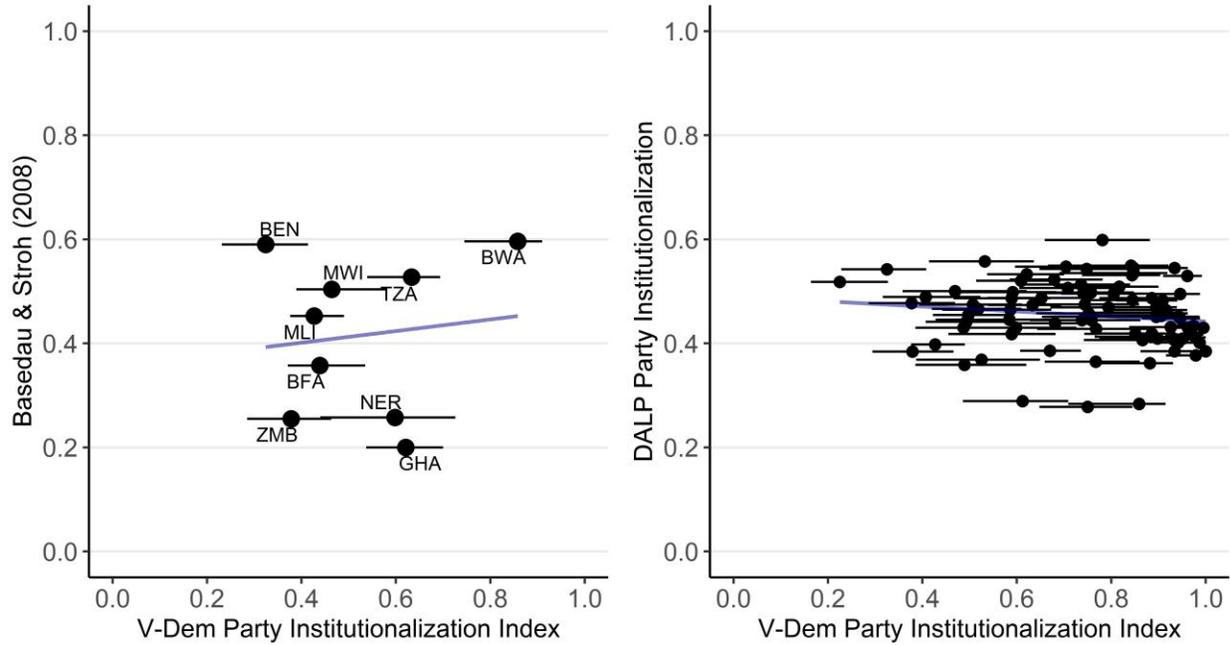


Figure 9. Comparing Indices of Party Institutionalization⁹

Finally, we investigate how the V-Dem Party Institutionalization Index compares to a common proxy for institutionalization: party age (Figure A1 in the Appendix). While the correlation between our index and the IADB/World Bank (Scartascini et al., 2018) measure of party age of the three main parties is positive (0.26), it is evident that even old parties vary in terms of their institutionalization in richer ways than what a crude measure as “average age” may capture.

Correlates of Party Institutionalization

⁹ Countries included in the right-hand panel: Benin (BEN), Botswana (BWA), Burkina Faso (BFA), Ghana (GHA), Malawi (MWI), Mali (MLI), Niger (NER), Tanzania (TZA), Zambia (ZMB).

Finally, in addition to mapping out how our measure of party institutionalization and its sub-components correlated with alternative proxies of party institutionalization, we demonstrate how our index of Party Institutionalization varies by two other common institutions used in comparative politics research. By checking whether these predictions are confirmed by our index, we seek to provide additional evidence of its validity. We invite scholars to investigate more carefully whether the differences in means and distributions that we identify hold under more intense scrutiny, taking advantage of our data to carefully test causal arguments developed in the extant literature.

First, we mapped the distribution of Party Institutionalization by the type of executive. To do this, we drew data from Selway and Self (2019) who coded whether states had a presidential, semi-presidential, or parliamentary form of executive for all elections for anocratic and democratic elections from 1945-2012. Using this dataset, we plot the distribution of Party institutionalization by executive type in the left panel of Figure 10. As can be seen below, there is little difference in the distribution of Party Institutionalization between semi-presidential and parliamentary forms of executive institutions. There is, however, a substantial drop-off in Party Institutionalization for presidential systems, consistent with the literature on the less-institutionalized nature of political parties within presidential systems (Samuels and Shugart, 2010). In addition to looking at executive regime type, we plotted Party Institutionalization across the type of electoral system: namely, majoritarian/plurality, proportional representation, or a mix of the two. The plot can be found in the right of Figure 10. We see little difference in the level of Party Institutionalization between electoral system types,¹⁰ a somewhat surprising result in light of the important role attributed to electoral systems for many party-related outcomes (Carey and Shugart, 1995; Duverger, 1962; Mainwaring, 1999).

¹⁰ The pattern is the same if we use district magnitude as a proxy for the electoral system.

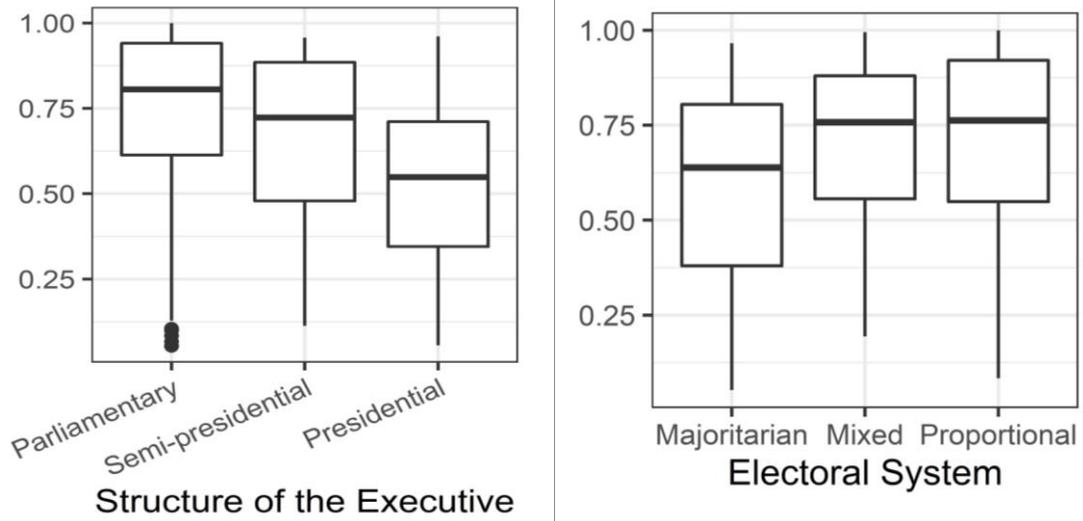


Figure 10. Distribution of levels of Party Institutionalization across Institutional Correlates

Conclusion

This article introduced the V-Dem Party Institutionalization Index, explained the theory that underlies the index construction, and test in multiple ways the validity and the reliability of the estimates. We follow McMann et al. (2016) in arguing that we should aim for indicators that meet the “good enough” threshold. We have tried to demonstrate that the Party Institutionalization Index we create is indeed good enough—that is, it is reliable and valid, and that the Party Institutionalization Index is constructed in an empirical and theoretically meaningful way.

We believe that the index opens new opportunities for scholars researching about political parties. Work using the index to explore a host of political questions has already started appearing. Bizzarro and his co-authors (2018), for example, found that countries with stronger parties tend to have consistently higher levels of economic growth, providing an important contribution to the literature about the institutional determinants of political economy outcomes. Similarly, Bernhard and his co-authors (2020) used a previous version of this same index as a predictor of democratic stability and found that stronger parties protect

democracy: countries with more institutionalized parties have a lower risk of experiencing democratic breakdown, even after controlling for many usual determinants of democratic stability. Rasmussen and Knutsen (2019) have shown how institutionalized parties complement or substitute the development of the welfare state using our measure, and Doyle and Power (2020) have tested the association between party institutionalization and presidential power.

The use of the index may also help advance our understanding of the determinants of variations in levels of party institutionalization. Work using the index could explore how democratic party institutionalization is shaped by the politics under authoritarian regimes. Other work might explore the factors that shape the types of linkages parties forge with voters, and how those linkages might change over time. The index and its components also provide us the opportunity to examine more closely the various dimensions to party institutionalization and how those dimensions combine and interact. Finally, we expect the index and this article to spark further productive discussion about how best to conceptualize and measure party institutionalization, and the trade-offs involved with different approaches.

Bibliography

- Basedau M and Stroh A (2008) Measuring Party Institutionalization in Developing Countries: A New Research Instrument Applied to 28 African Political Parties. *IDEAS Working Paper Series from RePEc*. Available at: http://search.proquest.com/docview/1698379587?accountid=11311&rfr_id=info%3Axri%2Fsid%3Aprimo (accessed 20 April 2020).
- Bernhard M, Hicken A, Reenock C, et al. (2020) Parties, Civil Society, and the Deterrence of Democratic Defection. *Studies in Comparative International Development* 55(1): 1–26.
- Bizzarro F, Pemstein D and Coppedge M (2016) Incorporating V-Dem’s Uncertainty Estimates in Regression Analysis. Department of Political Science, University of Notre Dame.
- Bizzarro F, Gerring J, Knutsen CH, et al. (2018) Party Strength and Economic Growth. *World Politics* 70(2): 275–320.
- Boix C, Miller M and Rosato S (2013) A Complete Data Set of Political Regimes, 1800–2007. *Comparative Political Studies* 46(12): 1523–1554.
- Bolleyer N and Ruth SP (2018) Elite Investments in Party Institutionalization in New Democracies: A Two-Dimensional Approach. *The Journal of Politics* 80(1): 288–302.
- Carey JM and Shugart MS (1995) Incentives to cultivate a personal vote: A rank ordering of electoral formulas. *Electoral Studies* 14(4): 417–439. DOI: 10.1016/0261-3794(94)00035-2.
- Coppedge M (2012) *Democratization and Research Methods*. Strategies for social inquiry. Cambridge ; New York: Cambridge University Press.
- Coppedge M, Gerring J, Altman D, et al. (2011) Conceptualizing and Measuring Democracy: A New Approach. *Perspectives on Politics* 9(2): 247–267.
- Coppedge M, Gerring J, Lindberg SI, Skaaning S-E, Teorell J, Altman D, Andersson F, et al. (2019) *V-Dem Codebook V9*. Varieties of Democracy (V-Dem) Project. Available at: <https://www.v-dem.net/en/data/data-version-8-1/>.
- Coppedge M, Gerring J, Lindberg SI, Skaaning S-E, Teorell J, Altman D, Bernhard M, et al. (2019) *V-Dem Country-Year Dataset v.9*. Varieties of Democracy (V-Dem) Project. Available at: <https://www.v-dem.net/en/data/data-version-9/>.
- Coppedge M, Gerring J, Knutsen CH, et al. (2019) *V-Dem Methodology v9*. Documentation. Gothenburg. Available at: https://www.v-dem.net/media/filer_public/2b/e8/2be80341-348e-453e-b766-e74f314155d2/v-dem_methodology_v9.pdf (accessed 17 November 2019).
- Doyle D and Power TJ (2020) Presidential Power and Party Strength: The “Inverse Relationship” Reconsidered. *Political Studies Review* 18(1): 108–124.
- Duverger M (1962) *Political Parties, Their Organization and Activity in the Modern State*. London; New York: Methuen; Wiley.
- Fjelde H (2010) Generals, Dictators, and Kings: Authoritarian Regimes and Civil Conflict, 1973—2004. *Conflict Management and Peace Science* 27(3): 195–218.

- Flores-Macías G (2018) Mexico's PRI: The Resilience of an Authoritarian Party and its consequences for Democracy. In: Loxton J and Mainwaring S (eds) *Life after Dictatorship: Authoritarian Successor Parties Worldwide*. 1st ed. Cambridge University Press, pp. 257–283. Available at: <https://www.cambridge.org/core/product/identifier/9781108560566/type/book> (accessed 30 September 2019).
- Geddes B, Wright J and Frantz E (2014) Autocratic Breakdown and Regime Transitions: A New Data Set. *Perspectives on Politics* 12(2): 313–331.
- Geddes B, Wright J and Frantz E (2018) *How Dictatorships Work: Power, Personalization, and Collapse*. Cambridge, United Kingdom ; New York, NY: Cambridge University Press.
- Gehlbach S and Keefer P (2011) Investment without democracy: Ruling-party institutionalization and credible commitment in autocracies. *Journal of Comparative Economics* 39(2): 123–139.
- Grzymała-Busse AM (2002) *Redeeming the Communist Past: The Regeneration of Communist Parties in East Central Europe*. Cambridge studies in comparative politics. Cambridge, [England] ; New York: Cambridge University Press.
- Hagopian F (1996) *Traditional Politics and Regime Change in Brazil*. Cambridge studies in comparative politics. Cambridge ; New York: Cambridge University Press.
- Hicken A (2011) Clientelism. *Annual Review of Political Science* 14(1): 289–310.
- Hicken A and Kuhonta EM (eds) (2015) *Party System Institutionalization in Asia: Democracies, Autocracies, and the Shadows of the Past*. New York, NY: Cambridge University Press.
- Huntington SP (1968) *Political Order in Changing Societies*. New Haven: Yale University Press.
- Hutchcroft PD and Rocamora J (2003) Strong Demands and Weak Institutions: The Origins and Evolution of the Democratic Deficit in the Philippines. *Journal of East Asian Studies* 3(2): 259–292.
- Ignazi P (1996) The Crisis of Parties and the Rise of New Political Parties. *Party Politics* 2(4): 549–566.
- Janda K (1980) *Political Parties: A Cross-National Survey*. New York : London: Free Press ; Collier Macmillan.
- Kalyvas SN (1996) *The Rise of Christian Democracy in Europe*. The Wilder House series in politics, history, and culture. Ithaca, N.Y.: Cornell University Press.
- Katz R (1980) *A Theory of Parties and Electoral Systems*.
- Key Jr. VO (1942) *Politics, Parties and Pressure Groups*. New York: Thomas Y. Crowell Company.
- Kinzo MDG (1988) *Legal Opposition Politics under Authoritarian Rule in Brazil: The Case of the MDB, 1966-79*. St. Antony's/Macmillan series. Houndmills, Basingstoke, Hampshire: Macmillan in association with St. Antony's College, Oxford.
- Kitschelt H (2014) Democratic Accountability and Citizen-Politician Linkages around the World. Available at: https://duke.qualtrics.com/SE/?SID=SV_eLPpbYbmOrnxyOp.

- Kitschelt H and Wilkinson S (2007) Introduction. In: Kitschelt H and Wilkinson S (eds) *Patrons, Clients, and Policies: Patterns of Democratic Accountability and Political Competition*. Cambridge, UK ; New York: Cambridge University Press.
- Kollman K, Hicken A, Caramani D, et al. (2019) Constituency-level elections archive [data file and codebook]. Center for Political Studies, University of Michigan.
- Levitsky S (2003) *Transforming Labor-Based Parties in Latin America: Argentine Peronism in Comparative Perspective*. Cambridge, U.K. ; New York: Cambridge University Press.
- Levitsky S and Way L (2010) *Competitive Authoritarianism: Hybrid Regimes after the Cold War*. Problems of international politics. New York: Cambridge University Press.
- Loxton J (2015) Authoritarian Successor Parties. *Journal of Democracy* 26(3): 157–170.
- Loxton J and Mainwaring S (eds) (2018) *Life after Dictatorship: Authoritarian Successor Parties Worldwide*. 1st ed. Cambridge University Press. Available at: <https://www.cambridge.org/core/product/identifier/9781108560566/type/book> (accessed 30 September 2019).
- Magaloni B (2008) *Voting for Autocracy: Hegemonic Party Survival and Its Demise in Mexico*. 1st pbk. ed. Cambridge studies in comparative politics. Cambridge ; New York: Cambridge University Press.
- Magaloni B and Kricheli R (2010) Political Order and One-Party Rule. *Annual Review of Political Science* 13(1): 123–143.
- Mainwaring S (1999) *Rethinking Party Systems in the Third Wave of Democratization: The Case of Brazil*. Stanford, Calif: Stanford University Press.
- Mainwaring S and Scully T (1995) Introduction : Party Systems in Latin America. In: Mainwaring S and Scully T (eds) *Building Democratic Institutions: Party Systems in Latin America*. Stanford, Calif: Stanford University Press.
- Mainwaring S, Gervasoni C and España-Najera A (2017) Extra- and within-system electoral volatility. *Party Politics* 23(6): 623–635.
- Mainwaring S, Bizzarro F and Petrova A (2018) Party System Institutionalization, Decay, and Collapse. In: Mainwaring S (ed.) *Party Systems in Latin America: Institutionalization, Decay, and Collapse*. Cambridge, United Kingdom ; New York, NY: Cambridge University Press, pp. 17–33.
- Marquardt KL and Pemstein D (2018) IRT Models for Expert-Coded Panel Data. *Political Analysis* 26(4): 431–456.
- McMann KM, Pemstein D, Seim B, et al. (2016) Strategies of Validation: Assessing the Varieties of Democracy Corruption Data. *Varieties of Democracy Institute: Working Paper* (23).
- Müller WC and Strom K (eds) (1999) *Policy, Office, or Votes? How Political Parties in Western Europe Make Hard Decisions*. Cambridge studies in comparative politics. Cambridge [England] ; New York: Cambridge University Press.
- Nichter S (2018) *Votes for Survival: Relational Clientelism in Latin America*. Cambridge University Press.
- Olson M (1965) *The Logic of Collective Action: Public Goods and the Theory of Groups*. Harvard economic studies v. 124. Cambridge, Mass: Harvard University Press.

- Osten S (2018) *The Mexican Revolution's Wake: The Making of a Political System, 1920–1929*. Cambridge Latin American Studies. Cambridge: Cambridge University Press. Available at: <https://www.cambridge.org/core/books/mexican-revolutions-wake/A7E101384E1EE07D5D773479153EF16F>.
- Panbianco A (1988) *Political Parties: Organization and Power*. Cambridge studies in modern political economies. Cambridge, [England] ; New York: Cambridge University Press.
- Poguntke T, Scarrow SE, Webb PD, et al. (2016) Party rules, party resources and the politics of parliamentary democracies: How parties organize in the 21st century. *Party Politics* 22(6): 661–678.
- Poole KT and Rosenthal H (1997) *Congress: A Political-Economic History of Roll Call Voting*. New York: Oxford University Press.
- Randall V and Svåsand L (2002) Party Institutionalization in New Democracies. *Party Politics* 8(1): 5–29.
- Rasmussen MB and Knutsen CH (2019) Party Institutionalization and Welfare State Development. *British Journal of Political Science*: 1–27.
- Samuels DJ and Shugart MS (2010) *Presidents, Parties, and Prime Ministers: How the Separation of Powers Affects Party Organization and Behavior*. Cambridge: Cambridge University Press. Available at: <http://ebooks.cambridge.org/ref/id/CBO9780511780882> (accessed 14 September 2019).
- Sartori G (1976) *Parties and Party Systems: A Framework for Analysis*. Cambridge [Eng.] ; New York: Cambridge University Press.
- Scartascini C, Cruz C and Keefer P (2018) *The Database of Political Institutions 2017 (DPI2017)*. 16 March. Inter-American Development Bank. Available at: <http://publications.iadb.org/11319/8806> (accessed 22 September 2019).
- Schattschneider EE (1977) *Party Government*. Westport, Conn: Greenwood Press.
- Schumpeter J (1942) *Capitalism, Socialism and Democracy*. New York: Harper & Bros.
- Seway J, Self D and Jacobson D (2019) Political Institutions in Anocracies [Dataset].
- Svolik MW (2012) *The Politics of Authoritarian Rule*. Cambridge studies in comparative politics. Cambridge, UK ; New York, NY: Cambridge University Press.
- Tavits M (2013) *Post-Communist Democracies and Party Organization*. Cambridge: Cambridge University Press. Available at: <http://ebooks.cambridge.org/ref/id/CBO9781139565196> (accessed 14 September 2019).
- Teorell J, Coppedge M, Lindberg S, et al. (2019) Measuring Polyarchy Across the Globe, 1900–2017. *Studies in Comparative International Development* 54(1): 71–95. DOI: 10.1007/s12116-018-9268-z.
- Volkens A, Krause W, Lehmann P, et al. (2019) The Manifesto Data Collection. Manifesto Project (MRG/CMP/MARPOR). Version 2019b. Wissenschaftszentrum Berlin für Sozialforschung (WZB). Available at: <https://doi.org/10.25522/manifesto.mpps.2019b>.

Table A1. Other Party Variables

Party ban (C) (v2psparban)
Question: Are any parties banned?
Clarification: This does not apply to parties that are barred from competing for failing to meet registration requirements or support thresholds.
Responses:
0: Yes. All parties except the state-sponsored party (and closely allied parties) are banned.
1: Yes. Elections are non-partisan or there are no officially recognized parties.
2: Yes. Many parties are banned.
3: Yes. But only a few parties are banned.
4: No. No parties are officially banned.
Scale: Ordinal, converted to interval by the measurement model.

Barriers to parties (C) (v2psbars)
Question: How restrictive are the barriers to forming a party?
Clarification: Barriers include legal requirements such as requirements for membership or financial deposits, as well as harassment.
Responses:
0: Parties are not allowed.
1: It is impossible, or virtually impossible, for parties not affiliated with the government to form (legally).
2: There are significant obstacles (e.g. party leaders face high levels of regular political harassment by authorities).
3: There are modest barriers (e.g. party leaders face occasional political harassment by authorities).
4: There are no substantial barriers.
Scale: Ordinal, converted to interval by the measurement model.

Opposition parties autonomy (C) (v2psoppaut)
Question: Are opposition parties independent and autonomous of the ruling regime?
Clarification: An opposition party is any party that is not part of the government, i.e., that has no control over the executive.
Responses:
0: Opposition parties are not allowed.
1: There are no autonomous, independent opposition parties. Opposition parties are either selected or co-opted by the ruling regime.
2: At least some opposition parties are autonomous and independent of the ruling regime.
3: Most significant opposition parties are autonomous and independent of the ruling regime.
4: All opposition parties are autonomous and independent of the ruling regime.
Ordering: Answer only if previous question (v2psbars) is coded 1-4.
Scale: Ordinal, converted to interval by the measurement model.

Candidate selection—national/local (C) (v2pscnslnl)
Question: How centralized is legislative candidate selection within the parties?
Clarification: The power to select candidates for national legislative elections is often divided between local/municipal party actors, regional/state-level party organizations, and national party leaders. One level usually dominates the selection process, while

sometimes candidate selection is the outcome of bargaining between the different levels of party organization.

Responses:

0: National legislative candidates are selected exclusively by national party leaders.

1: National legislative candidate selection is dominated by national party leaders but with some limited influence from local or state level organizations.

2: National legislative candidates are chosen through bargaining across different levels of party organization.

3: National legislative candidates are chosen by regional or state-level organizations, perhaps with some input from local party organizations or constituency groups.

4: National legislative candidates are chosen by a small cadre of local or municipal level actors.

5: National legislative candidates are chosen by constituency groups or direct primaries.

Scale: Ordinal, converted to interval by the measurement model.

Party competition across regions (C) (v2pscomprg)

Question: Which of the following best describes the nature of electoral support for major parties (those gaining over 10% of the vote)?

Clarification: Leave this question blank if election was nonpartisan, i.e., no parties (not even pro-government parties) were allowed.

Responses:

0: Most major parties are competitive in only one or two regions of the country, i.e., their support is heavily concentrated in a few areas.

1: Most major parties are competitive in some regions of the country, but not in others.

2: Most major parties are competitive in most regions of the country.

Scale: Ordinal, converted to interval by the measurement model.

Subnational party control (C) (v2pssunpar)

Question: Does a single party control important policymaking bodies across subnational units (regional and local governments)?

Clarification: Leave this question blank if election was nonpartisan, i.e., no parties (not even pro-government parties) were allowed.

Responses:

0: In almost all subnational units (at least 90%), a single party controls all or virtually all policymaking bodies.

1: In most subnational units (66%-90%), a single party controls all or virtually all policymaking bodies.

2: In few subnational units (less than 66%), a single party controls all or virtually all policymaking bodies.

Scale: Ordinal, converted to interval by the measurement model.

Table A2. Correlations (Pearson's r) between index components.

	(1)	(2)	(3)	(4)	(5)	(6)
Party Organizations (1)	1	0.896	0.772	0.509	0.380	0.878
Party Branches (2)	0.896	1	0.782	0.511	0.428	0.886
Distinct Platforms (3)	0.772	0.782	1	0.347	0.519	0.855
Legislative Cohesion (4)	0.509	0.511	0.347	1	0.180	0.625
Party Linkages (5)	0.380	0.428	0.519	0.180	1	0.647
Party Institutionalization (6)	0.878	0.886	0.855	0.625	0.647	1

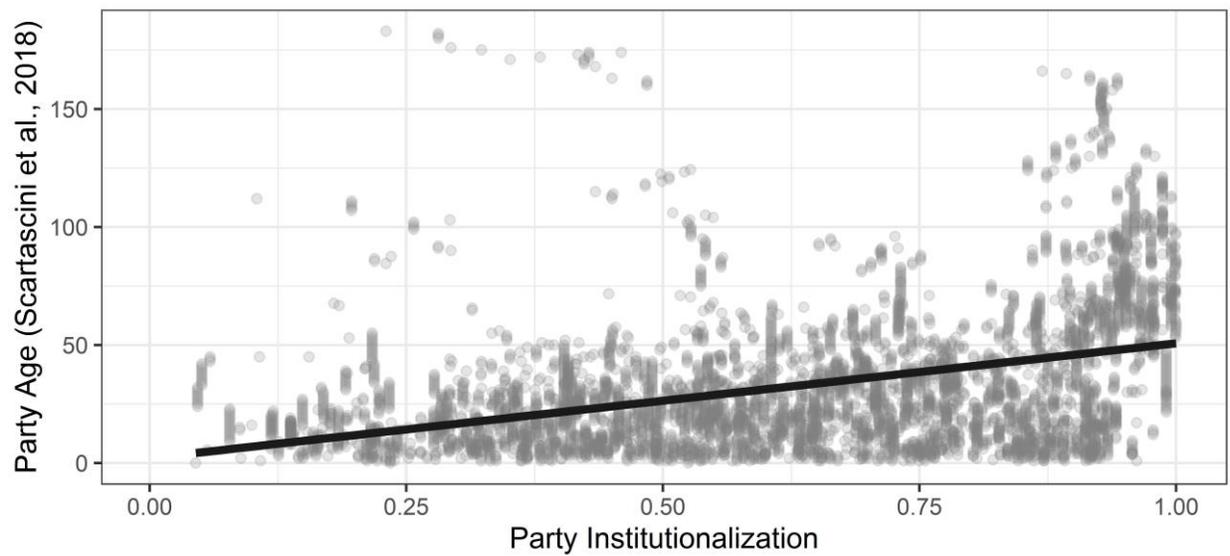


Figure A1. Party Institutionalization and Party Age