

Varieties of Corruption? A Typology of Country-Level Corruption Patterns Using Fuzzy-Set Ideal Type Analysis

Political Studies Review

1–21

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DOI: 10.1177/14789299251335227

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Abstract

Broadly applied unidimensional corruption indices fail to grasp important qualitative differences between various manifestations of corruption, creating substantive obstacles in corruption research. Against this background, the present article develops a typology of country-level corruption patterns comprising four Weberian ideal types (ITs) and assigns countries to ITs based on the fuzzy-set ideal type analysis (FSITA) method. The typology focuses on formal and informal institutions that influence emerging corruption patterns rather than tangible properties of corruption. The four ITs are *Limited misconduct in developed countries*, *Partial state capture*, *Autocratic patrimonialism*, and *Dispersed and unconstrained corruption*. The analysis, comprising a total of 83 countries globally, offers novel insights into corruption patterns and their underlying mechanisms, demonstrates the applicability of the FSITA method in the context of corruption research, and offers policy pointers in the field of anti-corruption.

Keywords

corruption, corruption patterns, corruption types, typology, set-theoretic methods, QCA, FSITA

Accepted: 28 March 2025

Introduction

Corruption—broadly defined as the use of public office for private gain (Rose-Ackerman and Palifka, 2016)—has become a major field of research over the past decades. Most

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empirical studies have operationalized corruption using unidimensional country-level measurements, such as Transparency International's Corruption Perceptions Index (CPI) and the World Bank's Control of Corruption Index (Andersson, 2017). These indices have excellent geographical and temporal coverage, which allows for identifying general trends, patterns, and mechanisms.

The unidimensional approach to corruption assumes—often implicitly—that acts referred to as “corrupt” are relatively homogeneous and that corruption in different countries varies in quantity rather than quality. This assumption is being questioned by a growing number of scholars (Ang, 2020; Graycar, 2015; Grzymala-Busse, 2008; Hajnal, 2025a; Jancsics, 2024; Johnston, 2006). As early as 2006, Johnston called for “rethink[ing] the current emphasis on corruption-index scores; the notion implicit in that approach that the problem is essentially the same everywhere” (Johnston, 2006: 186). Indeed, corruption is multifaceted: it may refer to various phenomena ranging from bribing a police officer to the systematic seizure of public assets by the ruling elites. Unidimensional measures fail to grasp this diversity and hinder the identification of intricate corruption patterns, their drivers, and their consequences.

Several typologies have been proposed to account for qualitative rather than quantitative differences in corruption. Some delineate types of corrupt transactions (Ang, 2020; Graycar, 2015; Jancsics, 2024), while others focus on broad patterns of corruption (Johnston, 2006; Mungiu-Pippidi, 2006) and state capture (Grzymala-Busse, 2008; Innes, 2014) at the country level. These contributions are either primarily theoretical in nature, focusing on the description of the inherent logic of types of corruption (or state capture), with the actual classification of countries receiving less attention, or are limited in their empirical scope due to the lack of available data.

This article aims to contribute to this stream of research by constructing a novel typology of corruption patterns and classifying a large number of countries using fuzzy-set ideal type analysis (FSITA; Kvist, 2007), which belongs to the realm of set-theoretic methods and is closely related to qualitative comparative analysis (QCA). The FSITA method, which has not been applied to develop corruption typologies, allows for the construction of Weberian ideal types (ITs) based on dimensions (in set-theoretic terms, sets; we use the two terms interchangeably) and the classification of cases using so-called fuzzy membership scores (MSs). This approach enables the determination of the extent to which cases match ITs rather than merely assigning them into clusters.

What, precisely, constitutes a corruption pattern? While various types of corruption—such as bribery in police, nepotism in public procurement, and favoritism in awarding mining concessions—may be observed in any country (Graycar, 2015), their magnitude (in terms of prevalence and political and socio-economic consequences) varies significantly across countries and periods. Moreover, corruption may be organized through different networks and mechanisms. In some countries, most corrupt activities are primarily organized through centralized “legal” networks overseen by ruling elites; in others, corruption tends to be dispersed and occur on a transactional basis. Yet in others, corrupt transactions are typically overseen by criminal organizations. Following Hajnal (2025a), we use the term “corruption pattern” to denote distinctive country-level corruption profiles, characterized by the magnitude of corruption types and the mechanisms and networks through which they operate. While every country is distinctive, we contend that there are subsets of countries that exhibit comparable patterns of corruption.

This exercise is relevant for the following reasons. Typologies are “well-established and analytical tools in the social sciences” as “they can be ‘put to work’ in forming concepts, refining measurement, exploring dimensionality, and organizing explanatory claims” (Collier et al., 2012: 217). Given the heterogeneity of phenomena labeled corrupt, the creation of typologies is a particularly useful analytical ambition in the context of corruption research. As the efficacy of anti-corruption measures is contingent upon the specific forms of corruption prevalent in a given context (Rose-Ackerman and Palifka, 2016), our research also offers valuable insights into this domain.

The article is structured as follows. Following the introduction, the article presents a brief overview of the FSITA method and proceeds to outline the constituent dimensions of the typology. It then identifies the ITs of corruption patterns and explains how various combinations of set memberships give rise to them. This is followed by the operationalization of the constituent dimensions and the calibration of countries’ membership scores (MSs). The subsequent section presents the main findings. The final section offers concluding remarks.

FSITA in a Nutshell

We follow the sequences suggested by Kvist (2007) in applying FSITA, a set-theoretic method suitable for descriptive and exploratory purposes. First, we describe the three dimensions of the typology. In the set-theoretical framework, dimensions are conceived as sets in which cases (i.e. countries) have fuzzy-set MSs ranging from 0 (fully out) to 1 (fully in), indicating the extent to which the cases belong to the different sets. To better capture the relatively complex and encompassing concepts underlying the dimensions of the typology, we break them down into constituent elements (sets). Second, based on these dimensions, we describe Weberian ITs of corruption patterns. For instance, in Figure 2, IT2 denotes an ideal-typical case, which has full membership of the sets “Power of the state” (*POS*) and “Democracy” (*DEM*) and full non-membership of the set “Societal control over corruption” (*SOC*). That is, this ideal-typical country is characterized by a powerful state and strong democracy but lacks societal control over corruption. With n dimensions, 2^n ITs are possible from a purely logical perspective—that is, $2^3 = 8$ in the present case, corresponding to the eight corners of the cube (Figure 2). However, not all of them are necessarily theoretically and empirically relevant—we will come back to this point later. Third, based on raw data, we calibrate the fuzzy MSs of our cases in the sets. Finally, we calculate the fuzzy MSs of the cases in the ITs, showing the degree to which cases match different ITs. The fuzzy MS of a country in IT2, for instance, equals the membership in the conjunction¹ $POS * DEM * (\sim SOC)$, that is, the maximum across the country’s MSs in *POS*, *DEM*, and $\sim SOC$.

Dimensions of the Typology

We rely on three dimensions to capture the incentive structures that influence corruption patterns. In their book *The Narrow Corridor*, Acemoglu and Robinson (2019) argue that the power of society and the state jointly determine what type of state emerges. Similarly, we posit that the *POS*—that is, the extent to which the government is able to exert central control and deliver state capacities—and societal control over corruption (*SOC*)—that is, the extent to which society is able and willing to participate in public life to exert pressure on the government to control corruption—substantially influence emerging corruption patterns. While *SOC* captures informal institutions primarily, formal political institutions

also affect corruption patterns. Formal democratic institutions (*DEM*), therefore, constitute the third condition of the typology. In the following, we discuss these dimensions in more detail.

First, to prevent the Hobbesian “war of all against all,” a powerful central state—a Leviathan—is needed, capable of preventing chaos, resolving conflicts, and implementing policies (Acemoglu and Robinson, 2019). Similarly, a powerful state is also a prerequisite for effective corruption control. Mann's work on the concept of state power (Mann, 1984, 2008) is an important anchor in this respect. In his seminal work, Mann distinguished between the despotic and infrastructural dimensions of state power, defining the infrastructural *POS* as “the capacity of the state to actually penetrate civil society and to implement logistically political decisions throughout the realm” (Mann, 1984: 189). We use the term “power of the state” in this sense.

At the same time, only strong states can become “predatory” (Diamond, 2008) and implement centrally controlled networks of grand corruption. Other factors—captured by the other two conditions of our typology—influence which of these outcomes is more likely. To grasp the encompassing concept of state power, we apply two further concepts and posit that if a state can achieve substantive stability (i.e. prevent political instability and violence) or possesses significant capacity (i.e. can achieve the goals it has set for itself; O'Reilly and Murphy, 2022), it qualifies as powerful. By contrast, states that possess neither of these attributes are considered weak.

Second, a vigilant and powerful society is needed to counterbalance the state and prevent it from becoming repressive and exploitative (Acemoglu and Robinson, 2019). With regard to corruption control specifically, this implies that to prevent the state from becoming predatory and incentivize it to tackle corruption effectively, society must be able and willing to participate in politics and public life and have a low permissiveness toward corruption. Participation is defined as “the values of direct rule and active participation by citizens in all political processes; it emphasizes nonelectoral forms of political participation such as through civil society organizations and mechanisms of direct democracy” (Lindberg et al., 2014: 160). Corruption permissiveness refers to the status of corruption in terms of societal norms—that is, the extent to which societies are willing to justify corruption (Lavena, 2013). In societies characterized by low permissiveness of corruption, public integrity and the separation of the public and private spheres constitute a norm, and corruption is a deviation (Mungiu-Pippidi, 2006). Both participation and corruption permissiveness have been shown to influence corruption and corruption patterns (Johnston, 2006; Lavena, 2013).

Third, the presence of formal democratic institutions is among the most important factors influencing corruption (Dimant and Tosato, 2018). Free and fair institutionalized political competition makes politicians accountable and thus creates incentives to tackle both grand and petty forms of corruption. In addition to electoral institutions, checks and balances and the rule of law also constitute significant constraints on corruption as they limit the power of the government to implement provisions that enable them to enrich themselves and their allies or cement their power (Kolstad and Wiig, 2016).

Ideal Types

IT1—Limited Misconduct in Developed Countries

This IT is characterized by a potent state, counterbalanced by a vigilant society, and constrained by democratic institutions. Corruption is rather the exception, not the norm.

Abuses of power are either transactional (Refakar and Cárdenas, 2023) in the form of fraud and embezzlement or limited to the undue (mostly legal) influence of powerful business interests on policymaking, often in the form of donations. While the harms of such influence-seeking may be significant, they are typically limited to certain domains or regulations. Bribery of public officials is rare, and although scandals occur, state institutions and the judiciary typically take action and intervene. IT1 is similar to what Mungiu-Pippidi (2006) referred to as a state of universalism and Johnston (2006) coined “Influence markets.”

IT2—Partial State Capture

With this IT, democratic institutions are present, and the state possesses substantial power, but societal control over corruption is weak. Consequently, powerful, sometimes overlapping business and political elites seize significant public assets and economic opportunities for their and their clientele networks’ benefit (Innes, 2014). Public power is mainly, albeit not entirely, exercised for private gain. This IT comprises milder cases of different types of state capture (e.g. oligarchical or party) (ibid.) and overlaps with what Johnston (2006) refers to as elite cartel corruption.

IT3—Autocratic Patrimonialism

With the IT of autocratic patrimonialism, the state possesses significant power but is constrained neither by democratic institutions nor a vigilant and powerful society. Consequently, the ruling elites—which consist of overlapping and informal business circles, political parties, and sometimes criminal groups—are able to capture the state fully and implement highly centralized corruption networks to enrich themselves and consolidate their power. Creating a vicious circle over the long term, this cemented power also allows ruling elites to loosen the remaining constraints on their power further and to create even more room for seizing state assets (Hajnal, 2025a). Corruption thus becomes a process of resource transfer toward crony and loyal groups (Jancsics, 2019). While overt grand corruption thrives, petty corruption—which does not serve the interest of the ruling elites—may, at times, be curbed effectively (Hajnal, 2025a). The term “predatory state” (Diamond, 2008; Vahabi, 2020) is often used with a similar meaning in the literature.

IT4—Dispersed and Unconstrained Corruption

With this IT, the government has little to no capacity to implement policies and maintain order, a dire situation often found in states described as weak or failing. Irrespective of the level of democracy and societal control over corruption—although both are typically low—these institutional constraints (or, more precisely, their lack) will result in the expropriation of public assets at will by various, sometimes competing interest groups (e.g. oligarchs, and clans; Johnston, 2006). In contrast to IT3, IT4 does not result in a centrally controlled corruption network, as the government lacks the capacity to implement such a network. It is also unable to curb petty corruption; hence, both petty and grand corruption flourish.

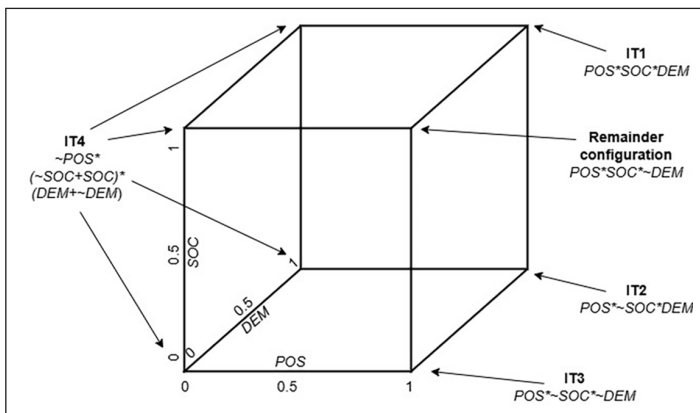
In line with the description above, Table 1 presents the property space—that is, the combinations (conjunctions) of dimensions that lead to the emergence of distinct ITs of corruption patterns. Note that not all possible combinations are present in the property space. Although it is possible from a purely logical perspective, we argue that the

Table I. Property Space.

	Powerful state (POS)	Societal control over corruption (SOC)	Democratic institutions (DEM)
IT1—Limited misconduct in developed countries	<i>POS</i>	<i>SOC</i>	<i>DEM</i>
IT2—Partial state capture	<i>POS</i>	\sim <i>SOC</i>	<i>DEM</i>
IT3—Autocratic patrimonialism	<i>POS</i>	\sim <i>SOC</i>	\sim <i>DEM</i>
IT4—Dispersed and unconstrained corruption	\sim <i>POS</i>	\sim <i>SOC</i> (+ <i>SOC</i>)	\sim <i>DEM</i> (+ <i>DEM</i>)

“ \sim ”: negation; “+”: logical “or.”

Source: Authors’ construction.

**Figure 1.** Property Cube.

“ \sim ”: negation; “*”: logical “and.”

Source: Authors’ construction.

remainder configuration ($POS * SOC * \sim DEM$) is unlikely to occur, as a powerful state counterbalanced by a powerful and vigilant society typically leads to the emergence of democratic institutions (Acemoglu and Robinson, 2019). Figure 1 presents the same information graphically with a so-called property cube (Schneider and Wagemann, 2012).

Operationalization and Calibration of Dimensions

This section presents the operationalization (including the raw data and the calibration procedure) of the three main sets (or dimensions), namely, *POS*, *SOC*, and *DEM*. Two-two further sets were applied to operationalize the first two. The year 2020 was selected as the subject year for all applied data sources,² as this was the most recent year in which all the indicators were available.

We employed the direct method of calibration (Schneider and Wagemann, 2012: 35–38), which uses a logistic function to transform the raw data into fuzzy MSs based on three anchors at 1 (full membership), 0.5 (point of indifference), and 0 (full non-membership). The anchors are selected by the researcher based on case-specific knowledge and the

distribution of the raw data in order to locate them (Schneider and Wagemann, 2012). The point of indifference denotes the demarcation point below (above) which a case is “rather out” of (“rather in”) a set. Importantly, “rather out” and “rather in” cases differ qualitatively from one another. Therefore, the “point of indifference” denotes a qualitative demarcation point and hence affects which ITs specific cases are assigned to. By contrast, the “fully in” and “fully out” anchors only affect the degree to which cases are members of sets and, hence, the extent to which they conform to ITs. For practical/computational reasons, we applied country-case raw data scores as “rather in” thresholds. We set the actual “points of indifference” in the codes marginally below these country scores. This was done to avoid countries having MSs of exactly 0.5, making it impossible to assign them to ITs.

Power of the State

To operationalize the constituent sets of *POS*, namely, stability (*STAB*) and state capacity (*STATCAP*), we applied the *Political Stability and Absence of Violence/Terrorism* index of the World Governance Indicators (WGI; Kaufmann and Aart, 2023) and the *State Capacity index* compiled by O’Reilly and Murphy (2022).

Calibration Anchors of STAB. Cases that have an equal or lower stability score than Nigeria—a country suffering from excessive rates of violent crime, including numerous kidnappings by the terrorist group Boko Haram—were considered to be “fully out.” The point of indifference was set right below China’s score. China exhibits relatively low scores on WGI’s *Stability Index*, falling below the average and the median. In addition, the country faces significant ethnic and religious tensions, as evidenced by the Uighurs in Xinjiang, and political upheaval, as exemplified by the protests in Hong Kong. Nevertheless, it can be considered a stable country overall. Cases whose score reached or exceeded Switzerland’s score were considered “fully in.”

Calibration Anchors of STATCAP. Libya is a justifiable choice for the “fully out” threshold for state capacity, as the government fails to deliver even the most basic public services. Countries reaching the level of state capacity in the Philippines were considered “rather in.” Despite the government’s inability to attain its objectives in specific domains (e.g. healthcare and education and managing separatist unrest in the Mindanao region), its state capacity remains considerable as it maintains a robust bureaucracy and enables substantive economic growth. Sweden, renowned for its high-quality public services and generous welfare provisions, was set as the threshold for full membership. Table 2 presents descriptive statistics of the raw data and qualitative anchors used for the calibration of *STATCAP* and *STAB*.

Using logical operators, the *POS* is the disjunction of stability and state capacity:

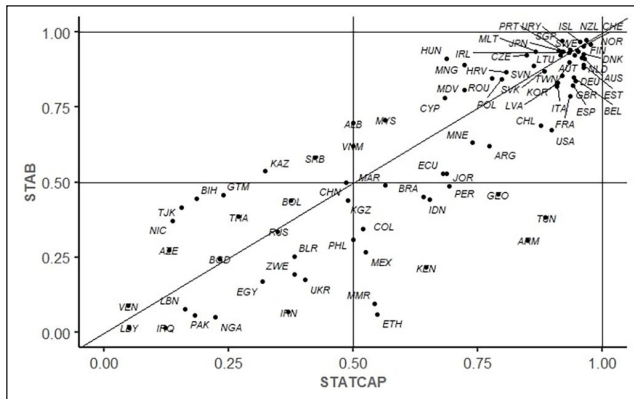
$$POS = STAB + STATCAP \quad (1)$$

In other words, either *STAB* or *STATCAP* is sufficient for *POS*, whereas if both are absent, *POS* is considered absent. In the case of fuzzy sets, the MS in a disjuncture equals the maximum of MSs in the constituent sets. Using an enhanced XY plot (Schneider and Wagemann, 2012), this means that cases located in the lower left quadrant are not members (i.e. “rather out”) of *POS*, whereas all the others are within (i.e. “rather in”) *POS*. As can be seen in Figure 2, the two components are strongly correlated. This is neither unexpected nor does it render the application of both components superfluous: in many cases, MSs in *POS* are substantively—often qualitatively—different from MSs in *STATCAP* and *STAB*.

Table 2. Descriptive Statistics and Anchors for Calibration of Raw Variables Used to Operationalize *STATCAP* and *STAB* (the Constituent Sets of *POS*).

Raw data	<i>STATCAP</i>	<i>STAB</i>
	State capacity index (O'Reilly and Murphy, 2022)	Political stability index (WGI)
Descriptives of raw data		
Min	-2.78	-2.46
Q1	-0.2	-0.6
Q2 (Median)	0.98	0.07
Q3	2.26	0.72
Max	3.42	1.49
Mean	0.92	-0.05
Calibration anchors		
Fully out (0)	Libya (-2.75)	Nigeria (-1.87)
Rather in (0.5+)	Philippines (0.15)	China (-0.33)
Fully in (1)	Sweden (2.72)	Switzerland (1.15)

Source: Authors' construction.

**Figure 2.** Enhanced XY Plot of *STAB* and *STATCAP* (the Constituent Sets of *POS*).

Values on the axes represent MSs.

Source: Authors' construction.

Societal Control Over Corruption

As explained in Section 3, we employed two constituent sets, namely, participation (*PART*) and corruption permissiveness (*PERM*), to operationalize *SOC*. We used the *Participatory Component Index* of the Varieties of Democracy (V-dem; Coppedge, 2024) to measure *PART*. To operationalize *PERM*, we applied two data sources. In the case of European Union (EU) Member States, we used the proportion of Special Eurobarometer (European Commission, 2022) respondents who deem corruption unacceptable. In the case of non-EU countries, *PERM* was measured using the principal component derived from four related questions in the World Values Survey (WVS; Haerpfer and et al, 2020), following the method applied by Lavena (2013). We calibrated the two raw data sources separately; that is, we defined distinct qualitative

anchors for EU countries and non-EU countries and independently applied the direct method of calibration based on these anchors.

Calibration Anchors for PART. Countries scoring equal or lower than Iran were considered “fully out” of *PART*. In Iran, long-standing norms, such as men’s guardianship over women, and formal institutions, including the religious police, pre-empt social participation and mobilization. Cases scoring equal or higher than the Netherlands are “rather in.” Although citizen participation in the Netherlands is primarily seen solely as an instrument of representative democracy rather than an essential feature of democracy (Michels, 2006) and, consequently, the country scores relatively low in the *Participatory Component Index* (slightly below the median and above the average), it is nevertheless characterized by a long-standing tradition of civic engagement (Meijeren et al., 2023). Denmark, boosted by strong norms of electoral and nonelectoral forms of participation, was set as the “fully in” threshold.

Calibration Anchors of PERM (within the EU). We set the “fully out” threshold below the lowest observed score (Hungary) as low-performers in the EU still have a relatively high intolerance of corruption on a global scale. Austria was set as the “rather in” threshold. While it scores relatively low among EU countries, it is still characterized by the norms of accountability and transparency to a significant extent. The large gap between Austria’s score and that of its lower neighbor, Romania, also reinforces this decision. Finally, cases reaching or exceeding Denmark’s score, an exemplary case of corruption control (Quah, 2013), were considered “fully in.”

Calibration Anchors of PERM (outside the EU). As for corruption permissiveness in non-EU countries (based on WVS data), Ukraine, characterized by a “culture of corruption” (Waal, 2016), was set as the “fully out” threshold. Although Switzerland scores relatively low, between the second and third quartiles, it has strong informal norms supporting public integrity. Therefore, cases reaching or overcoming its score were considered “rather in.” Finally, Norway and Singapore (having identical scores) were set as the “fully in” threshold. Table 3 shows descriptive statistics and qualitative anchors used for the calibration of STATCAP and STAB.

As we have argued in Section 3, strong participation and low corruption permissiveness are both necessary for effective societal control over corruption. In set-theoretic notation, this may be denoted as:

$$SOC = PART * PERM \quad (2)$$

In the case of fuzzy sets, the MS in a conjuncture equals the minimum of MSs in the constituent sets. In an enhanced XY plot (Schneider and Wagemann, 2012), therefore, only cases situated in the upper-right quadrant are members of *SOC* (Figure 3).

Democratic Institutions (DEM)

We use the *Regimes of the World* (RoW) classification by Lüthmann, Tannenber, and Lindberg, (2018) to operationalize *DEM*. The classification is based on V-dem democracy indices, which have important advantages vis-à-vis alternative democracy measures

Table 3. Descriptive Statistics and Anchors for Calibration of Raw Variables Used to Operationalize *PERM* and *PART* (the Constituent Sets of *SOC*).

Raw data	PERM (EU)	PERM (non-EU)	PART
	Proportion of people deeming corruption unacceptable (Special Eurobarometer)	Principal component of four related questions in the WVS	Participatory component index (V-dem)
Descriptives of raw data			
Min	56	6.4	0.12
Q1	77	8	0.5
Q2 (Median)	83	8.55	0.61
Q3	88	9.11	0.66
Max	98	9.58	0.87
Mean	81.04	8.5	0.55
Calibration anchors			
Fully out (0)	No case (50)	Ukraine (7.99)	Iran (0.13)
Rather in (0.5+)	Austria (70)	Switzerland (9.00)	Netherlands (0.61)
Fully in (1)	Denmark (84)	Singapore and Norway (9.16)	Denmark (0.71)

Source: Authors' construction.

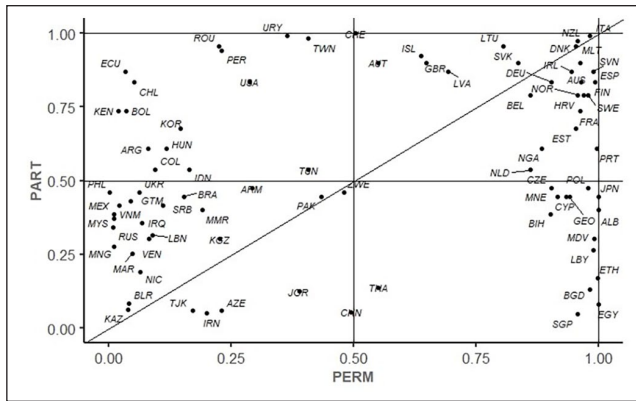


Figure 3. Enhanced XY Plot of *PART* and *PERM* (the Constituent Sets of *SOC*).

Values on the axes represent MSs.

Source: Authors' construction.

(Vaccaro, 2021). RoW encompasses different types of formal institutions and discerns four types of regimes, namely, closed autocracy, electoral autocracy, electoral democracy, and liberal democracy, and delineates them in a set-theoretic logic by applying logical operators to describe the sufficient conditions for each type. Table 4 shows the description of the four regime types and the fuzzy MSs we assign to them. While categorical democracy variables (such as RoW) are more suitable for descriptive purposes than interval democracy variables (Lindberg, 2016), they are sensitive to the selection of the subject

Table 4. Operationalization of *DEM* Based on Regimes of the World Data.

Regime type	Properties		Fuzzy MS in DEM
Closed autocracy	No de-facto multiparty, or free and fair elections, or Dahl's institutional prerequisites not minimally fulfilled	No multiparty elections for the chief executive or legislature	0
Electoral autocracy		De-jure multiparty elections for the chief executive and legislature	0.33
Electoral democracy	De-facto multiparty, free and fair elections, and Dahl's institutional prerequisites minimally fulfilled	Rule of law or liberal principles not satisfied	0.67
Liberal democracy		Rule of law and liberal principles satisfied	1

Source: Authors' construction based on Lührmann et al. (2018, 63).

year. Therefore, we computed the average *DEM* MSs across 2019, 2020, and 2021 and used these in the analysis.

Findings

Figure 4 and Table 5 present the results of the classification of a total of 83 countries for which all the applied data sources were available. The exact MSs of countries in sets (dimensions) and ITs are shown in Appendix 1. We emphasize that countries assigned to one IT are not expected to have similar levels of corruption overall. Rather, they share—according to the analysis—important similarities in terms of predominant types of corruption and mechanisms through which corruption is organized.

IT1—Limited Misconduct in Developed Countries

Twenty-eight countries were assigned to IT1. Most of these countries, especially those with higher MSs, are mature Western democracies. These states possess significant autonomy and are counterbalanced by democratic institutional constraints and vigilant society, conditions that are favorable for effective control of corruption. While the most famous examples of successful corruption control, such as in New Zealand and Nordic countries, are close to IT, there are some other, perhaps somewhat more surprising members of this group. The fact that the conditions are observed to a relatively large degree does not necessarily mean that corruption in these countries is insignificant but that it is qualitatively different from countries in other ITs. By imposing imperfect and incomplete yet substantial disincentives and impediments vis-à-vis potentially corrupt actors, the constraints prevent the emergence of a kleptocratic or criminal state, the capturing of the state by powerful interest groups, and the proliferation of petty corruption.

In Italy, for instance, powerful criminal organizations developed far-reaching and deeply embedded political connections, leading to the burgeoning of various forms of both petty and grand corruption. However, the extensive anti-mafia crackdowns and subsequent trials against the Cosa Nostra in the 1980s and the 'Ndrangheta in the 2020s (known as “maxi-trials”), which led to the prosecution and sentencing of numerous individuals, including politicians and bureaucrats, highlighted that these criminal organizations, and the businesses and political entities involved with them, should fear retaliation.

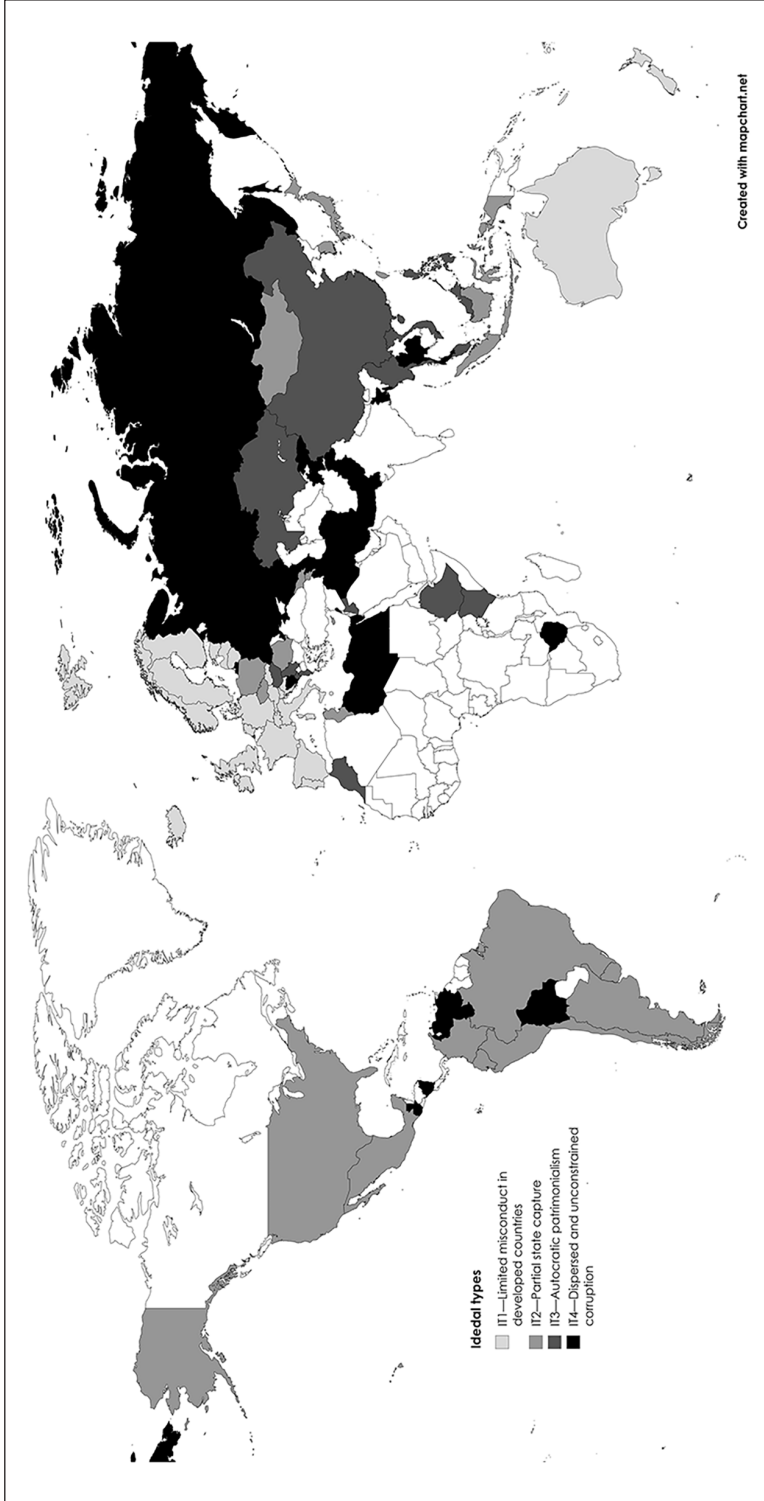


Figure 4. Results of the Classification.
Source: Authors' construction, created with mapchart.net.

Table 5. Results of the Classification.

POS	SOC	DEM	Countries assigned	N
IT1—Limited misconduct in developed countries				
1	1	1	Australia, Austria, Belgium, Switzerland, Germany, Denmark, Spain, Estonia, Finland, France, United Kingdom, Croatia, Ireland, Iceland, Italy, Lithuania, Latvia, Malta, Netherlands, Norway, New Zealand, Portugal, Slovak Republic, Slovenia, Sweden	25
IT2—Partial state capture				
1	0	1	Argentina, Armenia, Brazil, Chile, Colombia, Cyprus, Czech Republic, Ecuador, Georgia, Indonesia, Japan, Korea, Maldives, Mexico, Mongolia, Peru, Poland, Romania, Tunisia, Taiwan, China, Uruguay, United States	23
IT3—Autocratic patrimonialism				
1	0	0	Albania, China, Ethiopia, Hungary, Jordan, Kazakhstan, Kenya, Morocco, Myanmar, Montenegro, Malaysia, Philippines, Singapore, Serbia, Vietnam	15
IT4—Dispersed and unconstrained corruption				
0	0	0	Azerbaijan, Bangladesh, Belarus, Bolivia, Egypt, Iran, Iraq, Kyrgyz Republic, Lebanon, Libya, Nicaragua, Pakistan, Russian Federation, Thailand, Tajikistan, Venezuela, Zimbabwe	17
0	0	1	Bosnia and Herzegovina, Guatemala, Ukraine	3
0	1	1	Nigeria	1

Source: Authors' construction.

IT2—Partial State Capture

Twenty-two countries were classified into the IT2 case. These democracies have potent governments but lack societal control over corruption, allowing business and/or political elites to capture some (but not all) domains of the state and implement policies that serve their own purposes. Substantively more heterogenous than the set of countries assigned to IT1, this group includes countries of the former Eastern Bloc (Poland, Romania, and the Czech Republic) and the USSR (Georgia, Armenia), Latin American countries democracies (Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay), and three of the four “Asian Tigers” (South Korea, Indonesia, and Taiwan). The countries in question are all relatively young, having only become democracies within the past few decades. Their formal democratic institutions are more-or-less in place, but their societies have not developed the capability and/or willingness to prevent state capture effectively. As Williamson (2000) argues, informal institutions that are associated with societal norms related to corruption tend to change much slower than formal ones.

Puzzlingly, this group also includes some mature democracies, such as the United States and Japan. Concerning the United States, the fact that the court ruling against Republican presidential nominee Donald Trump regarding charges of large-scale tax evasion (Bromwich et al., 2023) resulted in no significant decline in popularity among his supporters demonstrates that in the presence of severe polarization, voters fail to punish corrupt politicians (Hajnal, 2025b). At least partially driven by this broadening space of partisan impunity, the influence of “big business” on politics via lobbying and campaign

financing—a long-standing concern regarding the functioning of American democracy (Johnston, 2006; Mills, 1999 originally published in 1956)—has increased to the degree that some recent contributions refer to it as state capture and argue that it substantially undermines democracy (Hertel-Fernandez, 2019). Recent large-scale corruption scandals involving former prime minister Abe Sinzo have also shed light on the presence of large-scale political corruption in Japan (Quah, 2020), although it is worth noting that the country has an MS of 0.55 only.

IT3—Autocratic Patrimonialism

Fifteen countries are attributed to IT3. Several autocratic Middle and East Asian autocracies (e.g. Kazakhstan, Malaysia, Myanmar, the Philippines, and China), autocratizing East European countries (Hungary, Serbia), and some African and Middle Eastern countries (e.g., Ethiopia, Jordan, Kenya, and Morocco), among others, belong to this group. These states, characterized by a powerful state that faces neither strong formal institutional nor societal constraints, are inclined to implement relatively centralized corruption networks to seize state assets and consolidate their power. Occasionally, they seek to curb certain forms of (typically petty) corruption (Hajnal, 2025a).

Mirroring this line of argumentation, Ang (2020) showed that in China, grand corruption involving exchanges between businesses and high-level politicians and bureaucrats (i.e. “access money”) thrives, while other petty types of corruption are effectively curbed. She argues that this pattern of corruption is favorable for economic growth, as such “access money” allows large corporations to win public contracts, circumvents regulations, and facilitates access to business opportunities. Singapore has also experienced remarkable economic expansion, becoming one of the most prosperous nations in the world. However, unlike China, Singapore, an outlier in many corruption studies, has been largely successful in combating both petty and grand corruption (Abdulai, 2009). As such, Singapore may be considered an outlier in this IT.

Autocratic patrimonialism does not typically favor inclusive economic development, however. In Hungary, the rapid de-democratization in 2010 was accompanied by the implementation of extensive centralized clientele networks (Fazekas and Tóth, 2016). Economic development was ambivalent until the outbreak of the COVID-19 pandemic. While most economic indicators were favorable (Martin, 2020), long-term structural indicators such as competitiveness, productivity, and the quality of human infrastructure eroded sharply or proved to be shallow compared to regional peer countries (Éltető and Martin, 2024). Since the pandemic, economic conditions have worsened due to structural vulnerabilities. The main beneficiaries of the regime have been friends and family members of the political elite and loyal corporations.

IT4—Dispersed and Unconstrained Corruption

Twenty-two countries were assigned to IT4. Struggling to establish central state control, these states are inclined to constrain neither petty nor grand corruption. While in three of them, basic formal democratic institutions are present, in the absence of an autonomous state and a powerful society, this does not fundamentally alter the nature of corruption. Members of this group include, but are not limited to, Middle Eastern countries (e.g. Lebanon, Libya, and Iraq), some post-soviet states (e.g. Tajikistan, Belarus, Ukraine, and the Kyrgyz Republic), less developed countries in Central America (e.g. Nicaragua, Guatemala, and Bolivia), and two African states (Egypt and Zimbabwe).

Some members of this group have recently faced wars or civil wars (such as Lebanon, Libya, and Iraq), whereas others have long struggled to collect taxes and provide even the most basic public services (such as Bolivia and Bangladesh). In such instances, it appears evident that the state is unable to fulfill its responsibility of combating corruption or developing and maintaining effective and resilient corruption networks. In contrast, the inclusion of some members of the group that are well-known for their autocratic strongmen (such as Vladimir Putin in Russia, Nicolas Maduro in Venezuela, and Recep Tayyip Erdoğan in Turkey) may appear counterintuitive. The fact that they have powerful leaders who face few constraints from democratic institutions and society does not mean that they possess sufficient autonomy to implement centralized clientele networks while effectively curbing petty forms of corruption. Such networks may exist but arguably tend to be more limited in scope relative to those in some IT3 countries, such as Hungary and China.

For instance, while in Russia, President Putin has substantive leverage over the country's business elites, the power of the federal government is clearly constrained by Russia's enormous size and ethnic and religious diversity, as showcased by disputes and conflicts over state autonomy in Chechnya and Tatarstan, and the Wagner mercenary group's uprising. Rochlitz (2014) argues that the federal authorities may tolerate predatory activities by local elites in return for electoral support. Nonetheless, Russia under Putin may be converging toward IT3. In the aftermath of the collapse of the USSR and subsequent privatization in the Yeltsin era, Russia was characterized by an extremely weak state and rival clans competing for state resources (Johnston, 2006: Chapter 6). However, the intense centralization of power over the past decade has resulted in the centralization of corruption (Rochlitz et al., 2020).

Notably, four countries attributed to IT4 lack a powerful central state but—in contrast to other countries in this group—have either democratic institutions (Bosnia-Herzegovina, Guatemala, Ukraine) or both democratic institutions and a potent society (Nigeria). At first glance, these configurations seem somewhat surprising. Arguably, these countries may be transitioning toward other, more stable configurations. Ukraine, for instance, may be heading toward another IT, possibly toward IT2. Conversely, Nigeria is likely to transition either toward IT1 or a more stable configuration of IT4 (e.g. $\sim POS * \sim SOC * \sim DEM$).

Conclusion

Corruption is a multifaceted phenomenon that encompasses a vast array of practices and mechanisms. While unidimensional corruption indices are useful for grasping the broad patterns of corruption and testing general causal claims, they obscure significant qualitative differences in corruption between countries (Graycar, 2015; Hajnal, 2025a; Johnston, 2006). Against this background, we constructed a four-element typology of corruption patterns (IT1—Limited misconduct in developed countries; IT2—Partial state capture; IT3—Autocratic patrimonialism; IT4—Dispersed and unconstrained corruption). As corruption patterns cannot be observed directly, we focused on (observable) incentive structures and described the mechanisms through which distinct configurations of incentives lead to the emergence of different patterns of corruption. We applied the FSITA method, which enables the capturing of these incentive structures more accurately than standard quantitative methods using logical operators and allows for assessing the degree to which countries conform to ITs. The resulting country groups exhibit significant intra-group homogeneity and inter-group heterogeneity.

The analysis showcases that the FSITA method can be fruitfully employed to study intricate patterns of corruption. More generally, the findings strengthen the relevance of considering qualitative (and not only quantitative) differences in corruption (Andersson, 2017; Johnston, 2006) and highlight that similar corruption levels may mask distinct patterns of corruption. Moreover, the analysis underpins that corruption entails distinct phenomena across regime types.

While the analysis did not directly address the question of anti-corruption, the findings nevertheless have significant implications in this area. The anti-corruption literature discerns two broad types of anti-corruption approaches. On the one hand, proponents of the “big bang” approach contend that only large-scale, rapidly implemented, and encompassing measures can effectively tackle systemic corruption (i.e. the institutionalized and normalized form of corruption; Persson et al., 2013). On the other hand, advocates of the incremental approach argue that smaller-scale measures can also yield a positive impact (Cuèllar and Stephenson, 2022). Arguably, the potential effectiveness of these approaches varies across corruption types. In IT1 countries, where corruption is an anomaly rather than a norm, and governments are potent but face significant constraints, smaller, technical reforms may work. In IT2 and IT3 countries, the ruling elite benefits from corruption directly and thus has little incentive to curb it. Thus, incremental reforms are likely to be futile. Rather, “big bang” type reforms that fundamentally alter the institutional context may be an effective alternative. Finally, in IT4 countries, where the state lacks both the resources and the motivation to address corruption, neither approach is likely to yield positive outcomes.

The main limitations of the study revolve around the operationalization of the complex concepts underlying the dimensions of the typology. Should more suitable and valid indices become available, future analyses could deploy more elaborate typologies. That said, the application of constituent sets has allowed for grasping the underlying concepts fairly accurately, and the fuzzy MSs enabled an assessment of the certainty of classification decisions.

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Data availability

The data used for the empirical analysis are available upon request.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Ethical approval

Ethical approval was not required to conduct this research.

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Notes

1. We use the following set-theoretic operations: + for disjunction (logical “or”); * for conjunction (logical “and”); ~ for negation.
2. Slight adjustments were necessary in the case of two data sources (see later).

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Appendix I

Table AI. Fuzzy MSs of Countries in the Dimensions (Sets) of the Typology and ITs.

Country	IT1	IT2	IT3	IT4
Albania	0.33	0.33	0.59	0.30
Argentina	0.08	0.67	0.33	0.23
Armenia	0.29	0.67	0.33	0.15
Australia	0.83	0.17	0	0.04
Austria	0.69	0.31	0.11	0.05
Azerbaijan	0.07	0.29	0.29	0.67
Bangladesh	0.15	0.26	0.26	0.67
Belarus	0.04	0.33	0.37	0.63
Belgium	0.79	0.21	0	0.06
Bolivia	0.03	0.44	0.44	0.56
Bosnia and Herzegovina	0.39	0.45	0.33	0.55
Brazil	0.15	0.64	0.33	0.36
Chile	0.05	0.67	0.33	0.12
China	0	0	0.50	0.50
Colombia	0.10	0.52	0.33	0.48
Croatia	0.67	0.21	0.21	0.13
Cyprus	0.45	0.55	0	0.22
Czech Republic	0.48	0.52	0.22	0.08
Denmark	0.95	0.05	0	0.04
Ecuador	0.03	0.67	0.33	0.32
Egypt, Arab Rep.	0.09	0.30	0.30	0.67
Estonia	0.68	0.32	0	0.04
Ethiopia	0.19	0.33	0.55	0.45
Finland	0.79	0.21	0	0.05
France	0.74	0.26	0	0.06
Georgia	0.45	0.55	0.33	0.21
Germany	0.83	0.17	0	0.04
Guatemala	0.05	0.46	0.44	0.54
Hungary	0.15	0.33	0.67	0.09
Iceland	0.64	0.36	0	0.03
Indonesia	0.16	0.65	0.33	0.35

(Continued)

Table A1. (Continued)

Country	IT1	IT2	IT3	IT4
Iran, Islamic Rep.	0.06	0.22	0.36	0.64
Iraq	0.07	0.10	0.10	0.67
Ireland	0.87	0.13	0	0.07
Italy	0.91	0.02	0	0.09
Japan	0.45	0.55	0	0.06
Jordan	0	0	0.69	0.31
Kazakhstan	0.04	0.33	0.54	0.46
Kenya	0.02	0.33	0.65	0.35
Korea, Rep.	0.15	0.85	0	0.08
Kyrgyz Republic	0.23	0.33	0.49	0.51
Latvia	0.78	0.22	0	0.09
Lebanon	0.09	0.14	0.14	0.67
Libya	0	0	0.04	0.72
Lithuania	0.67	0.15	0.15	0.08
Malaysia	0.01	0.33	0.67	0.29
Maldives	0.32	0.67	0.33	0.19
Malta	0.67	0.10	0.10	0.06
Mexico	0.01	0.53	0.33	0.47
Mongolia	0.01	0.67	0.33	0.11
Montenegro	0.44	0.44	0.55	0.26
Morocco	0	0	0.56	0.44
Myanmar	0.19	0.22	0.54	0.46
Netherlands	0.54	0.46	0	0.04
New Zealand	0.96	0.04	0	0.03
Nicaragua	0.06	0.33	0.38	0.62
Nigeria	0.20	0.20	0.20	0.56
Norway	0.79	0.21	0	0.02
Pakistan	0.16	0.16	0.16	0.57
Peru	0.23	0.67	0.33	0.31
Philippines	0.00	0.33	0.50	0.50
Poland	0.48	0.52	0.33	0.16
Portugal	0.61	0.39	0.11	0.06
Romania	0.31	0.67	0.33	0.15
Russian Federation	0.01	0.33	0.35	0.65
Serbia	0.11	0.33	0.58	0.42
Singapore	0.06	0.33	0.67	0.03
Slovak Republic	0.87	0.13	0	0.12
Slovenia	0.78	0.13	0.13	0.11
Spain	0.83	0.17	0	0.06
Sweden	0.79	0.21	0	0.05
Switzerland	0.50	0.50	0	0.04
Taiwan, China	0.41	0.59	0	0.07
Tajikistan	0.07	0.33	0.42	0.58
Thailand	0	0	0.39	0.61
Tunisia	0.41	0.59	0.33	0.11

(Continued)

Table A1. (Continued)

Country	IT1	IT2	IT3	IT4
Ukraine	0.06	0.40	0.40	0.56
United Kingdom	0.75	0.25	0	0.05
United States	0.29	0.71	0	0.10
Uruguay	0.36	0.64	0	0.06
Venezuela, RB	0.08	0.10	0.10	0.67
Vietnam	0	0	0.62	0.38
Zimbabwe	0.33	0.33	0.37	0.54

The highest MSs (pertaining to the IT a country belongs to) are marked in bold. The MSs in IT4 are the maximum across the MSs pertaining to the four different configurations of IT4 (see Table I).

Source: Authors' construction.