

Democratic Resilience, Corruption and Informality in High-Income Democracies: Economic Freedom and the Limits of Institutional Inclusion

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Abstract

Why do some high-income democracies remain vulnerable to democratic quality erosion despite economic openness and formal institutional consolidation? This article examines how perceived corruption and the shadow economy condition the relationship between economic freedom and democratic quality. Drawing on the distinction between inclusive and extractive institutions, it argues that economic freedom does not automatically strengthen democracy. Where public authority is perceived as impartial and corruption is low, market openness may reinforce formal participation, accountability and institutional trust. Where corruption and informality persist, however, economic freedom may coexist with unequal access, rent-seeking and institutional withdrawal. Using a country-year panel of high-income democracies between 2000 and 2017, the article tests whether corruption and the shadow economy moderate the relationship between economic freedom and V-Dem democratic quality indicators. The results provide mixed but theoretically informative evidence: economic freedom does not display a robust automatic democratic dividend once country and year fixed effects are introduced, while corruption and informality remain important diagnostic signals of institutional fragility. The article contributes to debates on democratic resilience by theorizing the shadow economy as an early-warning indicator of weakened state-society reciprocity in affluent democracies.

1. Introduction

High-income democracies are often assumed to be institutionally resilient because they combine prosperity, state capacity and formal democratic consolidation. Yet recent patterns of democratic weakening suggest that wealth and market openness do not automatically protect democratic quality. Democratic erosion may occur without immediate regime breakdown, through gradual losses in institutional trust, equality before the law, accountability and the perceived impartiality of the state (V-Dem Institute, 2025; Coppedge et al., 2025).

This article examines one dimension of this puzzle: why economic freedom may fail to translate into stronger democratic quality when corruption and informality weaken the inclusive character of institutions. Existing debates often treat market openness, property rights and freedom of exchange as supportive of liberal democracy. This expectation is plausible, but incomplete. Economic freedom can expand opportunity and constrain arbitrary state intervention, but only when the institutional environment prevents private advantage from being converted into political privilege (de Haan & Sturm, 2000; Bennett et al., 2017).

The core claim is that democratic resilience depends on the institutional conditions under which economic freedom operates. Drawing on Acemoglu and Robinson's distinction between inclusive and extractive institutions, the article argues that market openness has different democratic implications depending on whether public authority is impartial, corruption is contained and economic actors remain willing to participate in the formal institutional order. Where these conditions are absent, economic freedom may coexist with unequal access, rent-seeking and institutional withdrawal rather than democratic deepening (Acemoglu & Robinson, 2012, 2019; North et al., 2009).

The shadow economy is central to this argument. Informality is usually treated as a fiscal, regulatory or labour-market problem. This article instead conceptualizes it as a political signal of weakened state-society reciprocity. When firms, workers and households move activity outside formal rules, they reveal that the formal order is not perceived as sufficiently fair, credible or beneficial. In high-income democracies, where administrative capacity is comparatively strong, persistent informality is therefore not merely a development residue. It is a potential warning sign of democratic fragility (Perry et al., 2007; Medina & Schneider, 2018; Torgler & Schneider, 2009).

Empirically, the article uses a country-year panel of high-income democracies between 2000 and 2017. Democratic quality is measured with V-Dem v15 indicators, economic freedom with the Fraser Institute's Economic Freedom of the World index, corruption with World Bank governance indicators, and the shadow economy with Medina and Schneider's 1991–2017 estimates. The analysis uses country and year fixed effects, lagged specifications and alternative democracy measures to evaluate whether corruption and informality condition the relationship between economic freedom and democratic quality (Coppedge et al., 2025; Fraser Institute, 2025; World Bank, 2025; Medina & Schneider, 2019).

This article contributes to the study of democratization in three ways. First, it shifts attention from regime survival to the institutional conditions under which democratic quality is reproduced or eroded in affluent democracies. Second, it theorizes the shadow economy as a political signal of institutional withdrawal, low tax morale and weakened state-society reciprocity. Third, it provides cross-national evidence showing that economic freedom does not generate a robust automatic democratic dividend once institutional context and fixed effects are taken seriously (Acemoglu & Robinson, 2012; Medina & Schneider, 2018; V-Dem Institute, 2025).

This article proceeds as follows. Section 2 develops the theoretical framework and hypotheses. Section 3 presents the data, empirical strategy and identification concerns. Section 4 reports the results. Sections 5 and 6 discuss the shadow economy, corruption and the vicious circle of democratic erosion. Section 7 presents implications for high-income democracies, and Section 8 concludes.

2. Democratic Resilience, Institutions and Hypotheses

2.1 Democratic resilience beyond regime survival

Democratic resilience should not be reduced to the survival of electoral institutions or the absence of overt authoritarian reversal. Liberal-democratic quality also depends on the everyday capacity of institutions to sustain accountability, impartial enforcement, effective constraints on power and confidence in public authority. A democracy can retain competitive elections while gradually losing the social and institutional foundations that make formal rights meaningful (Rothstein & Teorell, 2008; V-Dem Institute, 2025).

This perspective is particularly relevant for high-income democracies. Prosperity and administrative capacity may reduce some risks of democratic breakdown, but they do not eliminate subtler forms of democratic weakening. When citizens believe that formal rules are selectively enforced, that elites can secure exemptions, or that political and economic influence are mutually reinforcing, democratic quality

becomes vulnerable even without constitutional rupture (Acemoglu & Robinson, 2019; V-Dem Institute, 2025).

Acemoglu and Robinson's distinction between inclusive and extractive institutions is useful for explaining this vulnerability. Inclusive institutions distribute power broadly, constrain elites and create predictable links between participation, rights and opportunity. Extractive institutions concentrate power and allow privileged actors to shape rules in their favour. The democratic relevance of economic freedom therefore depends on whether market access is embedded in institutions that remain inclusive, impartial and accountable (Acemoglu & Robinson, 2012, 2019).

In this framework, economic freedom is not treated as an automatic democratic good. It may support pluralism, autonomy and accountability when accompanied by inclusive political institutions. Yet it may also coexist with democratic fragility when market openness is filtered through corruption, unequal enforcement and informal privilege. The relevant question is not whether markets are formally open, but whether the institutional order makes that openness broadly accessible and politically non-extractive (Acemoglu et al., 2005; de Haan & Sturm, 2000; Hellman et al., 2000).

2.2 Corruption, unequal access and democratic quality

Corruption is not simply a transaction cost or a public-sector inefficiency. It is evidence that formal rules are not applied impartially. It signals that access to rights, permits, procurement, adjudication and public authority is mediated by personal connections, side payments or political leverage. In democratic terms, corruption weakens the promise that citizens and firms operate under general rules (Mauro, 1995; Rothstein & Teorell, 2008).

In low-corruption settings, economic freedom may enhance democratic agency by allowing individuals and firms to act under predictable and generalizable rules. In high-corruption settings, the same formal freedoms may coexist with unequal effective access. Rules remain on paper, but their implementation becomes stratified. This creates a hybrid order in which market participation depends not only on productivity or innovation, but also on the capacity to navigate informal power structures (Hellman et al., 2000; Mungiu-Pippidi, 2015).

This mechanism links corruption directly to democratic quality. Liberal democracy depends not only on elections and civil liberties, but also on impersonal administration, credible checks and balances and public confidence that authority is exercised under general rules. Where corruption becomes normalized, citizens are less likely to regard the state as a neutral guarantor of rights and more likely to interpret public power as a tool of extraction or favoritism (Rothstein & Teorell, 2008; V-Dem Institute, 2025).

2.3 Informality as institutional withdrawal

The literature on informality has moved beyond older dualist interpretations that treated the informal economy as a temporary residue of underdevelopment. More recent approaches emphasize survival, evasion, flexibility and institutional exit. For the purposes of democratic analysis, informality matters

because it reflects whether citizens and firms believe that formal participation offers credible rights, predictable enforcement and fair reciprocity (Benjamin et al., 2014; Perry et al., 2007).

This article aligns with research that interprets informality through trust, tax morale and state legitimacy. Tax morale is not merely civic virtue. It is shaped by beliefs about reciprocity, fairness and institutional performance. When citizens perceive that the state enforces rules unevenly or that elites can convert influence into privilege, the willingness to comply voluntarily falls. Informality then becomes a form of institutional withdrawal (OECD, 2024; Torgler & Schneider, 2009).

This perspective is especially important for high-income democracies. In such settings, large or persistent shadow sectors cannot be explained only by weak administrative capacity. Rather, they suggest a deeper disjuncture between formal institutional architecture and citizens' lived expectations of fairness. Persistent informality may therefore reveal democratic fragility before it becomes visible as overt backsliding (Hazans, 2011; Medina & Schneider, 2018; European Parliament, 2022).

2.4 Hypotheses

The theoretical argument can be translated into four testable hypotheses. The first captures the conventional expectation that economic freedom should be positively associated with democratic quality in high-income democracies. The remaining hypotheses test the institutional-conditional argument: corruption and informality should weaken the democratic return of economic freedom, while the shadow economy should itself be associated with lower democratic quality (Acemoglu & Robinson, 2012; Medina & Schneider, 2018).

- H1. Economic freedom is positively associated with democratic quality in high-income democracies.
- H2. The democratic return of economic freedom weakens where perceived corruption is higher.
- H3. The democratic return of economic freedom weakens where the shadow economy is larger.
- H4. The shadow economy is negatively associated with democratic quality, reflecting weakened institutional trust and state-society reciprocity.

The hypotheses do not imply that economic freedom is inherently democratic or anti-democratic. The article instead advances a conditional claim: economic freedom is more likely to support democratic quality when institutions remain inclusive, corruption is contained and economic actors perceive formal participation as legitimate. Where those conditions weaken, economic openness may coexist with democratic fragility (Acemoglu & Robinson, 2012; Torgler & Schneider, 2009).

3. Empirical Strategy and Identification Concerns

The empirical strategy is designed to estimate whether corruption and the shadow economy condition the relationship between economic freedom and democratic quality in high-income democracies. The unit of analysis is the country-year. The sample covers 2000–2017 and includes high-income democracies with available observations for V-Dem democratic quality, Fraser economic freedom, World Bank governance indicators, Medina-Schneider shadow economy estimates and macro controls (Gaspar, 2026).

The dependent variable is democratic quality, measured using the V-Dem v15 Liberal Democracy Index. Alternative measures, including V-Dem's Electoral Democracy Index and Liberal Component Index, are used in robustness checks. Economic freedom is measured using the Fraser Institute's Economic Freedom of the World summary index. Corruption is operationalized through World Bank governance indicators, and the shadow economy is measured as a percentage of GDP using Medina and Schneider's 1991–2017 estimates (Coppedge et al., 2025; Fraser Institute, 2025; World Bank, 2025; Medina & Schneider, 2019).

The baseline model estimates the direct association between economic freedom and democratic quality, while subsequent models introduce interaction terms between economic freedom and institutional filters. The preferred specification includes country and year fixed effects to account for unobserved country-level characteristics and common time shocks. The estimates should be interpreted as conditional associations, not as definitive causal effects (Rothstein & Teorell, 2008; Mungiu-Pippidi, 2015).

3.1 Model specification

The baseline model is:

$$Democracy(it) = \beta_0 + \beta_1 EconomicFreedom(it) + \beta_n X(it) + \mu_i + \lambda_t + \varepsilon(it)$$

The corruption moderation model is:

$$Democracy(it) = \beta_0 + \beta_1 EconomicFreedom(it) + \beta_2 Corruption(it) + \beta_3 (EconomicFreedom(it) \times Corruption(it)) + \beta_n X(it) + \mu_i + \lambda_t + \varepsilon(it)$$

The shadow economy moderation model is:

$$Democracy(it) = \beta_0 + \beta_1 EconomicFreedom(it) + \beta_2 ShadowEconomy(it) + \beta_3 (EconomicFreedom(it) \times ShadowEconomy(it)) + \beta_n X(it) + \mu_i + \lambda_t + \varepsilon(it)$$

The full model includes both interaction terms. A triple interaction between economic freedom, corruption and the shadow economy can be estimated as a robustness check, but should be interpreted with caution and supported by marginal-effect plots.

3.2 Identification and interpretation

The empirical strategy does not claim to identify a fully causal effect of economic freedom on democratic quality. Rather, it estimates conditional associations consistent with the proposed institutional mechanism. This is important because economic freedom, corruption, informality and democratic quality are jointly endogenous. For example, democratic institutions may improve corruption control; corruption may influence the design of market reforms; and economic development may affect both formalization and democracy (Acemoglu et al., 2005; North et al., 2009).

To reduce omitted-variable bias, the models include country and year fixed effects, time-varying controls and standard errors clustered by country. Robustness checks use lagged independent variables, alternative measures of democratic quality and alternative institutional measures. These tests do not establish full

causal identification, but they assess whether the core institutional mechanism is sensitive to timing assumptions or measurement choices (Gaspar, 2026).

The interpretation of interaction terms is central. A positive interaction between economic freedom and control of corruption would be consistent with the institutional filter hypothesis: economic freedom is more strongly associated with democratic quality where corruption is contained. A negative interaction between economic freedom and shadow economy size would suggest that informality weakens the democratic return of market openness. H4 is evaluated by examining the direct association between shadow economy size and democratic quality (Brambor et al., 2006).

3.3 Variables and expected signs

Table 1
Variables, data sources and theoretical expectations

Variable	Concept	Source	Scale/coding	Expected relationship
Democratic quality	Liberal-democratic performance	V-Dem Liberal Democracy Index	0–1; higher = more democratic	Dependent variable
Economic freedom	Market openness, property rights, freedom of exchange	Fraser Institute Economic Freedom of the World	0–10; higher = more freedom	Positive, conditional
Corruption risk	Lack of impartiality and extractive capture	World Bank Worldwide Governance Indicators, Control of Corruption	Inverted; higher = more corruption risk	Negative moderator
Shadow economy	Informality and institutional exit	Medina and Schneider global shadow economy estimates	% of GDP	Negative moderator
Controls	Development and scale	V-Dem full dataset and related macro controls	Log GDP per capita; log population; education where available	Controls

Note. The empirical sample is a country-year panel of high-income democracies for 2000–2017. The full replication package is available at <https://doi.org/10.5281/zenodo.20582336>.

4. Empirical Results

The empirical analysis uses a country-year panel covering 2000–2017. The sample is restricted to high-income democracies with available data on democratic quality, economic freedom, corruption risk, shadow economy size and macro controls. Operational details, codebook and replication materials are available in the Zenodo dataset associated with this article (Gaspar, 2026).

Table 2 reports descriptive statistics. The sample displays high average democratic quality, substantial variation in economic freedom, and meaningful cross-country and temporal variation in corruption risk and shadow economy size. The shadow economy averages approximately 15.9 percent of GDP in the analysis sample, but ranges from 5.1 to 40.2 percent of GDP, making it suitable for testing the institutional filtering argument (Gaspar, 2026).

Table 2
Descriptive statistics for the high-income democracy sample, 2000–2017

Variable	N	mean	SD	Min	Max
Democratic quality (V-Dem Liberal Democracy Index)	635	0.783	0.075	0.435	0.897
Electoral democracy (V-Dem)	635	0.857	0.049	0.559	0.923
Liberal component index (V-Dem)	635	0.917	0.052	0.704	0.984
Economic freedom (Fraser summary index)	635	7.743	0.464	4.570	8.770
Corruption risk (WGI, inverted)	607	-1.294	0.696	-2.397	0.666
Control of corruption (WGI)	607	1.294	0.696	-0.666	2.397
Shadow economy (% GDP)	620	15.920	6.853	5.100	40.200
GDP per capita, log	635	4.372	0.313	3.506	5.139
Population, log	635	6.850	1.691	3.375	10.456
Average education	296	11.381	1.381	7.340	13.300
Freedom to trade internationally	635	8.466	0.584	3.148	9.670

Note. Statistics are calculated for the high-income democracy analysis sample. Variable availability differs across indicators; education has fewer observations and is used only in robustness checks.

4.1 Main fixed-effects estimates

Table 3 reports the main fixed-effects estimates. All models include country and year fixed effects, GDP per capita and population controls, and standard errors clustered by country. Model 1 estimates the direct association between economic freedom and democratic quality. Models 2 and 3 introduce the corruption and shadow economy interactions separately. Model 4 includes both interactions (Gaspar, 2026).

The estimates do not support a simple liberalization thesis. Economic freedom is not robustly associated with democratic quality once country and year fixed effects are introduced. This is substantively important for democratization research because it suggests that democratic resilience cannot be inferred from market openness alone. The interaction terms also provide limited statistical support across the main specifications, indicating that the proposed institutional filtering mechanism is theoretically plausible but empirically fragile in this sample.

Table 3

Economic freedom, corruption, shadow economy and democratic quality: fixed-effects panel estimates

Variable	Model 1	Model 2	Model 3	Model 4
Economic freedom (centered)	0.0048 (0.0100)	0.0036 (0.0098)	-0.0049 (0.0106)	-0.0064 (0.0113)
Corruption risk (centered)		-0.0181 (0.0187)		-0.0181 (0.0181)
Shadow economy % GDP (centered)			-0.0045 (0.0035)	-0.0048 (0.0035)
Economic freedom × corruption risk		-0.0005 (0.0085)		-0.0033 (0.0122)
Economic freedom × shadow economy			0.0006 (0.0012)	0.0008 (0.0016)
GDP per capita, log	-0.1716** (0.0777)	-0.1842** (0.0810)	-0.2229** (0.1000)	-0.2407** (0.1070)
Population, log	0.1144 (0.1083)	0.1224 (0.1152)	0.1223 (0.1176)	0.1285 (0.1223)
Country fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Clustered SE	Country	Country	Country	Country
Observations	635	607	620	592
Countries	43	43	41	41
R-squared	0.888	0.889	0.882	0.883
Note. Robust standard errors clustered by country are reported in parentheses. All models include country and year fixed effects. Dependent variable: V-Dem Liberal Democracy Index. Significance levels: * $p < .10$, ** $p < .05$, *** $p < .01$.				

To facilitate interpretation of the interaction effects, Figs. 1 and 2 report the marginal effect of economic freedom on democratic quality across the observed ranges of corruption risk and shadow economy size. This is important because the coefficient of an interaction term does not, by itself, show the conditional effect of economic freedom at substantively meaningful levels of the moderator (Brambor et al., 2006).

Figure 1 shows that the estimated marginal effect of economic freedom remains close to zero across most observed levels of corruption risk, with confidence intervals crossing zero. This pattern is consistent with a

cautious reading: corruption risk may matter for democratic resilience, but the panel evidence does not show a strong or stable conditional democratic return to economic freedom (Gaspar, 2026).

Figure 2 similarly indicates that the marginal effect of economic freedom varies only modestly across levels of shadow economy size, with wide confidence intervals. The shadow economy remains theoretically important as an indicator of institutional exit and weakened reciprocity, but the results do not support a strong statistical claim that it systematically moderates the democratic effect of economic freedom (Gaspar, 2026).

4.2 Robustness checks

Table 4 evaluates the robustness of the main findings. First, the explanatory variables are lagged by one year to reduce concerns about simultaneity and reverse causality. Second, the models are re-estimated using alternative dependent variables from V-Dem and an alternative institutional measure based on rule-of-law risk. Third, a smaller education-controlled model is estimated where data availability permits (Gaspar, 2026).

The robustness checks reinforce the need for a cautious interpretation. Lagged predictors do not produce statistically significant interaction effects. Alternative democracy measures also yield mixed results. In the education-controlled model, the interaction between economic freedom and corruption risk reaches statistical significance, but this result should be interpreted carefully because the sample is smaller. Overall, the evidence is more consistent with rejecting an automatic democratic dividend from economic freedom than with confirming a strong and uniform interaction effect (Gaspar, 2026).

Table 4
Robustness checks: lagged predictors and alternative institutional/democracy measures

Variable	Lagged predictors	DV: Electoral democracy	DV: Liberal component	Alt institution: rule of law risk	Add education control
Economic freedom (centered)		-0.0052 (0.0084)	0.0013 (0.0059)	-0.0125 (0.0132)	-0.0181 (0.0113)
Economic freedom, t-1 (centered)	-0.0091 (0.0131)				
Corruption risk (centered)		-0.0144 (0.0155)	-0.0105 (0.0079)		-0.0127 (0.0104)
Corruption risk, t-1 (centered)	-0.0143 (0.0184)				
Shadow economy % GDP (centered)		-0.0042 (0.0029)	-0.0017 (0.0020)	-0.0048 (0.0032)	-0.0042 (0.0031)
Shadow economy, t-1 (centered)	-0.0051 (0.0034)				
Rule of law risk (centered)				-0.0635 (0.0481)	
Economic freedom × corruption risk		-0.0086 (0.0099)	0.0080 (0.0073)		-0.0184* (0.0094)
Economic freedom t-1 × corruption risk t-1	-0.0088 (0.0161)				
Economic freedom × shadow economy		0.0007 (0.0012)	-0.0002 (0.0010)	0.0005 (0.0015)	0.0032* (0.0017)
Economic freedom t-1 × shadow economy t-1	0.0008 (0.0016)				
Economic freedom × rule of law risk				-0.0022 (0.0136)	
Note. Robust standard errors clustered by country are reported in parentheses. All models include country and year fixed effects. Significance levels: * p < .10, ** p < .05, *** p < .01.					

Variable	Lagged predictors	DV: Electoral democracy	DV: Liberal component	Alt institution: rule of law risk	Add education control
GDP per capita, log	-0.2310** (0.1008)	-0.1828** (0.0884)	-0.1290*** (0.0486)	-0.2526** (0.1100)	-0.1899 (0.1268)
Population, log	0.1374 (0.1282)	0.0864 (0.1004)	0.0897 (0.0607)	0.1460 (0.1272)	0.1033 (0.1268)
Average education					-0.0312 (0.0359)
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Clustered SE	Country	Country	Country	Country	Country
Observations	564	592	592	592	265
Countries	41	41	41	41	31
R-squared	0.880	0.823	0.936	0.888	0.959
Note. Robust standard errors clustered by country are reported in parentheses. All models include country and year fixed effects. Significance levels: * $p < .10$, ** $p < .05$, *** $p < .01$.					

5. Discussion: The Shadow Economy as a Warning Sign for Democratic Resilience

The shadow economy is usually treated in public policy as a fiscal, regulatory or labour-market problem. In that conventional view, informal activity reduces tax revenues, distorts competition, weakens labour protections and complicates macroeconomic management. These effects are real, but they do not exhaust its political significance. In institutional terms, the shadow economy should also be read as a diagnostic signal. It reveals that a significant share of economic actors does not consider formal participation sufficiently credible, fair or beneficial to justify full compliance (European Parliament, 2022; Medina & Schneider, 2018; Perry et al., 2007).

This argument is especially important in high-income democracies. In low-capacity settings, large informal sectors are often interpreted as the predictable by-product of weak state penetration, low bureaucratic reach or underdevelopment. In wealthy democracies, however, persistent informality poses a more demanding theoretical question. If the state has substantial administrative capacity, if markets are highly developed, and if formal democratic institutions remain intact, why do firms, workers and households continue to shift activity outside formal rules? The answer advanced here is that the shadow economy reflects not only the burden of taxation or regulation, but also the quality of the institutional relationship between state and society (Medina & Schneider, 2018; Torgler & Schneider, 2009).

From the perspective of Acemoglu and Robinson, this can be understood through the distinction between inclusive and extractive institutions. Inclusive institutions sustain broad participation because they create reasonably predictable links between compliance, rights and opportunity. Extractive settings weaken those links. Rules continue to exist, but their enforcement becomes more selective, their benefits less evenly distributed and their burdens more asymmetrically felt. Under such conditions, informal economic behavior becomes intelligible as an adaptive response. Economic agents do not necessarily exit formality because they reject legality as such. They do so because they no longer trust that legality is administered impartially (Acemoglu & Robinson, 2012; Rothstein & Teorell, 2008).

The notion of tax morale is central because it links individual compliance behavior to regime-level legitimacy. Tax morale is shaped by beliefs about reciprocity, fairness and institutional performance. When citizens perceive that the state enforces rules unevenly or that elites are able to convert influence into privilege, the willingness to comply voluntarily falls. In this sense, informality is both economic and political. It signals that part of the population no longer accepts the terms under which authority is exercised (OECD, 2024; Torgler & Schneider, 2009).

The shadow economy therefore deserves analytical status as an early-warning variable. It indicates that state authority may still be legally extensive while becoming socially thinner. A polity can retain elections, courts and parliamentary procedures while losing the diffuse confidence required for effective democratic governance. When this occurs, the costs are cumulative. A wider shadow economy narrows the tax base, weakens social insurance financing, complicates regulatory enforcement and fragments labour-market citizenship. Those material effects then intensify the original political problem by further reducing the ability of democratic institutions to deliver visible and fair public goods (Medina & Schneider, 2018; V-Dem Institute, 2025).

6. Discussion: Corruption, Informality and the Vicious Circle of Democratic Erosion

If corruption and informality are interpreted separately, each appears as a serious but manageable governance problem. When they are analyzed together, however, a more troubling dynamic becomes visible. Corruption and the shadow economy do not merely coexist. They reinforce one another through a cumulative causal sequence that can progressively erode democratic quality. This sequence closely resembles what Acemoglu and Robinson describe as a vicious circle: once extractive tendencies gain traction, they reproduce themselves by concentrating power, weakening countervailing institutions and narrowing the social base of inclusion (Acemoglu & Robinson, 2012).

The first step in this circle is the erosion of state impartiality. Corruption weakens the principle that public authority should be exercised through general and impersonal rules. It signals that access to permits, procurement, legal protection and policy influence is mediated not solely by law, but by networks, side payments and political leverage. Formal participation becomes less attractive for outsiders because they bear the costs of legality without receiving the full benefits of institutional protection (Mauro, 1995; Rothstein & Teorell, 2008; Mungiu-Pippidi, 2015).

The second step is defensive exit into informality. As impartiality declines, citizens and firms adjust. Some reduce compliance opportunistically, but many do so strategically because the formal sphere no longer appears predictably fair. Informality becomes a hedge against arbitrary extraction, bureaucratic harassment or distributive asymmetry. This is why the shadow economy should not be interpreted merely as deviance. It reflects a breakdown in the reciprocal logic of formal institutions (Perry et al., 2007; Torgler & Schneider, 2009).

The third step is the weakening of fiscal and administrative capacity. As more activity moves outside formal channels, the tax base contracts, enforcement becomes more costly and the financing of public goods becomes less secure. Democratic states rely on formalized economic activity to sustain infrastructure, welfare systems, courts, regulators and professional public administration. When that base is eroded, the state's capacity to act effectively declines (North et al., 2009; OECD, 2024).

The fourth step is the fragmentation of democratic citizenship. Informality changes how citizens relate to the state and to one another. In highly formalized systems, taxation, labour protection and social insurance embed individuals in a shared framework of rights and obligations. In more informal systems, that common framework becomes patchier. Different categories of citizens experience the state in increasingly unequal ways (European Parliament, 2022; Perry et al., 2007).

The fifth step is renewed elite capture. A state weakened fiscally, administratively and normatively is easier to capture. As public legitimacy declines and the social base of compliance narrows, politically connected actors face fewer constraints in shaping rules, appropriating rents or insulating themselves from scrutiny. This completes the vicious circle: corruption weakens impartiality, weak impartiality encourages informality, informality erodes state capacity and a weaker state becomes more vulnerable to further capture (Acemoglu & Robinson, 2012; Hellman et al., 2000).

6.1 Institutional quadrants

The argument can be summarized through four institutional quadrants. These are ideal types rather than fixed classifications. Countries may move across quadrants over time as institutional quality, corruption, market access and formalization change (Acemoglu & Robinson, 2012; North et al., 2009).

Table 5
Institutional quadrants: economic freedom, corruption/informality and democratic resilience

Quadrant	Economic freedom	Corruption / informality	Democratic outcome	Typical profile
I. Virtuous circle	High	Low	High resilience: trust-based compliance	Nordic-type profile
II. Extractive trap	High formal freedom	High	Fragile or eroding: rent-seeking and access capitalism	High-income or emerging markets with weak accountability
III. Underdeveloped trap	Low	High	Low democratic quality: systemic informality and state capture	Low-income autocracies or weak states
IV. Transitional friction	Moderate	Moderate	Stable but stagnant: high costs of formality and incomplete trust	Portugal as an illustrative case

Portugal is used in Table 5 as an illustrative case of transitional friction, not as a claim of exceptionalism. The country combines formal democratic consolidation, EU membership, relatively high income status and substantial administrative modernization with persistent concerns over perceived corruption, institutional trust and informal economic practices. This makes it analytically useful for the article's argument: Portugal is neither an extractive-trap case nor a virtuous-circle case. Rather, it represents a middle position in which democratic and market institutions are formally established, but the perceived fairness, predictability and reciprocity of the formal order remain incomplete. In such contexts, informality should be read less as a sign of state absence and more as evidence of partial institutional confidence.

The quadrants clarify the article's central claim. Economic freedom is most democratically productive in the virtuous-circle quadrant, where market access is governed by impartial institutions and formal participation is widely perceived as beneficial. It is least productive in the extractive-trap quadrant, where formal freedoms may coexist with informal privilege, selective enforcement and elite capture. The transitional-friction quadrant is especially relevant for affluent democracies that retain formal institutional stability but face persistent problems of trust, compliance and informality (Acemoglu & Robinson, 2012; Mungiu-Pippidi, 2015).

7. Implications for High-Income Democracies

The argument developed in this article has implications for high-income democracies that combine formal market openness with persistent concerns over corruption, informality and institutional trust. The central issue is not whether countries should choose between markets and institutions. The real challenge is to understand when economic openness is embedded in democratic institutions that remain credible, impartial and inclusive (Acemoglu & Robinson, 2019; V-Dem Institute, 2025).

This means that policy reform cannot be limited to deregulation in the narrow sense. Reducing administrative burdens may help, but it will not produce robust formalization if citizens and firms continue

to perceive unequal treatment, low transparency or weak sanctions for privileged misconduct. The effectiveness of pro-market reform is conditional on institutional legitimacy. A market reform that lowers formal barriers while leaving discretionary privilege intact may increase the strategic value of political connections rather than broaden competition (OECD, 2024; Torgler & Schneider, 2009).

The argument also cautions against treating informality as a mere compliance deficit or corruption as a moral pathology. Both are institutional phenomena linked to the quality of state-society reciprocity. Policy aimed at reducing the shadow economy should therefore be framed not merely in terms of tougher enforcement, but in terms of strengthening the legitimacy of the formal order. This implies a broader agenda that includes greater transparency in public procurement, stronger sanctions for abuse of office, more predictable administrative procedures, improved judicial effectiveness and clearer demonstration that taxes are translated into visible and fairly distributed public goods (Medina & Schneider, 2018; Mungiu-Pippidi, 2015).

The current technological and geopolitical environment creates both opportunities and risks. Digitalization, artificial intelligence, e-government and the reconfiguration of value chains can improve traceability, reduce information asymmetries and lower compliance costs. Digital invoicing, interoperable public databases, procurement transparency and better audit tools may all contribute to shrinking the space for hidden transactions and discretionary abuse. Yet digitalization does not automatically create inclusion. It can also increase surveillance asymmetries, administrative opacity or concentration of informational power if governance standards are weak (OECD, 2024).

Portugal illustrates these tensions. As a consolidated European democracy, it benefits from EU legal integration, regulatory harmonization and administrative modernization. At the same time, recurring concerns over corruption perception, procedural opacity, uneven enforcement and persistent informal practices suggest that formal convergence does not automatically eliminate institutional frictions. Portugal is therefore best understood not as an exceptional case, but as an example of transitional friction within high-income democracy: formal democratic and market institutions are present, but the perceived returns to full formal compliance remain lower than they should be for some economic actors (European Parliament, 2022; Transparency International, 2025). This does not imply that Portugal is democratically fragile in the same sense as backsliding regimes. Rather, it illustrates how democratic resilience can be weakened by lower-intensity institutional frictions that operate below the threshold of regime crisis.

The role of economists and political scientists is therefore broader than the measurement of growth, corruption or lost tax revenue. Corruption, institutional trust, tax morale and informality should be treated as core components of democratic resilience. A state that is less trusted, less impartial and more vulnerable to capture will struggle to sustain the stable expectations and broad compliance on which democratic quality depends (Rothstein & Teorell, 2008; Mungiu-Pippidi, 2015).

8. Conclusion

This article has argued that the relationship between economic freedom and democratic quality is fundamentally conditional. Economic freedom does not operate in an institutional vacuum, nor does it

generate democratic outcomes by automatic logic. Its implications depend on whether public authority is impartial, corruption is contained, and citizens and firms perceive formal participation as legitimate (Acemoglu & Robinson, 2012; de Haan & Sturm, 2000).

The article's central contribution has been to bring the shadow economy into the analysis of democratic resilience in high-income democracies. Rather than treating informality as a marginal residue of underdevelopment or as a purely fiscal problem, the argument has reframed it as a politically meaningful signal of institutional withdrawal. The shadow economy reveals that some economic actors do not fully trust the formal order to deliver fair treatment, predictable enforcement or adequate returns to compliance (Medina & Schneider, 2018; Torgler & Schneider, 2009).

This dynamic becomes especially damaging when combined with corruption. Corruption erodes the neutrality of public authority and transforms formal rules into differentiated instruments of access and exclusion. Informality then emerges as a rational adaptation to that unequal environment. The interaction between the two can weaken democratic resilience by narrowing the social base of compliance, reducing fiscal capacity and fragmenting democratic citizenship (Hellman et al., 2000; Mauro, 1995).

This perspective helps explain the paradox that motivated the article. High-income status does not immunize democracies against institutional decay. Wealth can coexist with corruption tolerance, persistent informality and declining democratic quality. The empirical results are cautious, but they reinforce this point by showing that economic freedom does not display a robust automatic democratic dividend once institutional context and fixed effects are taken into account (Acemoglu & Robinson, 2019; V-Dem Institute, 2025).

The wider conclusion is therefore cautious but important. Democratic resilience depends not only on constitutional design or electoral competition, but on the deeper institutional bargain that binds citizens to the formal order. When corruption corrodes that bargain and informality becomes normalized, democracy may weaken socially before it weakens constitutionally. When institutions remain inclusive enough to sustain trust, reciprocity and broad participation, economic openness is more likely to reinforce rather than bypass democratic quality (Rothstein & Teorell, 2008; Acemoglu & Robinson, 2012).

Declarations

Author Contribution

Fernando C. Gaspar was responsible for the conceptualization, methodology, data curation, formal analysis, investigation, visualization, and writing of the manuscript.

Data Availability

The replication dataset, codebook, tables, figures, and reproduction materials are openly available on Zenodo, DOI: 10.5281/zenodo.20582336

Disclosure statement

The author declares that he has no known financial or non-financial competing interests that could have appeared to influence the work reported in this paper.

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Appendix

Appendix A. Countries included in the high-income democracy analysis sample

The table reports the countries included in the main analysis sample, the ISO3 code, and the number of country-year observations available between 2000 and 2017.

Country	ISO3	Years observed	First year	Last year
Argentina	ARG	2	2014	2017
Australia	AUS	18	2000	2017
Austria	AUT	18	2000	2017
Barbados	BRB	14	2000	2017
Belgium	BEL	18	2000	2017
Canada	CAN	18	2000	2017
Chile	CHL	6	2012	2017
Croatia	HRV	9	2008	2017
Cyprus	CYP	18	2000	2017
Czechia	CZE	12	2006	2017
Denmark	DNK	18	2000	2017
Estonia	EST	12	2006	2017
Finland	FIN	18	2000	2017
France	FRA	18	2000	2017
Germany	DEU	18	2000	2017
Greece	GRC	17	2001	2017
Hungary	HUN	9	2007	2017
Iceland	ISL	18	2000	2017
Ireland	IRL	18	2000	2017
Israel	ISR	18	2000	2017
Italy	ITA	18	2000	2017
Japan	JPN	18	2000	2017
Latvia	LVA	7	2009	2017
Lithuania	LTU	6	2012	2017
Luxembourg	LUX	18	2000	2017
Malta	MLT	17	2000	2017
Netherlands	NLD	18	2000	2017
New Zealand	NZL	18	2000	2017
Norway	NOR	18	2000	2017

Country	ISO3	Years observed	First year	Last year
Panama	PAN	1	2017	2017
Poland	POL	9	2009	2017
Portugal	PRT	18	2000	2017
Slovakia	SVK	11	2007	2017
Slovenia	SVN	17	2001	2017
South Korea	KOR	18	2000	2017
Spain	ESP	18	2000	2017
Sweden	SWE	18	2000	2017
Switzerland	CHE	18	2000	2017
Taiwan	TWN	18	2000	2017
Trinidad and Tobago	TTO	12	2006	2017
United Kingdom	GBR	18	2000	2017
United States of America	USA	18	2000	2017
Uruguay	URY	6	2012	2017

Figures

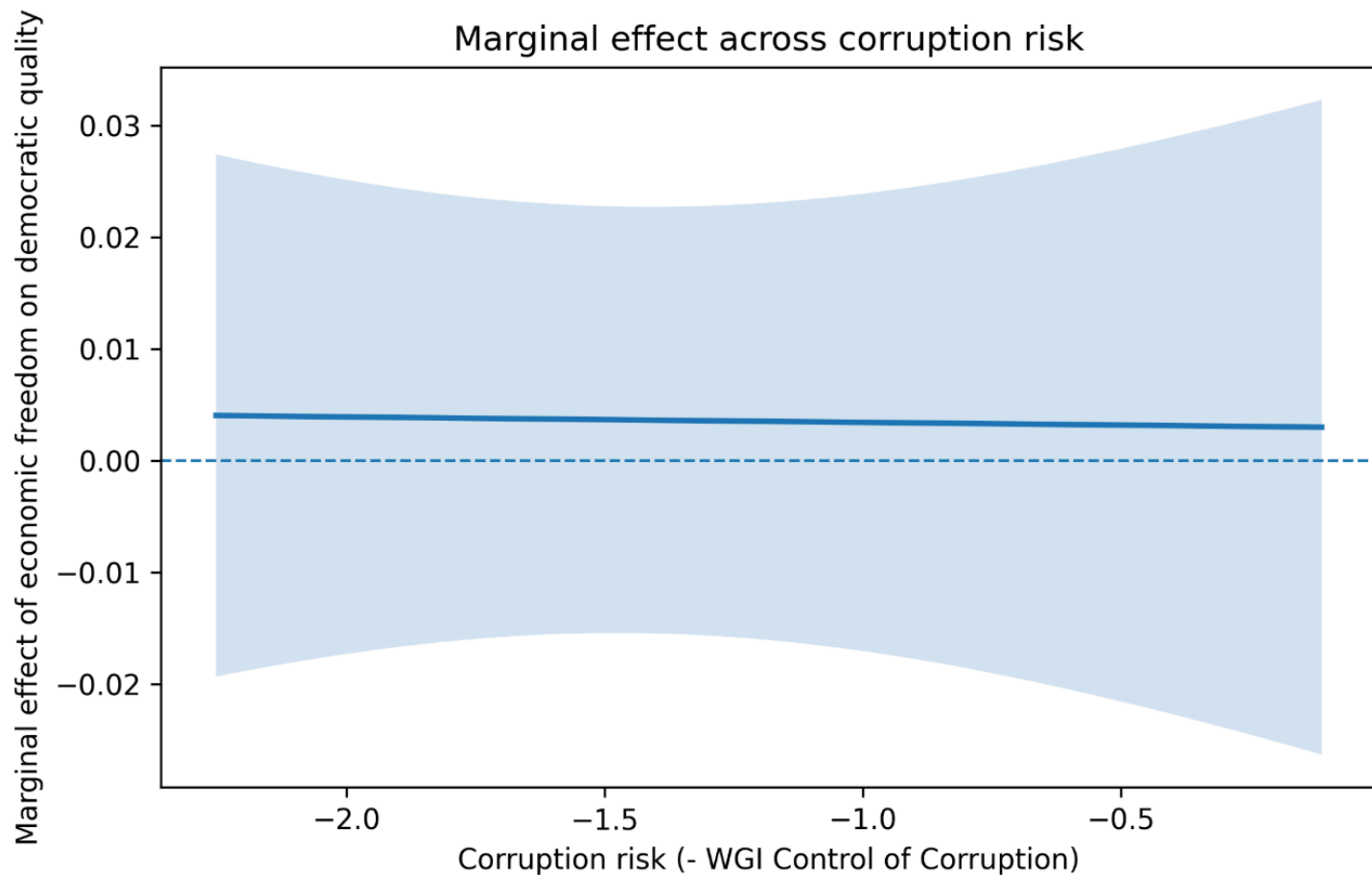


Figure 1

Marginal effect of economic freedom on democratic quality across levels of corruption risk

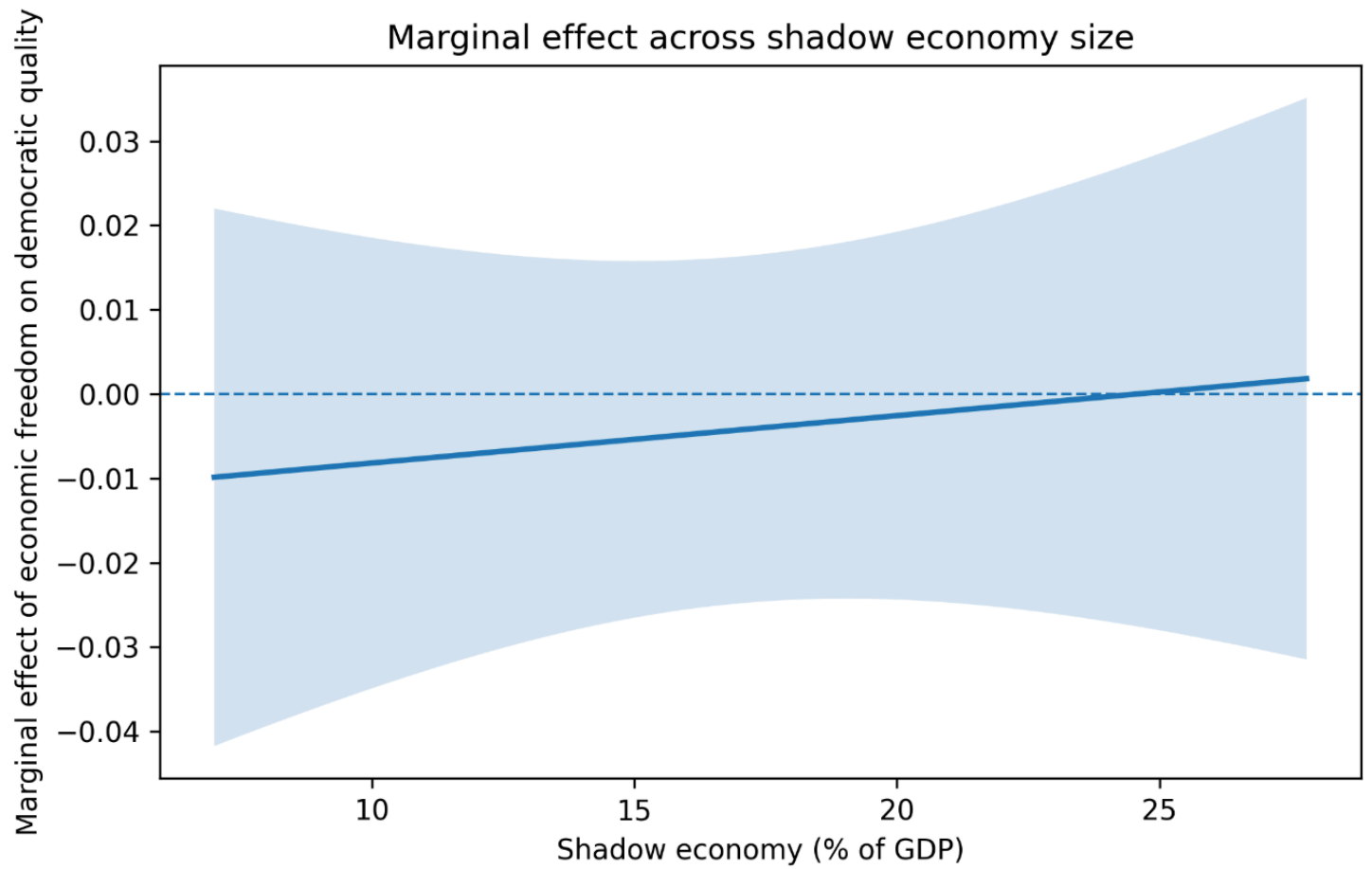


Figure 2

Marginal effect of economic freedom on democratic quality across levels of shadow economy size

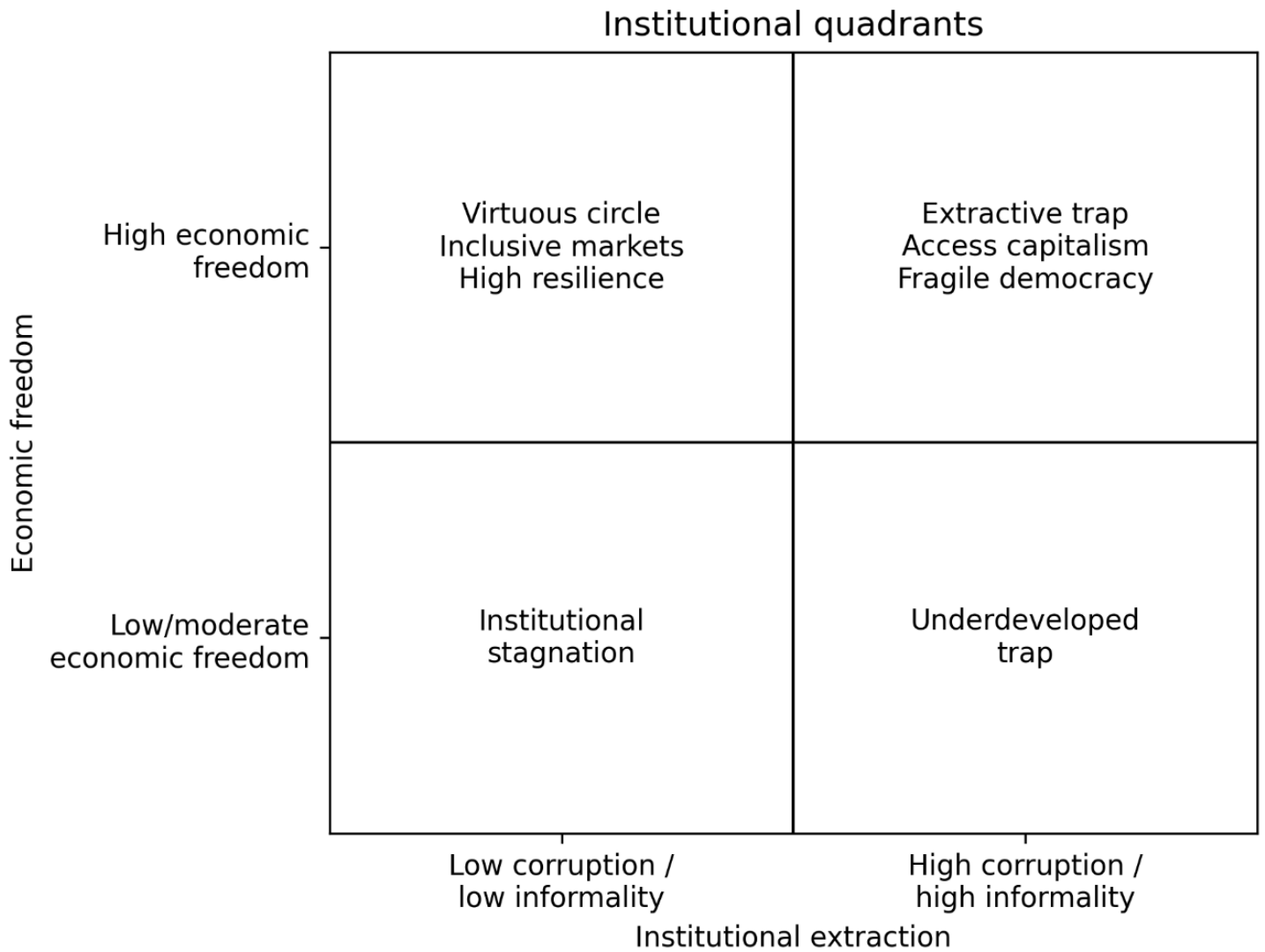


Figure 3

Institutional quadrants: economic freedom, corruption/informality and democratic resilience