

## Article

# Beyond Punishment: A Systems-Theoretic Critique of Punitive Anticorruption Legal Frameworks

Boris Kriger\*

Institute of Integrative and Interdisciplinary Research, Toronto, Canada

\* Correspondence: [boriskruger@interdisciplinary-institute.org](mailto:boriskruger@interdisciplinary-institute.org)

**Abstract:** The global anticorruption legal regime—anchored in the United Nations Convention Against Corruption (UNCAC), the U.S. Foreign Corrupt Practices Act (FCPA), and the UK Bribery Act—rests on a foundational premise: that corruption is primarily a problem of morally deficient individuals, addressable through criminal sanctions and enhanced enforcement. This article challenges that premise by applying a systems-theoretic framework to the analysis of anticorruption law. Drawing on transaction-cost economics, evolutionary game theory, and the theory of complex adaptive systems, the article argues that corruption is better understood as an emergent property of institutional systems operating under structural stress—specifically, the excess regulatory burden that this article terms institutional friction. Four interconnected claims are advanced. First, corruption prevalence correlates more strongly with institutional friction than with enforcement intensity or cultural variables. Second, when friction exceeds a critical threshold, corrupt behavior becomes the only individually rational strategy, and competitive dynamics systematically displace non-corrupt actors. Third, increasing punitive severity does not reduce corruption volume but drives it into more sophisticated and costly forms, generating an enforcement–concealment arms race that constitutes pure deadweight loss. Fourth, replacing human decision-makers with algorithmic systems at routine administrative nodes eliminates the structural precondition for corruption at those nodes. The article concludes that effective anticorruption reform requires a shift from punitive legal frameworks to structural interventions: regulatory simplification, strategic automation of discretionary decision points, and targeted rather than totalizing enforcement. The implications for international anticorruption law and domestic legal reform are discussed.

**Keywords:** anticorruption law; institutional friction; legal reform; punitive enforcement; systems theory

## 1. Introduction

Over the past four decades, the international community has constructed an elaborate legal architecture to combat public corruption. The United Nations Convention Against Corruption (UNCAC), adopted in 2003 and ratified by 190 states, established a comprehensive framework of criminalization, prevention, international cooperation, and asset recovery. Regional instruments—the Inter-American Convention Against Corruption (1996), the OECD Anti-Bribery Convention (1997), the African Union Convention on Preventing and Combating Corruption (2003)—reinforced these commitments. National legislation, from the U.S. Foreign Corrupt Practices Act (FCPA 1977) to the UK Bribery Act (2010), extended criminal liability to both domestic and transnational bribery, with penalties including substantial imprisonment and corporate fines reaching billions of dollars.

The empirical record of this legal regime is, at best, mixed. Transparency International's Corruption Perceptions Index shows no significant global improvement over the past two decades despite dramatically increased enforcement activity (Transparency International 2023). Cross-national studies consistently find that punitive enforcement campaigns produce short-term reductions in detected corruption followed by adaptation and resurgence (Persson, Rothstein, and Teorell 2013; Mungiu-Pippidi 2006). The question that animates this article is: why?

This article proposes that the limited success of conventional anticorruption law stems from a misdiagnosis at the level of legal theory. The dominant paradigm treats corruption as a principal-agent problem: a trusted official deviates from prescribed behavior to extract private rents, and the legal remedy consists of improved monitoring, harsher penalties, and stronger institutional oversight (Rose-Ackerman 2012; Klitgaard 1988). This framing locates the cause of corruption in individual moral failure and the solution in individual criminal accountability. The entire edifice of

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anticorruption law—from UNCAC’s criminalization provisions to national sentencing guidelines—is built on this foundation.

This article argues that this foundation is structurally inadequate. Drawing on a formal framework developed in (Kriger 2026) and elaborated in (Kriger 2025b), it advances the claim that corruption is not fundamentally a problem of deviant individuals within a sound institutional framework, but rather an emergent property of institutional systems under structural stress. Specifically, corruption arises from what this article terms institutional friction: the measurable gap between the formal regulatory requirements imposed on agents and the conditions under which those agents can achieve legitimate objectives. When this friction is sufficiently high, corruption becomes not a deviation from the system but an adaptive response to it—a response that punitive law is structurally incapable of eliminating.

The argument proceeds through four interconnected claims, each with specific implications for legal reform. The next section outlines the analytical framework. Subsequent sections develop each claim and its legal consequences. The concluding section synthesizes the policy implications and identifies directions for future legal research.

## 2. Analytical Framework: Institutional Friction and Structural Perturbation

The analytical foundation of this article rests on a concept borrowed from transaction-cost economics and adapted for legal analysis: institutional friction. Transaction-cost economics, developed by (Coase 1937) and (Williamson 1979, 1985), recognizes that economic activity is shaped not only by production costs but by the costs of transacting within institutional structures—the costs of obtaining permits, navigating regulations, securing approvals, and complying with procedural requirements. When these costs become excessive, they distort rational decision-making.

Institutional friction, as used in this article, refers specifically to the aggregate compliance cost imposed by rules that are not essential for the system’s stated objectives. Every regulatory system contains two categories of rules: essential rules, whose removal would compromise core objectives such as safety, fairness, or accountability; and discretionary rules, which have accumulated through historical accretion, political expediency, or bureaucratic self-interest without serving any indispensable function. Friction is the cost imposed by the latter category.

Consider a concrete legal example. A construction permit system designed to ensure building safety requires structural engineering review—an essential rule. If the same system also requires twelve sequential approvals from separate agencies, each with independent fees and processing times measured in months, the additional burden constitutes friction. The safety objective could be achieved with fewer steps; the additional steps serve institutional rather than public interests.

When institutional friction is sufficiently large, it operates as what systems theory terms a perturbation operator: it transforms the payoff landscape faced by rational agents. In an institutional system with low friction, the costs of regulatory compliance are proportionate to the benefits of the system’s objectives, and compliance is the individually rational strategy. As friction increases, the costs of compliance grow relative to the benefits, while the value of circumvention rises correspondingly. At some point, the perturbed environment makes corruption—defined as rule-circumventing behavior that yields higher individual payoffs than compliance—the rational adaptive response.

This framing has a crucial legal implication. If corruption is generated by structural conditions rather than by individual moral deficiency, then legal interventions targeting individual behavior—criminal prosecution, enhanced penalties, integrity pledges—address symptoms rather than causes. The structural cause, institutional friction, lies within the domain of administrative and regulatory law, not criminal law. This displacement between the locus of the cause and the locus of the legal response is, this article argues, the central reason for the limited effectiveness of the prevailing anticorruption legal regime.

## 3. Results and Discussion

### 3.1 The Friction Thesis: Why Regulatory Complexity Breeds Corruption

The first claim of this article is that the prevalence of corruption in an institutional system is a monotonically increasing function of institutional friction. This claim, formalized in (Kriger 2026) as the Principle of Systemic Origin, asserts a specific causal direction: institutional friction generates corruption, not the reverse. An institution with high friction and honest agents will develop corruption; an institution with low friction and dishonest agents will suppress it.

The empirical evidence is substantial. Cross-national studies have repeatedly found that corruption correlates more strongly with regulatory burden, bureaucratic complexity, and institutional opacity than with cultural variables or enforcement intensity (Treisman 2000; Svensson 2005; Dimant and Guglielmo Tosato 2018). The World Bank’s Doing Business indicators, which measure the procedural complexity of common regulatory transactions, show strong correlations between regulatory burden and corruption levels across jurisdictions.

The transition economies of the 1990s provide instructive comparative evidence. Countries that implemented rapid deregulation and simplification of business procedures—notably Estonia and Georgia—experienced significant reductions in corruption, while countries that maintained complex regulatory structures but increased enforcement—notably Russia and Ukraine in the same period—saw corruption shift in form without diminishing in volume (Olken and Rohini Pande 2012). These comparisons involve confounding variables and do not constitute controlled experiments, but the pattern is consistent with the friction thesis and inconsistent with the hypothesis that enforcement is the primary determinant of corruption levels.

The legal implications are direct. If regulatory complexity is the primary structural driver of corruption, then the most effective anticorruption intervention is not more criminal law but better administrative law. Regulatory simplification—reducing the number of permits required, consolidating approval processes, eliminating redundant documentation requirements, establishing clear and objective criteria for administrative decisions—addresses the structural cause. Every unnecessary procedural step in a regulatory system is a potential corruption node: a point where a human decision-maker exercises discretion, a queue forms, and an incentive to circumvent arises.

This analysis challenges a deeply entrenched assumption in anticorruption legal scholarship: that the appropriate legal response to corruption is primarily found in criminal law. The UNCAC devotes its longest chapter (Chapter III) to criminalization and law

enforcement, while its prevention chapter (Chapter II) is significantly shorter and less prescriptive. National anticorruption strategies routinely prioritize prosecution targets and conviction rates as measures of success. This emphasis is misplaced if the primary generator of corruption is regulatory complexity that falls within the domain of administrative reform rather than criminal justice.

### 3.2 Systemic Coercion: The Limits of Individual Criminal Liability

The second claim extends the first into the domain of criminal law doctrine. When institutional friction exceeds a critical threshold, participation in corruption becomes the unique individually rational strategy for agents occupying discretionary positions. Agents who refuse to participate are systematically displaced through competitive selection—not through deliberate conspiracy, but through the ordinary operation of competitive dynamics within the perturbed institutional environment (Kriger 2026).

The mechanism is straightforward. Every individual possesses a threshold of moral resistance—a psychological cost associated with engaging in corrupt behavior. This threshold varies across individuals: some will resist corruption at considerable personal cost, while others will participate readily. Critically, however, this threshold is finite for every individual. When the structural advantage of corruption (the gap between the payoff from circumvention and the payoff from compliance) exceeds the maximum moral resistance in the population, corruption becomes universal among agents who remain in the system.

The displacement mechanism operates through standard competitive dynamics. In an institutional environment where corruption yields higher returns than compliance, corrupt agents accumulate more resources, build stronger networks, and exercise greater institutional influence than their compliant counterparts. Over time, compliant agents are outcompeted, marginalized, and eventually displaced. The process requires no coordination, no conspiracy, and no deliberate exclusion—merely the predictable outcome of competition under a structurally perturbed payoff landscape.

The case of Frank Serpico, the New York City police officer who attempted to report systemic corruption in the early 1970s, illustrates this dynamic in the legal domain. Serpico's experience—ostracism, career obstruction, and ultimately a shooting under suspicious circumstances—was not the result of a coordinated conspiracy against whistleblowers but of systemic dynamics that treated non-participation in corruption as a threat to the established equilibrium (Rose-Ackerman 2012). The displacement mechanism applies with equal force to public procurement officials, customs agents, tax inspectors, and judicial officers in systems where friction has driven corruption above the critical threshold.

The implications for criminal law doctrine are profound. If corruption is maintained by structural selection dynamics rather than by the moral character of individuals, then the cornerstone of anticorruption criminal law—individual criminal liability—addresses the wrong unit of analysis. Prosecuting and replacing a corrupt official restart the selection process without altering its outcome. The replacement, facing the same structural incentives and the same competitive environment, will either adapt to the system's demands or be displaced in turn.

This does not mean that individual criminal liability should be abandoned. Criminal prosecution serves important functions: it expresses societal condemnation of corruption, provides a degree of deterrence against the most egregious forms, and may offer symbolic justice to victims of corrupt governance. But criminal liability cannot, by itself, reduce aggregate corruption if the structural conditions generating it remain in place. The analogy to public health is instructive: prosecuting individuals who spread a contagious disease may express important moral and legal norms, but it will not control an epidemic if the environmental conditions facilitating transmission are not addressed.

### 3.3 Adaptive Morphology: The Enforcement–Concealment Arms Race

The third claim is the most directly challenging to the prevailing legal paradigm. Increasing the severity of punishment for detected corruption does not reduce the total volume of corrupt transactions. It transforms the strategy space, driving corruption from crude and detectable forms into sophisticated, concealed, and costly forms. The total social cost of corruption—comprising the direct costs of corrupt transactions, the costs of concealment, and the costs of enforcement—may increase under harsher punishment regimes when the underlying institutional friction remains unaddressed (Kriger 2026).

The mechanism can be stated precisely. When penalties for corruption increase, rational agents do not simply cease corrupt behavior. They invest in more sophisticated methods of concealment. A direct cash bribe—easily detected, easily prosecuted—evolves into a network of consulting fees, deferred employment offers, charitable donations to shell organizations, and multi-jurisdictional financial intermediation. Each increase in enforcement pressure selects for more complex corruption, in a process analogous to the evolution of antibiotic-resistant bacteria under pharmaceutical pressure.

The legal history of anticorruption enforcement provides extensive evidence of this adaptive morphology. The evolution of corruption in response to the FCPA illustrates the pattern clearly. When the FCPA was enacted in 1977, the typical corrupt transaction involved direct cash payments to foreign officials. After four decades of increasingly aggressive enforcement—with penalties reaching into the billions of dollars—the typical corrupt transaction involves layers of intermediaries, complex corporate structures, third-party agents, and concealment mechanisms that require teams of forensic accountants to unravel. The corruption has not disappeared; it has evolved.

China's anticorruption campaigns provide a particularly clear illustration. Successive rounds of severe enforcement—including capital punishment for corruption offenses—have been accompanied by documented increases in the sophistication of corrupt schemes, from direct cash payments to cryptocurrency transfers, from personal favors to multi-layered intermediary networks, without clear evidence of aggregate reduction in corrupt activity (Svensson 2005).

The so-called waterbed effect in financial regulation—where restrictions in one jurisdiction or instrument class displace activity to less-regulated alternatives—is a direct manifestation of adaptive morphology in the legal context (Dimant and Guglielmo Tosato 2018). Anticorruption law encounters the same phenomenon: each legal closure creates pressure for new evasion channels.

The legal implications are stark. The prevailing strategy of escalating penalties and expanding the scope of criminalization is not merely insufficient—it may be actively counterproductive. Each escalation induces a corresponding escalation in concealment sophistication, generating a pure deadweight loss: resources expended on concealing and detecting corruption produce no social value. The magnitude of this waste is determined by the level of institutional friction, not by the severity of legal penalties. Legal

reform that focuses on reducing friction while maintaining proportionate enforcement would reduce this waste by removing the structural incentive that drives the arms race.

This analysis reframes the ongoing debate about optimal sentencing for corruption offenses. The deterrence literature, grounded in (Becker 1968) rational choice model of crime, posits that sufficiently severe penalties will deter criminal behavior. This model treats detection probability as exogenous—as a fixed feature of the enforcement environment. The adaptive morphology thesis endogenizes detection probability: agents respond to increased penalties not only by reducing criminal activity but by investing in concealment, thereby reducing the probability of detection. The standard deterrence calculus fails because it does not account for the agent's ability to transform the very enforcement landscape that the penalty is designed to exploit.

### 3.4 Automation as Structural Legal Reform

The fourth claim identifies the most direct structural remedy available to legal reformers. A necessary condition for any corrupt transaction is the presence of a human agent with personal interests at the point where discretionary authority is exercised. Replacing that human agent with an algorithmic decision-making system removes this necessary condition, thereby eliminating the structural possibility of corruption at that administrative node (Kriger 2026).

The argument rests on a simple structural observation. Corruption requires three conditions to be jointly satisfied at a decision node: discretion (the decision-maker can choose among multiple outcomes), personal interest (the decision-maker has a utility function that depends on personal benefits such as money, favors, or career advancement), and information asymmetry (the decision-maker's choice is not fully observable by supervisory authorities). An algorithmic system satisfies none of the latter two conditions. It has no personal interests—no relatives to favor, no bribes to accept, no career to protect. Its decisions are deterministic and auditable—any deviation from prescribed criteria can be detected by re-executing the algorithm.

The empirical evidence supports this claim. The automation of tax collection in multiple jurisdictions has dramatically reduced corruption in routine tax administration where assessments are computed algorithmically from declared income and assets (Olken 2007). Estonia's e-governance system, which automates the vast majority of citizen-government interactions, has been associated with consistently low corruption levels. Automated procurement systems that match bids to specifications without human intermediation have reduced procurement corruption in multiple jurisdictions (Rothstein 2011).

The most significant counterargument concerns corruption at the design stage: if humans design the algorithms, corruption may be embedded in the code rather than occurring at the point of execution. This objection has merit but does not defeat the automation thesis. Design-level corruption differs from execution-level corruption in three structural respects that make it more tractable for legal intervention. First, design-level corruption occurs once, at the time of system specification, rather than recurring with every transaction. Second, algorithmic decision rules are inspectable, testable, and auditable; a biased algorithm can be detected through statistical analysis of its outputs in ways that a corrupt human decision-makers biases cannot. Third, correcting a biased algorithm requires modifying code and redeploying the system—a single action that corrects all future decisions simultaneously—while correcting human corruption requires individual prosecution of each corrupt actor.

The legal framework for algorithmic governance is still in its early stages. The European Union's AI Act (2024) establishes risk-based regulation of artificial intelligence systems, including requirements for transparency, human oversight, and bias auditing. These regulatory tools are precisely what is needed to address design-level corruption in automated systems. The legal challenge is to develop a framework that mandates algorithmic transparency, requires regular auditing of automated decision systems, and establishes liability for design-level corruption—while simultaneously facilitating the automation of routine administrative decisions that currently serve as corruption nodes.

### 3.5 The Totalizing Ideal Constraint: Against Zero-Tolerance Legal Frameworks

The four claims developed above might suggest an unqualified prescription: reduce friction to zero, automate all decision nodes, and eliminate corruption entirely through structural reform. This section demonstrates that such a prescription encounters a fundamental structural constraint. Drawing on results from the theory of complex adaptive systems (Kriger 2025a), this article argues that the complete elimination of all informal adaptive behavior—including the residual, low-level practices that function as institutional flexibility—constitutes a totalizing optimization that destroys the adaptive capacity required for institutional viability under irreducible uncertainty.

Every institutional system operates under conditions of irreducible uncertainty: no regulatory design can fully anticipate all future contingencies. Institutional systems that maintain a degree of behavioral diversity—including tolerance for local variation, limited discretion for officials to adapt general rules to specific circumstances, and informal feedback mechanisms—retain the capacity to detect and correct their own design errors. Systems that enforce rigid uniformity—zero tolerance for any deviation from prescribed procedures—lose this capacity.

The historical record supports this constraint. Institutional systems that achieved near-total behavioral uniformity—command economies, totalitarian bureaucracies—exhibited catastrophic failure when environmental conditions changed, precisely because they had no internal mechanism for detecting or responding to mismatch between institutional rules and evolving reality. The costs of such failures were orders of magnitude larger than the costs of the prior institutional imperfections they sought to eliminate.

The legal implication is that zero-tolerance anticorruption frameworks are structurally self-defeating. The optimal anticorruption legal regime is one that vigorously targets major corruption—large-scale resource diversions, systemic distortions of institutional function—while preserving sufficient institutional flexibility for ongoing institutional learning and adaptation. This is not a license for corruption; it is a recognition that the legal system must distinguish between harmful corruption that distorts institutional function and minor adaptive behavior that provides feedback about where formal rules are misaligned with legitimate needs.

Several operational criteria can guide this distinction within legal frameworks. The magnitude of resource diversion provides a first filter: large diversions warrant criminal prosecution, while minor procedural shortcuts may be better addressed through administrative review. The directionality of benefit offers a second criterion: practices that benefit only the official at the expense of the public are corruption, while practices that improve service delivery or reduce unnecessary burden on citizens may signal regulatory design failures. The systemic effect provides a third consideration: practices that erode institutional trust warrant enforcement

action, while practices that maintain institutional function under conditions not anticipated by the formal rules may warrant regulatory adjustment rather than prosecution.

#### 4. Conclusions

The analysis presented in this article leads to a fundamental reorientation of anticorruption legal strategy. The dominant approach—criminalizing corrupt behavior, escalating penalties, expanding enforcement capacity, and exhorting ethical conduct—addresses symptoms rather than structural causes. If corruption is generated by institutional friction, maintained by selection dynamics, and rendered adaptive by enforcement pressure, then the effective legal response must be structural rather than punitive. Four policy implications follow directly from the analysis. First, the primary anticorruption intervention should be regulatory simplification. Administrative law reform—reducing unnecessary procedural requirements, consolidating approval processes, establishing clear and objective criteria for discretionary decisions—is more effective than criminal law expansion. Every unnecessary regulatory step eliminated is a corruption node removed. Second, strategic automation of routine administrative decision nodes should be a legal priority. Legal frameworks for algorithmic governance—requiring transparency, mandating bias auditing, establishing accountability for design-level decisions—should be developed in parallel with the expansion of automated administrative systems. Third, enforcement resources should be concentrated on high-impact corruption rather than distributed across all forms of institutional irregularity. Targeted enforcement against major resource diversions and systemic institutional distortions is more effective and less costly than the broad enforcement campaigns that drive the enforcement–concealment arms race. Fourth, anticorruption legal frameworks should incorporate institutional learning mechanisms. When citizens or officials circumvent formal procedures, the deviation should be investigated not only as a potential corruption case but also as a signal that the formal procedure may be misaligned with legitimate needs. Legal systems that treat all deviations exclusively as moral failures forgo diagnostic information that could improve regulatory design.

The implications for international anticorruption law are significant. The UNCAC review mechanism, which evaluates state compliance primarily through the lens of criminalization and enforcement, should be expanded to assess the structural conditions that generate corruption—regulatory complexity, administrative burden, and the availability of automated alternatives to discretionary human decision-making. A state that simplifies its regulatory environment and automates routine administrative decisions may do more to reduce corruption than a state that doubles its anticorruption prosecution budget. This article does not argue that criminal law is irrelevant to anticorruption strategy. Criminal prosecution serves important expressive, deterrent, and accountability functions that structural reform cannot replicate. The argument is that criminal law alone is insufficient, that it should be secondary to structural intervention in the allocation of anticorruption resources, and that its effectiveness depends on the structural environment in which it operates. Enforcement within a high-friction institutional environment produces an arms race; enforcement within a low-friction environment supports compliance norms that the structure already incentivizes. Corruption is not a disease of the soul. It is a disease of institutions. The remedy is institutional reform—legal, administrative, and technological—not moral reform. As argued elsewhere in the context of restorative justice (Kriger 2025c), the legal system’s persistent reliance on retribution as its primary response to wrongdoing traps both victims and offenders in cycles of harm that punitive frameworks cannot break. The same logic applies to anticorruption law: punishment alone cannot solve a problem whose roots are structural. The sooner anticorruption law embraces this structural diagnosis, the sooner it will begin to achieve the objectives that four decades of punitive enforcement have failed to deliver.

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