



Classifying Clientelism of Political Parties: Cross-National, Party-Level Explorations

Masaaki Higashijima and Hidekuni Washida

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Please address comments and/or queries for information to:

V-Dem Institute
Department of Political Science
University of Gothenburg
Sprängkullsgatan 19, Box 711
SE 40530 Gothenburg
Sweden
E-mail: contact@v-dem.net

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Classifying Clientelism of Political Parties: Cross-National, Party-Level Explorations *

Masaaki Higashijima[†]

Hidekuni Washida[‡]

Associate Professor

Associate Professor

University of Tokyo

Toyo University

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[†]Email: higashi@iss.u-tokyo.ac.jp.

[‡]Email: washida@toyo.jp.

Abstract

Recent research on clientelism has focused on varieties of clientelism while suggesting that clientelistic exchanges differ in terms of the strength of monitoring and enforcement mechanisms whereby politicians deliver benefits to voters in exchange for political support. By using newly collected V-Party data (1970-2019, 1,844 political parties from 165 countries), we identify two prominent types of clientelism that recent studies have suggested, relational clientelism and single-shot clientelism. While comparing our results with those based on other existing data sets, we suggest that it is important to unpack clientelistic linkages at the party level to grasp fine-grained differences in clientelism across parties within states. We then use our indicators to explore the relationship between democracy, development, and clientelism. Our analysis finds that relational clientelism persists even in rich and advanced democracies while the effect of democracy on single-shot clientelism has a curvilinear relationship with economic development.

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Introduction

The study of clientelism has been one of the fastest growing research areas in comparative politics over the past few decades (Kitschelt and Wilkinson 2007; Hicken 2011; Hicken and Nathan 2020). Surveys and experiments have shed light on micro-level relationships between brokers and clients (e.g., Wantchekon 2003; Stokes et al. 2013; Kramon 2016), whereas other scholars have conducted case studies and cross-national statistical analyses to identify macro-level patterns of clientelistic practices (e.g., Keefer 2007; Berenschot 2018; Yildirim and Kitschelt 2020). Given its rich implications, clientelism has offered a fertile research program in which scholars have used multiple methods to explore where clientelism comes from and what consequences it brings.

By using a newly collected, cross-national, party-level data set, this paper revisits the issue of cross-nationally classifying clientelism, which is an important step in exploring the causes and consequences of clientelistic practices across states. The micro perspective of clientelism is highly useful in illuminating the relationship between brokers and voters, yet this approach does not allow scholars to measure and compare patron-client relationships across countries and political parties. In contrast, the macro perspective that takes the country as the unit of analysis has primarily used country-level data, making it difficult to explore the features of each political party within a country in terms of their strategies for political mobilization, including those through clientelism. This paper bridges these two perspectives by classifying clientelism at the party-level in a global panel data set.

The primary goal of this paper is to understand patterns of clientelism focusing on political parties. Clientelistic mobilization has long been discussed as a mobilization strategy, with its characteristics often compared with those of pork-barrel and program-based policies (Kitschelt and Wilkinson 2007; Hicken 2011; Stokes et al. 2013). Additionally, recent studies have started exploring the manner in which different types of clientelism operate, pointing to dissimilar patterns of clientelistic linkages between politicians and voters (Nichter 2018; Yildirim and Kitschelt 2020; Hicken and Nathan 2020). With these issues in mind, we explore the Varieties of Party Identity

and Organization (V-Party) dataset (Version 2, [Lindberg et al. 2022](#)), a comprehensive party-level data set recording parties' mobilizational and organizational practices, to cross-nationally map patterns of clientelism.

Specifically, our principal component analysis confirms that clientelism can be classified into (1) a long-term, iterative relationship between parties, brokers, and voters and (2) short-term, one-shot interactions between those actors. The identified patterns of clientelism concur with the recent development of clientelism conceptualization, namely, "relational clientelism" ([Nichter 2018](#)) and "single-shot clientelism" ([Yildirim and Kitschelt 2020](#)).¹ Compared to [Yildirim and Kitschelt \(2020\)](#)'s Democratic Accountability and Linkages Project (DALP), which is cross-sectional data (2008/2009) on clientelism with a smaller number of countries (66 states), our analysis includes a much larger number of states (165 countries) over a longer period of time (1970-2019) and finds a clearer presence of these two types of clientelism.

Based upon this classification, we then use composite indices of these two variants of clientelism for an analysis on the causes of clientelism to validate the measures. Specifically, we analyze the effects of democracy and development on clientelism – one of the major topics in research on the macro-level causes of clientelism ([Keefer 2007](#); [Keefer and Vlaicu 2008](#); [Kitschelt and Kselman 2013](#); [Stokes et al. 2013](#); [Van Ham and Lindberg 2015](#); [Yildirim and Kitschelt 2020](#)). Our analysis reveals that the effects of democracy and economic development on clientelism differ depending upon the type. For example, relational clientelism tends to persist even in rich, advanced democracies while single-shot clientelism has a curvilinear relationship with economic development. In addition, we also find significant differences between ruling and opposition parties' clientelistic practices depending upon democracy and development.

This paper contributes to the literature on clientelism in several ways. First, we empirically identify the two types of clientelism that scholars have suggested by using comprehensive panel data on political parties. To the best of our knowledge, this study is the first scholarly attempt to capture the two prominent patterns of clientelism

¹Other recent studies resonate with this typology ([Aspinall et al. 2022](#); [Hicken et al. 2022](#)).

in time-series cross-sectional data including both incumbent and opposition parties. Second, using this most comprehensive data set, this study first explicitly models the inverted U-shaped relationship between political and economic development and clientelism, which has long been regarded as one of the most important issues in clientelistic exchange and strongly suggested by the literature, but few scholars have directly modeled and empirically examined this relationship in a systematic manner. In so doing, we also point to the conditions under which this bell-shaped relationship may appear. Our analysis contributes to remediating the mixed findings on the curvilinear relationship between clientelism and economic and political development, thus illuminating why clientelism persists in some rich democracies but withers in others.

Comparative Politics of Clientelism

Scholars have long researched clientelism as an important subject in the field of comparative politics (Scott 1972; Shefter 1977). In particular, the past decades have seen a bulk of pertinent studies on clientelism, advancing our understanding of this phenomenon (Kitschelt 2000; Piattoni 2001; Stokes 2005; Scheiner 2005; Kitschelt and Wilkinson 2007). According to Hicken (2011), clientelism is defined as the relationship in which an actor in a superior political, economic, and/or social position (the patron) grants various favors to another actor in a subordinate position (the client) in exchange for the client's political support (i.e., vote). Clientelistic relationships are thus typically hierarchical and involve iterated personal interactions in which the behavior of each actor is contingent on the behavior of the other.

The concept of clientelism becomes clearer when we compare it to other distributive strategies employed by politicians (Stokes et al. 2013). First, clientelistic exchange differs from economic distribution via programmatic policies in that it is not exercised according to formal rules (e.g., laws or policy programs) that mostly reflect policy demands by the citizenry. Second, clientelist distribution also differs from pork barrel distribution in that clientelism primarily targets particular individuals and households

whereas pork barrel distribution targets certain social groups and regions (Aspinall et al. 2022, pp.6-8). Based upon these distinct characteristics of clientelism, scholars have conducted analyses comparing clientelism to vote-buying (Stokes 2005), turnout buying (Nichter 2008; Szwarcberg 2015), and a combination of both (Gans-Morse, Mazzuca, and Nichter 2014).

Recent research suggests that clientelist practices can be classified into several patterns: When there is an exchange between votes and favors, some of the features of clientelism defined above may work differently (Kramon 2017; Mares and Young 2019; Hicken and Nathan 2020). Specifically, we discuss two issues to focus this variety of clientelism discussion. First, clientelistic exchange assumes that patrons can monitor their clients to solve the commitment problem: Voters may not vote for politicians after receiving benefits. The issue is that although monitoring mechanisms are observed particularly in cases where secret voting had yet to be introduced (Mares 2015; Kuo and Teorell 2017) and in some authoritarian regimes where ethnic and party networks are strong (Corstange 2016; Frye, Reuter, and Szakonyi 2019), in many cases the monitoring mechanisms seem to be weaker than previously believed (Hicken and Nathan 2020).

Second, in addition to the surveillance mechanism, the situation in which the relationship between the two parties is iterative and long-term is likely to mitigate the commitment problem. When both patrons and clients can expect a long-term relationship, politicians (patrons) are likely to be punished in the next election if they do not appropriately address the voters' (clients') concerns after receiving their votes, and accordingly, voters are also likely to find it difficult to not vote for the politicians because politicians may not work for the voters in the future if the voters deviate from the commitment. In this regard, long-term, iterative relationships enable both actors' commitment to be credible and thus lead to enforcing exchanges of votes and favors (Stokes 2005; Nichter 2008; Larreguy, Marshall, and Querubin 2016; Oliveros 2021).

In reality, we see much variation in the aforementioned two mechanisms that enable clientelistic exchange. We can locate clientelistic linkages across a wide spectrum: At one extreme, we find clientelistic relationships where both monitoring and enforce-

ment mechanisms operate strongly; at the other extreme, we find a type of clientelism where both mechanisms are extremely weak. The former type of clientelism is often based on long-term relationships, which are generated through dense party organizations, centralized government institutions, and/or employment and job security in the public sector and private companies. Scholars conceptualize this type of clientelism as “relational clientelism” (Nichter 2018). In relational clientelism, brokers mediate between patrons and clients in the exchange of benefits and votes. Amid this exchange, brokers’ tight, daily relationships with clients through hierarchical organizations enable patrons to resolve monitoring and enforcement problems (Yıldırım and Kitschelt 2020).

In contrast, the latter type of clientelism can be conceptualized as “single-shot clientelism” or “electoral clientelism,” wherein organizational ties linking patrons, brokers, and clients are relatively weak and therefore the monitoring and enforcement mechanisms do not function properly (Novaes 2017; Yıldırım and Kitschelt 2020; Hicken et al. 2022). This type of clientelism makes it more difficult to ensure credible exchange between votes and benefits (Yıldırım and Kitschelt 2020). That being said, even in this type of clientelism, studies suggest that not a few voters cast their votes for their patron politicians. To offer answers for this puzzle of exchange, comparativists point to mechanisms complementing monitoring and enforcement, such as the roles of goods provisions by politicians as costly signals of their policy competence (Muñoz 2018; Kramon 2017), reciprocal norms shared among patrons, brokers, and clients (Finan and Schechter 2012), and the importance of social networks (Cruz 2019; Ravanilla, Haim, and Hicken 2021).

Classifying Clientelism

As reviewed in the previous section, clientelistic practices are different according to how the mechanisms of monitoring and enforcement operate. Building on the recent classification of relational and single-shot clientelism (Aspinall et al. 2022; Berenschot

and Aspinall 2020; Hicken and Nathan 2020; Hicken et al. 2022; Yildirim and Kitschelt 2020; Mares and Young 2016; Nichter 2018), this section identifies and operationalizes these two types of clientelism by employing party-level panel data. We then compare our estimation results with the existing indices (from V-Dem and DALP). We suggest that the V-Dem data does not allow us to capture the two types of clientelism at the party level, whereas the DALP data is cross-sectional with limited country coverage and thus which factors contribute to strengthening different types of clientelism still remains an open question.

A Principal Component Analysis of Clientelism

Before selecting relevant variables to classify types of clientelism via principal component analysis (PCA), we will reiterate the basic characteristics of relational clientelism and single-shot clientelism. In relational clientelism, political parties consolidate electoral support by binding voters and brokers (e.g., bureaucrats, full-time party staff, managers or employers of state-run companies) into long-term relationships within hierarchical organizations through which patrons can distribute various state resources. These benefits range from daily necessities and constituency services to various welfare program benefits, small projects, employment in the public and private sectors, and preferential treatment in licensing and public procurement. Brokers are dependent on parties with regard to their careers and livelihoods and thus have strong incentives to mobilize electoral support not only through positive inducements but also through surveillance and coercive threats of removing crucial benefits for voters. To effectively enforce these clientelistic relationships, parties exert various kinds of formal and informal influence on budgets, state bureaucracy, businesses, and local communities. This type of clientelism has been widely observed in the former Communist Bloc countries of Eastern Europe, Russia, and Central Asia (Remington 2008; Mares and Young 2016, 2019; Higashijima 2022) as well as dominant party states that have appeared in Latin America, Asia, and Africa (Greene 2007; Magaloni 2006; Washida 2019; Weiss 2020a).

In contrast, in single-shot clientelism or electoral clientelism, loosely connected bro-

kers (e.g., supporters, family members and relatives, business associates, paid community residents, and criminal groups) are mobilized in an *ad hoc* manner during election campaigns (Aspinall et al. 2022; Hicken et al. 2022; Yıldırım and Kitschelt 2020). Brokers are not necessarily embedded in hierarchical organizations in the same manner as well-institutionalized parties and thus they are mobilized mainly during election campaigns carried out by individual candidates. Candidates raise their campaign funds by themselves and distribute cash, consumer goods, food, and other relatively small-scale benefits to voters, expecting that spending reminds voters of the norm of reciprocity or signals their generosity and competence (Kramon 2017). Such spending may prove futile because candidates and brokers lack an effective enforcement mechanism to secure clients' votes. That said, these seemingly ineffective mobilization strategies may persist because voters expect politicians to distribute money for voters' benefits and candidates feel obliged to deliver benefits to compete with other rival candidates who may also deliver benefits to garner votes. Single-shot (electoral) clientelism has been widely observed in various cases in Southeast Asia, including the Philippines, post-Suharto Indonesia, and democratic spells of Thailand; Latin America, such as Peru, Guatemala, and Colombia; and sub-Saharan Africa, such as Benin, Ghana, and Kenya (Aspinall and Berenschot 2019; Aspinall et al. 2022; Hicken et al. 2022; Muñoz 2018; Kramon 2017).

With the aforementioned conceptualizations of clientelism in mind, we examine and operationalize relational and single-shot clientelism by conducting a principal component analysis of V-Party data. To the best of our knowledge, the V-Party data set is the most extensive party-level panel data that comprehensively measures the organizations, identities, election campaigning methods, and policy platforms of 1,955 political parties in 169 countries from 1970 to 2019. Specifically, we use the following six items from the V-Party data set (Lindberg et al. 2022).

The first two items capture parties' identity in clientelistic issues and the salience of clientelistic appeals in parties' discourse. Specifically, the V-Party measures a party's identity in respective issues based on "the positions that a party expressed before

the election through official communication, e.g., election manifesto, press releases, official speeches and media interviews.” Drawing from the identity variables, the first item measures to what extent a political party depends upon clientelistic exchange when mobilizing supporters (*v2paclient*).² As the first item only measures the party position in clientelistic interactions, we also include the second item, which evaluates the salience of clientelistic mobilization. It measures how outstanding clientelistic exchange is as a tool in mobilizing supporters for a political party (*v2pasalie_11*).³

Although these two items are useful in capturing how important clientelistic practices are for political parties, they do not necessarily differentiate what kinds of benefits political parties distribute, what channels and sources they employ, as well as to what extent they can enforce clientelistic exchange by employing their organizational infrastructure. To consider these practices, the third and fourth items relate to the effectiveness of party machines that contribute to strengthening monitoring and enforcement mechanisms. As discussed prior, relational clientelism relies on hierarchical party machinery for surveillance and contingent rewards and punishment for voters, whereas single-shot (electoral) clientelism lacks a comparable organizational foundation and resorts to informal, private networks. To measure the strength of mass party organizations, we include items that evaluate whether parties have permanent party offices and party staff in local communities (*v2palocoff* and *v2paactcom*).⁴ In relational clientelism, party offices and staff serve as disciplined brokers who collect information about the electorate’s daily needs and partisanship and deliver benefits contingent on voters’ turnout and political support. Party members and activists are tied to their party’s fate, embedded in the incentive structure for climbing up the career

²Experts are asked: “To what extent do the party and its candidates provide targeted and excludable (clientelistic) goods and benefits - such as consumer goods, cash or preferential access to government services - in an effort to keep and gain votes?”

³Experts are asked to select the issue that they think as the most important in characterizing the party from a list of possible issues: “Which of the following issues are most relevant for the party’s effort to gain and keep voters?” Specifically, we are interested in whether they select the item: “Clientelism in order to keep or gain votes (the distribution of targeted and excludable benefits towards supporters.” The values of this item are recorded as a continuous variable between zero and one.

⁴The questions are: “Does this party maintain permanent offices that operate outside of election campaigns at the local or municipal-level?” and “To what degree are party activists and personnel permanently active in local communities?”

ladder, and thereby strongly motivated to monitor and enforce clientelistic exchange. In contrast, parties without such organizational infrastructure rely on individual candidates' personal networks to cultivate votes, which often lack an effective enforcement mechanism.

Similarly, the fifth and sixth items represent the funding sources of election campaigning. Again, the relational type of clientelism enables patrons to enjoy access to state resources, whereas the single-shot type usually lacks such state resources and relies more on individual candidates to raise campaign funds by themselves (Yildirim and Kitschelt 2020; Aspinall et al. 2022). Therefore, we generated two variables on the sources of campaign funds: the informal use of state resources as an incumbent party⁵ and the funds of individual candidates (*v2pafunds_5* and *v2pafunds_7*).⁶ It is worth noting that state resources here are not necessarily limited to the central government. The data implies that opposition parties often receive state resources, for example, by controlling governorship in state governments (Langfield 2014; Lucardi 2016; Weiss 2020b).

One may wonder whether we should use these four variables as components of clientelism rather than explanatory variables for clientelism (e.g., Yildirim and Kitschelt 2020). Based upon the recent conceptual refinement of clientelism, we assume that relational clientelism and a strong party machinery are tightly intertwined and thus evolve in tandem rather than take the view that strong party organizations first exist and then produce relational clientelism. Indeed, previous research indicates that the impending threat from elites and the masses induces political leaders to institutionalize mechanisms of credible resource sharing through political institutions including political parties (Meng 2020; Reuter 2017; Slater 2010; Smith 2005; Svulik 2012; Washida 2019; Zeng 2019).

We standardized these items and conducted an unrotated principal component analysis. The results are presented in Table 1, and the factor loading plot appears in

⁵This item does not include formal subsidies for political parties.

⁶The V-Party asks: "What were the major sources of party funds for this election campaign?" The values of these items are also recorded as continuous.

1.⁷ The analysis identifies two major components, which we can interpret as relational and single-shot types of clientelism. The substantive image implied by the results fit well with the conceptualizations presented above. The factor loading in the first component is all positive and sufficiently high except for the sixth item (fundraising by individual candidates). In contrast, parties ranked higher in the second component tend to lack robust party machinery (e.g., local offices and party staff and activists) and therefore rely heavily on individual candidates' efforts in raising funds rather than depend upon state expenditures. The first axis explains 38.9% of the variance and the second axis explains 27.9% of the variance, meaning that more than two-thirds of the total variance are explained by this model and both components look almost equally important in explaining variation. We decided on the number of dimensions by referring to both eigenvalues (shown in Table 1) and a scree plot (Appendix B.1). Based upon the estimation results, we created predicted values of relational and single-shot clientelism by computing principal component scores. The indicators are standardized so that the means and standard deviations of each component are set to zero and one, respectively.

Table 1: Results of principal component analysis

	I	II
Clientelistic mobilization	0.6973	0.4854
Saliency of clientelistic issues	0.6440	0.5196
Local party offices	0.6874	-0.5926
Local party activists/personnels	0.6214	-0.6561
Informal use of state resources	0.7432	0.1233
Funds raised by candidates	0.0824	0.6109
Eigenvalue	2.319	1.676
Variance explained	0.389	0.279

Note: N=6228. **Bold numbers**> |0.4|

To put the estimation results into context, Appendices C.1 and C.2 list 50 parties with high principal component scores of relational and single-shot clientelism, respectively. Although we include all the parties in the principal component analysis, the lists restrict the sample to parties that experienced more than three elections to ensure the results

⁷For descriptive statistics, see Appendix A.1.

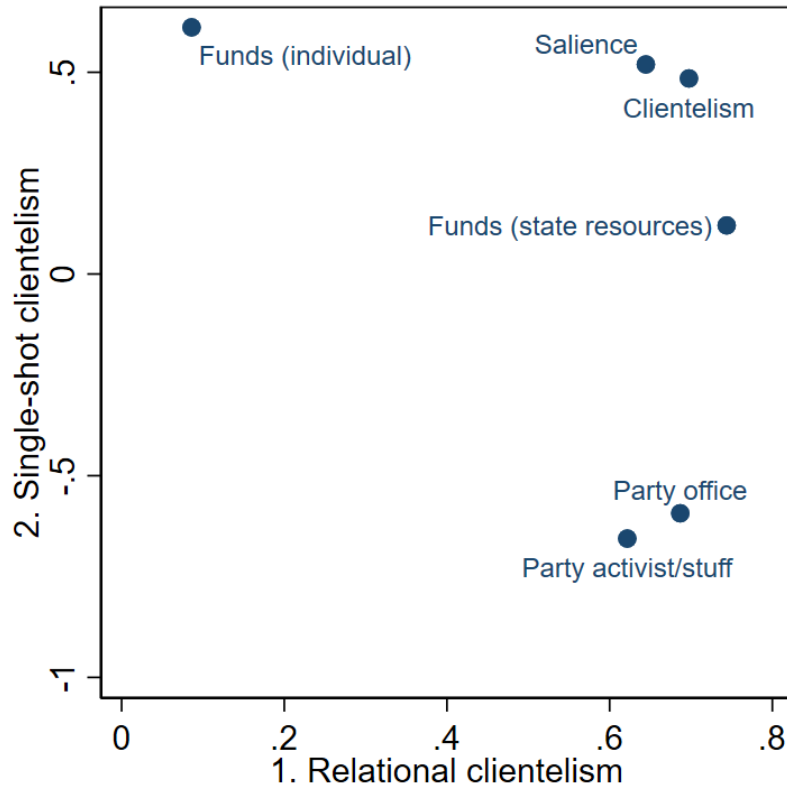


Figure 1: Factor loading plot

fit well with our intuition. Interestingly, parties ranked higher in the lists generally resonate with prominent cases referred to in the existing studies of clientelism. For example, Appendix C.1 (relational clientelism) includes typical cases taken up in the studies of authoritarian dominant parties and relational clientelism (e.g., [Brownlee 2007](#); [Geddes, Wright, and Frantz 2014](#); [Greene 2007, 2010](#); [Higashijima 2022](#); [Magaloni 2006](#); [Reuter 2017](#); [Washida 2019](#)), such as PDGE (Equatorial Guinea), PRI (Mexico), Colorado Party (Paraguay), PJ (Argentina), ZANU-PF (Zimbabwe), RPP/UMP (Djibouti), CCM (Tanzania/Zanzibar), KMT (Taiwan), UMNO (Malaysia), Golkar (Indonesia), Nur Otan (Kazakhstan), UR (Russia), and the Communist Party (Soviet Union).⁸

Similarly, typical cases discussed by the research on single-shot clientelism appear in Appendix C.2, such as parties in Thailand (NDP, PKS, PCT, NAP, PP, TCP), the Philippines (PNP, LDP, KMB, Lakas-CMD, PLP), Guatemala (PID, UNE, PR, PAN, FRG, UCN, MLN), Brazil (PPB, PTB), and Benin (UDNS, MADEP, PSD, RB).⁹ In stark

⁸Some cases of developed democracies, such as DC (Italy, [Piattoni 2001](#)), are also listed. The Japanese LDP ([Scheiner 2010](#)) is also ranked relatively high (89th).

⁹It is also intuitive to see that some Malaysian parties, such as PBS (49th) and PBB (77th), are ranked

contrast to relational clientelism (Appendix C.1), multiple parties join the list from the same countries in the case of single-shot clientelism (Appendix C.2). The numbers of cases of winning or retaining office within the total number of contested elections are much lower than those of higher-ranked countries in relational clientelism (Appendix C.1). This implies that single-shot clientelism may be more easily formed, and cementing electoral support through single-shot clientelism may also be more difficult than through relational clientelism.

Our principal component analysis of the party-level panel data enables us to draw a comprehensive, accurate map of the varieties of clientelism by delving into variation in the two types of clientelism across political parties on the globe. That being said, one important issue is: Do the results of our classification differ from those of other existing data sets?

Comparisons with Existing Indicators of Clientelism

Here we compare our measurement strategy with two prominent macro- and party-level indices proposed by previous research, namely the Varieties of Democracy (V-Dem) project (Coppedge et al. 2022) and Democratic Accountability and Linkages Project (DALP) (Kitschelt and Kselman 2013; Yıldırım and Kitschelt 2020). Through a comparison with these indicators, we highlight the differences and strength of our approach. Table 2 summarizes the main features of each project, such as country and temporal coverage, types of clientelism, and levels of aggregation.

Table 2: Main features of the three projects on clientelism measurement

Data Source	V-Dem	DALP	V-Party
Cross-national coverage	175 countries	88 countries	165 countries
Time-series coverage	1789-2021	2008 or 2009	1970-2019
Types of clientelism	No distinction	Relational/single-shot	Relational/single-shot
Level of aggregation	Country	Party (506 parties)	Party (1,844 parties)

higher in terms of single-shot clientelism. They are both parties in the Borneo states (Sabah and Sarawak), where the leading party of peninsular Malaysia (UMNO, listed in Appendix C.1) lacks strong party machinery and thereby needs to rely on vote-buying exercised by these coalition partners (although PBS sometimes operated as an opposition party).

V-Dem Data Set

Most empirical studies have analyzed cross-national variance in the prominence of clientelistic mobilization. In particular, a series of indicators developed by the V-Dem project (Coppedge and Ziblatt 2022; Coppedge and Wilson 2022) have contributed to renewing interest in clientelism.¹⁰ The V-Dem provides four indicators related to clientelism, that is: (1) the degree of vote buying (*v2elvotbuy*)¹¹, (2) the extent to which excludable goods (private and club goods) and public goods make up a share of the budget (*v2dlencmps*),¹² (3) an assessment of whether the linkage strategies of major parties are clientelistic or policy/programmatic (*v2psprlnks*),¹³ and (4) a composite index of these three items created using a Bayesian factor analysis model (*v2xnp_client*).¹⁴ Most studies have used this composite index to measure national-level clientelism.

An advantage of using the V-Dem data is its extensive coverage of not only the number of countries (175) but more importantly of time (from 1789 to 2021). Many scholars have produced important new insights for the clientelism studies by using the V-Dem indicators (e.g., Lindberg, Lo Bue, and Sen 2022; Lo Bue, Sen, and Lindberg 2021; Lundstedt and Edgell 2020; Sigman and Lindberg 2017; Singh 2019; Van Ham and Lindberg 2015). However, the V-Dem indices suffer several drawbacks. First, although these indicators are based upon a broad definition of clientelism (e.g., Hicken 2011), they do not necessarily correspond to the classifications elaborated by the recent studies (i.e., relational and single-shot types of clientelism). As individual indicators on clientelism in the V-Dem data set are drawn from different theoretical perspectives, it is unclear to what extent they overlap or capture mutually distinct aspects of different

¹⁰The V-Dem constructs indices by applying a Bayesian item response model to originally collected, expert survey data.

¹¹The question is: “In this national election, was there evidence of vote and/or turnout buying?” The V-Dem clarifies the meaning by noting: “Clientelistic relationships include the targeted, contingent distribution of resources (goods, services, jobs, money, etc) in exchange for political support.” For details, refer to the V-Dem codebook (Coppedge et al. 2022)

¹²The V-Dem asks: “Considering the profile of social and infrastructural spending in the national budget, how ‘particularistic’ or ‘public goods’ are most expenditures?”

¹³The question is: “Among the major parties, what is the main or most common form of linkage to their constituents?” and the options range from clientelistic to policy/programmatic.

¹⁴The question is: “To what extent are politics based on clientelistic relationships?” The first three items are inverted so that higher values indicate a higher extent of clientelism.

types of clientelism.

Moreover, macro-level indices like the V-Dem data are susceptible to aggregation bias, which makes it difficult to compare political parties, a main actor in mobilizing political support through clientelism. In the V-Dem expert survey, experts are asked to evaluate national-level averages of clientelistic practices. In other words, each coder evaluates a specific country-year data point by referring to multiple parties within the country. However, the V-Dem does not necessarily adopt a unified weighting scheme in the aggregation process or specific criteria regarding experts' selection of "major parties" when evaluating the degree of national-level clientelism. This runs the risk of ineligible measurement errors between the degrees of political parties' clientelism within a country. Although the V-Dem adjusts inter-coder differences of evaluation criteria and coder reliability (Coppedge et al. 2020), it is uncertain to what extent their approach can alleviate the aggregation bias. In this regard, a party-level data set like the V-Party helps scholars directly analyze inter-party differences within countries.

Table 3: Correlations between V-Party-based indicators and V-Dem indicators

	Party-level		Country-level		
	Relational	Single-shot	Vote-buying	Excludable	Nonprogram
Government parties					
Single-shot	0.0832	-			
Vote-buying	0.4383	0.6265	-		
Excludable goods	0.3759	0.3716	0.6283	-	
Nonprogram	0.4590	0.5154	0.7624	0.6747	-
Composite index	0.4578	0.5961	0.9149	0.7700	0.9123
Opposition parties					
Single-shot	-0.0402	-			
Vote-buying	0.2838	0.5680	-		
Excludable goods	0.2045	0.3781	0.6441	-	
Nonprogram	0.2240	0.5277	0.7835	0.6881	-
Composite index	0.2577	0.5650	0.9196	0.7842	0.9153

Note: N=2,699 (government parties), N=3,278 (opposition parties). **Bold numbers** > |0.4|

To compare our indicators with the V-Dem indicators, Table 3 presents simple bivariate correlations between our relational and single-shot indicators and four V-Dem indicators related to clientelism. To simplify the interpretation, the three V-Dem indicators aside from the composite index are reversed so that higher values

represent a higher degree of clientelism. We set the unit of analysis as party and then merge the V-Dem indicators with the party-level V-Party data. In calculating the correlations, we divide the sample into government parties (including coalition partners) and opposition parties (including unaffiliated parties).¹⁵

The table indicates that, although the V-Dem measures of clientelism are associated with both relational and single-shot clientelism, the V-Dem indicators have slightly higher correlations with single-shot clientelism. In addition, these V-Dem indicators are more positively correlated with the two types of clientelism in the sample of government parties than those in the opposition parties sample. This may be an indication of an aggregation bias: The V-Dem expert evaluation is primarily based upon ruling parties. Moreover, among the three individual indicators of the V-Dem, the item on excludable benefits has relatively smaller correlations with the indicators of relational and single-shot clientelism. It is worth noting that high correlations among the V-Dem individual indicators suggest that they are likely to overlap conceptually and thus they may not be suitable in distinguishing between the two dissimilar types of clientelism.¹⁶

DALP Data Set

In contrast to the country-level indicators, party-level measurements enable us to conduct fine-grained analyses. By setting the unit of analysis at the party level, we are able to directly analyze clientelism as parties' mobilization strategies. In this regard, the aforementioned DALP database provides an extensive party-level data set, which covers 506 parties of 88 countries in 2008/2009. It features mainly four aspects of information regarding political parties: (a) local and municipal-level party organizations, (b) exchange mechanisms, (c) monitoring and enforcement, and (d) party policy

¹⁵We designated a party as a governing party if the party belongs to the first (senior partners) and second (junior partners) categories of *v2pagovsup* in the V-Party data and opposition parties otherwise.

¹⁶The table also indicates that government parties tend to exploit the incumbency advantages in developing relational clientelism, resonating with [Yildirim and Kitschelt \(2020\)](#)'s finding. In contrast, regarding single-shot clientelism, we see no substantial differences between ruling and opposition parties. This implies that, intriguingly, opposition parties enjoy equivalent opportunities to engage in single-shot clientelism ([Yildirim and Kitschelt 2020](#)).

positions.

To explore the types of clientelism, Kitschelt and his colleagues (Yıldırım and Kitschelt 2020; Kitschelt and Kselman 2013) conducted a principal component analysis focusing on the types of benefits delivered in clientelistic exchange. Specifically, they used the items of (b1) consumer good provision,¹⁷ (b2) preferential public benefits,¹⁸ (b3) employment opportunities,¹⁹ (b4) government contracts,²⁰ and (b5) regulatory proceedings.²¹

Restricting the sample to less developed countries (362 parties in 66 countries), Yıldırım and Kitschelt (2020) argued that clientelistic exchanges can be classified into relational and single-shot modes. Based on this classification, the results of their analyses include the implication that electorally and organizationally robust incumbent parties are more likely to develop relational clientelism, whereas organizationally weak opposition parties tend to resort to single-shot clientelism in the developing world.

Although their work is an important first step for the studies of party-level clientelism, there are a couple of issues to be addressed by further research. The first issue is that, in addition to the problem of a limited geographic scope (88 countries),²² the time-coverage of the DALP data is limited to a single data point (2008 or 2009). In general, analyses of cross-sectional data are likely to encounter omitted variable biases because it is difficult to control for country- and time-specific confounders. We do not know yet whether their findings apply when we use panel data covering a wide range

¹⁷Examples include “food or liquor, clothes, cookware, appliances, medicines, building materials, etc.”

¹⁸Examples include “preferential access to subsidized prescription drugs, public scholarships, public housing, better police protection, etc.”

¹⁹Examples include “post office, janitorial services, maintenance work, jobs at various skill levels in state owned enterprises or in large private enterprises with government contracts and subsidies, etc.”

²⁰Examples include “public works/construction projects, military procurement projects without competitive bidding to companies whose employees support the awarding party.”

²¹The benefits are provided by influencing “the application of regulatory rules issued by government agencies (e.g., more lenient tax assessments and audits, more favorable interpretation of import and export regulations, less strict interpretation of fire and escape facilities in buildings, etc.).”

²²As pointed out, Yıldırım and Kitschelt (2020) limited the geographic scope to non-developed countries (66/88 countries) in their analysis. This may produce an unintended selection bias and make it difficult to explore curvilinear relationships between clientelism and development, which has been examined in Kitschelt and Kselman (2013), Kitschelt and Wilkinson (2007), and Van Ham and Lindberg (2015).

of countries and time periods.

The second problem is the validity of the two-dimensional conceptualization using DALP. Although their classification based on the type of goods is theoretically reasonable, these five items are in fact highly correlated. Therefore, we need to be careful in validating the two-dimensional measurements of clientelism. For example, standard criteria in selecting the number of dimensions of a principal component analysis using the DALP data set, such as eigenvalues or a scree plot, indicate that a single dimension is sufficient to explain the variance (Appendices B.2 and B.3)

We replicated the principal component analysis (both with and without rotation) using the DALP dataset (excluding developed countries, consistent with [Yıldırım and Kitschelt 2020](#)). We found that the first dimension explains most of the variance (79%), while the second dimension explains only a marginal variance (9%). The eigenvalue of the first dimension is 3.93, whereas that of the second dimension is less than 0.5, falling short of the standard cut-point (1.0). The results are similar when we use all 88 countries included in the data (See Appendices B.2 and B.3). Based on these two dimensions, [Yıldırım and Kitschelt \(2020\)](#) created indicators of relational clientelism (means of b2, b3, b4, and b5) and single-shot clientelism (b1).²³ However, the correlation between these two indicators is extremely high (greater than 0.8). Their measure of relational clientelism is highly correlated with our measure of both relational and single-shot clientelism, and the same holds for their measure of single-shot clientelism.²⁴ This indicates that their measurements do not necessarily capture well the varieties of clientelism.

In addressing the issues that DALP encounters, our principal component analysis of the V-Party data is highly useful. The broad country and time coverage of our data set is useful for scholars in extending analytical scopes of cross-national party-level

²³They also examined the index of "preponderance of relational clientelism" (differences between them).

²⁴The correlation with our relational clientelism index are respectively 0.60 (means of b2/3/4/5) and 0.53 (b1), while the correlation with our single-shot clientelism index are 0.41 (means of b2/3/4/5) and 0.51 (b1). To calculate these correlations, we first merged the V-Party data of 2008/2009 with the DALP data by matching party names present in both of the two data sets. Because the V-Party records only the values of election years, we complemented the values of non-electoral years with the values of closest elections conducted between 2000 and 2007.

research of clientelism while increasing measurement accuracy and employing multi-level, panel data estimators. We hope the new indicators of relational and single-shot clientelism contribute to refining comparative analysis of clientelism in future research. As a preliminary step in validating our indicators of party-level clientelism, the next section explores structural determinants of divergent patterns of clientelism by focusing primarily on the differences between governing and opposition parties.

Determinants of Clientelism: Party-Level Panel Data Analysis

In this section, we examine two prominent structural factors that have attracted continuous attention by comparativists, democratization and economic development, on the development of clientelism. Specifically, we assess whether the two types of clientelism have curvilinear relationships with political and economic development, as suggested by [Kitschelt and Kselman \(2013\)](#). We explicitly model the inverted U-shaped relationship between them by employing our new indices and panel data.

In the meantime, we also focus on the following three important issues regarding the effect of political and economic development on clientelism. First, given that the effect of democracy can be conditional on the level of economic development ([Kitschelt and Wilkinson 2007](#); [Magaloni, Diaz-Cayeros, and Estévez 2007](#)), we examine the conditional effect of democracy on clientelism depending on economic development. Second, as existing studies remain ambivalent regarding the time scope of the effect of democracy on clientelism, we examine both the current state of democracy and the cumulative stock of democratic experience. Third, as ruling parties are in a better position to exploit state resources, we analyze whether government (opposition) parties are more likely to employ relational (single-shot) clientelism ([Yıldırım and Kitschelt 2020](#)).

Note that what we examine here are relevant associations between the key variables, not causality. Using the most comprehensive party-level data of clientelism, we

empirically assess at which levels of economic and political development and under which conditions strong clientelistic practices emerge.

Theoretical Arguments and Hypotheses

Economic Prosperity and Clientelism

Conventional wisdom argues that the relationship between clientelism and economic development is an inverted U-shape due to competing effects (Kitschelt and Kselman 2013; Yıldırım and Kitschelt 2020). On one hand, economic development expands states' revenue, providing political parties with resources to mobilize electorates. This in turn heightens people's expectations of the distributive capacities of political parties. On the other hand, economic development lowers the effectiveness of clientelistic mobilization by increasing the economic autonomy of voters. Voters are less induced by economic incentives when they become more affluent, educated, and urbanized (Kitschelt 2000; Kitschelt and Wilkinson 2007; Weitz-Shapiro 2014). Economic development also enables poor voters to escape from the "poverty trap" imposed by ruling parties (Magaloni 2006). Despite some evidence for this curvilinear relationship (Kitschelt and Kselman 2013), it is still uncertain whether and to what extent economic development promotes and constrains the different types of clientelism.

We argue that these competing effects of economic development operate differently depending on the type of clientelism. Specifically, the positive effect (i.e., increasing resources for political parties) is expected to be stronger for relational clientelism because parties with institutional infrastructure can effectively translate the increased amount of resources into electoral support while limiting the negative effect of economic development (i.e., decreasing marginal return of electoral support from voters). For example, in relational clientelism, parties can extend the quid pro quo relationship to welfare programs, public and private employment, and other crucial benefits to entrench brokers and voters (Frye, Reuter, and Szakonyi 2019; Mares and Young 2019; Rosenfeld 2017). In contrast, the negative effect of economic development may be more salient for single-shot clientelism, which lacks the organizational infrastructure

to attract support from the better-off.

H1a: The prominence of relational clientelism is positively associated with economic development.

H1b: The prominence of single-shot clientelism is strongest in middle-income countries and becomes weaker in poorer and richer countries (inverse U-shaped relationship).

Democracy and Clientelism

In contrast to the association with economic development, we know less about the relationship between clientelism and democracy. Previous literature suggests that similar competing effects are at work. On one hand, electoral competition encourages clientelistic mobilization. When politicians find that their seats are secure, they have fewer incentives to distribute benefits and are instead more inclined to put money in their own pockets. As elections become more competitive, however, politicians start deploying clientelistic appeals. In line with this argument, [Van Ham and Lindberg \(2015\)](#) demonstrate that democratization induces political parties to shift from blatant electoral manipulation and violence to vote-buying.²⁵ On the other hand, democratization encourages alternative mobilization strategies by enhancing the credibility of campaign promises ([Keefer 2007](#); [Keefer and Vlaicu 2008](#); [Kitschelt 2000](#)) or by reducing the effectiveness of materialistic mobilization due to increasingly enlightened and democratic citizens ([Bueno de Mesquita et al. 2003](#); [Magaloni 2006](#); [Magaloni, Diaz-Cayeros, and Estévez 2007](#); [Weitz-Shapiro 2014](#)). Democracy also strengthens institutional checks and balances to constrain clientelistic mobilization, including autonomous media, judicial and audit bodies, and legislative power with effective opposition parties.

Moreover, some studies suggest that the effect of democracy is conditional upon the level of economic development ([Kitschelt and Wilkinson 2007](#); [Magaloni, Diaz-Cayeros,](#)

²⁵They also found a declining trend of clientelism in more democratized countries although it was not statistically significant.

and Estévez 2007). Specifically, Kitschelt and Wilkinson (2007) argue that democracy activates clientelism at the middle level of development because the clientelism-inducing effect of electoral competition exceeds the negative effect associated with increasingly affluent voters. As the economy develops, however, parties turn to a programmatic linkage strategy or “portfolio diversification,” in which they combine private and club/public goods (Magaloni, Diaz-Cayeros, and Estévez 2007; Weitz-Shapiro 2014). Despite this intuition, there have been few systematic empirical analyses to examine the conditional effect of democratization. With these issues in mind, we examine whether the marginal effect of democracy is conditional upon economic development and curvilinearly related to clientelism.²⁶

H2a: The marginal effect of democracy levels on clientelism is stronger in the middle range of economic development and weaker in low- and high-income countries (inverse U-shaped relationship).

This conditional effect may differ according to the types of clientelism. Relational clientelism is expected to be resilient even in developed democracies, whereas practices of single-shot clientelism are likely to be reduced as a country economically develops with affluent and democratic citizens. Therefore, we hypothesize that:

H2b: Democracy levels become more negatively associated with single-shot clientelism than relational clientelism in developed nations.

In addition, another stream of literature examines the long-term, cumulative stock of democratic experience (Keefer 2007; Keefer and Vlaicu 2008; Kitschelt and Kselman 2013; Yildirim and Kitschelt 2020). This body of research suggests that democratic maturity constrains clientelism by enhancing the credibility of programmatic policy

²⁶Because strong associations between economic development and democracy require further elaboration to entangle a complex dynamism, this paper focuses on the short-term, conditional effect of the current level of democracy.

promises, nurturing democratic citizens, and empowering institutional checks and balances. Based on the analysis of DALP, [Kitschelt and Kselman \(2013\)](#) find a constraining effect of democratic stock on clientelism (cf. [Yıldırım and Kitschelt 2020](#)). To examine whether this finding holds in more systematic data, we hypothesize that:

H3a: Democratic maturity constrains the prominence of clientelism.

The cumulative effects of democracy should be more effective in reducing relational clientelism. Although relational clientelism is positively associated with economic development (H1a), multiple cycles of competitive elections and well-institutionalized horizontal accountability make it difficult to sustain the centralized control of political machinery on which relational clientelism relies. In contrast, although single-shot clientelism is reduced by high levels of economic development (H1b), it may be less susceptible to the cumulative experience of democratic politics, because this type of clientelism is exercised in a decentralized manner by diverse actors. Therefore, we derive the following hypothesis.

H3b: The constraining effect of democratic maturity is less strong on single-shot clientelism.

Incumbency, Opposition, and Clientelism

We also expect that the prominence of clientelism may change depending on whether parties are in office or opposition. As reviewed earlier, there is a solid enforcement mechanism in relational clientelism for the credible exchange of benefits for votes by embedding voters in a hierarchy of patron-client relationships. Although this type of clientelism is more effective than single-shot clientelism, parties need to develop a well-coordinated party machinery and establish a firm grip on bureaucracy and substantial parts of the economy. Given the higher costs of investing in organizational infrastructure, ruling parties are in a better position to develop relational clientelism

than opposition parties, which often lack resources and opportunities.

In contrast, single-shot (electoral) clientelism relies on loose networks of brokers employed by individual candidates (Hicken et al. 2022). Although the major resources employed in this type of clientelism, such as cash handouts and the provision of consumer goods, often lacks a credible enforcement mechanism, single-shot clientelism does not require parties to invest in developing hierarchical organizations. Therefore, even opposition parties can enjoy equivalent opportunities for utilizing single-shot clientelism without investing in organizational infrastructure as long as they have access to private resources of their own or informal networks (Yıldırım and Kitschelt 2020). Government parties without a sufficient capacity to develop effective relational clientelism may also have incentives to use this type of clientelistic mobilization.

H4a: The gap between government and opposition parties is more salient in relational clientelism than in single-shot clientelism.

Moreover, the manner in which the effects of economic development and democracy change may differ not only according to the types of clientelism but also the parties' incumbency status. For example, although relational clientelism may thrive even at higher levels of economic development, economic development narrows the incumbency advantage by making it difficult to sustain control over the economy and by providing opposition parties with diverse financial sources for clientelistic purposes. Repeated cycles of competitive elections in developing economies then expand opportunities for opposition parties to learn how to coordinate electoral campaigns, cultivate their support bases by winning governorship at sub-national levels, and develop their own clientelistic networks by occupying budgetary resources of sub-national governments (Langfield 2014; Lucardi 2016; Weiss 2020b).

H4b: The government-opposition gap in relational clientelism tends to be narrower in developed democracies.

Regarding conditional effects on single-shot clientelism, [Yıldırım and Kitschelt \(2020\)](#) suggest that government parties are better at cultivating relational clientelism, whereas opposition parties are more likely to focus on single-shot clientelism. However, because of relatively low costs in developing single-shot clientelism, government parties may also find it useful to develop single-shot clientelism when relational clientelism is not fully available. Therefore, we expect a smaller gap between government and opposition parties in single-shot clientelism and that H2b should apply for both ruling and opposition parties.

Variables and Estimator

To test our hypotheses, we conduct a multi-level panel data analysis. We use the party-level data merged with a series of country-level variables. The main clientelism variables consist of 6,186 party-election years of 1,894 parties in 167 countries from 1970 to 2019, while the number of observations in the following analysis is slightly smaller due to the limited availability of other explanatory variables. The dependent variables are the standardized indicators of relational and single-shot clientelism, drawn from the principal component analysis in the previous section.

To test the effects of economic development on clientelism (H1a and H1b), the main explanatory variables are logged GDP per capita (*e_gdppc* times 1000 from V-Dem) and its squared term. To examine the conditional effect of democracy (H2a and H2b) ([Kitschelt and Wilkinson 2007](#)), we use the lagged polity 2 score and its interaction with economic development indicators (GDP per capita and its squared term). Following the previous literature ([Kitschelt and Kselman 2013,?](#)), we also introduce the weighted sum of polity 2 scores ([Marshall and Jaggers 2020](#)) to measure the stock of democracy (H3a and H3b), which is normalized from zero to one.²⁷ To examine the curvilinear

²⁷We follow the same procedure to calculate the stock of democracy ([Yıldırım and Kitschelt 2020](#)): Taking the sum of 100 years of polity scores with the annual one percent discount rate for each year. We do not use the V-Dem's polyarchy index in the main analysis because it includes vote-buying practices, a component of measurement for clientelism, when measuring fairness of elections. That being said, we check the robustness of the results by using an alternative indicator, the lexical index

relationships with these democracy variables, we introduce their squared terms.

To assess the relationship between the type of clientelism and the incumbency advantage (H4a and H4b), we include the dummy variable of incumbency status (1 for ruling parties, including coalition partners, and otherwise 0). Moreover, to explore whether the effects of economic development and democracy are conditioned by government status, we add the interaction terms between the incumbency dummy and the variables of interest.

In addition to these variables, we include a handful of important control variables that are likely to affect the degree of clientelism, such as lagged economic growth rate (annual growth of *e_gdppc* from V-Dem) and year- and region-fixed effects. We employ a three-level multilevel estimator (hierarchical linear model) to account for the nested structure of the data, i.e., election years nested in the party and then country levels.²⁸

Results and Discussion

Figure 2 presents the results for relational clientelism and single-shot clientelism.²⁹ The upper panels of Figure 2 show the results for relational clientelism, while the lower panels represent those for single-shot clientelism. The left panels show how predicted values of each type of clientelism changes depending on levels of economic development (H1a [upper] and H1b [lower]); The middle panels present how the marginal effects of democracy on each type of clientelism may change according to levels of economic development (H2); The right panel shows how predicted values of each type of clientelism change depending upon the degrees of democracy stock (H3).

of democracy (Skaaning, Gerring, and Bartusevičius 2015), to find the results remain unchanged. See Appendix C.3.

²⁸Here, we assume only the variances of intercepts at the party and country levels as random elements. The results remain robust when we use country-fixed effects models (see Appendix C.4.)

²⁹The regression tables are shown in Appendices A.3 and A.4.

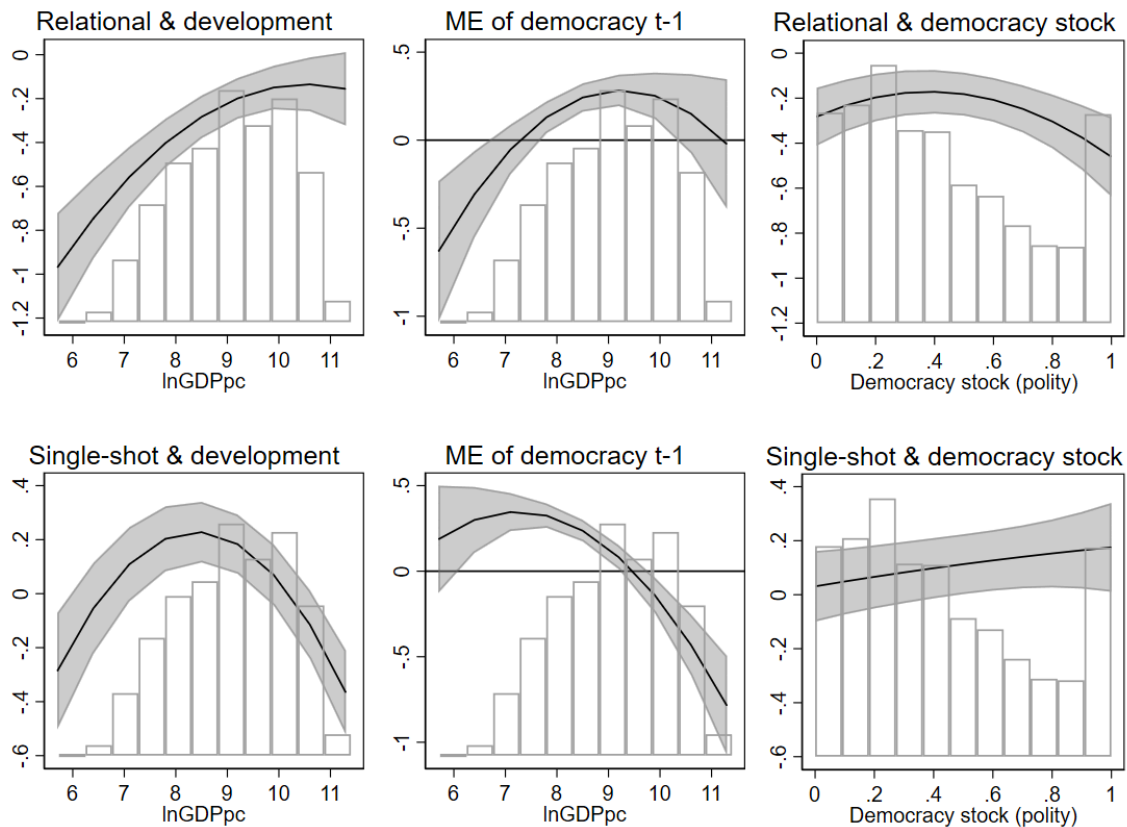


Figure 2: Predicted values of two types of clientelism: development and democracy
 Note: The estimates are based on models 2/3 and 8/9 of Appendices A.3 and A.4, respectively. “ME” means marginal effects.

The upper left panel shows a positive association between relational clientelism and economic development (as expected in H1a). The prominence of relational clientelism reaches its peak when GDP per capita is about 30,000 USD and starts diminishing thereafter. In contrast, the lower left panel indicates that the relationship between single-shot clientelism and economic development follows a clear inverse U-shaped form (as expected in H1b).³⁰ Its peak comes much earlier, around 5,000 USD, and diminishes thereafter. These contrasting findings may suggest a way to interpret the mixed results of previous studies on why economic development suppresses clientelism in some countries but not in others. These findings may also propose an answer to the puzzle why dominant parties are able to sustain clientelistic relationships even after going through high levels of economic development.

³⁰Both the Akaike Information Criteria (AICs) and the Bayesian Information Criteria (BICs) indicate that assuming the curvilinear relationship better explains the variation in both types of clientelism than simple linear relationships.

The middle and right panels of Figure 2 examine H2a/H2b and H3a/H3, respectively. The middle panels illustrate the marginal effects of the current level of democracy. As expected in H2a, the marginal effect of current democracy level reaches its peak in middle-income countries, while it begins to drop in more developed economies in terms of both relational and single-shot clientelism. The findings suggest that the effect of democracy on clientelism varies depending on the level of economic development. Electoral competition encourages political parties to deploy clientelistic mobilization when it pays off and discourages mobilization as economic development makes clientelistic practices costly.

In line with H2b, the middle panels of Figure 2 show that the negative effect of current level of democracy in developed democracies appears only in single-shot clientelism. This indicates that the current state of democracy contributes to reducing single-shot clientelism, whereas relational clientelism persists even in developed economies.

Moving to the right panels, the democracy stock has a slightly curvilinear but negative effect on the prominence of relational clientelism in the long run, supporting H3a. In contrast, the stock of democracy has no constraining effect on single-shot clientelism as expected in H3b. Instead, the relationship between single-shot clientelism and democracy stock is moderately positive. This helps us understand why some developing countries with a long history of democracy still suffer from clientelistic exchange.

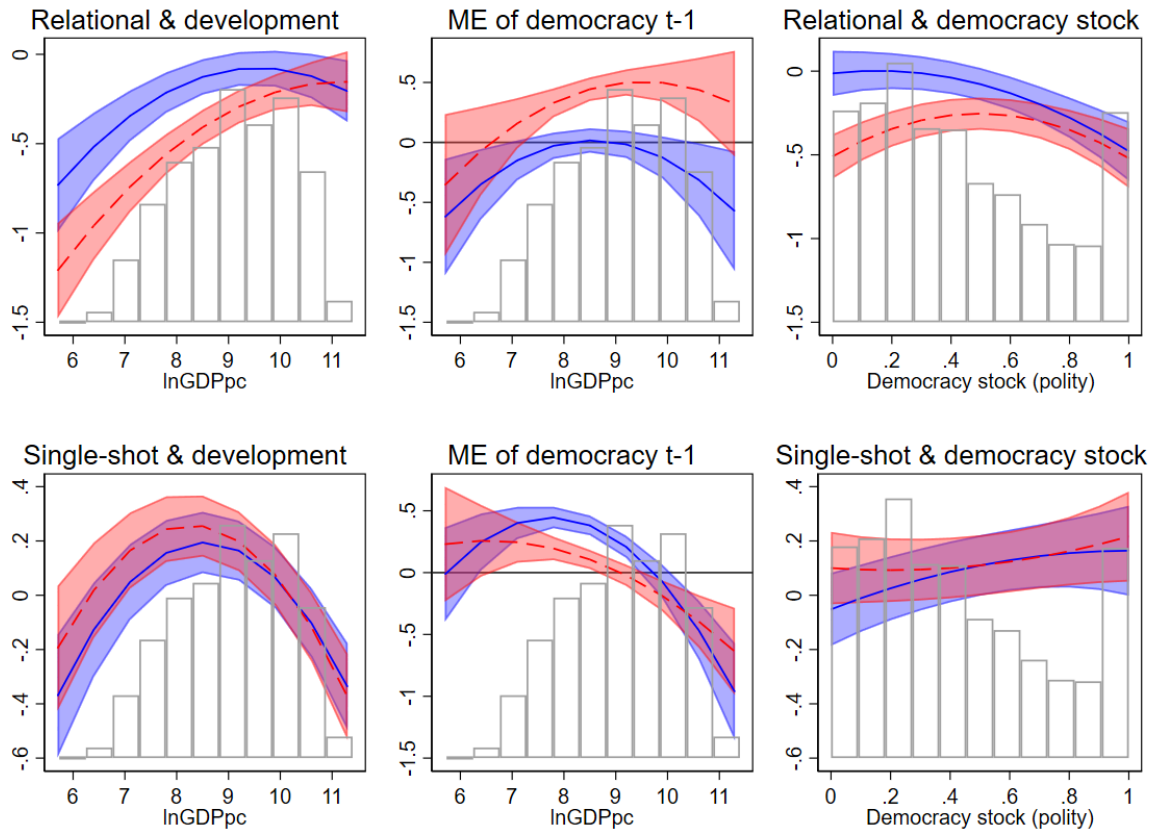


Figure 3: Predicted values of two types of clientelism: development and democracy by government status

Note: The straight blue lines stand for the incumbent and the dashed red lines represent the opposition. The estimates are based on Models 4/5/6 and 10/11/12 of Appendices A.3 and A.4, respectively.

We also suggested that the relationships between clientelism and economic and political development may differ according to whether parties are incumbent or not (H4a and H4b). Figure 3 shows how the curvilinear relationships change depending on whether a party is incumbent or not (straight blue lines for the incumbent and dashed red lines for the opposition, respectively).³¹

In line with H4a, the gap between government and opposition parties is larger in relational clientelism than single-shot clientelism: in the case of single-shot clientelism, the confidence intervals are mostly overlapped (lower left and right panels), whereas they rarely overlap in the case of relational clientelism (upper panels). In particular, ruling parties enjoy a more advantageous position in establishing relational clientelism. However, the gap in relational clientelism between governing and opposition parties

³¹Based on the estimates of models 4/5/6 and 10/11/12 of Appendices A.3 and A.4, respectively.

becomes narrower as political and economic developments advance. As indicated in the upper middle panel, democratization in developing economies provides opposition parties with the opportunity to develop their own clientelistic linkage and curtail incumbency advantages. The lower middle panel demonstrates that democratization positively affects the prominence of single-shot clientelism in low and middle levels of economic development, but the marginal effects turn to be negative as economy develops regardless of incumbency status. These results corroborate with H4a and H4b.

Conclusion

The purpose of this paper was to elucidate factors behind clientelism from a party-level perspective while highlighting clientelism as a party's mobilization strategy. This paper used newly collected party-level data (V-Party) and conducted a principal component analysis to capture two types of clientelism that the recent literature pointed to — relational and single-shot (electoral) types of clientelism.

Our analysis suggests there is a need for scholars to distinguish between the two types of clientelism in order to advance our understanding of the causes of clientelism. Our principal component analysis identified both relational and single-shot clientelism in a clear manner. Our analysis on the determinants of clientelism found that the conventional wisdom of the curvilinear relationship between clientelism and economic development can be applied only to single-shot clientelism whereas relational clientelism is positively associated with economic development. Our findings contribute to reconciling the mixed results on the effect of economic development on clientelism and answer puzzles such as why clientelism remains intact in some developed countries.

Our analysis also indicates that we may need to differentiate between the short-term and long-term effects of democracy on the prominence of clientelism. Our results show that democracy encourages both types of clientelism in middle-income countries in the short term but effectively suppresses relational clientelism in the long run while

narrowing the gap between government and opposition parties. This finding implies the necessity to focus on the marginal effect of democracy depending on the level of economic development rather than focusing merely on the simple association between clientelism and democracy. Importantly, we also found how the effect of democratization and economic development on clientelistic linkages differs according to the type of clientelism and whether political parties occupy government positions or not.

This paper is an important first step in understanding the correlates of clientelism according to multi-level, cross-sectional time-series perspectives. To validate the importance of the distinction between relational and single-shot clientelism on hierarchical panel data, we conducted a comprehensive analysis of the relationships between clientelism and two prominent factors cultivating clientelism recognized by previous studies, democratization and economic development.

However, there are likely other relevant factors nurturing these types of clientelism, such as electoral systems, state capacity, the amount of financial resources of political parties as well as the type (oil- or tax-based resources), and center-local relationships, to name a few. Furthermore, additional cross-national analysis may be needed for illuminating the mechanisms operating behind the correlations identified in this study. Although this is a more elusive task given that the data is cross-national and observational, identifying the causality between the variables is a task for future research.

In any case, as our study shows, classifying different patterns of clientelism through cross-national party-level data enables us to add a new perspective to better understand the development and patterns of clientelistic linkages in the contemporary world.

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Appendix

A Descriptive statistics and regression tables for the main analyses

A.1 Descriptive statistics of Table 1

Variable	Mean	St.Dev.	N
Clientelistic mobilization	-0.202	1.429	6186
Saliency of clientelistic issues	0.173	0.261	6186
Local party offices	0.427	1.473	6186
Local party activists/personnels	0.406	1.413	6186
Informal use of state resources	0.197	0.302	6186
Funds raised by candidates	0.298	0.309	6186

A.2 Descriptive statistics of Figure 2/Table A.1 and Figure 3/Table A.2

Variable	Mean	St.Dev.	N
Relational clientelism	0.003	1.010	5750
Single-shot clientelism	-0.009	1.011	5750
Government status	0.452	0.498	5750
ln GDP per cap.	9.148	1.089	5750
Democracy stock	0.470	0.301	5750
Democracy level	0.757	0.297	5750
Growth	0.020	0.038	5750

A.3 Regression table for relational clientelism

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
lnGDPpc	0.113*** (0.0256)	0.752*** (0.167)	-0.0788 (0.333)	0.783*** (0.186)	0.748*** (0.165)	0.0225 (0.442)
lnGDPpc ²		-0.0357*** (0.00930)	0.00903 (0.0193)	-0.0349*** (0.0103)	-0.0356*** (0.00923)	0.00221 (0.0254)
Democracy level	0.285*** (0.0364)	0.200*** (0.0387)	-5.940*** (1.696)	0.203*** (0.0384)	0.213*** (0.0385)	-4.832* (2.342)
Level x lnGDPpc			1.346*** (0.394)			1.120* (0.533)
Level x lnGDPpc ²			-0.0727** (0.0229)			-0.0588 (0.0304)
Democracy stock	0.0817 (0.104)	0.580*** (0.166)	0.534** (0.167)	0.634*** (0.165)	1.034*** (0.185)	0.649*** (0.165)
Democracy stock ²		-0.758*** (0.174)	-0.786*** (0.179)	-0.827*** (0.173)	-1.044*** (0.189)	-0.892*** (0.178)
Government	0.186*** (0.0112)	0.190*** (0.0111)	0.190*** (0.0111)	0.442 (0.734)	0.496*** (0.0392)	1.274 (2.415)
Govt x lnGDPpc				0.0569 (0.164)		-0.217 (0.571)
Govt x lnGDPpc ²				-0.00892 (0.00906)		0.0161 (0.0337)
Govt x Level						-0.898 (2.919)
Govt x Level x lnGDPpc						0.223 (0.673)
Govt x Level x lnGDPpc ²						-0.0197 (0.0387)
Govt x Stock					-0.830*** (0.165)	
Govt x Stock ²					0.375** (0.145)	
Growth	0.790*** (0.153)	0.625*** (0.154)	0.613*** (0.154)	0.605*** (0.154)	0.587*** (0.153)	0.581*** (0.153)
Constant	-1.494*** (0.244)	-4.414*** (0.758)	-0.638 (1.440)	-4.798*** (0.846)	-4.549*** (0.753)	-1.215 (1.924)
Var.(country level)	0.481*** (0.037)	0.466*** (0.037)	0.460*** (0.037)	0.467*** (0.037)	0.467*** (0.036)	0.458*** (0.036)
Var.(party level)	0.764*** (0.015)	0.762*** (0.015)	0.762*** (0.015)	0.752*** (0.015)	0.745*** (0.014)	0.740*** (0.014)
Number of countries	158	158	158	158	158	158
Number of parties	1,773	1,773	1,773	1,773	1,773	1,773
Number of observations	5,750	5,750	5,750	5,750	5,750	5,750
Log likelihood	-3791.7	-3766.7	-3757.7	-3716.9	-3702.6	-3675.8
AIC	7709.5	7663.3	7649.3	7567.7	7539.1	7495.6
BIC	8128.9	8096.0	8095.3	8013.7	7985.2	7974.9

Results of HLM. Standard errors in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

A.4 Regression table for single-shot clientelism

	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
lnGDPpc	-0.0696*** (0.0210)	1.189*** (0.132)	0.169 (0.263)	1.139*** (0.148)	1.185*** (0.132)	0.619 (0.350)
lnGDPpc ²		-0.0708*** (0.00736)	-0.00502 (0.0153)	-0.0689*** (0.00821)	-0.0705*** (0.00735)	-0.0322 (0.0201)
Democracy level	0.238*** (0.0288)	0.191*** (0.0305)	-3.237* (1.331)	0.190*** (0.0304)	0.186*** (0.0305)	-1.436 (1.847)
Level x lnGDPpc			0.991** (0.310)			0.518 (0.421)
Level x lnGDPpc ²			-0.0685*** (0.0180)			-0.0396 (0.0240)
Democracy stock	0.257** (0.0846)	0.184 (0.131)	0.117 (0.131)	0.163 (0.131)	-0.0768 (0.147)	0.0573 (0.131)
Democracy stock ²		-0.0392 (0.138)	0.245 (0.142)	-0.00961 (0.138)	0.193 (0.151)	0.314* (0.142)
Government	-0.0353*** (0.00881)	-0.0321*** (0.00872)	-0.0300*** (0.00867)	-0.466 (0.578)	-0.152*** (0.0309)	4.067* (1.899)
Govt x lnGDPpc				0.0575 (0.129)		-1.046* (0.449)
Govt x lnGDPpc ²				-0.00115 (0.00713)		0.0631* (0.0265)
Govt x Level						-4.775* (2.292)
Govt x Level x lnGDPpc						1.203* (0.528)
Govt x Level x lnGDPpc ²						-0.0716* (0.0304)
Govt x Stock					0.507*** (0.130)	
Govt x Stock ²					-0.407*** (0.115)	
Growth	0.368** (0.121)	0.212 (0.121)	0.191 (0.120)	0.215 (0.121)	0.221 (0.121)	0.223 (0.120)
Constant	0.486* (0.216)	-5.083*** (0.609)	-1.171 (1.141)	-4.770*** (0.680)	-5.006*** (0.608)	-2.902 (1.528)
Var.(country level)	0.610*** (0.039)	0.610*** (0.039)	0.596*** (0.039)	0.609*** (0.039)	0.607*** (0.039)	0.594*** (0.039)
Var.(party level)	0.573*** (0.011)	0.573*** (0.011)	0.573*** (0.011)	0.572*** (0.011)	0.571*** (0.011)	0.571*** (0.011)
Number of countries	158	158	158	158	158	158
Number of parties	1,773	1,773	1,773	1,773	1,773	1,773
Number of observations	5,750	5,750	5,750	5,750	5,750	5,750
Log likelihood	-2423.1	-2370.6	-2341.6	-2360.6	-2362.4	-2315.5
AIC	4972.1	4871.3	4817.2	4855.2	4858.8	4774.9
BIC	5391.5	5304.0	5263.2	5301.2	5304.8	5254.2

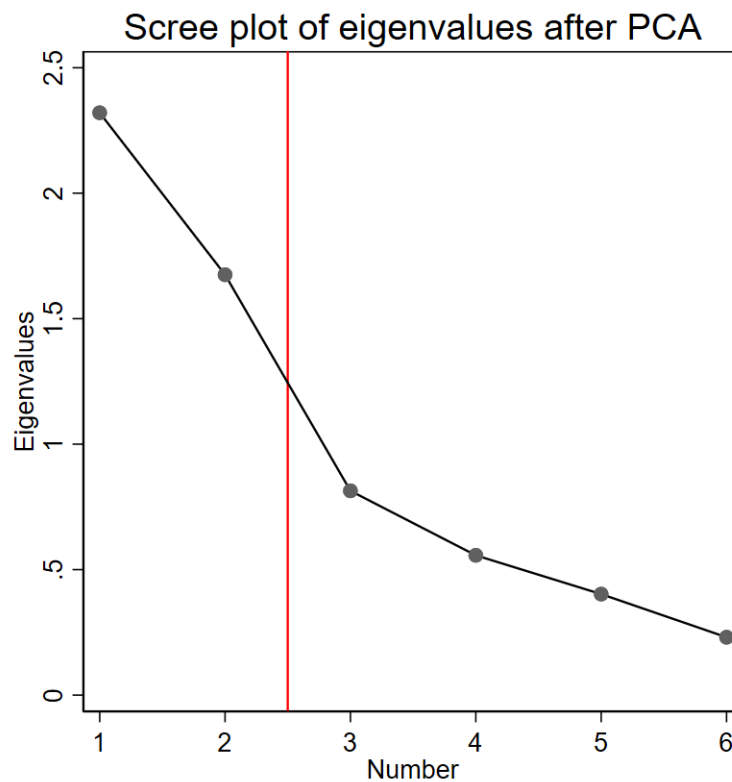
Results of HLM. Standard errors in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

B Principal component analyses

B.1 Screeplot of eigenvalues for PCA using the V-Party data

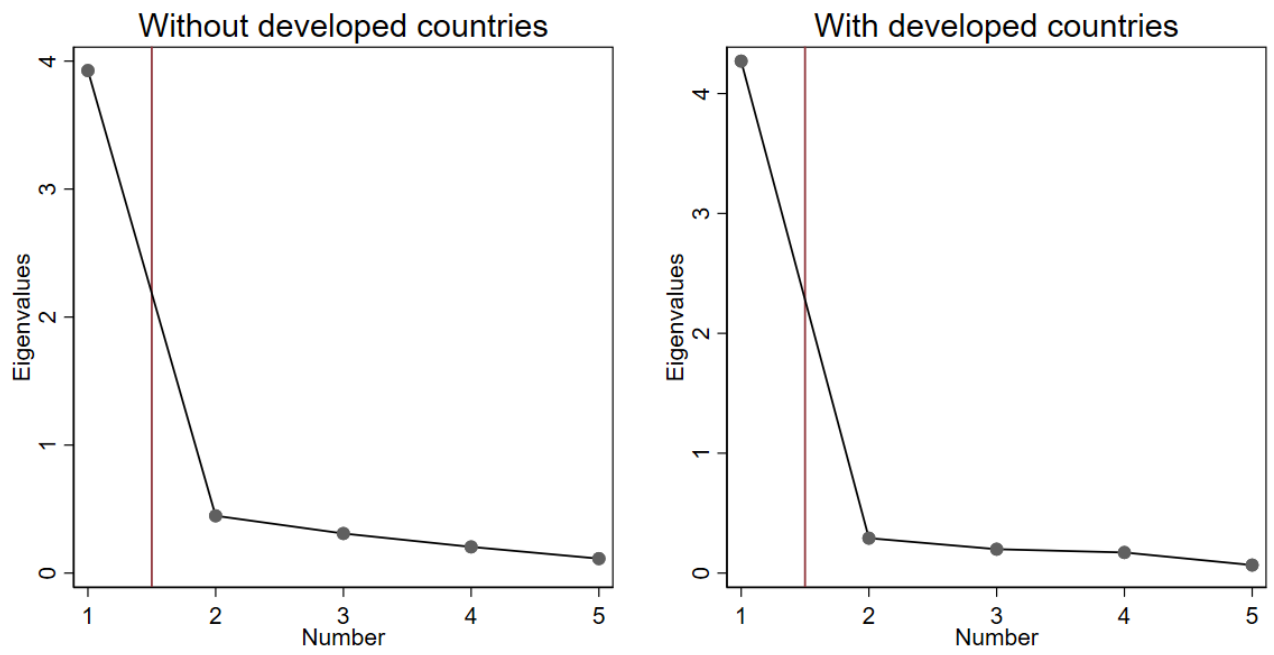
The screeplot shows that the first two principal components exceed the value of 2, the conventional threshold above which principal components are relevant latent variables well summarizing the data.



B.2 Results of principal component analysis using DALP data

	Without developed countries Dimension I	With developed countries Dimension I
b1 (Vote-buying)	0.839	0.895
b2 (Social benefits)	0.898	0.920
b3 (Patronage)	0.888	0.933
b4 (Procurement)	0.929	0.955
b5 (Arrangements)	0.883	0.919
Eigenvalue	3.926	4.271
Variance explained	0.785	0.854
Chronbach's alpha	0.929	0.955
Number of countries	66	88
Number of parties	371	506

B.3 Screeplot of PCA with the DALP data



C List of political parties and patterns of clientelism

C.1 50 parties sorted by the relational clientelism index

Rank	Relational	Party / coalition	Country	Ele	Gov
1	2.994	PDGE (Democratic Party of Equatorial Guinea)	Equatorial Guinea	7	7
2	2.880	YAP (New Azerbaijan Party)	Azerbaijan	5	5
3	2.814	RPT (Rally of the Togolese People)	Togo	9	9
4	2.737	HHK (Republican Party of Armenia)	Armenia	6	5
5	2.681	PCT (Congolese Party of Labour)	Congo, Rep.	13	13
6	2.620	ANR-PC (National Republican Association-Colorado Party)	Paraguay	13	11
7	2.598	KPK (Cambodian Peoples' Party)	Cambodia	7	7
8	2.551	ZANU-PF (Zimbabwe African National Union – Patriotic Front)	Zimbabwe	9	9
9	2.526	CDP (Congress for Democracy and Progress)	Burkina Faso	6	5
10	2.525	DPS (Democratic Party of Socialists)	Montenegro	7	7
11	2.508	PRI (Institutional Revolutionary Party)	Mexico	17	12
12	2.462	RCD (Democratic Constitutional Rally)	Tunisia	5	5
13	2.450	MPR (Popular Movement of the Revolution)	Congo, Dem.Rep.(K)	5	5
14	2.360	UMNO (United Malays National Organization)	Malaysia	11	10
15	2.346	UMP (Union for the Presidential Majority)	Djibouti	4	4
16	2.241	Golkar (Party of the Functional Groups)	Indonesia	11	10
17	2.220	NDP (National Democratic Party)	Egypt	9	9
18	2.185	RDPC (Cameroon People's Democratic Movement)	Cameroon	6	3
19	2.158	PSD (Social Democratic Party)	Romania	7	4
20	2.122	KMT (Nationalist Party)	(Taiwan)	17	13
21	2.117	NO (Nur Otan)	Kazakhstan	5	5
22	2.108	CCM (Party of the Revolution)	Zanzibar (Tanzania)	7	4
23	2.049	SWAPO (South West Africa People's Organization)	Namibia	7	7
24	2.016	SDP (Social Democratic Party)	Montenegro	7	6
25	1.963	PRDR (Democratic [and Social] Republican Party)	Mauritania	4	3
26	1.949	PDP (People's Democratic Party)	Nigeria	6	4
27	1.926	PZPR (Polish United Workers' Party)	Poland	5	5
28	1.876	DC (Christian Democrats)	Italy	6	6
29	1.827	MRNDD (National Republican Movement for Democracy)	Rwanda	4	4
30	1.806	CCM (Party of the Revolution)	Tanzania	8	8
31	1.795	PPP (Pakistan Peoples Party)	Pakistan	10	5
32	1.786	NRM (National Resistance Movement)	Uganda	7	7
33	1.776	PJ (Justicialist [Peronist] Party)	Argentina	12	7
34	1.773	ER (United Russia)	Russia	4	4
35	1.768	SPS (Socialist Party of Serbia)	Serbia	11	4
36	1.760	USDP (Union Solidarity and Development Party)	Myanmar	6	1
37	1.739	MSZMP (Hungarian Socialist Workers' Party)	Hungary	4	4
38	1.717	BSP (Bulgarian Socialist Party)	Bulgaria	10	1
39	1.715	FLN (National Liberation Front)	Algeria	8	8
40	1.707	PDPT (People's Democratic Party of Tajikistan)	Tajikistan	5	5
41	1.699	PSS (Socialist Party of Albania)	Albania	9	5
42	1.677	CPSU (Communist Party of the Soviet Union)	Soviet Union	5	5
43	1.671	PRSC (Social Christian Reformist Party)	Dominican, Rep.	9	6
44	1.655	PNH (National Party of Honduras)	Honduras	12	6
45	1.637	PAIS (PAIS Alliance)	Ecuador	4	4
46	1.616	MPLA (People's Movement for the Liberation of Angola)	Angola	7	6
47	1.612	LSI (Socialist Movement for Integration)	Albania	4	2
48	1.601	PSI (Italian Socialist Party)	Italy	6	3
49	1.601	PSD (Socialist Destourian Party)	Tunisia	4	4
50	1.600	RPP (People's Rally for Progress)	Djibouti	9	5

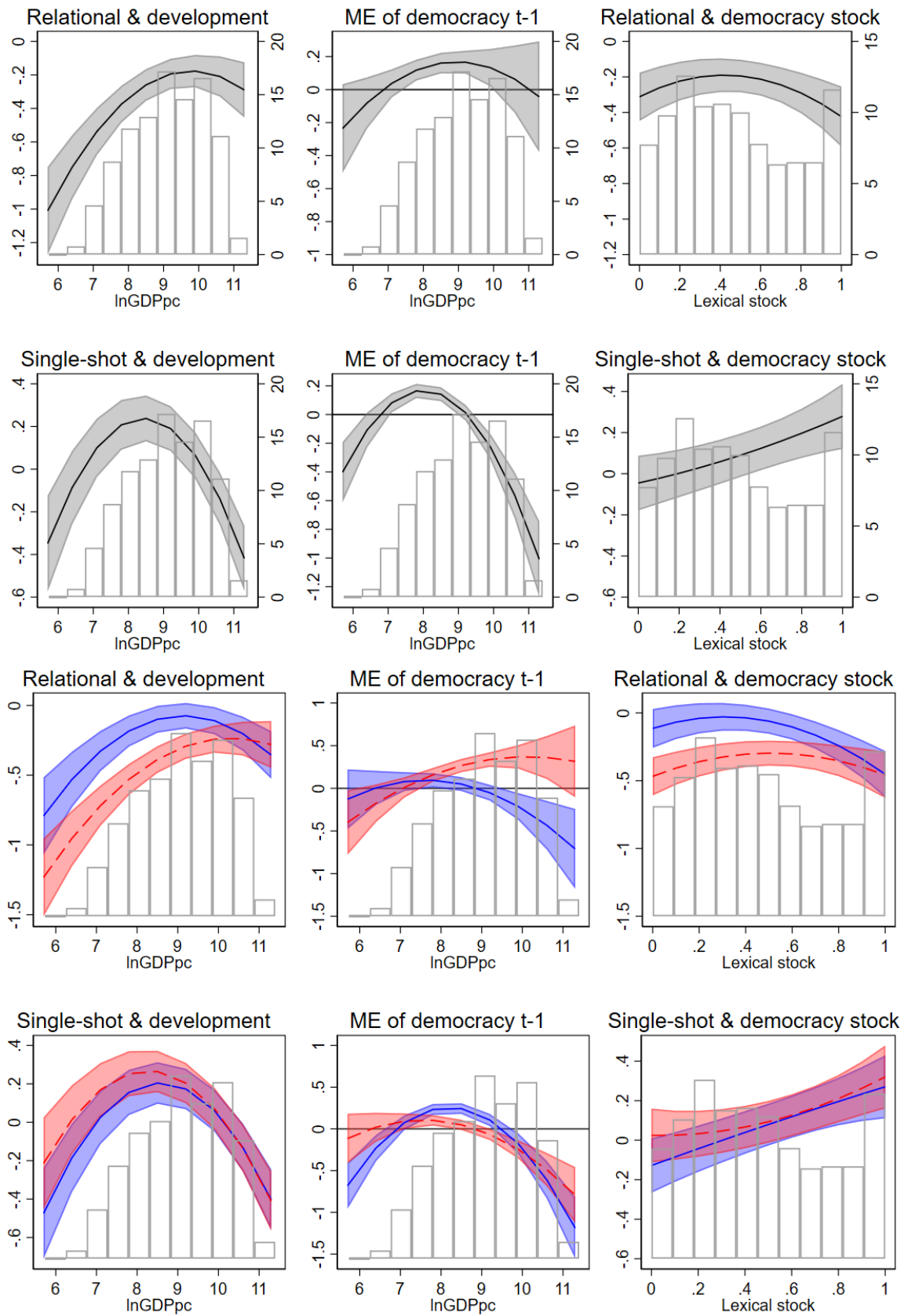
Note: Right columns represent the number of elections in the data set and those of winning/retaining the office.

C.2 50 parties sorted by the single-shot clientelism index

Rank	Single-shot	Party / coalition / group	Country	Ele	Gov
1	3.345	NDP (National Development Party)	Thailand	4	2
2	2.845	PNP (Nacionalist Party)	Philippines	5	2
3	2.549	PKS (Social Action Party)	Thailand	8	6
4	2.535	LSI (Socialist Movement for Integration)	Albania	4	2
5	2.416	LDP (Fight of Democratic Filipinos)	Philippines	4	1
6	2.412	PCT (Thai Nation Party)	Thailand	12	8
7	2.344	(Sunni Religious (non-party))	Kuwait	7	0
8	2.343	(Pro-Government (non-party))	Kuwait	9	0
9	2.336	KMB (Nationalist People's Coalition)	Philippines	9	2
10	2.200	PRS (Republican Party of Albania)	Albania	5	1
11	2.194	NAP (New Aspiration Party)	Thailand	4	4
12	2.118	PP (Democrat Party)	Thailand	14	8
13	2.089	TCP (Thai Citizens' Party)	Thailand	4	3
14	2.049	UDNS (Union for Democracy and National Solidar)	Benin	4	0
15	2.016	PID (Democratic Institutional Party)	Guatemala	4	2
16	1.956	UNE (National Unity of Hope)	Guatemala	5	1
17	1.940	PR (Revolutionary Party)	Guatemala	6	1
18	1.939	CDP (Congress for Democracy and Progress)	Burkina Faso	6	5
19	1.902	PT (Labour Party)	Mauritius	10	1
20	1.892	Lakas-CMD (Christian Muslim Democra)	Philippines	8	5
21	1.838	PAN (National Advancement Party)	Guatemala	5	1
22	1.793	FRG (Guatemalan Republican Front)	Guatemala	6	1
23	1.793	MADEP (African Movement for Development and Progress)	Benin	5	2
24	1.743	MSM (Militiant Socialist Movement)	Mauritius	9	2
25	1.723	ADF (Alliance for Democracy and Federation)	Burkina Faso	5	0
26	1.693	PCT (Congolese Party of Labour)	Congo, Rep.	13	13
27	1.657	UCN (National Center Union)	Guatemala	6	0
28	1.627	PCD (Democratic Convergence Party-Reflection)	Sao Tome Pr.	6	1
29	1.626	PMSD (Mauritian Social Democrat Party)	Mauritius	8	1
30	1.606	UPADS (Pan-African Union for Social Democracy)	Congo, Rep.(B)	5	2
31	1.583	MCDDI (Congolese Movement for Democracy and Integral Development)	Congo, Rep.(B)	4	2
32	1.575	PLP (Liberal Party)	Philippines	10	4
33	1.541	ARENA (Association for the Rebirth of Madagasca)	Madagascar	5	4
34	1.534	MLN (National Liberation Movement Party)	Guatemala	7	3
35	1.515	UDV-RDA (Voltaic Democratic Union / African Democratic Rally)	Burkina Faso	7	2
36	1.511	PPB (Progressive Party)	Brazil	7	4
37	1.494	SSU (Sudanese Socialist Union)	Sudan	4	4
38	1.483	SDPK (Social Democratic Party Kyrgyzstan)	Kyrgyzstan	4	2
39	1.445	PSD (Social Democratic Party)	Benin	7	2
40	1.438	PTB (Brazilian Labour Party)	Brazil	9	6
41	1.423	AP (Alliance Party)	Fiji	4	3
42	1.404	PRD (Democratic Renewal Party)	Benin	7	1
43	1.397	MP (Popular Movement)	Morocco	9	8
44	1.383	PML (Pakistan Muslim League (Nawaz))	Pakistan	6	2
45	1.380	RB (Benin Rebirth Party)	Benin	7	1
46	1.366	PPP (Pakistan Peoples Party)	Pakistan	10	5
47	1.327	ND (New Democracy)	Serbia	4	1
48	1.318	ADI (Independent Democratic Action)	Sao Tome Pr.	5	2
49	1.308	PBS (United Sabah Party)	Malaysia	4	4
50	1.294	NPP (National Patriotic Party)	Liberia	4	3

Note: Right columns represent the number of elections in the data set and those of winning/retaining the office.

C.3 Estimates using alternative indices



C.4 Estimation using country-fixed effects

