URBAN DECAY, AUSTERITY, AND THE RULE OF LAW[†]

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ABSTRACT

Detroit has failed and its infrastructure is crumbling. But Detroit is not an isolated case. It is a paradigmatic example of increasing urban decay across the United States. While commentators have warned that the declining state of the country's infrastructure threatens U.S. prosperity, there is a bigger issue at stake. Decaying urban environments jeopardize the rule of law, undermining the very foundation of the social contract.

This Article shows that the strength of the rule of law in a given country can be predicted by that government's ability (or inability) to provide public services—particularly, a livable urban environment. When urban decay sets in, individuals are led to believe that the government and thus citizens as a collective have abandoned their commitments to following the basic rules governing the social contract. This, in turn, reduces incentives of individuals to engage in lawful behavior. As a result, the rule of law is, like the city itself, left in shambles. In support of this theoretical account, we provide empirical evidence that urban decay weakens the rule of law.

As a normative matter, we claim that U.S. austerity policies aimed at incentivizing municipal fiscal accountability have produced the government's failure to provide adequate urban infrastructure. We argue that selective

centralized support of local goods and services can better balance the dual goal of preserving the rule of law and encouraging municipal fiscal accountability.

INTRODUCTION

The bankruptcy of Detroit[1] has brought renewed attention to the city's crumbling infrastructure and urban blight.[2] As ubiquitous images of Detroit attest,[3] abandoned and decaying buildings dominate the cityscape, trash accumulates in empty lots, broken sidewalks run along pothole-riddled streets, decrepit bridges threaten collapse, shattered streetlights darken unsafe streets, and once grand public libraries, theaters, and train stations stand shuttered and defaced, symbols of a city in ruins.

This state of decline has earned Detroit the infamous designation of "most miserable city" in America.[4] But the Motor City is not alone in its crumbling urban infrastructure. Detroit is a paradigm of declining cities across the United States—from Baltimore, Maryland[5] to Gary, Indiana[6] to San Bernardino,

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[1] Detroit filed for bankruptcy on July 18, 2013, qualifying as both the largest American city to ever file for bankruptcy and the largest municipal bankruptcy ever in terms of debt, with about $18 billion in outstanding liabilities at the time of the filing. *See* Monica Davey & Mary Williams Walsh, *Billions in Debt, Detroit Tumbles Into Insolvency*, N.Y. TIMES, July 18, 2013, http://www.nytimes.com/2013/07/19/us/detroit-files-for-bankruptcy.html; *see also Detroit Bankruptcy is the Nation's Largest*, N.Y. TIMES, July 18, 2013, http://www.nytimes.com/interactive/2013/07/18/us/detroit-bankruptcy-is-the-largest-in-nation.html (providing data on the five largest U.S. municipalities filing for bankruptcy in the past 60 years).

[2] *See, e.g.*, Mark Binelli, *How Detroit Became the World Capital of Staring at Abandoned Old Buildings*, N.Y. TIMES MAG., Nov. 9, 2012, http://www.nytimes.com/2012/11/11/magazine/how-detroit-became-the-world-capital-of-staring-at-abandoned-old-buildings.html; Peter Hitchens, *From Motown to Ghost Town: How the Once Mighty Detroit Is Heading Down a Long, Slow Road to Ruin*, DAILY MAIL ONLINE (July 9, 2011, 16:01 EST), http://www.dailymail.co.uk/news/article-2012971/From-Motown-Ghost-town-How-mighty-Detroit-heading-long-slow-road-ruin.html; Steven Rattner, *We Have to Step In and Save Detroit*, N.Y. TIMES OPINIONATOR, (July 19, 2013, 10:03 PM), http://opinionator.blogs.nytimes.com/2013/07/19/we-have-to-step-in-and-save-detroit/ (calling for billions in reinvestment spending to save Detroit).

[3] *See, e.g.*, YVES MARCHAND & ROMAIN MEFFRE, THE RUINS OF DETROIT (2011) (photographic project capturing Detroit's urban decay).

[4] Kurt Badenhausen, *Detroit Tops 2013 List of America's Most Miserable Cities*, FORBES (Feb. 21, 2013, 2:20 PM), http://www.forbes.com/sites/kurtbadenhausen/2013/02/21/detroit-tops-2013-list-of-americas-most-miserable-cities/.

[5] Baltimore's decline was poignantly portrayed in hit television series *The Wire* (HBO television broadcast 2002–2008), which was filmed in Baltimore, with each series exploring a different facet of the relationship between the city's physical and moral decay. *See* THE WIRE: URBAN DECAY AND AMERICAN TELEVISION 23–91 (Tiffany Potter & C.W. Marshall eds. 2009) (collection of essays assessing the relationship between the show and city). Notwithstanding the success of *The Wire*, Baltimore has not transitioned to a more livable urban environment. *See, e.g.*, Kathie Davies, *Five Years After The Wire Left Screens, the TV Set Remains . . . How the Real Baltimore Is Still Poverty-Plagued City of Series*, DAILY MAIL ONLINE (Apr. 11, 2013, 09:04 EST), http://www.dailymail.co.uk/news/article-2307221/Baltimore-poverty-plagued-city-5-years-TV-The-Wire-left-screens.html.

[6] *See, e.g.*, Alicia Munnell et al., *Are Cities Fiscal Woes Widespread? Are Pensions the Cause?*, STATE AND LOCAL PENSION PLANS (Ctr. for Ret. Research at Boston Coll., Boston, Mass.), Dec. 2013, at 4, *available at* http://crr.bc.edu/wp-content/uploads/2013/12/slp_36_508rev.pdf ("Thousands of abandoned buildings downtown and throughout the neighborhoods have for years attracted criminal activity and Gary was known

California[7]—where urban infrastructure is crumbling and distressed municipal governments struggle to provide basic public services.[8] To paint a national picture: Almost one-third of the major roads in the United States are in "poor or mediocre condition;"[9] nearly a quarter of all bridges are "structurally deficient" or "functionally obsolete;"[10] about half of U.S. households lack access to public transit;[11] and the electrical grid is strained and outdated, costing the economy as much as $180 billion annually in power outages and disturbance.[12] Years of inadequate investment are starting to show.

The impact of this collapsing urban infrastructure on the global competitiveness of the United States has been widely discussed.[13] But the

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for years as the 'murder capital.'"); James Nye, *City of the Century that Became a Ghost Town: Tragic Portraits from the Decaying World of America's Industrial Heartlands*, DAILY MAIL ONLINE (July 14, 2012, 08:50 EST), http://www.dailymail.co.uk/news/article-2173761/Tragic-portrait-city-decline-The-desolate-ruins-Gary-Indiana-reveal-decaying-heart-Americas-proud-industrial-centre.html (providing a vivid portrait of Gary's pervasive urban decay).

   [7] Since declaring bankruptcy in 2012, the city of San Bernardino has cut municipal services to near "nonexistence." *See* Ian Lovett, *A Poorer San Bernardino, and a More Dangerous One, Too*, N.Y. TIMES, Jan. 14, 2013, at A12, *available at* http://www.nytimes.com/2013/01/15/us/crime-rises-in-san-bernardino-after-bankruptcy.html. The parks department has been "shredded" with park maintenance left to volunteers, the police force has been drastically cut, leaving neighborhood watch groups to try to maintain order, and discarded bulk items are left to pile on the sidewalks. *Id.* The mayor's office is down to one paid employee, the mayor himself, and one volunteer chief of staff, who is the mayor's own son. *Id.*

   [8] Since 2010, in addition to Detroit, at least thirty-seven other cities and towns have declared bankruptcy and others teeter on the edge of financial collapse. *See Bankrupt Cities, Municipalities List and Map*, GOVERNING, http://www.governing.com/gov-data/municipal-cities-counties-bankruptcies-and-defaults.html (last updated Dec. 3, 2013) (providing an interactive map of all municipalities filing for bankruptcy since 2010). Michelle Anderson provides additional examples of the cuts in public services that have occurred in many of these cities. *See* Michelle Wilde Anderson, *The New Minimal Cities*, 123 YALE L.J. 1118, 1157–73 (2014).

   [9] AM. SOC'Y OF CIVIL ENG'RS, 2013 REPORT CARD FOR AMERICA'S INFRASTRUCTURE 48 (2013), *available at* http://www.infrastructurereportcard.org [hereinafter 2013 REPORT CARD].

   [10] *Id.* at 36.

   [11] *See id.* at 7.

   [12] *See* U.S. DEP'T OF ENERGY, "GRID 2030"—A NATIONAL VISION FOR ELECTRICITY'S SECOND 100 YEARS 5 (2003), *available at* http://energy.gov/sites/prod/files/oeprod/DocumentsandMedia/Electric_Vision_Document.pdf.

   [13] *See, e.g.*, U.S. DEP'T OF TREASURY & COUNCIL OF ECON. ADVISORS, A NEW ECONOMIC ANALYSIS OF INFRASTRUCTURE INVESTMENT 30 (2012), *available at* http://www.treasury.gov/resource-center/economic-policy/Documents/20120323InfrastructureReport.pdf [hereinafter 2012 TREASURY REPORT] ("[T]he United States is investing less in infrastructure than other nations. . . . [I]t is clear that persistent neglect of our infrastructure will impact America's competitive position *vis-à-vis* the rest of the world."); U.S. DEP'T OF COMMERCE, THE COMPETITIVENESS AND INNOVATIVE CAPACITY OF THE UNITED STATES 5-2 (2012), *available at* http://www.commerce.gov/sites/default/files/documents/2012/january/competes_010511_0.pdf (stressing that both improving traditional infrastructure such as the U.S. highway system, and developing modern infrastructure like widely accessible broadband internet, is important); *see also* Bruce Katz et al., *America's Infrastructure: Ramping Up or Crashing Down*, BROOKINGS INST., 1 (Jan. 2008), http://www.brookings.edu/~/

failure to invest adequately in a livable urban environment has potentially more troubling, and overlooked, consequences. As this Article describes, this failure jeopardizes the shared commitment of citizens and public officials to the rule of law[14]—spurring a downward spiral of widespread rule defection and increased coercive enforcement at significant social costs.

In this account, the rule of law stands at the heart of the social contract,[15] whereby individuals voluntarily unite into civil society and agree to be subject to that society's laws in exchange for social order. Within this framework, individuals give a centralized authority—or government—a monopoly on the legitimate use of force in order to enforce legal rules. In addition, the government is tasked with coordinating the production of certain essential goods and services, such as urban infrastructure. Just as self-interested individuals cannot be expected to spontaneously abide by laws, even where they have implicitly contracted to do so,[16] neither can they be expected to spontaneously invest (or invest optimally) in "public goods,"[17] as they cannot enjoy these goods exclusively.[18]

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media/research/files/papers/2008/1/infrastructure%20katz%20puentes/01_infrastructure_katz_puentes.pdf ("Infrastructure has a dramatic effect on the economic competitiveness of our nation, the health of our environment and our quality of life."). The popular press has also largely emphasized the link between mounting urban decay and decreasing global competitiveness of the United States. *See, e.g.*, Michael Porter & Jan Rivkin, *What Washington Must Do Now*, ECONOMIST, Nov. 21, 2012, http://www.economist.com/news/ 21566902-eight-point-plan-restore-american-competitiveness-what-washington-must-do-now; Harold L. Sirkin, *Improving America's Competitiveness*, BLOOMBERG BUSINESSWEEK (June 25, 2012), http://www. businessweek.com/articles/2012-06-25/improving-america-s-competitiveness.

[14] *See infra* notes 30–31 and accompanying text (describing the debate around the meaning of the term "rule of law").

[15] The notion of social contract was originally developed in the political philosophy of Thomas Hobbes and later differently elaborated by John Locke, Jean Jacques Rousseau, and Immanuel Kant. The common idea underpinning these philosophers' treatments of the social contract was that individuals voluntarily agree to collectively binding social arrangements, which, given individual consent, create normatively desirable outcomes. For a discussion of the similarities and the differences in the elaboration of the social contract by these philosophers, see Michel Rosenfeld, *Contract and Justice: The Relation Between Classical Contract Law and Social Contract Theory*, 70 IOWA L. REV. 769, 847–80 (1985). In the twentieth century, John Rawls resurrected the idea of the social contract, arguing that social arrangements are only legitimate if they would be freely and rationally chosen by all individuals in a hypothetical "original position," in which each individual's preferences and capacities are set aside under a "veil of ignorance." *See* JOHN RAWLS, A THEORY OF JUSTICE 136–42 (1971).

[16] When individuals are self-interested, there will always be circumstances in which it is individually profitable to break agreed-upon rules. *See infra* notes 41–42 and accompanying text.

[17] In addition to urban infrastructures, typical examples of public goods include internal and external security, health, and education. It is worth observing that broad definitions of urban infrastructure also tend to include education and health infrastructure. *See, e.g.*, 2012 TREASURY REPORT, *supra* note 13, at 2, 15, 16 (including hospitals and schools as part of urban infrastructure as well). For empirical convenience, however,

The government's dual role provides different information to individuals. When the government intervenes to prevent law breaking, observers obtain information about that discrete rule infraction. This information, however, is insufficient for individuals to form a belief as to whether most others are abiding by, or deviating from, the rule of law.[19] In contrast, exchanges between citizens and government as provider of public goods are typically highly interactive and long term—as the nature of such goods make them crucial to the daily well-being of all citizens.[20] Accordingly, what the government does, as the provider of public goods, gives individuals a much better sense of what *other* individuals are doing. Indeed, the long-term production of public goods is premised on the government's ability to coordinate citizen contributions to such goods (typically through taxation)[21] and the maintenance of these public goods sends signals that are consistent with rule abidance by others.[22] Hence, access to adequate and well-maintained public goods induces citizens to infer that legal rules and institutions are meaningful and that most individuals adhere to the social contract.

Given the primacy of one's urban environment, we argue that the government's provision of adequate urban infrastructure plays an especially salient role in signaling to individuals that most others conform their behavior to legal rules. This, in turn, fosters an individual's sense that following the

in this Article urban infrastructure only refers to "basic infrastructure," such as road, bridges, electric grids, water systems, and the like. *See infra* notes 166–67 and accompanying text.

    [18] Given the nonexclusive character of public goods, once they are produced, everyone can free ride on their existence, which frustrates incentives for their production. *See* ANDREU MAS-COLELL ET AL., MICROECONOMIC THEORY 350, 362 (1995). Paul Samuelson is largely credited as having introduced the theory of public goods in his classic 1954 article *The Pure Theory of Public Expenditure*. *See* Paul A. Samuelson, *The Pure Theory of Public Expenditure*, 36 REV. ECON. & STAT. 387, 388–89 (1954).

    [19] While repeated enforcement intervention may lead people to believe that lawlessness is on the rise, it does not necessarily reflect a society-wide abandonment of the rule of law. Rather, the government may simply be pursuing its function in preventing rule infractions effectively. Similarly, scarce enforcement intervention may either indicate that most people abide by law or that the government is inadequately fulfilling its role as public enforcer. In both cases, the information observers obtain is not conclusive as to whether most individuals are abiding to, or deviating from, the basic rules governing the social contract.

    [20] This is especially so in the case of urban infrastructure, which directly and inescapably affects the daily lived experience of all citizens. *See infra* notes 67–73 and accompanying text.

    [21] The government's role as enforcer also embodies society as a whole, as that role is likewise premised on the coordination of citizen contributions through taxation. *See infra* note 52 (explaining that rule enforcement can itself be regarded as a public good). However, the discrete nature of the government's actions as public enforcer makes those actions less informative about the degree of individual adhesion to the social contract. *See supra* note 19 and accompanying text.

    [22] Well-maintained urban infrastructure prompts a heuristic about the level of individual adhesion to the rules of the social contract, as such infrastructure would not be there (or would be deteriorated) without most people abiding to such rules.

rules is valuable. As a result, "social cooperation" (rule abidance) and "social advocacy" (taking actions to hold both fellow citizens and public officials accountable to the law) emerge as an equilibrium in such an environment.[23] Under this social equilibrium, the rule of law is strengthened, and coercive government enforcement becomes less necessary, creating net gains for society.

Urban decay,[24] in contrast, leads individuals to believe that the government and thus citizens as a collective have abandoned their commitment to follow the rules. This, in turn, causes individuals to respond rationally by placing less value on their own law abidance. Social cooperation and social advocacy are undermined. Without support from the bottom, the rule of law begins to crumble—setting in motion a vicious cycle potentially leading to a break down in the rule of law entirely. Once this vicious cycle is set in motion, increased coercive enforcement—such as "zero tolerance" policing strategies—cannot salvage the rule of law. Rather, such enforcement increases the risk of governmental abuse of power—abuse which is characteristic of a polity lacking a strong rule of law.[25] Moreover, stricter coercive enforcement can only compensate for the loss of social cooperation and social advocacy to a limited extent, and at significant costs.[26]

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[23] *See* Gillian K. Hadfield & Barry R. Weingast, *Microfoundations of the Rule of Law*, 17 ANN. REV. POL. SCI. 21, 23 (2014) ("Our approach emphasizes that the concept of the rule of law is part of an equilibrium. The rule of law does not reside in particular institutions, beliefs, or behaviors. It is a description of the nature of an equilibrium arising from the interaction of institutions, beliefs, and behaviors."). Like Hadfield and Weingast, we also attempt to provide a microfoundation of the rule of law—in the sense that we focus on how individual behavior and beliefs produce aggregate outcomes. However, we consider a more complex transactional environment, where the role of the government is not just providing coercive enforcement, but also supplying public goods.

[24] The term "urban decay" in this Article also refers to the decay of "suburban" areas, rather than just city centers. Indeed, it is worth observing that while 82.4% of the U.S. population lives in metropolitan areas, the largest percentage of that population lives in suburban areas. *See The World Fact Book: Urbanization*, CIA, https://www.cia.gov/library/publications/the-world-factbook/fields/2212.html (last visited Sept. 2, 2014).

[25] *See infra* notes 45–47, 113–19 and accompanying text.

[26] *See* Hadfield & Weingast, *supra* note 23, at 38 ("[W]e believe that a legal order cannot be stabilized by centralized government coercion alone; robust legal orders depend on widespread support in the form of social sanctions and routine voluntary compliance."). This account of the consequences of urban decay casts a doubt on the popular "broken windows theory" (BWT) of deterrence. *See* James Q. Wilson & George L. Kelling, *Broken Windows*, ATLANTIC MONTHLY, Mar. 1982, at 29. Conflating minor physical disorder (e.g., littering and graffiti) and minor social disorder (e.g., drug dealing and public drinking) as concurrent sources of urban decay, the BWT suggests that urban decay, if left unattended, may cause serious, and even violent, crime. *See id.* at 31–32. "[T]he potential criminals do not know the probability of being detected in a neighborhood, but the lack of enforcement of minor crime and disorder fills this void and signals low enforcement," incentivizing criminal activity. *See* Bernard E. Harcourt & Jens Ludwig, *Broken Windows: New Evidence from New York City and a Five-City Social Experiment*, 73 U. CHI. L. REV. 271, 281 (2006). On these assumptions, the BWT

Assuming that welfare maximization is a normative goal of public policy, why do governments fail to provide and maintain quality urban infrastructure? This Article argues that such a failure is an unintended consequence of long-standing austerity policies at both the national and subnational levels vis-à-vis local municipalities. Austerity, operationalized at the state level through the "fiscal constitution,"[27] is commonly justified by the argument that avoiding subsidies to local communities is instrumental in forcing communities to maintain fiscal discipline.[28] This argument, however, ignores the trade-off between the *ex ante* gains from austerity and its *ex post* social costs such as a weaker, or even broken, rule of law. While a detailed blueprint for optimally solving this trade-off is beyond the scope of this Article, we suggest that selective centralized support of local services, including local infrastructure, might better balance the dual goal of preserving the rule of law and encouraging financial accountability at the local level.

The Article proceeds as follows. We lay out our basic claim in Part I—namely, that the quality of urban infrastructure plays a central role in supporting the rule of law. In Part II, we provide empirical support for our claim, gathering data from 124 countries related to the quality of the urban environment and the degree to which these countries are characterized as having a strong or weak rule of law. Analysis of that data confirms that the quality of a country's urban infrastructure has a measurable impact on the rule of law and that low quality urban infrastructure leads to a weakened rule of law, not the other way around, as one might presume. In Part III, we chart a course forward balancing the gains and losses of austerity at the local level. In doing that, we also set a roadmap for subsequent discussion of the degree to which sustained investment in infrastructure is a normative requirement of a government invested in both a functioning social contract and the rule of law.

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advocates an enforcement strategy that emphasizes the necessity of pervasive police presence and aggressive misdemeanor arrest. *See* Wilson & Kelling, *supra*, at 34. This approach, however, overlooks that the negative causal chain of events triggered by urban decay starts with the government's abandonment of its obligations under the social contract rather than individual rule defection. The cycle can thus be reversed only when the government resumes its obligations to provide an adequate and livable urban environment. *See infra* Part I.B.3.

[27] David A. Super, *Rethinking Fiscal Federalism*, 118 HARV. L. REV. 2544, 2549 & n.21 (2005) ("The formulation of most states' fiscal policies is guided by a combination of state constitutions' fiscal rules . . . , state statutes, the state legislatures' procedural rules, and traditions that shape the expectations of the major players in budgetary affairs. . . . [The term] 'fiscal constitutions,' . . . refers to the combined effect of all these restraints . . . ."); *see also* Richard C. Schragger, *Democracy and Debt*, 121 YALE L.J. 860, 863, 866 (2012) (observing that states' fiscal constitutions have historically included "constitutional debt limitations, balanced budget mandates, public-purpose requirements, and other restrictions on debt and spending").

[28] *See infra* notes 200–05 and accompanying text.

I. THE RULE OF LAW AND URBAN INFRASTRUCTURE

We theorize that the quality of the environment in which residents live determines the degree to which the rule of law will take root and thrive. In making this argument, we recognize that the relationship between the urban environment and the rule of law is multifaceted, multidimensional, and mediated through complex processes at both the individual and collective level. Nevertheless, we suggest that the rule of law is the linchpin of the social contract between citizens and civil society, and that adequate urban infrastructure plays a highly visible and salient role in underpinning the rule of law.

A. *The Rule of Law and the Social Contract*

In its abstract normative sense, the rule of law is a political ideal that is not necessarily descriptive of any actual society.[29] Moreover, the meaning of "rule of law" is highly contested,[30] with various interest groups using the phrase to promote different—and often competing—agendas.[31] Whatever the agenda, the

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[29] *See* JOSEPH RAZ, *The Rule of Law and its Virtue*, *in* THE AUTHORITY OF LAW: ESSAYS ON LAW AND MORALITY 210, 211 (2d ed. 2009) ("The rule of law is a political ideal which a legal system may lack or may possess to a greater or lesser degree."); Brent White, *Putting Aside the Rule of Law Myth: Corruption and the Case for Juries in Emerging Democracies*, 43 CORNELL INT'L L.J. 307, 309 (2010).

[30] *See, e.g.*, Richard H. Fallon, Jr., *"The Rule of Law" as a Concept in Constitutional Discourse*, 97 COLUM. L. REV. 1, 1 (1997) (stating that the precise meaning of the rule of law "may be less clear today than ever before"); Frank Lovett, *A Positivist Account of the Rule of Law*, 27 LAW & SOC. INQUIRY 41, 41 (2002) ("[D]escriptive accounts of the Rule of Law remain strikingly vague and imprecise."); Margaret Jane Radin, *Reconsidering the Rule of Law*, 69 B.U. L. REV. 781, 781 (1989) (noting that the rule of law ideal "is deeply contested" and that we lack a "canonical formulation of its meaning").

[31] These agendas include the promotion of economic development, the protection of human rights, equality and political liberty, and the spread of democracy. *See* Daniel B. Rodriguez et al., *The Rule of Law Unplugged*, 59 EMORY L.J. 1455, 1456–57 (2010); *see also* Michael Rosenfeld, *The Rule of Law and the Legitimacy of Constitutional Democracy*, 74 S. CAL. L. REV. 1307, 1308–09 (2001) ("[T]he descriptive meaning of 'the rule of law' is dependent on the prescriptive meaning one ascribes to it; in the context of complex contemporary polities there likely will be vigorous disagreements concerning the relevant prescriptive standards at stake."). Besides the conflict around the promotion of specific agenda, further disagreement exists among advocates of a formal (or proceduralist) conception of the rule of law and advocates of a substantive conception. *See generally* Paul Craig, *Formal and Substantive Conceptions of the Rule of Law: An Analytical Framework*, 1997 PUB. L. 467 (1997) (discussing each conception at length). For the former, the rule law only encompasses procedural and institutional qualities, which should guide lawmaking and law enforcement by public authorities. *See, e.g.*, RAZ, *supra* note 29, at 214 ("This is the basic intuition from which the doctrine of the rule of law derives: the law must be capable of guiding the behaviour of its subjects. It is evident that this conception of the rule of law is a formal one."). Among others, the qualities the rule of law should embody include the requirements that laws be general, public, prospective, understandable, consistent, stable, and congruent. *See* LON L. FULLER, THE MORALITY OF LAW 46–91 (rev. ed. 1969) (discussing the rule of law with respect to these issues). On the contrary, for advocates of a substantive

rule of law ideal almost always includes a normative commitment to the "supremacy of law" over the arbitrary exercise of power ("the rule of men").[32] Hence, at a minimum, the term "rule of law" includes a commitment by public officials and citizens to conform their behavior to legal rules and processes rather than individualized or momentary whims.[33]

In this foundational sense, the rule of law stands at the heart of the social contract, as articulated in the political philosophies of Hobbes, Locke, and Rousseau.[34] Individuals consent to unite into civil society and embrace the rule of law,[35] without which they are to remain in the state of nature,[36] wherein "the rule of men" leads to destruction, chaos, and uncertainty. That is, the rule of law is the means through which individuals replace "relations of hostility," which define the state of nature, with "relations of contract," which constitutes a civil society.[37] The rule of law is thus consensual and contractual, both as it applies to the horizontal dimension of social interactions among citizens—the

conception, the rule of law should be related to certain moral rights and duties of individual citizens and public authorities, such as individual freedom and equality. Historically, the substantive conception of the rule of law is associated with the work of the Austrian philosopher Friedrich Hayek. *See* F. A. HAYEK, THE POLITICAL IDEAL OF THE RULE OF LAW (1955).

[32] *See, e.g.*, Fallon, *supra* note 30, at 8–9 (arguing that the distinguishing feature of the rule of law is that legal rules and processes, as opposed to other norms, guide people, including officials and judges, in their actions); Rodriguez et al., *supra* note 31, at 1465 ("[T]he framework [of the rule of law] as it has been revisited and refined over the centuries highlights the fundamental and normative point that a good legal system is effective only insofar as individuals and officials are ruled by law, not men."); Todd Zywicki, *The Rule of Law, Freedom, and Prosperity*, 10 SUP. CT. ECON. REV. 1, 5 (2003) ("[T]he rule of law requires that government action be 'bound by rules fixed and announced beforehand.'" (quoting FRIEDRICH A. HAYEK, THE ROAD TO SERFDOM 72 (1944))).

[33] Andrew Venn Dicey, the Victorian scholar credited with introducing the term "rule of law," was the first to describe the supremacy of law as the basic requirement underpinning the rule of law. *See* A. V. DICEY, INTRODUCTION TO THE STUDY OF THE LAW OF THE CONSTITUTION 180–205 (8th ed. 1915).

[34] *See supra* note 15. However, in the elaboration of the Hobbesian social contract, the requirement to act according to the law only applies to citizens, while the exercise of authority is conceived as unconstrained to preserve the stability of civil society. *See infra* notes 114–18 and accompanying text.

[35] Consent to the rule of law, and the other institutions of civil society, does not require the actual agreement of the social contractors, as that would be an unworkable requirement. *See* Rosenfeld, *supra* note 31, at 1316. What suffices to establish legitimacy of those institutions is the hypothetical *ex ante* agreement of the social contractors, acting as rational individuals. John Rawls introduced the notion of the sufficiency of hypothetical consent in social contract theory. *See* RAWLS, *supra* note 15, at 11–13.

[36] In social contract theory, the state of nature is understood as the logical, rather than the historical, antecedent of civil society: i.e., a dimension in which individuals are stripped of any social and political relationship. *See* J. W. GOUGH, THE SOCIAL CONTRACT: A CRITICAL STUDY OF ITS DEVELOPMENT 4 (2d ed. 1957).

[37] David Gauthier, *The Social Contract as Ideology*, 6 PHIL. & PUB. AFF. 130, 134 (1977).

pactum unionis[38]—and the vertical dimension of social interactions between citizens and government—the *pactum subjectionis*.[39]

1. Pactum Unionis *and* Pactum Subjectionis

Under the guarantee of the rule of law, each individual voluntarily reaches agreements and associates with other individuals in the *pactum unionis* (the "social contract proper" or "contract of association")[40] to bring order to social interactions. The *pactum unionis*, however, is insufficient to build a well-ordered society.

Despite their different takes on the concept of a social contract, Hobbes, Locke, and Rousseau all believed that social order was consistently threatened by the risk that a given individual may cease to voluntarily abide by the rules.[41] In at least some circumstances, narrow self-interests will encourage individuals to break the rules. If such rule breaking becomes the norm, however, the *pactum unionis* is broken, as the commitment to act lawfully cannot be sustained in the absence of a reciprocal commitment by others.[42] In order to be meaningful, legal norms and procedures require enforcement mechanisms and a third party with enforcement authority.

This need for authority in civil society gives rise to an additional, vertical dimension of social contracting: the *pactum subjectionis* between citizens and government (the "contract of submission" or "contract of government").[43] Individuals voluntarily subsume their will to a centralized authority—the government—who acts as a third party enforcer of their reciprocal promises to abide by the law. While coercive government enforcement is costly to citizens—who are required to give the government a monopoly on the legitimate use of force and, as taxpayers, fund the government operations—they are better off bearing collective enforcement cost than living without the

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[38] *See* W. FRIEDMANN, LEGAL THEORY 117–19 (5th ed. 1967) (defining the *pactum unionis* as the process of building a society).

[39] *See id.* (defining the *pactum subjectionis* as the process of structuring the exercise of power).

[40] *See* GOUGH, *supra* note 36, at 2 (defining the "social contract proper" or "*pacte d'association*").

[41] *See* Rosenfeld, *supra* note 15, at 864–69.

[42] Reciprocity in contracts requires that agreements are bargained for as "two-sided exchanges, and not one-sided promises." *See* P. S. ATIYAH, THE RISE AND FALL OF FREEDOM OF CONTRACT 447 (1979). As applied to the rule of law context, this implies that no voluntary commitment to act according to the law can arise in the absence of similar commitments by others, as the lack of a "mutuall [sic] transferring of Right" frustrates the transactional object of obtaining social order. *See* THOMAS HOBBES, LEVIATHAN 68 (Everyman's Library ed., 1979) (1651).

[43] *See* GOUGH, *supra* note 36, at 3 (defining the "contract of submission" or "contract of government").

rule of law. At the same time, the rule of law acts as an element that supports the viability of the *pactum subjectionis*.[44] The rule of law requires that certain essential institutional arrangements—such as a basic constitutional structure, a system of independent judicial review, and separation of powers—be in place to prevent abuses of power by rulers and enforcers.[45] To Juvenal's question "*sed quis custodiet ipsos custodies?*" (i.e., "who is to guard the guards themselves?"),[46] the answer is, again, the rule of law, which serves as a "rule among rulers" in addition to a "rule among citizens."[47]

The modern economic theory of public goods point outs an additional *raison d'être* for the delegation of authority to the government under the *pactum subjectionis*.[48] There are essential goods and services—so-called "public goods"—that individuals fail to supply. Typical examples include a country's internal and external security, health care, education, and—most importantly for the purpose of this Article—urban infrastructure.[49] The common feature shared by all these goods is that their consumption is nonexclusive. Once supplied, everyone will benefit from their existence, even the free riders who did not contribute to their production.[50] This disincentivizes individuals from producing such goods, to the detriment of all.[51] Thus, just as rule enforcement requires the existence of a third party entity, so too does the existence and maintenance of public goods require a third party coordinator.[52]

The additional role served by the government as provider of public goods has important implications for the rule of law. As we explain below, by

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[44] FRIEDMANN, *supra* note 38, at 117–19.

[45] *See* Rodriguez et al., *supra* note 31, at 1475–79.

[46] *See* Juvenal, *Satire VI*, *in* JUVENAL AND PERSIUS 230, 266–67 (Susanna M. Braund ed. & trans., 2004) (c. 117 C.E.); Juvenal, *Satire 6: Roman Wives*, *in* THE SATIRES 37, 50 (Niall Rudd trans., 1991) (c. 117 C.E.).

[47] *See* W. IVOR JENNINGS, THE LAW AND THE CONSTITUTION 46 (5th ed. 1959).

[48] On the relationship between social contract theory and public goods theory, see generally ANTHONY DE JASAY, SOCIAL CONTRACT, FREE RIDE: A STUDY OF THE PUBLIC GOODS PROBLEM (1989).

[49] *See infra* note 67 and accompanying text.

[50] *See supra* note 18 and accompanying text.

[51] Viewed through the lens of game theory, the production of public goods is a classic case of Prisoner Dilemma. *See* RICHARD CORNES & TODD SANDLER, THE THEORY OF EXTERNALITIES, PUBLIC GOODS, AND CLUB GOODS 13 (1986). All citizens would benefit from cooperation (i.e., contributing honestly toward the provisions of public goods), but defection (i.e., not contributing or under-contributing to such goods) is the dominant strategy for self-interested individuals. As a result, public goods are provided suboptimally, unless corrective mechanisms are put in place. *See id.*

[52] Rule enforcement (or civil order) itself can be regarded as a public good. *See* JASAY, *supra* note 48, at 3 (observing that "[w]hat Hobbes deduced from the preference for a single good—civil order—later theorists have extended to any good from which an individual can benefit without contributing to the cost of producing or maintaining it"). However, as we explain below, the dual role of the government as enforcer and provider of public goods exhibits radically different transactional and informational features. *See infra* Part I.A.2.

providing public goods, the government sustains a social equilibrium that encourages rule abidance, making the rule of law, to an important extent, self-enforceable.

2. Information, Coordination, and Enforcement

The dual role of government as public enforcer and provider of public goods arises in transactional environments that have different informational value. Coercive government enforcement is a necessary corrective to ensure the viability of exchanges between self-interested individuals and to allow them to contract with one another in a predictable environment. However, the government's spot intervention to remedy rule infractions is not informative of "what others are doing"—the degree of adhesion to the *pactum unionis*. Firstly, the government's enforcement action may be information known only to the individual being "punished," in which case it has no informational value for other individuals. Secondly, even if the government's enforcement action is publicly known, it only provides information on discrete deviations from the *pactum unionis*. That information, however, is not a "sufficient statistic" for individuals to form a belief as to whether most others are abiding by, or deviating from, the rules.[53]

Unlike the public enforcement contract, the "public goods contract"[54] between citizens and government involves reoccurring and long-term exchanges, as the nature of such goods makes them crucial to an individual's well-being on a day-to-day basis throughout her life.[55] This highly interactive

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[53] *See* JEAN TIROLE, THE THEORY OF CORPORATE FINANCE 122 n.21 (2006) (defining a "sufficient statistic" as an observable variable that summarizes all the information in a sample about the desired unobservable variable).

[54] In this Article, the government–citizens exchange (i.e., the *pactum subjectionis*) is conceptualized as involving two distinct, although interconnected, contracts: the public enforcement contract, involving the role of the government as third-party enforcer of the relations among citizens, and the public goods contract, involving the role of the government as provider of public goods.

[55] *See* Michelle Wilde Anderson, *Cities Inside Out: Race, Poverty, and Exclusion at the Urban Fringe*, 55 UCLA L. REV. 1095, 1136–37, 1149–50 (2008) (suggesting that collective services affect the everyday life of citizens through both affirmative and negative aspects, where the former involve essential citizens' rights *to* some services, including services to personal safety and health, and the latter include citizens' rights to be free *from* some disservices, such as air pollution, noise, and ground contamination). The shutdown of the U.S. government in 2013 provided a vivid illustration of the effect that a sudden government's failure to provide public goods can have on citizens. *See* Lynn R. Goldman, *Government Shutdown Harms the Public Health*, HUFFINGTON POST POLITICS (Oct. 11, 2013, 12:34 PM), http://www.huffingtonpost.com/lynn-r-goldman/government-shutdown-harms_b_4084828.html (discussing effects of the recent shutdown on public health services); Sam Hananel et al., *10 Ways a Government Shut Down Might Affect You—Even if You are Not a Federal Worker*, NBC WASHINGTON (Sept. 30, 2013, 1:31 PM), http://www.nbcwashington.com/news/local/

exchange provides information about the degree of adhesion to the *pactum unionis*. This is because the long-term production of public goods is premised on the government's ability to continuously coordinate individual contributions to such goods and because maintenance of public goods sends signals that are consistent with rule abidance by others. Hence, access to adequate public goods signals to individuals that legal rules and institutions are meaningful. Put differently, when the government fulfills its function of coordinating the production and maintenance of public goods, individuals form a belief that most others choose rule abidance over rule defection. This fosters an individual sense that following the rules is valuable, encouraging patterns of "social cooperation" in both the interaction with the government and with other individuals.

A game-theoretic illustration helps to better understand the equilibria of the social contract game and the role played by the government as provider of public goods in determining such equilibria. We assume a simple world of two individuals: Individual 1 and Individual 2, who are about to interact with each other. Each individual has a choice between two strategies: *Cooperate* and *Defect*. The strategy *Cooperate* can be interpreted as involving rule abidance. The strategy *Defect* involves, instead, rule defection. Unlike the strategy *Defect*, the strategy *Cooperate* demands the exercise of effort and, hence, is more costly. Each individual cannot observe what the other individual does. In order to compute optimal actions, we can thus represent the game between Individual 1 and Individual 2 in its strategic form through the below payoff matrix.[56]

10-Ways-a-Government-Shutdown-Might-Affect-You—Even-If-Youre-Not-a-Federal-Worker-225528942. html (observing that services such as trash pickup, national parks, and building inspections may be put on hold during a shutdown).

[56] Strategic form games (or normal form games) model interaction between parties assuming that each party plays simultaneously without knowing the actions of the other party. *See* DOUGLAS G. BAIRD ET AL., GAME THEORY AND THE LAW 6–9 (1994). More specifically, the matrix of Figure 1 shows a two-player version of the "Stag Hunt Game": a strategic form game that game theorists use to illustrate the coordination issues involved by social contracting. *See* KEN BINMORE, 1 PLAYING FAIR: GAME THEORY AND THE SOCIAL CONTRACT 120–21 (1994).

Figure 1. Social Contract Game

The rows of the matrix represent Individual 1's strategies. The columns of the matrix represent Individual 2's strategies. The four cells of the matrix correspond to the possible outcomes of the game. The number on the left is Individual 1's payoff for the corresponding outcome of the game. The number on the right is Individual 2's payoff. Each Individual is assumed to seek to maximize her expected payoff from the game. A cell in which both payoffs are starred corresponds to a Nash equilibrium, wherein each Individual is then simultaneously making the best response to the strategic choice of the other.[57]

As shown by the matrix, there are two equilibria for the game. Either both Individuals choose *Cooperate* or they both choose *Defect*. When they *Cooperate* (shown in the northeast cell), their payoff is positive. Indeed, when individuals follow the rules, social welfare increases, for example because there is less need for coercive enforcement. Each Individual's effort is rewarded with lower participation costs (e.g., lower taxation) and, hence, a net benefit. When both Individuals *Defect* (shown in the southwest cell), their payoffs are normalized to zero, as neither Individual exerts effort and, thus, neither receives any benefits. The outcome (*Cooperate*, *Defect*) (shown in the northwest and southeast cells respectively) is not an equilibrium because the payoff of the Individual who chooses *Cooperate* is negative, as her costly effort goes unrewarded when the other Individual chooses *Defect* and, hence, result in a loss.

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[57] *See* John F. Nash, Jr., *Equilibrium Points in* n-*Person Games*, 36 PROC. NAT'L ACAD. SCI. 48, 49 (1950).

The government as provider of public goods acts as a correlation device allowing the Individuals to coordinate toward one of the possible equilibria. It does so by sending a public signal to each Individual about the likely strategy of the other. Because the long-term production of public goods is premised on the government's ability to continuously coordinate individual efforts and well-maintained public goods sends signals that are consistent with rule abidance by others, when individuals observe adequate public goods, they are led to assume that the other agreed to play *Cooperate*. Hence, each Individual "trusts" the other, choosing *Cooperate* in their turn. In contrast, when the government fails to provide or maintain public goods, each Individual is led to assume that the other has chosen *Defect* and, hence, chooses *Defect* in her turn.[58]

While social cooperation is an equilibrium outcome when the government provides adequate public goods, the heterogeneous interests of citizens may still lead to some rule defection out of the equilibrium path, to the detriment of those following the rules. However, when most individuals are on a "good" (i.e., cooperative) equilibrium,[59] patterns of "social advocacy" are also likely to develop in order to constrain rule defection. By social advocacy, we refer to citizens' monitoring both fellow citizens and public officials to ensure that they behave lawfully and are held accountable to the law. In a good equilibrium, incentives for social advocacy arise because individuals are motivated to preserve the benefits of the social contract and free riding off the monitoring of others is less likely to be profitable. Firstly, if a potential free rider has private information about another individual's rule breaking, and keeps that information to herself, no one else will offer any social advocacy—making free riding unprofitable to the potential free rider. Secondly, if someone's rule breaking is widely known, then the failure to socially disapprove the rule breaking (i.e., attempting to free ride off the advocacy of others) will be also widely known (i.e., the free rider will reveal her "type"),[60] exposing her to

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[58] If the equilibrium (*Defect*, *Defect*) is identified with the state of nature, the agreement of the individuals to play *Cooperate* can thus be seen as representing a social contract. *See* BINMORE, *supra* note 56, at 121.

[59] A good (Nash) equilibrium is one in which the sum of the utilities of all the players is maximized.

[60] As standard in the adverse selection literature, "type" refers to the categorization of agents into "good" and "bad" ones. An adverse selection problem arises when an agent has hidden knowledge of her characteristics or value. *See generally* George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488, 490 (1970) (introducing the adverse selection problem in its classic form, described as the situation that arises when a seller does not know how much the buyer is willing to pay for a good, i.e., the seller does not know whether the buyer's "type" is *good* or *bad*). In the social advocacy context, a good type engages in social advocacy, while a bad type free rides on the efforts of other.

social sanctions and reputational losses.[61] Thirdly, if the rule-breaking behavior is public knowledge and *no one* engages in social advocacy, then individuals have moved to a "bad" equilibrium, presumably, in this context, because the government has failed to provide adequate public goods and hence to sustain the conditions for cooperative patterns to develop.[62]

3. *Virtuous and Vicious Cycles*

The above game-theoretic account of social contracting suggests that the rule of law is not just imposed from the top down through coercive government enforcement. Rather, the government's provision of adequate public goods leads to a virtuous cycle in which incentives develop for "social enforcement"—social cooperation and social advocacy—which strengthens the rule of law.[63]

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[61]   Individuals who sit idly by while others break rules are often punished by social advocates as much as the rule breakers—think of the way people react to parents in a restaurant who do not restrain their children from throwing tantrums. *See* Bruce L. Benson, *Reciprocal Exchanges as the Basis for Recognition of Law: Examples from American History*, 10 J. LIBERTARIAN STUD. 53, 56 (1991) (arguing that community responses to rule defection have historically involved ostracism and the loss of reputational capital).

[62]   As rule abidance breaks down, people have fewer incentives to engage in social advocacy. For example, it makes sense for someone on a pristine street to call out a teenager who litters, as deterring this one individual is likely to result in a completely clean street. However, there is no purpose served in scolding a teenager who litters on a trash pile, as he is clearly only one of many. *See infra* notes 83–90 and accompanying text (discussing these mechanisms in greater detail).

[63]   *See* Benson, *supra* note 61, at 53 (arguing that the law can also develop "from the ground," as a result of the "recognition of mutual benefits"); HAROLD J. BERMAN, LAW AND REVOLUTION: THE FORMATION OF WESTERN LEGAL TRADITION 274 (1983) (same); *see also* Ken Binmore, *Reciprocity and the Social Contract*, 3 POL., PHIL. & ECON. 5, 6 (2004) (describing the social contract as a repeated game and suggesting that "the reciprocity mechanism allows a much wider range of behavior to be supported as an equilibrium in repeated games than is generally thought").

The distinction between coercive and social enforcement of the rule of law is reminiscent of the strand of legal literature that emphasizes the importance of establishing a "rule of law culture" in addition to "rule of law institutions." The common idea shared by these studies is that in a proper culture of legality, individuals take the legitimacy of law and legal institutions for granted, which aids to sustain the rule of law. *See, e.g.*, Rosa Ehrenreich Brooks, *The New Imperialism: Violence, Norms, and the "Rule of Law,"* 101 MICH. L. REV. 2275, 2285, 2323 (2003) (discussing the role of culture in determining compliance with the law); Philip Selznick, *Legal Cultures and the Rule of Law*, *in* THE RULE OF LAW AFTER COMMUNISM: PROBLEMS AND PROSPECTS IN EAST-CENTRAL EUROPE 21, 37 (Martin Krygier & Adam Czarnota eds., 1999) (emphasizing the importance of a "culture of lawfulness" in the establishment of the rule of law); Brian Tamanaha, *The History and Elements of the Rule of Law,* 2012 SING. J. LEGAL STUD. 232, 246 (2012) (arguing that when the cultural belief supporting the rule of law "is pervasive, the rule of law can be resilient, ... [w]hen this cultural belief is not pervasive, the rule of law will be weak or nonexistent"). Along the same lines, Herbert Hart highlights the importance of reciprocal recognition of legal rules, which takes place when such rules are accepted and employed in general practice from an internal point of view rather than just an external (i.e., coercive) point of view. *See* H. L. A. HART, THE CONCEPT OF LAW 100–10 (3d ed. 2012). Gerard Postema similarly suggests that the rule of law involves two main attributes: *legality*—"the formal, procedural, and institutional aspects of the

By reducing the rate of rule defection, social enforcement mechanisms simultaneously reduce the amount and cost of coercive government enforcement. Such mechanisms also support coercive enforcement when necessary (i.e., in the case of residual rule defection), sustaining it "from the ground" and lowering the cost of effective governmental intervention. Indeed, in economic terms, social and coercive enforcement of the rule of law are "complementary goods with some substitute effects."[64] Thus, on the one hand, a robust rule of law requires the support of both coercive and social enforcement. On the other, the more effective social enforcement mechanisms are, the less coercive enforcement is needed.[65]

Conversely, when the government fails to provide public goods, it creates a vicious cycle, weakening the rule of law. When faced with the lack of (or inadequate) public goods, individuals are led to believe that the government and citizens as a collective have abandoned their commitment to follow the basic rules governing the social contract. Individuals may choose, in turn, to breach their own obligations toward both the government and each other.[66] As parties to the social contract—be they individuals or the government itself— breach their obligations, obedience to the law loses its inherent value. Social enforcement mechanisms (social cooperation and social advocacy) are lost. This increases exponentially the costs of coercive enforcement, while at the same time making it less effective—undermining the rule of law and potentially breaking it down altogether.

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ideal"—and *fidelity*—"a set of relationships and responsibilities rooted in core convictions and commitments, which are essential for the realization of this ideal." *See* Gerald J. Postema, *Fidelity in Law's Commonwealth*, *in* PRIVATE LAW AND THE RULE OF LAW (Dennis Klimchuck ed., forthcoming) (manuscript at 4), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2294665. Unlike our account of social enforcement, however, these accounts fail to explain why "a proper culture of legality," or "fidelity" to the rule of law, emerges in any given society.

[64] *See* N. GREGORY MANKIW, PRINCIPLES OF ECONOMICS 441 (7th ed. 2015) ("In the real world, of course, most goods are neither perfect substitutes (like nickels and dimes) nor perfect complements (like right shoes and left shoes)."); *see also id.* at 70 (providing a general definition of complementary and substitute goods).

[65] *See* Hadfield & Weingast, *supra* note 23, at 33 (suggesting that many enforcement mechanisms can replace coercive enforcement, including "decentralized collective punishment mechanisms that support any normative social order such as social disapproval, withdrawal of cooperation or trade, and unilateral or collective retaliation, as well as organized and official force"). Unlike Hadfield and Weingast, however, we do not see social enforcement as a perfect substitute of coercive governmental enforcement.

[66] Ken Binmore provides a vivid description of the retribution that may follow from the lack of reciprocity in any given exchange. As he writes, "[p]eople provide a service to others expecting to get something in return. As the saying goes, I'll scratch your back if you'll scratch mine. If the service a person provides *isn't* satisfactorily reciprocated, then the service will be withdrawn. Sometimes, some disservice will be offered instead." *See* KEN BINMORE, PLAYING FOR REAL: A TEXT ON GAME THEORY 319 (2007).

B. *The Man and the City*

Among the several public goods the government is expected to provide to citizens, we argue that urban infrastructure plays an especially salient role in underpinning the rule of law. Urban infrastructure—including roads and highways, electrical supply, water resources, air quality, public transportation systems, traffic control, safe travel, and a pleasing overall aesthetic[67]—directly and inescapably affects the daily lived experience of all citizens. A well-maintained water supply, for example, avoids leakage and the associated waste of natural and economic resources while also preventing the spread of diseases.[68] Good roadways[69] and effective transit systems[70] improve the local economy, allowing people and goods to move efficiently.[71] A sound transportation system also improves community health by reducing traffic congestion (and, hence, air pollution) and decreasing the likelihood of accidents.[72] Efficient electrical supply plays a similarly vital role in driving the success of industrial processes, as well as ensuring the effective daily function of individual households.[73]

These stylized illustrations help to explain why the quality of urban infrastructure visibly expresses the degree of adhesion to the social contract by

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[67] This list is intended as exemplificative rather than illustrative of urban infrastructure components, which also include, for example, sanitary systems, public facilities (e.g., libraries), and parks. The reason we limit our exemplification to the above list of components is that those are the components for which we were able to collect data in our cross-country analysis of urban infrastructure and the rule of law. *See infra* notes 166–68 and accompanying text.

[68] *See* 2013 REPORT CARD, *supra* note 9, at 29 (attributing to the U.S. wastewater supply system an overall grade of D (poor) and estimating a needed investment cost of $298 billion over the next 20 years).

[69] *See id.* at 48–50 (attributing to the U.S. road system an overall grade of D (poor) and documenting an estimated $101 billion cost in wasted time and fuel annually due to traffic congestion in many U.S. highways).

[70] *See id.* at 7, 51–53 (attributing to the U.S. transit system an overall grade of D (poor) and remarking that 45% of American households lack any access to transit).

[71] *See* 2012 TREASURY REPORT, *supra* note 13, at 10 ("For example, in Chicago, transportation agglomeration benefits have led to greater business clustering and economic growth associated with manufacturing, as businesses took advantage of Chicago's position in a national transportation network.").

[72] *See id.* ("[W]ell-maintained roads with adequate capacity, coupled with access to public transit and other driving alternatives, can lower traffic congestion and accident rates which not only saves Americans time and money but also saves lives."); *see also* PEDRO ANTUNES ET AL., CONFERENCE BD. OF CAN., THE ECONOMIC IMPACT OF PUBLIC INFRASTRUCTURE IN ONTARIO 25 (2010), *available at* http://suma.org/cmsupload/fckeditor/Research/10-144_EcomomicImpactPublicInfrastructure_WEB.pdf (observing that a better road system lowers commuting time and improves personal health); David Alan Aschauer, *Why Is Infrastructure Important?*, *in* IS THERE A SHORTFALL IN PUBLIC CAPITAL INVESTMENT?, at 21, 23 (Alicia H. Munnell ed., Fed. Reserve Bank of Boston Conference Series No. 34, 1990), *available at* https://www.bostonfed.org/economic/conf/conf34/conf34b.pdf.

[73] *See* 2013 REPORT CARD, *supra* note 9, at 8, 60–64 (attributing to the U.S. energy system an overall grade of D+).

both the government and individuals. When the government provides and maintains adequate urban infrastructure, both households and communities at large receive essential economic, environmental, health, and safety benefits.[74] Such benefits provide a signal to individuals about the legitimacy and stability of legal rules, as well as the polity's shared commitment to abide by law. Continued access to those benefits supports the development of social enforcement, strengthening the rule of law. Conversely, when the government fails to provide a livable urban environment, conflict replaces cooperation in social interactions, and incentives for social advocacy are jeopardized, ultimately undermining the rule of law.

The ensuing discussion analyzes the specific factors that may cause inadequate urban infrastructure to result in the loss of social cooperation and social advocacy. As explained in subsection I.B.1, in an unlivable urban environment, unlawful behavior is not only likely to become *socially common* but also *socially approved*. This, in turn, creates a risk that the disregard of one rule may spread like a contagion infecting other rules, with the result that doing what is practical in lieu of what is legal may become the new normal in such an environment.[75] Similarly, as discussed in subsection I.B.2, the loss of the benefits arising from adequate urban infrastructure is likely to make it less profitable for citizens to be civically engaged. Moreover, an unlivable urban environment may reduce citizen access to the democratic process, with negative consequences on citizens' ability to exercise social advocacy. Finally, in subsection I.B.3, we explain why increased coercive enforcement may only compensate for the loss of social enforcement that is produced by inadequate urban infrastructure up to a point, and why this conclusion sets our theory of

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[74] Influential research by David Aschauer and others has explored the link between public infrastructure investment and economic growth since the late 1980s, finding evidence of large private sector productivity gains from public infrastructure investments. *See, e.g.*, David Alan Aschauer, *Is Public Expenditure Productive?*, 23 J. MONETARY ECON. 177 (1989); David A. Aschauer, *Public Investment and Productivity Growth in the Group of Seven*, 13 ECON. PERSP. 17 (1989); John G. Fernald, *Roads to Prosperity? Assessing the Link Between Public Capital and Productivity*, 89 AM. ECON. REV. 619 (1999) (documenting a causal link between infrastructure investments and productivity gains); Alicia H. Munnell, *Infrastructure Investment and Economic Growth*, J. ECON. PERSP., Fall 1992, at 189, 195 (comparing the economic benefits of infrastructure investments between regions in the United States, generally finding smaller but economically significant benefits in comparison to Aschauer's estimates). In addition, infrastructure investments have been found to positively impact property values and, more generally, improve living standards. For a review of the studies exploring the several benefits arising from adequate infrastructure investments, see 2012 TREASURY REPORT, *supra* note 13, at 7–11.

[75] *See infra* notes 91–93 and accompanying text.

the relationship between urban environment and the rule of law apart from the popular broken windows theory (BWT) of deterrence.[76]

1. *Urban Decay and Social Cooperation*

Because urban infrastructure is a highly visible and salient public good, the failure to provide such infrastructure—made tangible by "urban decay"[77]— may jeopardize social cooperation along several dimensions. Urban decay refers to the fundamental and long-lasting aspects of unrelenting physical disorder such as boarded-up and abandoned buildings and public spaces, potholed roads and overwhelming traffic congestion, broken playgrounds, and poor (or no) access to clean water and basic sanitation.[78] Minor forms of physical disorder, e.g., piled trash and graffiti, may also be associated with urban decay but are unlikely to determine it in isolation. At the same time, they can more easily be remedied by spot interventions, rather than demanding sustained investment in infrastructure.

The negative impact of urban decay on social cooperation can be observed in the relationship between a government and its citizens—the *pactum subjectionis*.[79] As illustrated in the game in Figure 1 above,[80] individuals faced with urban decay may rationally lose interest in following the law, perceiving that the government itself, as well as most others, have discarded rules. In other words, urban decay serves as a heuristic used by individuals to conclude that the government is not adequately fulfilling its function in coordinating the production of public goods, as well as heuristic to conclude that other individuals have ceased to adhere to the rules of the social contract. As a result, the legitimacy of the government's rules and institutions are weakened, and so are individual incentives to choose patterns of rule abidance over patterns of rule defection. In this context, dashing illegally across gaps in traffic in the absence of adequate traffic control or protected crosswalks,[81] parking illegally

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[76] *See infra* notes 122–39 and accompanying text.

[77] *See supra* note 24.

[78] *See* Malia Jones et al., *Eyes on the Block: Measuring Urban Physical Disorder Through In-Person Observation*, 40 SOC. SCI. RES. 523, 524 (2011) (defining urban disorder as referring to "the conditions of streets, sidewalks, building exteriors, and other characteristics visible to any passer-by"). As explained below, by adopting a definition of urban decay that refers to the fundamental aspect of physical disorder, we aim to limit the overlap between physical and social aspects of disorder. *See infra* notes 127–33 and accompanying text.

[79] *See supra* notes 43–47 and accompanying text.

[80] *See supra* Figure 1 and accompanying text.

[81] *See* Tom Vanderbilt, *In Defense of Jaywalking: Banning the Practice Won't Make Pedestrians Safer*, SLATE (Nov. 2, 2009, 4:01 PM), http://www.slate.com/articles/life/transport/2009/11/in_defense_of_

on the sidewalks in the absence of legal parking,[82] ignoring red lights to get across gridlocked intersections, or littering where there are no trash cans may all become socially common behaviors.

Sociological studies documenting the influence that the urban environment has upon an individual's behavior and cognitive process[83] are consistent with our game-theoretic account of social contracting. These studies highlight that unlawful conduct—as well as other forms of rule defection—not only may become *socially common* but also *socially approved* in a decayed urban environment. The distinction between "common" and "approved" behaviors derives from the sociological concepts of "descriptive norms" and "injunctive norms." As explained by sociologist Robert Cialdini, "[t]he descriptive norm describes what is typical or *normal*. It is what most people do, and it motivates by providing evidence as to what will likely be effective and adaptive action."[84] The injunctive norm, instead, specifies "what ought to be done"[85] relative to all sort of legitimate rules, including legal rules.[86] Most importantly

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jaywalking.2.html (suggesting that jaywalking emerges as a response to the lack of protected crosswalks and pedestrian-friendly engineering). The enforcement of anti-jaywalking laws in the United States is typically sporadic. Thus, last year's attempt by the Los Angeles police to enforce stricter anti-jaywalking rules (and penalties) made headlines. *See* Aidan Lewis, *Jaywalking: How the Car Industry Outlawed Crossing the Road*, BBC NEWS MAG. (Feb. 11, 2014, 19:13 ET), http://www.bbc.com/news/magazine-26073797. Consistent with this Article's thesis, those headlines were followed by a report of the Los Angeles 2020 Commission that presented a worrying catalogue of structural city failings, including "widespread poverty and job stagnation, huge municipal pension obligations, a struggling port and tourism industry and paralyzing traffic." *See* Adam Nagourney, *Report Finds Los Angeles at Risk of Decline*, N.Y. TIMES, Apr. 9, 2014, http://www.nytimes.com/2014/04/10/us/report-finds-a-los-angeles-in-decline.html.

    [82] *See* Karl Soper, *Russia: Moscow's Peculiar Illegal Parking Problem*, GLOBAL VOICES (Aug. 31, 2012, 15:41 GMT), http://globalvoicesonline.org/2012/08/31/russia-the-peculiarities-of-national-parking/ ("Moscow drivers . . . . are used to parking illegally on streets, and blocking traffic . . . . In neighborhoods, they block alleys into courtyards, and impede movement of emergency vehicles. . . . [D]rivers defend their behavior by arguing that Moscow's buildings, apartments, and other infrastructure were built with little parking.").

    [83] *See* Timothy J. Haney, *"Broken Windows" and Self-Esteem: Subjective Understandings of Neighborhood Poverty and Disorder*, 36 SOC. SCI. RES. 968, 969 (2007) ("Sociological research dating to the early 1900s documents the influence that a city has upon an individual's behavior and cognitive processes.").

    [84] Robert Cialdini et al., *A Focus Theory of Normative Conduct: Recycling the Concept of Norms to Reduce Littering in Public Spaces*, 58 J. PERSONALITY & SOC. PSYCHOL. 1015, 1015 (1990) [hereinafter Cialdini et al., *A Focus Theory*]; *see also* Robert Cialdini et al., *The Transsituational Influence of Social Norms,* 64 J. PERSONALITY & SOC. PSYCHOL. 104, 104 (1993) [hereinafter Cialdini et al., *Transsituational Influence*]. The concept of descriptive norm is reminiscent of the category of "conformity" employed in the psychology literature and defined as "the tendency to copy the most prevalent behavior in a population [which] is particularly a strong and robust predictor of human behavior." *See* Jeffrey P. Carpenter, *When in Rome: Conformity and the Provision of Public Goods*, 33 J. SOCIO-ECON. 395, 395 (2004) (internal citations omitted).

    [85] Cialdini et al., *A Focus Theory*, *supra* note 84, at 1015.

    [86] In his original formulation of injunctive norms, Cialdini had mostly moral imperatives in mind. *See* Cialdini, *Transsituational Influence*, *supra* note 84, at 104 (defining injunctive norms as specifying "what people approve and disapprove within the culture and motivate action by promising social sanctions for

for the purpose of this discussion, under what is known as the "Cialdini effect,"[87] injunctive norms are found to be more effective when accompanied by consistent descriptive norms.[88] The classic example is littering, where an antilittering (injunctive) norm will be more likely to deter littering when it operates in a non-littered rather than a pre-littered setting.[89]

As applied to our analytical framework, injunctive norms consist of the collective expectation that people will abide by the rules in order to create an ordered society. Descriptive norms are the degree to which citizens actually engage in the appropriate behavior. Under the Cialdini effect, it is easy to see why the government's failure to provide a livable urban environment leads citizens to breach the rules. Because injunctive norms are less likely to be internalized by individuals in circumstances of urban decay, their violation will be less costly, as social retribution is unlikely to sanction unlawful behavior in these circumstances. The result is that injunctive norms will be more often misaligned with descriptive norms. Thus, in an urban environment with no trash cans, the descriptive norm will tend to include littering, as social retribution is unlikely to sanction this conduct regardless of the antilittering injunctive norm.[90]

More generally, individuals who live in a decaying urban environment must necessarily develop adaptive behavioral patterns, many of which are likely to involve routine legal transgressions. They will also tend to develop attitudes that justify and normalize their actions. For example, if, in the absence of adequate traffic control or protected crosswalks, the safest way to cross the street is to dash illegally across gaps in traffic, a pedestrian is unlikely to believe that jaywalking is wrong because it is illegal. Rather, the pedestrian will discount the persuasiveness of the injunctive norm against jaywalking in

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normative or counternormative conduct"). More recent studies, however, have applied the concept of injunctive norms to a wider range of rules, including legal rules. *See* Kees Keizer et al., *The Spreading of Disorder*, 322 SCIENCE 1681, 1682 (2008).

[87] *See* Keizer et al., *supra* note 86, at 1682.

[88] *See id.* at 1682 ("Injunctive-norm information in a persuasive message is more effective when accompanied by descriptive norm information that is in alignment rather than in conflict with that message." (internal citations omitted)).

[89] *See* Cialdini et al., *A Focus Theory*, *supra* note 84, at 1019; *see also* Susan M. Reiter & William Samuel, *Littering as a Function of Prior Litter and the Presence of the Absence of Prohibitive Signs*, 10 J. APPLIED SOC. PSYCHOL. 45, 45 (1980) (showing that prior exposure is an important variable in determining the effectiveness of antilittering signs).

[90] *See* Benno Torgler et al. *Environmental and Pro-Social Norms: Evidence on Littering*, 9 B.E. J. ECON. ANALYSIS & POL'Y 1, 1 (2009) (demonstrating that the perceived littering behavior by others influences either one's own littering or non-littering behavior).

favor of a belief that one should do what is practical to get safely across the street. As other pedestrians follow suit, the reciprocity necessary to support the injunctive norm against jaywalking is undermined and jaywalking emerges as the new descriptive norm.

Moreover, as highlighted by a 2008 *Science* article, widespread and highly visible disregard of one injunctive norm in favor of a descriptive norm of doing what is practical can evolve into generalized disregard of other injunctive norms, a process referred to as "cross-norm inhibition effect."[91] Hence, a decaying urban environment is likely to lead to more than merely minor legal transgressions, like jaywalking, but will spread like a contagion infecting other injunctive norms.[92] In such an environment, paying a bribe or otherwise attempting to leverage political, social, or economic influence may likewise become socially accepted behaviors that are justified because they are seen as nothing less than a practical way to get things done.[93]

More critically, urban decay may act as a cue that "incivility" has replaced social order in one's relationship to fellow citizens[94]—the *pactum unionis*.[95] The urban environment provides a signal as to whether others are committed to a pattern of rule abidance or rule defection. When individuals are surrounded by physical disorder, the signal tells them that others will more easily lean toward rule defection, as the conditions for rule abidance are jeopardized by the law devaluing induced by urban decay. This, in turn, reduces the likelihood of cooperative patterns in the horizontal dimension of social contracting, as

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[91]   *See* Keizer et al., *supra* note 86, at 1682.

[92]   *See id.*

[93]   It is worth observing that, on the one hand, doing what is practical is more likely to coincide with rule abidance in an ordered urban environment. For example, in an environment with protected crosswalks and adequate traffic control, crossing a road legally is likely to be more practical than jaywalking. On the other hand, citizens will tend to be more willing to sustain the cost of doing what is impractical in an ordered environment, because of the value they place in supporting the social contract.

[94]   *See* Albert Hunter, *Private, Parochial and Public Social Orders: The Problem of Crime and Incivility in Urban Communities*, *in* THE CHALLENGE OF SOCIAL CONTROL: CITIZENSHIP AND INSTITUTION BUILDING IN MODERN SOCIETY 230, 230–42 (Gerald D. Suttles & Mayer N. Zald eds., 1985) (associating visible evidence of urban disorder with "incivility"); Neelkamal Rastogi, *Role of Social Disorder-Related Environmental Cues as Signals in Modulating Social Learning, Norm Non-Compliance and Collective Decisions in Human Societies*, 99 CURRENT SCI. 1046, 1049 (2010) ("Disorder-related visual and acoustic signals from group members and even from human-generated environmental cues are presumably perceived as indicators of non-compliance of social norms."); Robert J. Sampson & Stephen W. Raudenbush, *Systematic Social Observation of Public Spaces: A New Look at Disorder in Urban Neighborhoods*, 105 AM. J. SOC. 603, 604 (1999) (observing that physical disorder has "long been noted as central to a neighborhood's public presentation").

[95]   *See supra* notes 40–42 and accompanying text.

individuals condition their compliance with legal norms on reciprocal compliance by others. That is, to the extent that urban physical disorder serves as demonstrative evidence that others do not follow legal rules, it may make individuals less willing to constrain their behavior in accordance with such rules whenever rule compliance is personally costly.

2. *Urban Decay and Social Advocacy*

In addition to jeopardizing social cooperation, physical disorder also decreases the likelihood that individuals will engage in social advocacy by monitoring other individuals and public officials and holding them accountable to the law. As discussed above, social advocacy is essential to the social enforcement of the rule of law.[96] However, effective social advocacy requires both incentives for civic engagement and access to the democratic process. Urban decay undermines both.

Under our game-theoretic account of social contracting, incentives for social advocacy arise on the equilibrium path when most social contractors prefer rule abidance to rule defection.[97] Under this "good" equilibrium (i.e., the *Cooperate, Cooperate* equilibrium of the game represented in Figure 1 above),[98] engaging in social advocacy and sanctioning rule defection is likely to be profitable to social contractors. However, the government's failure to provide public goods moves social contractors to a "bad" equilibrium (i.e., the *Defect, Defect* equilibrium of the game represented in Figure 1 above).[99] Under this opposite equilibrium, social advocacy is no longer profitable, as most social contractors prefer rule defection to rule abidance.

Consistent with our game-theoretic account of social contracting, urban sociologists have long suggested that urban decay negatively correlates with "collective efficacy": a citizen's belief in her ability to exercise influence over events that affect her life.[100] Individuals who live daily amidst unrelenting physical disorder are more likely to feel impotent, unable to control the events

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[96] *See supra* notes 59–62 and accompanying text.

[97] *See supra* note 59 (providing a definition of good (Nash) equilibrium).

[98] *See supra* Figure 1 and accompanying text.

[99] *See id.*

[100] *See* Sampson & Raudenbush, *supra* note 94, at 612–13 (defining "collective efficacy" as "the linkage of cohesion and mutual trust with shared expectations for intervening in support of neighborhood social control"); *see also* ALBERT BANDURA, SOCIAL FOUNDATIONS OF THOUGHT AND ACTION: A SOCIAL COGNITIVE THEORY 391 (1986) (defining perceived efficacy as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances").

around them.[101] They are more likely to be "subjectively alienated" from other citizens and their own communities.[102] Confronted constantly with disorder, such individuals perceive that they are powerless to effect change in their surroundings, much less to effect change in the behavior of fellow citizens and government officials.[103] This tends to translate into higher levels of social mistrust.[104] As a result of these combined effects, individuals who live in decaying urban environments are less likely to be civically engaged and participate in social groups, volunteer organizations, or political meetings.[105] At the extreme, they may even give up voting and other forms of democratic involvement.

In a recent study of unincorporated urban areas, Michelle Anderson suggests an additional channel through which urban decay can negatively impact social advocacy: the creation of physical barriers that jeopardize both the exercise of political voice and the access to participatory democracy.[106]

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[101] *See* Haney, *supra* note 83, at 970 (arguing that signs of dilapidation or decay "often translate into feelings of fatalism"); Sampson & Raudenbush, *supra* note 94, at 612–13 ("One is unlikely to take action in a neighborhood context where the rules are unclear and people mistrust one another.").

[102] *See* Karlyn J. Geis & Catherine E. Ross, *A New Look at Urban Alienation: The Effect of Neighborhood Disorder on Perceived Powerlessness*, 61 SOC. PSYCHOL. Q. 232, 233 (1998) (arguing that living in decay and disorder can lead to "*subjective* alienation . . . [the] learned, generalized expectation that outcomes of situations are determined by forces external to oneself" (internal citations omitted)).

[103] *See id.* at 238 ("Neighborhood disorder in turn is associated with high perceived powerlessness."); Townsand Price-Spratlen & Wayne A. Santoro, *Neighborhood Disorder and Individual Community Capacity: How Incivilities Inform Three Domains of Psychosocial Assessment*, 31 SOC. SPECTRUM 579, 583 (2011) (reporting that "disorder increases residents' feelings of powerlessness, mistrust of their neighbors, and depressive symptoms" (internal citations omitted)); Robert J. Sampson & Stephen W. Raudenbush, *Seeing Disorder: Neighborhood Stigma and the Social Construction of "Broken Windows"*, 67 SOC. PSYCHOLOGY Q. 319, 319 (2004) ("[C]oncept of disorder has penetrated social psychology. . . . For example, a number of recent studies have linked perceived disorder to physical decline, depression, psychological distress, and perceived powerlessness." (internal citations omitted)).

[104] *See* Catherine E. Ross et al., *Powerlessness and the Amplification of Threat: Neighborhood Disadvantage, Disorder, and Mistrust*, 66 AM. SOC. REV. 568, 579–80 (2001) ("Neighborhood disorder is associated with mistrust. Moreover, perceived neighborhood disorder produces more mistrust among those who feel powerless to control their lives than among those with a sense of personal control." (internal citations omitted)*).

[105] *See* Cathy J. Cohen & Michael C. Dawson, *Neighborhood Poverty and African American Politics*, 87 AM. POL. SCI. REV. 286, 290–91 (1993) (showing that in decaying Detroit neighborhoods even those who are not poor are less likely to participate in voluntary social groups and political organizations); Haney, *supra* note 83, at 973 (discussing earlier studies showing that neighborhood decay decreases "civic engagement"); Price-Spratlen & Santoro, *supra* note 103, at 583 ("[D]isorder is negatively related to both community-focused cognitions such as satisfaction or sense of community, and to behaviors such as citizen participation in community organizations and informal neighboring.").

[106] *See* Anderson, *supra* note 55, at 1157–58. Residents of unincorporated urban areas face additional barriers that may reduce their political voice, such as dilution effects arising out of issues of geographical

Unincorporated urban areas are primarily low-income residential neighborhoods lying outside the borders of an incorporated city.[107] These neighborhoods can be grouped consistently into two categories. The first "lacks one or more vital service, such as piped, potable water; sewage and wastewater disposal; adequate law enforcement and fire protection; street paving, lighting, and traffic control; and/or flood and stormwater control."[108] The second, and largely overlapping, category "face health risks and depressed land values due to a concentration of a metropolitan area's undesirable land uses, contamination from past land uses, or uncontrolled vulnerability to natural disaster."[109] Hence, unincorporated urban areas offer a tangible, and widespread,[110] example of decaying urban environments in today's America.

In these environments, residents face not only a sense of persistent political disempowerment but also physical barriers that constrain their ability to take part in the democratic process. For example, the lack of an adequate public transportation system, coupled with the scarce economic resources of residents and geographic dispersion, may prevent access to governmental institutions and, hence, collective monitoring of those institutions.[111]

In spite of their differences, each of the above accounts share a common conclusion: a decaying urban environment undermines citizens' incentives to engage in social advocacy, with the result that unlawful conduct by both fellow citizens and public officials is less likely to be detected or sanctioned.[112]

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dispersion and oversized county government. *See id*. at 1157. Those issues, however, remain outside the scope of this Article's investigation.

[107]   *See id*. at 1101.

[108]   *Id.*

[109]   *Id.* at 1101–02.

[110]   *See id.* at 1095 (observing that "[a]cross the country, millions of low-income households live in [such] urban enclaves").

[111]   *See id.* at 1157. As observed by Anderson, this is the case of North Richmond, California, an unincorporated urban area that is

> less than five miles away from City Hall in Richmond, but its residents must drive more than an hour to reach the county seat, which is located in a different city, to attend the meetings of their governing Board of Supervisors. Such a distance is no small barrier for low-income residents reliant on public transportation in a clogged metropolitan area.

Id. at 1157–58 (footnote omitted).

[112]   The difficulties that are often experienced in building anticorruption schemes in developing countries are hardly surprising if one considers that those countries often exhibit widespread urban decay. As observed by one commentator, "[a]ny anti-corruption scheme, to be successful, must involve the civil society, the ultimate victims of corruption." Okechukwu Oko, *Subverting the Scourge of Corruption in Nigeria: A Reform Prospectus*, 34 N.Y.U. J. INT'L L. & POL. 397, 465 (2002). But if those victims are engaged in surviving daily and assaultive urban physical disorder, they are less likely to have the resources, and the incentives, to be

3. *Strict Coercive Enforcement and the Broken Windows Theory*

With the loss of both social cooperation and social advocacy, social enforcement becomes virtually non-existent. As a result, preservation of the rule of law is left to coercive mechanisms.[113] Without support from the bottom, however, such mechanisms require vastly increased coercive force to maintain social order, which poses several concerns. For one thing, an increase in the government's enforcement power may increase the room for public official misconduct and other abuses of power. Indeed, the demand for a "stronger government" calls to mind Hobbesian justifications for preferring forms of absolute government to a democratic system.[114] For Hobbes, given the inherently unstable nature of society,[115] only the attribution of absolute power could prevent self-interested individuals from going back to a "state of war."[116] It is no coincidence that it is this strain of Hobbesian political thought that has suffered the greatest criticism.[117] Taken to its logical extreme, Hobbes's argument suggests that the law applies only to citizens and not to rulers. As a result, "the enforcer may be free to infringe upon relations of contract and render them equally uncertain,"[118] contradicting the basic reason for the delegation of enforcement authority to the government. Although in modern democracies institutional safeguards exist precisely to prevent official abuse,[119] expanding the government's coercive power still carries an intrinsic risk of increased government abuse and misconduct.

Additionally, strict coercive enforcement requires citizens to bear higher costs to preserve a pattern of rule abidance over a pattern of rule defection. In a decaying urban environment such costs might well become so high as to make effective enforcement unfeasible. As discussed above, in such an environment, citizens develop adaptive behavioral patterns that often involve a

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meaningfully involved in the fight against corruption. *See also infra* Part II.B–C (documenting that a country's urban decay results in higher perceived corruption).

[113] *See supra* notes 64–65 and accompanying text (discussing the relationship between social enforcement and coercive enforcement).

[114] *See* HOBBES, *supra* note 42, at 189 ("Subjects owe to [their] Soveraigns [sic], simple Obedience, in all things, wherein their obedience is not repugnant to the Lawse [sic] of God . . . .").

[115] *See* THOMAS HOBBES, *The Citizen: Philosophical Rudiments Concerning Government and Society*, *in* MAN AND CITIZEN 87, 234 (Bernard Gert ed., Charles T, Wood, T. S. K. Scott-Craig & Bernard Gert trans., 1972) (1642).

[116] *See id.*

[117] *See* J. A. Thomas, *Some Contemporary Critics of Thomas Hobbes*, 26 ECONOMICA 185, 186–91 (1929).

[118] *See* Rosenfeld, *supra* note 15, at 895.

[119] *See supra* notes 44–47 and accompanying text.

transformation of unlawful conduct into socially accepted behaviors.[120] Norm contagion escalates this process, potentially leading a critical mass of individuals to engage in a wide range of illegal transgressions on a regular basis.[121] Faced with such widespread rule defection, even strict coercive enforcement may fail to ensure the rule of law. Thus, increased coercive enforcement can compensate for the loss of social enforcement only up to a point. Beyond that point, the rule of law begins to break down, with potentially enormous negative social consequences.

This account of the limits of coercive enforcement also casts a doubt on the "broken windows theory," and its rationale for "zero tolerance" policing policies. The BWT suggests that *minor signs of social and physical disorder*, if left unattended, may induce additional disorder, including serious crime[122]—hence providing a justification for a policy of strict rule enforcement,[123] which has been adopted in several cities worldwide[124] since the theory's formulation in the early 1980s.[125]

Under both our own theory and the BWT, physical signs of disorder provide the tipping point triggering a vicious cycle of increased disorder and illegality.[126] However, the similarity stops there, as the two theories are otherwise both positively and normatively distinct.

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[120]   *See supra* notes 83–89 and accompanying text.
[121]   *See supra* notes 90–93 and accompanying text.
[122]   *See* Wilson & Kelling, *supra* note 26.
[123]   *See* Bernard Harcourt, *Reflecting on the Subject: A Critique of the Social Influence Conception of Deterrence, The Broken Windows Theory, and Order-Maintenance Policing New York Style*, 97 MICH. L. REV. 291, 294 (1998) (observing that the BWT has offered the ground for the development of the so-called "new path of deterrence," which is "a loosely grouped set of initiatives in the area of crime and punishment, ranging from order-maintenance policing to curfews, gang-loitering laws, informal public-space zoning, reverse stings, and shaming penalties").
[124]   *See* Keizer et al., *supra* note 86, at 1681 ("[A]pproaches based on the BWT have become popular and have been adopted worldwide (e.g., in various cities in the United States, Great Britain, Netherlands, Indonesia, and South Africa).").
[125]   The original BWT essay by James Q. Wilson and George L. Kelling appeared in the *Atlantic Monthly* in 1982. *See* Wilson & Kelling, *supra* note 26.
[126]   The BWT, as our theory, is grounded on earlier sociological theories of urban decay and social contagion. *See* Harcourt & Ludwig, *supra* note 26, at 281. However, unlike the BWT, our theory is based on the investigation of what causes disorder. From a normative viewpoint the difference is substantial, as we draw normative implications from the elaboration of the causes of disorder rather than the mere evidence of disorder.

From a positive perspective, the BWT addresses, by its very definition, minor signs of disorder, such as noise, littering, and trash in vacant lots.[127] In contrast, our definition of physical disorder essentially refers to the fundamental and long-lasting aspect of urban decay, such as major deterioration of buildings, public spaces, roads, and water/sanitation systems. The difference is nontrivial, as minor signs of physical disorder tend to overlap with manifestations of social disorder. That is, they tend to be the product of "the accumulated series of behaviors of local residents,"[128] rather than the result of underinvestment in urban infrastructure. The BWT also explicitly associates physical disorder with social disorder (including loitering, drug use and sale, vandalism, gang activity, and public drinking), considering both as concurrent sources of urban decay.

The BWT's *implicit* and *explicit* association of physical disorder to social disorder has important conceptual implications.[129] As aptly observed by Bernard Harcourt, the BWT is analytically grounded on a pervasive dichotomy between "orderly" and "disorderly" individuals,[130] with these categories assumed to "have a pre-existent fixed reality."[131] While Harcourt challenges this approach suggesting that "the category of the disorderly is itself a reality produced by the method of policing" supported by the BWT,[132] we suggest that the categories of "orderly" and "disorderly" have already broken down once the city is in disarray. Once the government itself behaves in a "disorderly" fashion, then the definition of "orderly" breaks down and illegality becomes

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[127] The account of physical disorder appearing in Wilson's and Kelling's original formulation of the BWT is more evocative than descriptive. *See* Wilson & Kelling, *supra* note 26, at 32 (identifying the emergence of physical disorder in the following chain of events: "[a] piece of property is abandoned, weeds grow up, a window is smashed"). Subsequent empirical studies of the BWT, however, have precisely identified the components of minor physical disorder in order to verify the association between the level of disorder and the level of crime. *See, e.g.*, WESLEY G. SKOGAN, DISORDER AND COMMUNITY DECLINE: FINAL REPORT TO THE NATIONAL INSTITUTE OF JUSTICE 18 (1987); WESLEY G. SKOGAN, DISORDER AND DECLINE: CRIME AND THE SPIRAL OF DECAY IN AMERICAN NEIGHBORHOODS 104 (1990) (reproducing the result of 1987 report).

[128] Harcourt & Ludwig, *supra* note 26, at 282.

[129] From an empirical perspective, it has been observed that conflating social disorder variables with physical disorder variables might bias the analysis of the dependent variable crime, as some social disorder variables, such as drug use and sale, capture major crimes in themselves. *See, e.g.*, Sampson & Raudenbush, *supra* note 94, at 608.

[130] *See* Harcourt, *supra* note 123, at 297.

[131] *Id.*

[132] *Id.* For Harcourt, "[t]he techniques of punishment that comprise the quality-of-life initiative create the disorderly person as an object of suspicion, surveillance, control, relocation, micromanagement, and arrest." *Id.* at 298.

the norm. There are no longer "orderly" citizens when the government itself is disordered.[133]

From a normative perspective, our theory radically departs from the BWT. Based on the presumptive existence of a causal link between minor disorder and serious crime, the BWT advocates a policy of strict coercive enforcement. It emphasizes the necessity of pervasive police presence in urban communities and a high arrest rate, combined with other aggressive enforcing techniques[134]—an enforcement strategy referred to as "order maintenance policing" or "quality-of-life initiative."[135] This approach, however, overlooks the fact that social and coercive enforcement only are substitutes to a limited and imperfect extent. Harcourt's examination of the effects of the quality-of-life initiative New York City adopted in the 1990s supports our argument.[136] Consistent with our predictions, he found that New York's quality-of-life initiative coincided with a sharp increase in complaints of police

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[133] Further, the BWT directly links minor physical and social disorder with violent crimes. We argue, instead, that under conditions of urban decay and visible lawlessness, conflict prevails over cooperation in social interactions, frustrating the conditions of reciprocal compliance that are indispensable to support a robust rule of law. This lack of reciprocity might easily induce citizens to pay a bribe or adopt behaviors that lead to various unlawful conducts, but is less likely to include murder, rape, or other violent crimes—as such crimes involve breaking injunctive norms of an entirely different order. In addition, earlier studies that investigated the causal relation between physical disorder and violent crimes have found only a loose correlation between the two, making it uncertain whether violent crime occurs as a result of minor social disorder, or other concurrent factors, such as income inequality or racial diversity. *See, e.g.*, Keizer et al., *supra* note 86, at 1681 ("[R]esearch on the BWT has so far been correlational, so conclusions about causality are shaky." (internal citations omitted)); Sampson & Raudenbush, *supra* note 94, at 603 ("Contrary to the 'broken windows' theory, . . . the relationship between public disorder and crime is spurious except perhaps for robbery."); Sampson & Raudenbush, *supra* note 103 at 336 (documenting that perceptions of social disorder are influenced by "neighborhoods' racial, ethnic, and class composition"). Part II below aims to address similar concerns that may arise with respect to our own theory.

[134] *See, e.g.*, Jeffrey Fagan & Garth Davies, *Street Stops and Broken Windows:* Terry*, Race, and Disorder in New York City*, 28 FORDHAM URB. L.J. 457, 461 (2000); Harcourt, *supra* note 123, at 302, 330; Debra Livingston, *Police Discretion and the Quality of Life in Public Places*: *Courts, Communities, and the New Policing*, 97 COLUM. L. REV. 551, 553–56 (1997) (providing vivid examples of the policing strategies aimed at reducing urban disorder that were used throughout the United States during the 1990s).

[135] *See, e.g.*, Livingston, *supra* note 134, at 551.

[136] *See* Harcourt, *supra* note 123, at 331–39, 377–84. For additional discussions of New York's quality of life initiative, see also Livingston, *supra* note 134, at 590, 605, 639–40; Sarah E. Waldeck, *Cops, Community Policing, and the Social Norms Approach to Crime Control: Should One Make Us More Comfortable with the Others?*, 34 GA. L. REV. 1253, 1271–77 (2000). For an examination of order maintenance policing strategies at national level, see GERALD E. FRUG, CITY MAKING: BUILDING COMMUNITIES WITHOUT BUILDING WALLS 199–200 (1999), which discusses the effects of "get-tough" policing strategies on community building efforts in America's urban centers. It is also worth noting that New York's newly elected major Bill de Blasio has recently rehired William J. Bratton, the principal architect of 1990s quality-of-life initiative, to head the NYPD. *See* Lauren Kirchner, *Breaking Down the Broken Windows Theory*, PAC. STANDARD (Jan. 7, 2014, 4:00 AM), http://www.psmag.com/navigation/politics-and-law/breaking-broken-windows-theory-72310/.

brutality and other forms of officer misconduct.[137] He similarly found that law enforcement costs rose exponentially under that policing strategy, both in economic and social terms.[138] At the same time, he cast doubt on whether the huge costs New York citizens were required to bear could be credited with having exerted any direct impact on the reduction in crime rates New York experienced in those years.[139]

Our theoretical analysis of the relationship between urban decay and the rule law suggests that a better approach to address the consequences of urban disorder would start with an investigation of the reasons that produced the government's failure to provide public goods in the first place. Only when that underlying problem is identified can effective remedies be identified. Before proceeding to articulate any such remedies, however, it seems necessary to operationalize our own theory so as to avoid being exposed to the criticism of building normative considerations on an untested hypothesis.

II. EMPIRICAL FOUNDATION

The previous Part explained that the urban environment plays a highly salient role in underpinning the rule of law. The provision by the government of a livable urban environment signals to individuals that legal rules and institutions are meaningful, and that most others are committed to abide by the law. This fosters an individual sense that following the rules is valuable, promoting both social cooperation and social advocacy. Under these conditions, social enforcement supports coercive government enforcement of the rule of law, with the result that the rule of law becomes stronger.[140] In contrast, when the government fails to provide a livable environment, citizens infer that both the government and fellow citizens have reneged on their obligations under the social contract. Hence, people are induced to abandon cooperative patterns in favor of a counter pattern of conflict in both their interactions with the government and with fellow citizens. The social enforcement of the rule of law is lost, contributing to a downward spiral that

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[137]   *See* Harcourt, *supra* note 123, at 378–80.

[138]   *See id.* at 298–99, 381–84 (reporting that misdemeanor arrest had a disproportionate impact on minorities, and that the number of arrests rose by fifty percent with huge increase in out-of-pocket expenses).

[139]   *See id.* at 332, 335–37 (observing that the falling-crime trend in 1990s New York ran parallel to the natural waning of the crack epidemic that had ravaged the city in the years before).

[140]   *See supra* Part I.A.3.

exponentially increases the cost of preserving social order and weakens the rule of law.[141]

In this Part, we empirically test the claim that the quality of a country's urban infrastructure impacts the strength of the rule of law. To this end, we gathered data from 124 countries related to the quality of the urban environment and the degree to which these countries are characterized by a robust rule of law, as represented by an index of perceived corruption. Consistent with prior empirical studies that have attempted to measure the rule of law, we engage in a cross-country analysis on the assumption that the rule of law "captures something of universal applicability."[142] As discussed above, at its core the rule of law includes a commitment by public officials and citizens to obey the law because it is the law.[143] To this extent, the rule of law embodies a cluster of values that goes beyond national borders and cultures, justifying attempts at cross-country analyses.

The ensuing empirical analysis shows that the strength of a country's rule of law and the quality of its urban infrastructure are positively correlated. More importantly—and consistent with our theoretical analysis—it reveals that a decaying urban environment is likely the cause of the weakening of the rule of law, and not the other way around, as some might presuppose.

A. *Data and Empirical Methodology*

In examining the impact of urban infrastructure on the rule of law, we begin by collecting data from the Gallup World View's *Institutions and Infrastructure* database.[144] The Gallup database gathers survey data that measure residents' satisfaction with the general quality of everyday life in their community, including various types of urban infrastructure such as roads and highways, water, air, public transportation systems, and overall "city beauty."[145] In addition, we used data from the World Health Organization (WHO)'s *Global Status Report on Road Safety* 2009 on the number of

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[141]   *See id.*

[142]   Rodriguez et al., *supra* note 31, at 1463.

[143]   *See supra* notes 32–33 and accompanying text.

[144]   *The Gallup WorldView*, GALLUP, http://www.gallup.com/strategicconsulting/157244/gallup-worldview.aspx (last visited Sept. 2, 2014). Gallup is a research-based global consulting company, which conducts public opinion polls worldwide on a variety of issues, including law and order, food and shelter, institutions and infrastructure, jobs, and well-being. *See Who We Are*, GALLUP, http://www.gallup.com/careers/108199/who.aspx (last visited Sept. 2, 2014).

[145]   Appendix Table 2 defines all variables and provides a list of Gallup's survey questions used to evaluate the satisfaction of residents with urban infrastructure.

pedestrian deaths per capita, which we use as a proxy for traffic disorder,[146] consistent with earlier empirical studies documenting a significant correlation between pedestrian deaths and the degree to which people follow traffic rules.[147] We then averaged indexes from the Gallup database and the WHO database to develop an index of urban infrastructure, which we call URBAN.[148] Higher scores on URBAN are associated with higher quality urban infrastructure.

Next, in order to measure the strength of the rule of law, we use the *Corruption Perceptions Index* (CPI) provided by the Transparency International database.[149] The CPI estimates community perceptions of the level of a country's corruption based on interviews with businesspeople and a standard definition of corruption involving the abuse of office for private gain.[150] Higher scores on the CPI are associated with lower levels of corruption.[151] Of course, the CPI cannot capture the individual frustration of citizens, but it does capture the informed views of analysts, businesspeople, and experts on both business and government corruption. To this extent, we see the CPI as a reasonably reliable measure of perceived corruption in a country.

We recognize that finding a suitable measure for the rule of law is a challenging task. Existing studies have mostly employed multiple measures with the aim of capturing the many components of the rule of law.[152] Among others, these components include a country's system of checks and balances, judicial independence, human security and human rights protection, and

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[146] WORLD HEALTH ORG., GLOBAL STATUS REPORT ON ROAD SAFETY: TIME FOR ACTION 241–45 (2009), *available at* http://whqlibdoc.who.int/publications/2009/9789241563840_eng.pdf.

[147] *See generally* Lode Vereeck & Klara Vrolix, *The Social Willingness to Comply with the Law: The Effect of Social Attitudes on Traffic Fatalities*, 27 INT'L REV. L. & ECON. 385 (2007) (finding a significant correlation between pedestrian deaths and the degree to which people follow traffic rules).

[148] In robustness tests, we also construct a different URBAN index, using a weighted average (instead of a simple average) for both the data from the Gallup database and the WHO database, with weights summing up to one for similar variables. That is, if two variables are similar—e.g. "quality of roads" and "quality of roads and highways"—we weight them only one-half. We find that our results are not affected by this choice.

[149] *Corruption Perceptions Index: Overview*, TRANSPARENCY INT'L, http://www.transparency.org/research/cpi/overview (last visited Sept. 2, 2014). Transparency International is a nongovernmental, worldwide organization established for the fight against corruption. *See Who We Are*, TRANSPARENCY INT'L, http://www.transparency.org/whoweare/organisation (last visited Sept. 2, 2014).

[150] *Corruption Perceptions Index: Overview*, TRANSPARENCY INT'L, *supra* note 149.

[151] *Id.*

[152] *See* Julio Ríos-Figueroa & Jeffrey K. Staton, Unpacking the Rule of Law: A Review of Judicial Independence Measures 2 (Apr. 26, 2009) (unpublished manuscript), *available at* http:/ssrn.com/abstract=1434234.

regulatory enforcement.[153] Scholars, however, have expressed repeated concerns with the validity of multicomponent measures.[154] In large part, that disagreement is a reflection of the disagreement over the meaning of the rule of law that plagues theoretical research.[155] Indeed, "[w]ithout a shared concept, it is not clear how to compare validity across measures."[156] To address these concerns, a possible solution is to avoid employing broad definitions and focus, instead, on stand-alone components, as this mitigates issues of correlation and trade-offs that affect multicomponent measures.[157] Employing measurement decisions that follow from a chosen theoretical framework and defined analytical goals should also help to produce better estimates of the rule of law.[158]

The choice of the CPI as proxy for the strength of the rule of law fits both these suggested criteria. First, it captures a stand-alone, and important, component of the rule of law: the absence of perceived corruption, as corruption is a direct manifestation of the extent to which both government officials and fellow citizens renege on their obligations under the social contract.[159] Moreover, because of its nonideological nature, the CPI seems particularly well suited to avoid issues related to partisan debates over the meaning of the rule of law (e.g., whether the rule of law includes economic values, such as freedom of contract, or constitutional values, such as freedom of expression).[160] While divergent approaches may define "rule of law"

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[153] *See, e.g.*, MARK DAVID AGRAST ET AL., THE WORLD JUSTICE PROJECT, RULE OF LAW INDEX 2012–2013 11 (2012), *available at* http://worldjusticeproject.org/sites/default/files/WJP_Index_Report_2012.pdf (providing data on several dimensions of the rule of law, such as limited government powers, absence of corruption, order and security, fundamental rights, open government, regulatory enforcement, civil justice, criminal justice, and informal justice). The World Justice Project (WJP) is among the most well-known indexes of the rule of law. However, as explained in the text, using indexes based on multiple variables can be problematic. Additionally, the WJP database only covers 97 countries, while the Transparency International database provides data on 177 countries.

[154] *See* Ríos-Figueroa & Staton, *supra* note 152, at 2.

[155] *See supra* notes 30–31 and accompanying text.

[156] Ríos-Figueroa & Staton, *supra* note 152, at 3.

[157] *Id.* at 5 (focusing on judicial independence); *see also* Rodriguez et al., *supra* note 31, at 1474 (suggesting that several of the rule of law's components often are in conflict with one another, raising trade-off issues in estimating the rule of law "more globally" that are difficult to solve).

[158] Robert Adcock & David Collier, *Measurement Validity: A Shared Standard for Qualitative and Quantitative Research*, 95 AM. POL. SCI. REV. 529, 539 (2001).

[159] *See Absence of Corruption*, THE WORLD JUSTICE PROJECT, http://worldjusticeproject.org/factors/absence-of-corruption (last visited Sept. 2, 2014); *see also* Daniel Treisman, *The Causes of Corruption: A Cross-National Study*, 76 J. PUB. ECON. 399, 399 (2000) (finding that countries with longer exposure to democracy exhibit lower level of corruption).

[160] *See supra* note 31 and accompanying text.

differently, there can be no question that a lack of public corruption is a core goal of a rule of law society. Where public officials may exercise their power on a whim—or in exchange for money—a country is not governed by laws, but rather by men.[161] Second, under this Article's theoretical framework, the rule of law embodies a requirement of conditional reciprocity according to which individuals follow the rules as long as they assume that others follow the rules as well. Because the CPI captures *perceived* corruption, it thus measures precisely what we want to know: how individuals in a given country perceive the degree of commitment by others around them to legality.

Our regression analysis of the impact of urban infrastructure quality (URBAN) on the strength of the rule of law (as proxied by the CPI) also includes controls for a number of relevant variables, such as GDP per capita (GDP), INCOMEEQUALITY, HUMANRIGHTS, HEALTHCARE, and EDUCATION (all defined in Appendix Table 2).

Controlling for a country's GDP per capita is particularly important, as a vast body of literature suggests a relationship between corruption and GDP. Drawing on recent studies suggesting that a higher GDP might reduce corruption (rather than the other way around, as conventionally assumed),[162] we control for GDP per capita[163] so to exclude the possibility that any identified relationship between URBAN and the CPI might be driven by a country's GDP.

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[161] *See supra* note 32 and accompanying text.

[162] The existing literature on the relationship between GDP and corruption recognizes the difficulty of deriving clear arguments with respect to the direction of causation between these two variables. *See, e.g.*, Johann Graf Lambsdorff, Corruption in Empirical Research: A Review 2–3 (Nov. 1999), (unpublished manuscript), *available at* http://www1.worldbank.org/publicsector/anticorrupt/d2ws1_jglambsdorff.pdf. Nonetheless, most empirical studies assume a direction of causality that goes from (higher/lower) corruption to (lower/higher) GDP. *See* Hafeez Ur Rehman & Amjad Naveed, *Determinants of Corruption and Its Relation to GDP*: *(A Panel Study)*, 12 J. POL. STUD. 27, 30–32 (2007). Only recently, scholars have begun to explore the possibility of "reverse causality," with the direction of causality going from (higher/lower) GDP to (lower/higher) corruption. *See, e.g.*, Daniel Treisman, *What We Have Learned about the Causes of Corruption from Ten Years of Cross-National Empirical Research?*, 10 ANN. REV. POL. SCI. 211, 211 (2007).

[163] We retrieved GDP estimates from the World Bank GDP per capita dataset. *See GDP Per Capita in Current U.S. Dollars*, WORLDBANK, http://data.worldbank.org/indicator/NY.GDP.PCAP.CD/countries? display=default (last visited Sept. 2, 2014) (defining GDP per capita as "gross domestic product [in current U.S. dollars] divided by midyear population").

We also include a control for INCOMEEQUALITY[164] and HUMANRIGHTS,[165] in order to verify whether the impact of URBAN on the CPI still persists once we take into account the impact of these other variables.

Further, we recognize that broader definitions of urban infrastructure tend to include both the quality of a country's health care system and education as major components.[166] However, both health care and education are multidimensional concepts, meaning that they do not only include an "urban dimension" (i.e., whether a country has a sufficient number of well-maintained hospital and schools) but also an "intrinsic quality dimension" (i.e., health or educational services might be excellent notwithstanding poor hospital or school infrastructure). As discussed above, multidimensional concepts are more difficult to measure.[167] For this reason, we limit our definition of URBAN to single-dimensional concepts (i.e., a country's "basic" urban infrastructure such as, for example, roads and highways), while controlling that the impact of URBAN on the CPI still persists once HEALTHCARE and EDUCATION are taken into account as additional independent variables.[168]

We show our overall sample of 124 countries in Appendix Table 1, ranked by their scores on the URBAN index.[169] We also note that we perform almost all of our regressions with contemporaneous data from 2011. In the few cases where observations were unavailable for 2011, we use the last available data.

B. Cross-Country Analysis

Figure 2 visually illustrates the correlation between the quality of urban infrastructure (URBAN) and the robustness of the rule of law, as measured by the CPI.

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[164] We retrieved estimates of INCOMEINEQUALITY from the World Bank GINI index dataset. *See GINI Index*, WORLDBANK, http://data.worldbank.org/indicator/SI.POV.GINI (last visited Sept. 2, 2014).

[165] We retrieved estimates of HUMANRIGHTS from the Escola de Cultura de Pau Human Right Index 2010 dataset. *See* Maria Cañadas Francesch et al., *Alert 2010! Report on Conflicts, Human Rights and Peacebuilding*, ESCOLA DE CULTURA DE PAU, 185–94 (Dec. 31, 2009), http://escolapau.uab.cat/img/ programas/alerta/alerta/alerta10i.pdf. Among available human rights indexes, the Escola de Pau index is the more comprehensive, and is comprised of 22 indicators. *See id.* at 185. Higher scores on the index indicate a larger degree of noncompliance with human rights obligations. *See id.*

[166] *See supra* note 17.

[167] *See supra* notes 153–57 and accompanying text.

[168] In other words, we verify that URBAN has an impact on the rule of law (i.e., the CPI) that is independent from the effect of both HEALTHCARE and EDUCATION.

[169] In Appendix Table 1, we also provide the abbreviation for each country (i.e., Tick) included in our sample. We show summary statistics for each of the variables employed in our analysis in Appendix Table 3.

Figure 2. Correlation between Rule of Law (CPI) and URBAN
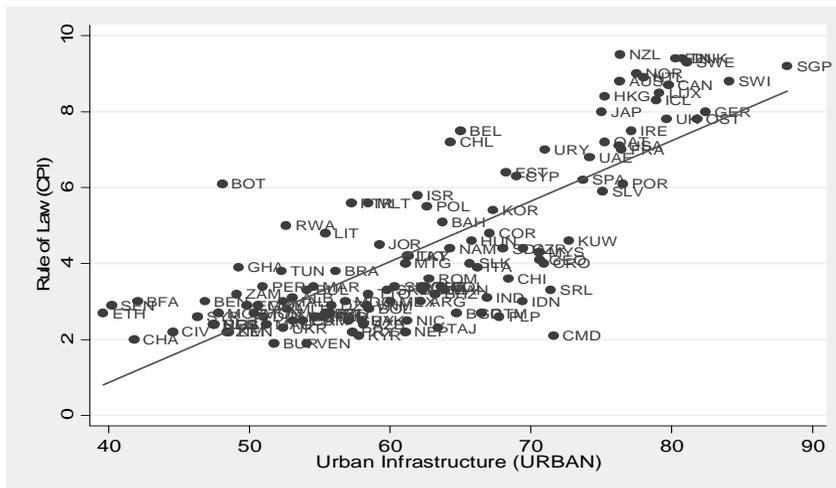
Figure 2 shows a clear positively sloped relation between URBAN and the CPI, with a positive and significant correlation between the two variables at 0.78. This evidence suggests that lower-quality urban infrastructure (corresponding to a lower score on URBAN) is associated to a weaker rule of law (corresponding to higher perceived corruption and, hence, a lower score on the CPI).[170] This is consistent with our claim that citizens will cooperate with the government and among themselves—therefore refraining from the conflict patterns inherent to corrupt practices (e.g., bribery, extortion, fund misappropriation, and the like)—as long as the quality of urban infrastructure signals that cooperation is mutually profitable to the social contractors.

We show the results of our linear (OLS) regressions of the CPI (our dependent variable) against URBAN (our main independent variable) in Table 1. Specifically, in Column (1) we present the univariate regression (i.e., the uncontrolled regression of the CPI against URBAN); in Columns (2) through (6), we control for GDP, HEALTHCARE, EDUCATION, INCOMEEQUALITY, and HUMANRIGHTS; and in Column (7) we control for all variables. We observe

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[170]   The sample distribution in Figure 2 also seems to point to the existence of a threshold effect—that is, the slope of the reduced form correlation between URBAN and the CPI suggests that urban infrastructure must reach a certain level before corruption begins to decline significantly. Correspondingly, when URBAN is relatively low (below 55), the CPI is more stationary, suggesting that a certain level of urban infrastructure may be a necessary precondition for the emergence and maintenance of a robust rule of law.

that including a control for all variables reduces our sample to 101 observations.

Table 1. OLS Estimates

Variables	(1) CPI	(2) CPI	(3) CPI	(4) CPI	(5) CPI	(6) CPI	(7) CPI
URBAN	0.159*** (0.0115)	0.0865*** (0.0204)	0.155*** (0.0208)	0.106*** (0.0122)	0.154*** (0.0124)	0.141*** (0.0120)	0.0766*** (0.0220)
GDP		0.0614*** (0.0171)					0.0373* (0.0208)
HEALTHCARE			0.00301 (0.0120)				-0.0139 (0.00923)
EDUCATION				1.052*** (0.134)			0.919*** (0.146)
INCOMEEQUALITY					-0.0238 (0.0167)		0.0114 (0.0114)
HUMANRIGHTS						-0.221*** (0.0600)	-0.220*** (0.0520)
CONSTANT	-5.495*** (0.700)	-2.032* (1.032)	-5.416*** (0.806)	-6.178*** (0.543)	-4.273*** (1.102)	-3.918*** (0.777)	-3.616*** (1.083)
OBSERVATIONS	124	124	124	124	110	114	101
R-SQUARED	0.619	0.732	0.619	0.743	0.626	0.663	0.837

As shown by Table 1,[171] URBAN has a positive and statistically significant impact on the CPI in all our regressions—which is, again, consistent with our claim that urban infrastructure plays a crucial role in underpinning the rule of law. Table 1 further shows that the impact of URBAN on the CPI remains significant when we control for HEALTHCARE and EDUCATION (in Columns (3) and (4)), suggesting that the impact of a country's basic urban infrastructure on the strength of the rule law is an autonomous explanatory variable.

C. Addressing Endogeneity

One potential concern with the above methodology is that OLS analysis only tells us whether the variables discussed are correlated, rather than one causes the next. Hence, that analysis cannot exclude endogeneity, i.e., the

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[171] In all our Tables, (i) the variables CPI, URBAN and GDP are standardized: from each observation we subtract the relevant average and we divide the resulting number for the standard deviation; (ii) we use heteroskedasticity robust standard errors, and (iii) the ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. This means that the null hypothesis (the hypothesis that an independent variable has no impact on a dependent variable) cannot be rejected with a probability of 1%, 5%, and 10%, respectively. In statistics, when the significance level is above 10%, it is standard to consider the result to be statistically insignificant or uninformative.

possibility that (i) changes in the rule of law (CPI) correlate with the quality of the urban environment (URBAN), but may be caused by a country characteristic other than URBAN (a "specification problem"), or that (ii) changes in the CPI may cause changes in URBAN rather than the other way around (a "simultaneity problem").[172] If either is true, the regression model we employ and the estimates we obtain may not be robust.

While addressing potential endogeneity concerns is a major challenge for any empirical study, it is especially so in the absence of panel data, as in our study.[173] Because of this limitation, our analysis is constrained to the cross-country dimension of the relationship between urban infrastructure and the rule of law. This limitation does not allow us to consider individual country characteristics (country fixed effects), potentially increasing the risk of both specification and simultaneity problems.[174]

To address the above endogeneity concerns, we employ an instrumental variable approach through a two-stage least squares (2SLS) regression.[175] The first stage predicts the key independent variable using an instrumental variable (or exogenous regressor)—a variable that can explain changes in the independent variable but is unrelated (or poorly related) to the dependent variable being studied. The second stage explains the dependent variable through the independent variable as predicted using the instrumental variable.

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[172] *See* Lubimor P. Litov, et al., *Lawyers and Fools: Lawyer-Directors in Public Corporations*, 102 GEO. L.J. 413, 436 (2014); *see also* Ian Ayres & John J. Donohue III, *Shooting Down the "More Guns, Less Crime" Hypothesis*, 55 STAN. L. REV. 1193, 1255–56 (2003). In the econometric jargon, specification and simultaneity problems are respectively referred to as "omitted and correlated variable bias" and "reverse causality." *See* WILLIAM H. GREENE, ECONOMETRIC ANALYSIS 56–58 (7th ed. 2012).

[173] Panel data is unavailable for two reasons. First, most of the data from the Gallup dataset about URBAN is only available for 2011. Second, the CPI is not designed to allow for country scores to be compared over time. The CPI reports a country's rank relative to other countries rather than a country's score relative to itself over time. Hence, the CPI delivers only relative information—and the CPI ranking is a one off assessment. Given the relative measure of the CPI, a country's rank in a given data source can change (i) if perceptions of corruption in other countries included in that source change, or (ii) if countries are added or removed from that data source.

[174] With panel data, we could investigate the time series evidence (with both country fixed effects and first-difference regressions) of the relationship between URBAN and the CPI, mitigating potential biases from omitted time-invariant variables as well as reverse causality issues at the country level. For a discussion of fixed-effects and first-difference methods as applied to legal analysis, see Litov et al., *supra* note 172, at 437–38.

[175] *See generally* JEFFREY M. WOOLDRIDGE, ECONOMETRIC ANALYSIS OF CROSS SECTION AND PANEL DATA 89–90 (2d ed. 2010) (discussing 2SLS regressions and the diagnostic tests used to determine whether instrumental variables are correctly selected). For a discussion of the instrumental variable approach as applied to legal analysis, see Litov et al., *supra* note 172, at 436–37.

As instrumental variable that we assume would influence a country's urban infrastructure quality (URBAN), but would not (or poorly) influence the strength of that country's rule of law (CPI), we selected the number of each country's World Heritage sites (UNESCO)[176]—collecting data from the United Nations Educational Scientific and Cultural Organization website.[177] The presence of World Heritage sites would intuitively appear to positively impact people's perception of a country's urban environment as well as promote investment in urban infrastructure to attract and manage site-related tourism.[178] At the same time, World Heritage sites are part of the historical heritage of a country[179] and thus largely unrelated to a country's current commitment to the rule of law. In this respect, Mexico, China, and Italy provide good examples. All of these countries have remarkable World Heritage sites,[180] while their corruption levels are relatively high (i.e., their CPIs are relatively low).[181]

We document the results of our second-stage regressions of the CPI against URBAN, as predicted through UNESCO, in Table 2.[182] Specifically, in Column (1) we present the univariate regression; in Columns (2) through (6), we control for GDP, HEALTHCARE, EDUCATION, INCOMEEQUALITY, and HUMANRIGHTS; and in Column (7) we control for all variables. We observe

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[176] Like all other variables appearing in our analysis, we standardize UNESCO: from each observation we subtracted the average of the variable, and then we divided the resulting number by the standard deviation of that variable. Further, in our regressions we use the logarithmic transformation of UNESCO, because its distribution is strongly positively skewed (left-skewed).

[177] *World Heritage List*, UNESCO, http://whc.unesco.org/en/list (last visited Sept. 2, 2014). At the time we preformed our analysis, UNESCO's list included 962 sites (745 cultural, 188 natural, and 29 mixed sites) in 157 countries. *See id.*

[178] As reported on the UNESCO website, sites must be of outstanding universal value and meet selecting criteria in order to be included on the World Heritage list. *Criteria for Selection for World Heritage List*, UNESCO, http://whc.unesco.org/en/criteria (last visited Sept. 2, 2014). At minimum, the presence of a World Heritage Site should influence URBAN by increasing the score on the city beauty component of that index. *See supra* note 145 and accompanying text. Some of these sites are transboundary properties, belonging to more than a single country. For example, the "Waterton Glacier International Peace Park" is listed as being a transboundary Canadian-American property. *See Waterton Glacier Inernational Peace Park*, UNESCO, http://whc.unesco.org/en/list/354 (last visited Sept. 2, 2014). In similar cases, we assign the site to each country. Intuitively, a World Heritage site is a public, and thus, non-exclusive, good. Hence, even though a site is shared between two (or more) countries, it may still have the same positive impact on the people's perception of the urban environment, as well as promote investments in urban infrastructure, in both countries

[179] *See* UNESCO, OPERATIONAL GUIDELINES FOR THE IMPLEMENTATION OF THE WORLD HERITAGE CONVENTION 2–5 (2013), *available at* http:// whc.unesco.org/archive/opguide13-en.pdf.

[180] *See World Heritage List*, UNESCO, *supra* note 177.

[181] *See Corruption Perceptions Index: Overview*, TRANSPARENCY INT'L, *supra* note 149.

[182] To save space, we show the results of our first-stage regressions on the impact of UNESCO on URBAN in Appendix Table 4.

that including a control for all variables reduces our sample to 101 observations.

Table 2. Second-Stage Regression

Variables	(1) CPI	(2) CPI	(3) CPI	(4) CPI	(5) CPI	(6) CPI	(7) CPI
URBAN (IV)	0.145***	0.110*	0.135**	0.0975*	0.121*	0.195***	0.178***
	(0.0428)	(0.0633)	(0.0641)	(0.0580)	(0.0631)	(0.0288)	(0.0575)
GDP		0.0507					0.0149
		(0.0346)					(0.0207)
HEALTHCARE			0.0124				-0.0478**
			(0.0294)				(0.0187)
EDUCATION				1.109***			0.912***
				(0.385)			(0.131)
INCOMEEQUALITY					-0.0361		0.0216
					(0.0222)		(0.0144)
HUMANRIGHTS						-0.122	-0.188**
						(0.0837)	(0.0765)
CONSTANT	-4.636*	-3.329	-4.719**	-5.891***	-1.725	-7.470***	-8.095***
	(2.640)	(3.385)	(2.303)	(2.181)	(4.590)	(1.906)	(2.789)
OBSERVATIONS	124	124	124	124	110	114	101
R-SQUARED	0.614	0.725	0.615	0.742	0.603	0.600	0.771

As shown by Table 2, the coefficient of URBAN in all our regressions is positive and statistically significant. This means that URBAN still has a positive impact on the CPI when predicted through the exogenous regressor UNESCO. In particular, the coefficient in Column (7), which includes all our controls, is statistically significant at the 1% level.[183] The fact that the impact of URBAN on the CPI holds when controlling for HEALTHCARE and EDUCATION (in Columns (3) and (4)) sustains that result, confirming that the influence "basic" urban infrastructure exerts on individuals' commitment to the rule of law is, to a significant extent, independent from those variables. Overall, these results confirm that our instrumental variable analysis properly addressed the endogeneity concerns discussed above,[184] suggesting (1) that the quality of

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[183] *See supra* note 171. In addition, the coefficient in Table 2, Column (7), at 0.178, is higher than the corresponding coefficient we obtain in the OLS estimation, at 0.0766.

[184] To test the validity of our instrumental variable approach, we performed the "Hansen-Sargan endogeneity test" for Column (7) (i.e., the fully controlled model) of the 2SLS regression. The Hansen-Sargan endogeneity test verifies whether the specified endogenous variable (i.e., URBAN) can be treated as exogenous after instrumenting it through the excluded instrument UNESCO. This means that under the null hypothesis, the instrumental variable (i.e., UNESCO) is treated as exogenous; a rejection of the null indicates that the endogeneity problem has not been addressed and that no causality has been identified. In particular, the Hansen-Sargan endogeneity test is defined as the difference of two Hansen-Sargan endogeneity test statistics:

urban infrastructure has a measurable impact on the rule of law, (2) that a higher quality urban infrastructure causes a country to have a strengthened rule of law, and (3) that a weaker urban infrastructure leads to a weakened rule of law.

III. NORMATIVE AND POLICY IMPLICATIONS

The results of our empirical investigation supports our claim that the quality of urban infrastructure shapes a polity's commitment to the rule of law, suggesting that urban decay is potentially as harmful to the rule of law as ineffective legal institutions. To put it plainly, the overall decline of America's urban infrastructure—made dramatically evident by the blight and decay of Detroit and several other American cities[185]—jeopardizes an assumed pillar of American society: the shared commitment to the rule of law.

In this Part, we investigate the causes behind the nation's collapsing urban infrastructure and propose interventions that can halt the vicious cycle that begins with urban decay. Our analysis suggests that urban decay is an unintended effect of long-standing austerity policies at both the national and subnational levels vis-à-vis local municipalities. Such policies, operationalized at the state level through the "fiscal constitutions,"[186] are commonly justified as necessary to force communities to maintain fiscal discipline.[187] What this argument overlooks, however, are the effects of austerity on the urban environment and the societal commitment to the rule of law. That is, it neglects the trade-off between the *ex ante* gains of austerity and the *ex post* social costs associated with the loss of social enforcement (social cooperation and social advocacy) and a broken rule of law.

Putting forward a detailed blueprint for optimally solving this trade-off is beyond the scope of this Article. What follows, instead, is a roadmap for subsequent discussions of the costs and consequences of austerity at the local

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the first treats the instrumental variable (i.e., UNESCO) as endogenous and the second as exogenous. Thus, the lower is the value of the Hansen-Sargan endogeneity test, the higher the probability that the instrumental variable (UNESCO) is exogenous. For a theoretical discussion of the Sargan-Hansen endogeneity test, see FUMIO HAYASHI, ECONOMETRICS 217–21 (2000). For a more practical discussion, see Christopher F. Baum et al., *Instrumental Variables and GMM: Estimation and Testing*, 3 STATA J. 1, 17–18 (2003). The associated *p*-value of the test for model (7) is 0.15, implying that we cannot reject the null hypothesis and, hence, that the variable URBAN, as predicted through UNESCO, can be treated as exogenous.

[185]   *See supra* notes 3–8 and accompanying text.
[186]   *See supra* note 27 and accompanying text.
[187]   *See infra* notes 200–07 and accompanying text.

level. With this objective in mind, we suggest that selective centralized support of local services would help preserve a shared commitment to the rule of law, without disrupting a municipality's incentives for financial accountability—with a net gain to social welfare.

A. Austerity and the Rule of Law

Our analysis of the relationship between urban infrastructure and the rule of law has so far proceeded on the assumption that citizens delegate authority to, and demand accountability from, "the government," conceived as a central entity. In actuality, however, authority and accountability for overseeing both a country's enforcement function and the provision of public goods are unlikely to be administered exclusively by central authorities.[188] Instead, they are typically shared between central and local bodies according to principle of decentralization and fiscal federalism.[189] In fact, in the United States, local municipalities are the primary providers of important public services, including urban infrastructure.[190]

Decentralization in the provision of public goods primarily addresses organizational and informational needs, theoretically promoting the more efficient delivery of such goods.[191] At the same time, however, decentralization poses a problem of moral hazard, as local municipalities may have incentives to overspend if they anticipate that the central government will back municipal financial obligations in case of distress.[192] In response to this problem, the U.S. federal government and state governments have embraced a general commitment to austerity vis-à-vis local municipalities, through a variety of policies that combine balanced budget requirements, expenditure limitations,

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[188]   *See, e.g.*, Wallace E. Oates, *An Essay on Fiscal Federalism*, 37 J. ECON. LIT. 1120, 1120 (1999) (discussing how authority has been given various states "significant portions of federal authority").

[189]   Fiscal federalism is the branch of economics that studies issue of decentralized authority that arise in the context of a federal system of government or, more generally, in systems of government that involve decentralized government policy-making within a formally unitary state. *See* Geoffrey Brennan & Alan Hamlin, *Fiscal Federalism*, *in* 2 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 144, 148 (Peter Newman ed., 1998).

[190]   *See* Omer Kimhi, *Reviving Cities: Legal Remedies to Municipal Financial Crises*, 88 B.U. L. REV. 633, 634 (2008). "National" public goods (e.g., national defense) that serve the entire population of a country remain the domain of the central government. *See* Oates, *supra* note 188, at 1121; Super, *supra* note 27, at 2577 ("[T]he federal government leverages its fiscal resources for particular types of activity that it believes are national priorities.").

[191]   *See* Oates, *supra* note 188, at 1120.

[192]   *See infra* notes 200–02 and accompanying text.

and other fiscal constraints.[193] This approach has been widely criticized on the ground that it downplays the importance of the economic cycle in causing local decline.[194] As we explain below, however, lost in the discussion on austerity policies is the consideration of the declining urban environment these policies bring about and the effects that such an environment may produce on social contracting and the rule of law.

1. Decentralization and Moral Hazard

Under social contract theory, citizens delegate authority to the government in exchange for the delivery of public goods.[195] In practice, however, the execution of that obligation is (in part) decentralized to local municipalities. This serves to address two main informational and organizational issues in the administration of the government's functions. First, when a country's development results in geographically distinct sectors, decentralizing the provision of public goods ensures that those goods reflect local needs better than a centralized one-size-fits-all solution.[196] Second, while the exclusive provision of public goods by the central government produces a monopoly regime, a decentralized system enables competition among local municipalities.[197] Under such a system, citizens can theoretically "shop" for a

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[193]   *See infra* notes 203–07 and accompanying text.

[194]   *See infra* notes 208–11 and accompanying text.

[195]   *See supra* notes 48–52 and accompanying text.

[196]   This is the classic "Oates' decentralization theorem," introduced by economist William Oates. Under Oates' theorem, local governments are assumed to have informational advantages over the central government in tailoring public goods policy to territorial needs. This promotes the production of the optimal level of output of local public goods, maximizing social welfare. *See* WALLACE E. OATES, FISCAL FEDERALISM 54 (1972); *see also* Brennan & Hamlin, *supra* note 189, at 145; Oates, *supra* note 188, at 1121–22.

[197]   The theory of competitive federalism has its roots in the work of economist Charles Tiebout. *See* Charles M. Tiebout, *A Pure Theory of Local Expenditures*, 64 J. POL. ECON. 416, 418, 422 (1956). The central argument of Tiebout's theory was that just as market competition produces a system that is responsive to consumers' needs, interjurisdictional competition results in a government system that is responsive to the preferences of local residents. *See id.* at 420. Tiebout's theory, however, is not without its critics. First, competitive federalism has been criticized as being based upon unrealistic assumptions. *See, e.g.*, DAVID N. KING, FISCAL TIERS: THE ECONOMICS OF MULTI-LEVEL GOVERNMENT 28–32 (1984) (providing a summary of this line of criticism). In particular, criticism has been raised about the level of information potential residents have about new municipalities and the assumption of their unconstrained ability to move. *See, e.g.*, KING, *supra*, at 29–30. Second, some have argued that interjurisdictional competition does not result in an equilibrium. *See, e.g.*, James M. Buchanan & Charles J. Goetz, *Efficiency Limits of Fiscal Mobility*, *in* EXPLORATIONS IN CONSTITUTIONAL ECONOMICS 246, 246–47 (James M. Buchanan ed., 1989); Joseph E. Stiglitz, *The Theory of Local Public Goods Twenty-Five Years After Tiebout: A Perspective*, *in* LOCAL PROVISION OF PUBLIC SERVICES: THE TIEBOUT MODEL AFTER TWENTY-FIVE YEARS 17, 50 (George R. Zodrow ed., 1983). Third, it has been observed that Tiebout's model is incomplete as it only considers exit as an organizational mean, while citizens can also exercise voice to influence the production of public goods. *See,*

specific bundle of public goods and tax burdens by choosing where to locate.[198] The threat of citizens' relocation in turn incentivizes the efficient production of collective services.[199] Thus, in principle, the decentralization of the government's obligations as provider of public goods to local municipalities should serve the goal of promoting the efficient execution of those obligations—supporting a robust rule of law.

Decentralization, however, poses a problem of moral hazard and fiscal discipline, as congruence is required between a municipality's revenues and expenditures to obtain the beneficial effects of decentralization.[200] If the central government bears the risk of local overspending or other forms of opportunism—assuming full responsibility for a municipality's financial obligations—the incentives for social enforcement are reduced, because residents only partially internalize the consequences of their inadequate monitoring of local officials. Central government "insurance" allows distressed municipalities to externalize the costs or subsidy of public goods and services onto citizens of other areas. Hence, residents of distressed municipalities have lower incentives to monitor local officials, "since there would be little reason for [them] to monitor the use of funds that they did not provide" (or provided only marginally).[201] In rationally expecting citizens to be civically disengaged,

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e.g., John D. Donahue, *Tiebout or not Tiebout? The Market Metaphor and America's Devolution Debate*, J. ECON. PERSP., Fall 1997, at 73, 74, 80; Susan Rose-Ackerman, *Beyond Tiebout: Modeling the Political Economy of Local Government*, *in* LOCAL PROVISION OF PUBLIC SERVICES: THE TIEBOUT MODEL AFTER TWENTY-FIVE YEARS, *supra*, at 55, 73–74; *see also infra* notes 219–22 and accompanying text (discussing the use of exit and voice in Hirschman's classic taxonomy of organizational means). Despite this criticism, Tiebout's central argument—that municipalities compete for residents—continues to enjoy wide acceptance. *See, e.g.*, John E. Chubb, *The Political Economy of Federalism*, 79 AM. POL. SCI. REV. 994, 995 (1985); Frank H. Easterbrook, *Antitrust and the Economics of Federalism*, 26 J.L. & ECON. 23, 28–29, 33–35, 43–44 (1983); Oates, *supra* note 188, at 1124.

[198] *See* Tiebout, *supra* note 197, at 418 (specifying the conditions under which the potential benefits of competitive federalism would be realized).

[199] *See id.* at 419–20.

[200] *See, e.g.*, Clayton P. Gillette, *Fiscal Federalism, Political Will, and Strategic Use of Municipal Bankruptcy*, 79 U. CHI. L. REV. 281, 287 (2012) ("As a general proposition, fiscal federalism requires each level of government to internalize both the costs and the benefits of its activities."); Wallace E. Oates, *Toward a Second-Generation Theory of Fiscal Federalism*, 12 INT'L TAX & PUB. FIN. 349, 350–54 (2005) (suggesting that financial independence is necessary to avoid that central governments might compromise the satisfaction of local needs); Super, *supra* note 27, at 2571 (describing the division of fiscal responsibilities as traditional of fiscal federalism).

[201] Gillette, *supra* note 200, at 299; *see also* Robert P. Inman, *Transfers and Bailouts: Institutions for Enforcing Local Fiscal Discipline*, 12 CONST. POL. ECON. 141, 142–44 (2001) (observing that when residents do not fully internalize the cost of the local public goods, they have an incentive to overconsume). The cross-subsidization of distressed municipalities could also induce residents of financially healthier municipalities to produce suboptimally, as these residents anticipate that they will not fully enjoy the product

local officials in turn have no incentives to avoid profligate spending or other misconduct.[202]

Austerity, operationalized at state level through the "fiscal constitutions,"[203] has been traditionally justified as the appropriate response to issues of municipal moral hazard. Central governments have embraced a general commitment to avoid subsidies to local municipalities through policies that variously combine balanced budget requirements, expenditure limitations, and other fiscal constraints.[204] Historically, these policies emerged as a response to the cascade of municipal failure in the second half of the nineteenth century and the perception that overspending by local officials caused those failures.[205] The legacy of that political response has endured with a continuing belief that a current commitment to austerity prevents the need for future spending to support troubled municipalities and, hence, is necessary to constrain moral hazard at the local level.

It is thus unsurprising that much of the political discourse that has followed Detroit's filing for bankruptcy has focused on ensuring that no pathway for either a federal or state bailout of Detroit will be available.[206] Underlying this

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of their efforts. *See generally* TIROLE, *supra* note 53, at 237, 242–43 (discussing cross-subsidization as "good borrowers being forced, by the suspicion of low-quality borrowing, to issue high-interest debt or to substantially reduce their equity stake" and discussing how asymmetric information reduce the quality of loans).

[202]   *See, e.g.*, Robert J. Barro, *The Control of Politicians: An Economic Model*, PUB. CHOICE, Spring 1973, at 19, 22–26 (arguing that without electoral controls to constrain their behavior, politicians have strong incentives to further their own self-interest at the expense of the public interest); Kevin A. Kordana, *Tax Increases in Municipal Bankruptcies*, 83 VA. L. REV. 1035, 1066–71 (1997) (describing the moral hazard problem inherent in municipal borrowing).

[203]   *See* Super, *supra* note 27, at 2549 n.21 (defining "fiscal constitution").

[204]   *See* Schragger, *supra* note 27, at 866 (observing that states have adopted various constitutional constraints to limit fiscal flexibility, including balanced budget requirements—in forty-one states, earmarking the use of public monies—in forty-six states, and limits on debt—three-quarters of the states). In addition, many states have "tax uniformity requirements intended to prevent subsidies through selective exemptions." *Id.* And over thirty states have some form of expenditure limitations. *See id.*

[205]   *See id.* at 862–63; Super, *supra* note 27, at 2605–07. Super observes that the input for budget constraints at the state and local levels originally came from Jacksonians, who viewed such constraints as a way to limit "the ability of corrupt or imprudent state government to inflict lasting harm." *See* Super, *supra* note 27, at 2606.

[206]   *See, e.g.*, Jackie Calmes, *$300 Million in Detroit Aid, but No Bailout*, N.Y. TIMES, Sept. 27, 2013, at A1 (reporting declarations by administrator officials in Washington about the "somewhere between zero and zero" chances that Congress may bailout Detroit); Kevin Liptak, *No Bailout Coming for Detroit, Treasury Secretary Says*, CNN POLITICAL TICKER (July 28, 2013, 12:36 PM ET), http://politicalticker.blogs.cnn.com/2013/07/28/no-bailout-coming-for-detroit-treasury-secretary-says/ (reporting U.S. Treasury Secretary Jack Lew's comment that "the issues that Detroit has in terms of problems with its creditors it's going to have to work out with its creditors").

discourse is the usual tale of local excess, and responsibility for its consequences, that has commanded austerity responses to local downturns in the United States for more than a century.[207] However, this is not the full picture.

2. Failing Cities, Norm Contagion, and the End of the Rule of Law

Central governments' austerity policies vis-à-vis municipalities are an *ex ante* response to management and monitoring failures at the local level. The assumption is that meaningful fiscal discipline can provide the right incentives to avoid those failures in the future. Echoing classic Keynesian arguments against austerity,[208] the main criticism to this approach has been that it fails to consider the causal relationship between economic cycles and local decline. Under this criticism, local decline is attributed to the natural alternation between periods of booming prosperity and subsequent depression, rather than moral hazard occurring at the local level.[209] Those who believe that local downturns depend on the business cycle question, "whether the goal of 'fiscal

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[207] The federal bailouts of New York City in 1975 and Washington, D.C. in 1995 are two isolated exceptions. *See* Gillette, *supra* note 200, at 308.

[208] Economist John Maynard Keynes introduced the notion that economies naturally cycle between booms and busts and demonstrated that austerity policies tend to exacerbate these swings. *See* JOHN MAYNARD KEYNES, *Notes on the Trade Cycle*, *in* THE GENERAL THEORY OF EMPLOYMENT INTEREST AND MONEY 313 (MacMillan Press Ltd. 1973) (1936). Keynesians attack austerity on the ground that cutting public expenditures leads to reduced employment and aggregate consumption and, ultimately, decreasing growth. For Keynesian accounts of the recent wave of austerity, see, for example, Isabel Ortiz & Matthew Cummins, The Age of Austerity: A Review of Public Expenditures and Adjustment Measures in 181 Countries i (Mar. 24, 2013) (unpublished manuscript), *available at* http://policydialogue.org/publications/working_papers/age_of_austerity/ ("The worldwide propensity toward fiscal consolidation can be expected to aggravate the employment crisis and diminish public support at a time when it is most needed."); JAN IN 'T VELD, EUROPEAN COMM'N, ECONOMIC PAPER NO. 506, FISCAL CONSOLIDATION AND SPILLOVER IN THE EURO AREA PERIPHERY AND CORE 1 (2013), http://ec.europa.eu/economy_finance/publications/economic_paper/2013/pdf/ecp506_en.pdf (reporting that recent consolidation measures in the Euro zone have had large negative spillover effects, through the channels of both reduced demand and competiveness, and overall worsened the economic situation). In the United States, economist Paul Krugman has notably attacked austerity policies with great frequency from the pages of the New York Times. *See, e.g.*, Paul Krugman, Op-Ed., *The 1 Percent's Solution*, N.Y. TIMES, Apr. 26, 2013, at A31 (arguing that the austerians' position has imploded); Paul Krugman, *The Depressed Economy is All About Austerity*, N.Y. TIMES BLOG: THE CONSCIENCE OF A LIBERAL (Sept. 24, 2013, 11:48 AM), http://krugman.blogs.nytimes.com/2013/09/24/the-depressed-economy-is-all-about-austerity/ (arguing that the U.S. depressed economy can be largely blamed on government spending cuts).

[209] *See, e.g.*, TERRY NICHOLS CLARK & LORNA CROWLEY FERGUSON, CITY MONEY: POLITICAL PROCESSES, FISCAL STRAIN, AND RETRENCHMENT 85–91 (1983) (documenting that local economies are influenced by trends in national economies); Natalie R. Cohen, *Municipal Default Patterns: An Historical Study*, 9 PUB. BUDGETING & FIN. 55, 55 (1989) (arguing that municipal defaults are closely related to a country's business cycle).

discipline' is itself achievable,"[210] and attack austerity on the ground that it produces procyclical policies that exacerbate, rather than cure, the negative effects of economic swings.[211]

The problem with the austerity myth, however, lies not only in its disregard for the natural booms and busts of economic cycles. Lost in much of the discussion on austerity is the consideration of the *ex post* effect of such policies on social contracting and the rule of law. By definition, austerity involves deep cuts to essential public services that are likely to be conducive to a lower quality, and potentially decaying, urban environment. Limited resources for garbage collection, fire protection, street maintenance, park upkeep, public transportation, and the like tend to translate into abandoned trash piles, rutted streets, unsafe parks, empty buildings, shattered streetlights and other distinguishing features of urban decay.[212] Decaying American cities—from Detroit to Baltimore to Gary to San Bernardino and many more—offer vivid examples of the implication of austerity.[213] To make things worse, mandated balanced budget constraints often require tax increases in already troubled municipalities. Tellingly, Detroit has both the highest income and property tax rates in the entire state of Michigan.[214] Similarly, Baltimore has the highest property taxes in Maryland, and its income tax is the highest allowed under state law.[215]

This combination of declining urban infrastructure and onerous fiscal burdens epitomizes the government's abandonment of its obligations under the public goods contracts, spurring a vicious cycle that jeopardizes the shared commitment to the rule of law. As explained in Part I, this vicious cycle begins with urban decay and ends with the loss of social enforcement of the rule of law—increasing defections from the patterns of social cooperation and advocacy that are necessary to establish and maintain a robust rule of law.[216] It is thus hardly surprising that popular press coverage of troubled cities has often involved tales of increasing lawlessness, mounting corruption, and various

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[210]   Schragger, *supra* note 27, at 863.

[211]   *See* David Gamage, *Preventing State Budget Crises: Managing the Fiscal Volatility Problem*, 98 CAL. L. REV. 749, 766–69 (2010); Super, *supra* note 27, at 2609.

[212]   *See* Anderson, *supra* note 8, at 1160–67 (providing tangible, and recent, examples of the negative effects cutting policies have produced on the quality of public services in many U.S. cities).

[213]   *See supra* notes 3–8.

[214]   *See* CITIZENS RES. COUNCIL OF MICH., REPORT NO. 382, DETROIT CITY GOVERNMENT REVENUES vi (2013), http://www.crcmich.org/PUBLICAT/2010s/2013/rpt382.pdf.

[215]   *See* Munnell et al., *supra* note 6, at 2.

[216]   *See supra* Part I.A.3.

other forms of social disorder[217]—as these are all manifestations of the replacement of social cooperation with conflict patterns, both among citizens and vis-à-vis authorities.

An accelerating rate of population decline in distressed municipalities is similarly unsurprising.[218] Under Albert Hirschman's classic taxonomy of the relationships between individuals and organizations,[219] individuals essentially have two organizational means to address a decrease in the quality of the goods or services provided by an organization (including a municipality): "voice" and "exit." Voice involves the exercise of monitoring and governance rights—thus, in the context of the government–citizens relationship, voice can be equated to what we have defined as social advocacy.[220] Exit involves the withdrawal of an individual's participation from an organization—for example, through relocation to a new municipality. This analytical framework suggests that when social advocacy is an unviable alternative, exit remains the only option to escape unlivable urban environments and express one's discontent with the exercise of power by local and central authorities. Of course, the availability of

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[217] In March 2013, former Detroit's mayor Kwame Kilpatrick was found guilty of multiple counts of racketeering and extortion and sentenced to twenty-eight years in prison. *See* Steven Yaccino, *Ex-Mayor Sentenced to 28 Years in Corruption Case that Helped Detroit Go Broke*, N.Y. TIMES, Oct. 11, 2013, at A12. Kilpatrick's involvement in corruption was not an isolated case, but the symptom of a wider malaise. *See, e.g.*, Kate Abbey-Lambertz, *Detroit Corruption Rooted Out as Felony Bribery Charges Filed Against 7 Building Inspectors*, HUFFINGTON POST (Aug. 29, 2013, 12:40 PM EDT), http://www.huffingtonpost.com/2013/08/29/ detroit-corruption_n_3837180.html. In fact, right before filing for bankruptcy, Detroit had higher crime rates than other comparable U.S. jurisdictions and the highest violent crime rate among U.S. cities with over 200,000 residents. *See* City of Detroit, Proposal for Creditors (June 14, 2013), http://www.detroitmi.gov/ Portals/0/docs/EM/Reports/City%20of%20Detroit%20Proposal%20for%20Creditors1.pdf. Similarly, Baltimore has undergone repeated corruption scandals and so did most other troubled American municipalities. *See, e.g.*, Theo Emery, *Baltimore Police Scandal Spotlights Leader's Fight to Root out Corruption*, N.Y. TIMES, May 9, 2012, at A11; Ian Urbina, *Baltimore Mayor is Convicted in One Count in Gift Card Case, but Acquitted on 3*, N.Y. TIMES, Dec. 2, 2009, at A16; *see also* Anderson, *supra* note 8, at 1139, 1226–27 (finding that distressed cities that have cut public services have higher rates of violent crime, property crime, and arson than national averages); Clayton P. Gillette, *Dictatorships for Democracy: Takeover of Financially Failed Cities*, 114 COLUM. L. REV. (forthcoming 2014) (manuscript at 3), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2407608 ("The deterioration of services during periods of fiscal crisis translates into higher crime rates . . . .").

[218] *See, e.g.*, Munnell et al., *supra* note 6, at 1–4 ("[Baltimore] has lost one-third of its population since the 1950s . . . . [Detroit's] population has plummeted more than 40 percent from its peak of nearly 1.2 million when the local automobile industry was booming in the 1950s . . . . [and] Gary's population has shrunk by more than half since the 1960s . . . .").

[219] *See* ALBERT O. HIRSCHMAN, EXIT, VOICE, AND LOYALTY: RESPONSES TO DECLINE IN FIRMS, ORGANIZATIONS, AND STATES 3–4 (1970).

[220] *See supra* notes 59–62 and accompanying text.

exit will be limited for some residents.[221] But empirical data on declining population rates in distressed municipalities suggest that for at least some individuals exit is both possible and attractive.[222]

Under the classic Tieboutian account of interjurisdictional mobility,[223] a citizen's ability to exit a municipality that is failing to provide good services at low cost produces a race to the top, which helps to sort "good" municipalities from "bad."[224] We argue, however, that interjurisdictional mobility may have additional, and overlooked, consequences. If one assumes the validity of this Article's approach to social contracting, citizens that relocate to escape urban physical disorder may "export" conflict schemes. To the extent that urban decay can be considered an effect of national and subnational austerity policies, urban decay embodies a mass collective failure of the social contract. Thus, the option of moving from one municipality to another is unlikely to cure the rational expectation of legal failures and the devaluing of laws engendered in citizens by urban decay. Having lived in one municipality that has been ignored by the mass of people—as embodied by the state or federal government—how can one have faith that the next municipality won't suffer the same fate?

Instead, exit has the potential to spread social discontent and the devaluing of laws through norm contagion—particularly to the extent that individuals move to urban environments that are similarly, though perhaps not yet quite as severely, distressed. Relocating citizens that have developed adaptive behavioral patterns involving routine law breaking as a response to hostile urban environments are unlikely to immediately change their *modus operandi* when transferring to a new municipality. For example, if dropping trash on the

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[221]   The availability of exit is driven by the trade-off with the costs of exit, as resulting by the interaction with a range of factors. Such costs include the costs arising from the fiscal characteristics of the new municipality, but also "the location of the wage-earners' workplaces, the availability of transportation, . . . commuting costs (including time) and housing costs, and such factors as the location of relatives and friends." *See* Vicki Been, *"Exit" as a Constraint on Land Use Exactions: Rethinking the Unconstitutional Conditions Doctrine*, 91 COLUM. L. REV. 473, 519 (1991).

[222]   A national survey conducted for the Department of Housing and Urban Development during the 1980s found that 35.1% of the respondents said they would "definitely or probably" leave their community if public services declined. *See* ELAINE B. SHARP, CITIZEN DEMAND-MAKING IN THE URBAN CONTEXT 149, 150–52 (1986); s*ee also* Note, *Missed Opportunity: Urban Fiscal Crises and Financial Control Boards*, 110 HARV. L. REV. 733, 742–43 (1997) ("[R]eductions in general services such as playgrounds, fire and police protection, and public transportation can often make a city unattractive to those who can choose where they live and, furthermore, may have a disproportionate impact on certain groups of city residents.").

[223]   *See supra* note 197 and accompanying text.

[224]   *See, e.g.*, Clayton P. Gillette, *Fiscal Home Rule*, 86 DENV. U. L. REV. 1241, 1242 (2009); Schragger, *supra* note 27, at 868.

ground because there are no sufficient trashcans has become an acceptable behavior,[225] citizens will tend to replicate it when relocating to a new municipality.

Of course, the impact of norm contagion on the social contracting equilibrium of the new municipality will depend on multiple factors. However, several arguments suggest that this impact might be non-negligible. For one thing, empirical studies show that citizens tend to sort themselves into income-homogenous communities, as a municipality's fiscal characteristics are a primary driver influencing the people's decision to live there.[226] This suggests that relocation decisions from decaying municipalities involve migration maps rather than random moves, meaning that critical masses of individuals will tend to move from a decaying municipality to certain specific new municipalities[227]—and, due to income constraints and the widespread nature of urban decay in the United States, usually to new municipalities where infrastructure is also likely to be of marginal quality. This adds to the impact of norm contagion, as that impact critically depends on the magnitude of the migration patterns from the decaying municipality to the new municipalities. Additionally, the level of the new municipality's urban infrastructure will play a part in determining the impact of norm contagion. It is self-evident that the better the quality of the new municipality's infrastructure, the less likely the relocating residents will be to stick with past habits of unlawful behavior. However, once a citizen has developed those habits, the infrastructure quality threshold that may be required to induce patterns of rule abidance may need to be higher. If one considers the pervasiveness of urban decay in today's America and the structural failure to invest in urban infrastructure,[228] it seems unlikely that most municipalities will be able to meet that threshold.[229]

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[225]   *See supra* note 89 and accompanying text.

[226]   *See* Been, *supra* note 221, at 525–26.

[227]   *Id.* at 524 (reporting empirical studies that show a correlation between differences in local tax and expenditure policies and migration patterns).

[228]   *See supra* notes 9–12 and accompanying text.

[229]   The data from the "Moving to Opportunity" (MTO) study conducted by the U.S. Department of Housing and Urban Development are consistent with this theoretical assumption. Launched in 1994, the MTO study involved the random assignment of housing vouchers to help low-income families move to less disadvantaged and disorderly communities in New York, Chicago, Los Angeles, Baltimore, and Boston. *See* Harcourt & Ludwig, *supra* note 26, at 276–77, 300–14. In examining the results of the MTO study, Harcourt and Ludwig find that "moving people to communities with less social or physical disorder—the key intervening factor in the original Wilson and Kelling broken windows hypothesis—on balance does *not* lead to a reduction in their criminal behavior." *See id.* at 277. The MTO study is thus consistent with the idea that *merely* moving people to "*less* disadvantaged and disorderly" communities might not be sufficient to restore patterns of rule abidance over patterns of rule defection. Instead, once the contract between government and

It is worth noting the parallel between our story of norm contagion and classical economic contagion, which involves the possibility that local distress may spread to other, economically interconnected, municipalities.[230] Even strict fiscal federalists concede that centralized intervention might occasionally be necessary to avoid systemic effects[231]—much as it is necessary to bail out banks whose failures would threaten the entire economy.[232] Thus, the federal rescue of New York City from impending bankruptcy in 1975[233] can be likened to the federal bailouts of financial giants such as Citigroup during the recent financial crisis.[234] Only in the presence of exceptional too-big-to-fail concerns, however, will strict fiscal federalists concede that a centralized bailout is necessary for a local municipality.[235] In contrast to this reductive approach, our analysis suggests that the risk of contagion following local distress may involve multiple dimensions, with norm contagion being not as

citizens is broken, very high quality urban infrastructure is needed to control the *ex post* damages such a breach may cause. This, however, may be politically or practically infeasible, which suggests that regulatory measures to prevent the government from breaching that contract in the first place are needed. *See infra* Part III.B.

[230] *See* Gillette, *supra* note 200, at 302 (defining the risk of contagion inherent in municipal distress as "the possibility that local distress is indicative of more general fiscal difficulties or that unresolved local distress will cause disruption in other markets, because the risks of one are interconnected with risks elsewhere").

[231] Under Oates' Decentralization Theorem, the absence of spillover effects is a strong condition (or constraint) necessary for decentralization to dominate centralization in the provision of public goods. *See* Wallace E. Oates, *On the Theory and Practice of Fiscal Decentralization* 6, 12 (Inst. for Federalism & Intergovernmental Relations, Working Paper No. 2006-05, 2006), *available at* http://www.ifigr.org/ publication/ifir_working_papers/IFIR-WP-2006-05.pdf; *see also* Paul Seabright, *Accountability and Decentralization in Government: An Incomplete Contracts Model*, 40 EUR. ECON. REV. 61, 65, 85 (1996) (concluding that centralization can increase welfare by improving "coordination" and accounting for spillover effects, although it involves a loss of accountability).

[232] *See* Adam J. Levitin, *In Defense of Bailouts*, 99 GEO. L.J. 435, 451–52, 483–84, 487 (2011) (suggesting that for too-big-to-fail financial institutions—defined as those financial institutions "[where] there is a perception that [the institution's] failure might trigger socially unacceptable macroeconomic consequences"—bailouts are inevitable); Simone M. Sepe, *Regulating Risk and Governance in Banks*: *A Contractarian Perspective*, 62 EMORY L.J. 327, 381–83 (2012) (arguing that bank bailouts are unavoidable given the risk of macroeconomic shocks that arise from bank failures).

[233] *See*, *e.g.*, Edward M. Gramlich, *New York: Ripple or Tidal Wave? The New York City Fiscal Crisis: What Happened and What Is to Be Done?*, 66 AM. ECON. REV. 415, 423–26 (1976) (finding evidence of risk of contagion in the potential failure of New York City). *But see* David S. Kidwell & Charles A. Trzcinka, *Municipal Bond Pricing and the New York City Fiscal Crisis*, 37 J. FIN. 1239, 1246 (1982) (finding that the effect of New York City's near default on interest rates "was at most small and of short duration").

[234] Citigroup received $45 billion, funded through the U.S. government purchase of preferred stock with warrants, *plus* other federal aid. *See Bailout Recipients*, PROPUBLICA, http://projects.propublica.org/bailout/list (last updated July 22, 2014).

[235] *See* Gillette, *supra* note 200, at 308–09. However, one is left to question why the national significance of a city like New York did justify centralized support, while Detroit does not. *See supra* note 206 and accompanying text.

strictly dependent on the size of the municipality as economic contagion and, consequently, much less exceptional.

B. Saving our Cities

The above account of the relationship between austerity, declining urban infrastructure, and commitment to the rule of law leaves us with a puzzle. On the one hand, the central governments' financial support of local municipalities (i.e., full government insurance) leads to moral hazard, as incentives for social enforcement are lost when the provision of purely local goods is cross-subsidized by residents of other municipalities. On the other hand, austerity policies still result in the loss of social enforcement—leading to decaying urban environments and engendering a sense that following the rules is no longer valuable.

The lack of social enforcement, in turn, is likely to call for stricter coercive enforcement through increased policing.[236] Distressed municipalities, however, might be unable to afford the high costs of stricter coercive enforcement. The empirical evidence confirms this assumption. According to recent data, nearly every distressed U.S. city is also among the country's "most underpoliced cities."[237] And, in any event, as explained above, social and coercive enforcement of the rule of law are only substitute to a limited, and imperfect, extent.[238]

Economically, we can describe both full government insurance and austerity policies as "corner solutions." A corner solution exists where a problem involving a trade-off between two (or more) variables is solved by maximizing one variable at the expense of the other.[239] Austerity policies maximize *ex ante* efficiency (mitigating moral hazard), at the expense of *ex post* efficiency (leading to urban decay). In contrast, full government insurance maximizes *ex post* efficiency (minimizing urban decay), at the expense of *ex ante* efficiency (increasing moral hazard). However, a polity

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[236] *See supra* notes 64–65, 113–21 and accompanying text.

[237] Anderson, *supra* note 8, at 1161 (citing Aaron Chalfin & Justin McCrary, *The Effect of Police on Crime: New Evidence from U.S. Cities, 1960-2010*, at tbl.10 (Nat'l Bureau of Econ. Research, Working Paper No. 18815, 2013), http://www.nber.org/papers/w18815). Anderson also reports that while heavily underpoliced, "insolvent cities make sizable cuts to their law enforcement budgets during insolvency." *See id.* at 1162–63.

[238] *See supra* notes 26, 120–21 and accompanying text.

[239] *See* MICHAEL CARTER, FOUNDATIONS OF MATHEMATICAL ECONOMICS 502 (2001) (defining a *boundary*—i.e., *corner*—solution as the solution that "lies on the boundary of the feasible set" of solutions to an optimization problem).

needs both to constrain moral hazard and to avoid urban decay in order to maintain a strong rule of law. Hence, individuals are not indifferent to maximizing either variable over the other (i.e., *ex ante* versus *ex post* efficiency). One should thus look for an "interior solution,"[240] which can ensure maximization of both variables.

1. *Partial Insurance as an Interior Solution*

At a theoretical level, partial government insurance—defined here as the provision of partial financial support from the central governments to troubled municipalities[241]—constitutes an immediate interior solution to the problem of preserving a strong rule of law. On the one hand, partial government insurance helps to maintain a municipality's urban infrastructure in distressed times, avoiding the *ex post* effects of austerity policies. On the other hand, since partial insurance does not wholly shield residents from the cost of local decline, it constrains the *ex ante* risk of increased moral hazard incentives.

Moving from a theoretical to a practical setting, providing a normative justification for partial government insurance is a much more complex task. It requires, for example, identifying the optimal insurance level that the central government should provide[242] and determining how best to address residual incentives for increased moral hazard. Detailed answers to these and other related questions are beyond this Article's scope.[243] However, we suggest as a general guideline that centralized support to troubled municipalities should operate selectively to ensure the uninterrupted operation of quality municipal services and, in particular, a livable urban environment.[244] The preservation of

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[240]   *See id.* (defining an *interior* solution as "an interior point . . . of the feasible set" of solutions to an optimization problem).

[241]   While, in principle, centralized support could equally come from the national government or subnational governments, current political constraints suggest that the latter might be better placed to provide partial government insurance. *See* Gillette, *supra* note 200, at 285 (suggesting that the states' ability to "exercise plenary authority over their political subdivisions" makes them better suited than the federal government to create adequate mechanisms to address fiscal distress).

[242]   While Detroit received $300 million by the federal government, this amount of money does not qualify as sufficient to preserve local public services when compared to the $18 billion budget deficit of Detroit. *See* Calmes, *supra* note 206.

[243]   For an attempt to provide such detailed answers, see Anderson, *supra* note 8, at 1195–1221.

[244]   It is worth emphasizing the difference between our partial insurance approach and the municipal insolvency law approach of preserving "basic health and safety" local services. *See id.* at 1188–94 (describing the latter approach). The preservation of basic health and safety local services provided by municipal bankruptcy law merely allows municipalities to derogate to the order of priority in payment, i.e., to postpone the repayment of debt if this is needed to ensure the continuing provision of basic services. Anderson criticizes existing municipal bankruptcy provisions to the extent that they fail to clearly define what amounts to a basic

street lighting and a number of public parks, access to clean water and disposal systems, and building maintenance (including the demolition of blighted structures) are some examples of the services for which a central government should provide insurance.

Support for similar interventions could be provided through the injection of new money, temporary loan guarantees, or other forms of financial aid to local municipalities. Importantly, unlike state or federal bailouts used to cover existing budget deficits, selective intervention by the central governments would not relieve the burden of financial distress entirely for local municipalities. For example, it would not involve backing a city's public employee pension commitments, as this kind of shortfall is less likely to immediately affect a polity's urban environment quality.[245] On the one hand, this selective approach would mitigate the risk that expectations of future rescue by the central governments would exacerbate moral hazard and increase the likelihood of a municipality's overspending.[246] On the other hand, a policy of selective intervention would avoid the drastic cuts to essential public services that are likely to result in lower quality, and potentially decaying, urban environments. This would produce two immediate benefits. First, it would halt further urban decline and, hence, help to preserve at least some level of social enforcement of the rule of law.[247] Second, selective intervention would make it more likely that a distressed municipality could avoid the increased cost of coercive enforcement caused by increasing urban decline.

At the very least, central governments should preserve community viability by backstopping urban decline caused by municipal financial distress, as this would help preserve the public goods contract on which the rule of law depends.[248] This would not shield local residents from the financial strictures

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health and safety service. *See id.* at 1194. However, even leaving aside Anderson's claim, municipal bankruptcy law does not touch on the issue of what should be done when a municipality's cash flow income is per se not sufficient to allow for the provision of public services (i.e., even under derogation to the order of priority in payment).

[245] An exception would be constituted by police and fire department employees, who provide essential services to preserve a livable urban environment. Hence, it might be desirable to provide some partial insurance for both these employees' adequate staffing and sufficient coverage of their pension plans.

[246] *See supra* notes 200–02 and accompanying text.

[247] *See supra* notes 212–17 and accompanying text.

[248] Anderson's advocated aim of preserving what she calls "urban-scale habitability"—defined as involving "a question of collective conditions, such as crime rates, fire risk, emergency response times, access to clean water, access to wastewater disposal systems, and street lighting"—resonates very close to our own claim. *See* Anderson, *supra* note 8, at 1197–98. However, while she focuses more on how to implement such a

and likely tax increases that a municipality's financial recovery plan demands. However, it would avoid the perverse effects arising from the combination of increased fiscal pressure and retrenchment policies,[249] preserving the sense of legitimacy of social institutions and hence constraining the risk of citizens' exit and norm contagion across municipalities. Permitting public services to continue allows social enforcement to continue—as individuals perceive the government as abiding by the social contract, so too will they curb their own lawless impulses and be incentivized to police those of others.

Similarly, selective centralized intervention would not leave local administrators "unpunished" in cases where financial distress and increasing urban decay could be attributed to bad management rather than the economic cycle.[250] As observed by one commentator, state responses to local financial crises "almost always result[] in the creation of . . . financial control board[s] [FCBs],"[251] which are "powerful entities composed of appointed members vested by the state with plenary powers that far exceed those available to local elected officials."[252] Our proposal would not infringe upon a state's ability to use FCBs as a means to temporarily revoke delegated authority from local officials. It would, however, require an adjustment of an FCB's functions. As their name suggests, FCBs have primarily been used to ensure the fiscal integrity of distressed municipalities.[253] This task has generally involved supervising the implementation of austerity plans: state-approved balanced budgets, cuts to city expenditures, and tax increases, leading to the perverse effects described above.[254]

Our proposed adjustment would build upon the additional layer of control FCBs provide while making it a means to preserve, rather than potentially jeopardize, community viability. Under such an adjustment, FCBs should have authority to supervise and manage the transfer of central funds to preserve essential local services as well as to administer those services—in particular,

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condition of habitability, our analysis is mainly concerned on explaining *why* implementing and preserving such a condition is efficient from a social contract and aggregate welfare perspective.

[249]   *See supra* notes 212–15 and accompanying text.

[250]   *See supra* notes 200–02, 208–11 and accompanying text.

[251]   Note, *supra* note 222, at 734; *see also* Kimhi, *supra* note 190, at 654 ("A state financial board is a state agency created to help a distressed locality overcome its economic troubles. The board usually oversees the financial affairs of the city during its time of crisis, and initiates a rehabilitation process designed to help the locality recover." (footnote omitted)).

[252]   Note, *supra* note 222, at 734.

[253]   *See* Kimhi, *supra* note 190, at 670; Note, *supra* note 222, at 736.

[254]   *See supra* notes 212–15 and accompanying text.

infrastructure investments. Coupled with the preservation of current FCB control powers, which would help reign in residual moral hazard incentives, this slight modification of FCB functions could transform it into an entity to protect a community's commitment to the rule of law in distressed times.[255]

Over time, experience gained by central governments, FCBs, and local officials, especially in the case of large municipalities, would provide beneficial information on the best courses of action to undertake with other distressed municipalities. Based on that experience, central governments could adjust their level of support to local municipalities, developing valuable empirical evidence for improving implementation strategies. While this process would necessarily require some trial and error, what is most important is that partial government insurance offers a feasible alternative to the typical binary options of "spend more" or "spend less" and the inefficient solution these options provide to the trade-off between a polity's moral hazard and its degree of adhesion to the rule of law.

2. Urban Infrastructure and Social Welfare

A policy of selective intervention to solve the trade-off between the *ex ante* risk of moral hazard and the *ex post* issues of urban decay necessarily invokes a damage control philosophy. Upon distress, "controlling damages" appears as the only available solution to avoiding further urban decline while internalizing the risk of local official's overspending and other opportunistic behaviors. However, even outside the context of municipal emergency, this Article's central claim, that urban infrastructure quality has a direct impact on the

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[255] A note published in the Harvard Law Review in 1996 advocates a transformation of Financial Control Boards into "Financial Reform Boards" (FRBs), which should seek regional reforms to ensure that troubled municipalities "make the necessary structural and operational changes to avoid a recurrence." *See* Note, *supra* note 222, at 745–46. In principle, our proposal is compatible with the FRB proposal of planned regional interventions. Nevertheless, the FRB proposal essentially focuses on correcting the lack of participatory democracy implied by the appointment of non-elected FCBs members. *See id*. at 735, 749. Our theory, instead, suggests that without ensuring the continued provision of essential local goods—such as a livable urban environment—citizens are unlikely to have the incentives to exercise their political voice even if legally entitled to do so. A more recent article by Clayton Gillette takes a different approach to FRBs, arguing that vesting such entities with dictatorship-like powers "may provide a superior mechanism not only for addressing current fiscal distress, but also for preventing its recurrence." *See* Gillette, *supra* note 217, at 11. Viewing municipal financial distress as the product of moral hazard and inefficient political structures, Gillette suggests that only agents that can "operate outside the constraints of normal politics" have the right incentives to reform those political structures. *See id.* The discussion of the trade-off between the costs and benefits of implementing more democratic or authoritarian FRBs remain outside the scope of this Article. We argue, however, that a full evaluation of that trade-off can only take place when one considers not only *ex ante* moral hazard problems but also the *ex post* problems arising from urban decay.

strength of the rule of law, provides the foundation for a more general normative claim: adequate and sustained public investments in urban infrastructure are essential to support the rule of law.

The conventional public policy rationale for promoting investments in urban infrastructure usually rests on arguments that such investments lead to economic growth and productivity, increased land values, improved energy efficiency, and more rational public health systems. It is thus unsurprising that a March 2012 report by the Department of Treasury and the Council of Economic Advisers made all of those arguments[256] to support "a bold plan to renew and expand America's infrastructure."[257] However, the link between the quality of urban infrastructure and the strength of the rule of law is overlooked.

The link between urban infrastructure and the rule of law recasts investments in urban infrastructure as a public policy issue that involves not only distributive concerns, but also allocative concerns. Indeed, the gains arising from investments in infrastructure have traditionally been conceptualized as a benefit due to the American middle class, which receives disproportionate advantages from such investments.[258] Our research, however, suggests that *any* American stands to benefit from increased spending on urban infrastructure as such spending should be viewed as a bulwark against urban decay and the potentially enormous, immediate, direct, and long-lasting costs associated with the loss of the rule of law.

CONCLUSION

The rule of law stands at the heart of the social contract between individuals in a civil society. As part of that contract, the government assumes responsibility for coordinating the production and maintenance of essential public goods. The presence of adequate public goods signals to individuals that legal rules and institutions are meaningful and that most others share a commitment to abide by law. This, in turn, encourages the development of patterns of reciprocity and cooperation and, hence, leads to increased social order.

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[256] *See* 2012 TREASURY REPORT, *supra* note 13, at 7–11.

[257] *Id.* at 1 (specifying that the plan includes a $50 billion up-front investment connected to a $476 billion six-year reauthorization of the surface transportation program and the creation of a National Infrastructure Bank).

[258] *See id.* at 3–4 (focusing on transportation infrastructure, and the impact this investment will have on middle-class jobs).

Urban infrastructure plays an especially salient role in supporting the social contract, as each individual's daily well-being is directly and inescapably affected by the quality of the environment in which she lives. A livable and high-quality urban environment acts as a powerful signal that both the government and most others are fulfilling their obligations under the social contract, spurring a beneficial upward spiral in which social cooperation and social advocacy emerge as an equilibrium. Under this social equilibrium, the rule of law becomes stronger and coercive government enforcement becomes less necessary—with net social gains.

Urban decay, in contrast, signals to individuals that the government has reneged on its obligations and causes them to assume that others have done the same. The equilibrium of social cooperation and social advocacy is thus shattered, as choosing rule defection over rule abidance becomes profitable for individuals. Once rule defection spreads through norm contagion and becomes both accepted and expected behavior among large portions of the polity, coercive enforcement strategies, such as "zero tolerance" policing, can only compensate at the margins, and can even lead to a declining rule of law in a vicious cycle.

Given the critical role of urban infrastructure in supporting the rule of law, policymakers concerned with welfare maximization should necessarily concern themselves with preventing urban decay. However, long-standing austerity policies aimed at municipalities have had the unintended effect of contributing to urban decline. Detroit—like Baltimore, Gary, San Bernardino, and many others—are but symptoms of the failure to appreciate the *ex post* costs of austerity in creating urban decay and undermining the rule of law. In the continued debate over the benefits and cost of austerity, the normative implications of America's decaying cities should no longer be ignored.

APPENDIX

Table 1. Ranking of Countries by URBAN Index Score

COUNTRY	TICK	URBAN
Singapore	SGP	88.22
Switzerland	SWI	84.08
Germany	GER	82.4
Austria	OST	81.78
Sweden	SWE	81.08
Denmark	DNK	80.75
Finland	FIN	80.27
Canada	CAN	79.76
United Kingdom	UK	79.63
Luxembourg	LUX	79.13
Iceland	ICL	78.89
Netherlands	NTL	78
Norway	NOR	77.5
Ireland	IRE	77.11
Portugal	POR	76.53
France	FRA	76.44
New Zealand	NZL	76.32
Australia	AUS	76.31
United States	USA	76.27
Hong Kong	HKG	75.25
Qatar	QAT	75.25
Slovenia	SLV	75.11
Japan	JAP	75.04
United Arab Emirates	UAE	74.17
Spain	SPA	73.69
Kuwait	KUW	72.69

COUNTRY	TICK	URBAN
Cambodia	CMD	71.6
Sri Lanka	SRL	71.41
Uruguay	URY	71
Croatia	CRO	70.92
Georgia	GEO	70.61
Malaysia	MYS	70.57
Czech Republic	CZR	69.44
Indonesia	IDN	69.41
Cyprus	CYP	68.98
China	CHI	68.4
Estonia	EST	68.23
Saudi Arabia	SDA	68
Philippines	PLP	67.75
Korea (South)	KOR	67.31
Costa Rica	COR	67.06
India	IND	66.87
Guatemala	GTM	66.48
Italy	ITA	66.18
Hungary	HUN	65.79
Slovakia	SLK	65.65
Belgium	BEL	65.01
Bangladesh	BGD	64.7
Chile	CHL	64.28
Namibia	NAM	64.25
Panama	PAN	63.88
Bahrain	BAH	63.71
Colombia	COL	63.63
Tajikistan	TAJ	63.39
Bosnia & Herzegovina	BHZ	63.19
Romania	ROM	62.75

COUNTRY	TICK	URBAN
Poland	POL	62.62
Thailand	THA	62.48
Jamaica	JAM	62.3
Greece	GRE	62.22
Argentina	ARG	62.16
Israel	ISR	61.94
Turkey	TUR	61.3
Nicaragua	NIC	61.2
Latvia	LVA	61.19
Montenegro	MNE	61.08
Nepal	NPL	61.06
El Salvador	SLV	60.33
Mexico	MEX	60.01
Serbia	SRB	59.77
Jordan	JOR	59.22
Bolivia	BOL	58.51
Trinidad & Tobago	TTO	58.45
Malta	MLT	58.43
Vietnam	VNM	58.31
Azerbaijan	AZE	58.11
Pakistan	PAK	58
Kyrgyzstan	KGZ	57.77
Paraguay	PRY	57.31
Puerto Rico[*]	PRI	57.24
Guyana	GUY	57.03
Madagascar	MDG	56.81
Brazil	BRA	56.1
Algeria	DZA	55.81
Iran	IRN	55.72
Kazakhstan	KAZ	55.55

COUNTRY	TICK	URBAN
Lithuania	LTU	55.39
Ecuador	ECU	55.38
Honduras	HND	55.17
Armenia	ARM	54.64
Morocco	MAR	54.56
Venezuela	VEN	54.1
Bulgaria	BGR	54.09
Cameroon	CAM	53.77
Lebanon	LEB	53.06
Albania	ALB	53.04
Mali	MLI	52.69
Rwanda	RWA	52.61
Malawi	MAL	52.39
Ukraine	UKR	52.38
Tunisia	TUN	52.28
Burundi	BUR	51.75
Mauritania	MAU	51.19
Dominican Republic	DOM	51
Peru	PER	50.94
Moldova	MOL	50.63
Mongolia	MON	50.33
Egypt	EGY	49.82
Ghana	GHA	49.22
Zambia	ZAM	49.11
Kenya	KEN	48.56
Zimbabwe	ZIM	48.39
Botswana	BOT	48.07
Mozambique	MOZ	47.78
Russia	RUS	47.5
Uganda	UGA	47.48

COUNTRY	TICK	URBAN
Nigeria	NER	47.44
Benin	BEN	46.83
Syria	SYR	46.31
Côte d'Ivoire	CIV	44.56
Burkina Faso	BFA	42.06
Chad	CHA	41.81
Senegal	SEN	40.22
Ethiopia	ETH	39.61

[*]For the purposes of our analysis, Puerto Rico is treated as a country.

Table 2. Variable Definitions

In this Table, we provide definitions of all the variables we use in our empirical analysis. Table 2.1 presents definitions for all the variables composing our main independent variable (URBAN). Table 2.2 presents definition for all other variables employed in our analysis, including our main dependent variable (CPI), independent variable (URBAN), instrumental variable (UNESCO) and control variables. All variables employed in our analysis are measured on a scale from 0 to 100.

1. Urban Index Composition (defining all variables composing the index of the quality of urban infrastructure—URBAN).

Variable	Definition
CITY BEAUTY	Score based on the question: "In your city or area where you live, are you satisfied or dissatisfied with the beauty or physical setting?"
OVERALL CITY SATISFACTION	Score based on the question: "Are you satisfied or dissatisfied with the city or area where you live?"
TRAFFIC DISORDER	Score based on Pedestrian Deaths per capita
PUBLIC TRANSPORTATION	Score based on the question: "In the city or area where you live, are you satisfied or dissatisfied with the public transportation systems?"
QUALITY OF AIR	Score based on the question: "In your city or area where you live, are you satisfied or dissatisfied with the quality of air?"
QUALITY OF ELECTRICITY SUPPLY	Score based on survey of international organizations, national sources, and executives.
QUALITY OF ROADS AND HIGHWAYS	Score based on average between: (i) survey of international organizations, national sources, and executives; (ii) survey based on the question: "In the city or area where you live, are you satisfied or dissatisfied with the roads and highways?"
QUALITY OF WATER	Score based on the question: "In your city or area where you live, are you satisfied or dissatisfied with the quality of water?"
SAFE WALKING	Score based on the question: "Do you feel safe walking alone at night in the city or area where you live?"

2. Other Variables (defining all variables used in our empirical analysis, including URBAN).

Variable	Definition
CORRUPTION PERCEPTION INDEX (CPI)	The CPI ranks countries/territories based on how corrupt their public sector is perceived to be. It is a composite index, a combination of polls, drawing on corruption-related data collected by a variety of reputable institutions and reflecting the views of observers from around the world (including experts living and working in the countries/territories evaluated). The index takes values between 0 and 10. Higher values indicate a lower perception of corruption in the country. The CPI is based on the following questions: Is corruption widespread within businesses located in (country), or not? Is corruption widespread throughout the government in (country), or not?
URBAN INDEX (URBAN)	Index ranking countries based on the quality of urban infrastructure, considering components such as roads and highways, electrical supply, water and air, public transportation, traffic control, and overall city beauty. It takes values between 0 and 100 and is computed by taking the simple average of all the variables defined in Table 2.1.
UNESCO	Number of World Heritage sites.
GDP	Annual GDP per capita.
HEALTH CARE (HEALTHCARE)	Separated urban infrastructure variable. Score based on the question: "In your city or area where you live, are you satisfied or dissatisfied with the availability of quality health care?"
EDUCATION	Separated urban infrastructure index, taking value between 0 and 100. Score based on the question: "In your city or area where you live, are you satisfied or dissatisfied with the education system or the schools?"

Variable	Definition
INCOME EQUALITY (INCOMEEQUALITY)	Index ranking countries based on the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. It takes value between 0 and 100.
HUMAN RIGHTS (HUMANRIGHTS)	Index ranking countries based on the degree of lack of protection or noncompliance of the obligations of States in regard to human rights and the International Humanitarian Law (IHL) in 195 countries (the 192 member states of the United Nations, as well as the Palestinian Authority, Taiwan, and the Vatican).

Table 3. Summary Statistics

In this Table, we present summary statistics of our dataset. For each variable, the table reports the following statistics: mean, standard deviation, minimum value, maximum value and median.

	MEAN	SD	MIN	MAX	MEDIAN
CPI	4.40	2.21	1.9	9.5	3.4
URBAN	62.22	10.91	39.61	88.22	61.62
UNESCO	7.28	9.41	0	47	4
GDP	17.22	17.70	0.44	103.36	11.36
HEALTHCARE	58.14	18.56	18	95	58
EDUCATION	3.82	0.926	2.10	6.1	3.7
INCOMEEQUALITY	39.21	9.52	23	70.7	39.3
HUMANRIGHTS	2.60	2.05	0.18	7.72	2.16
OBSERVATIONS	124				

Table 4. First-Stage Regressions

In this Table, we show the first-stage estimates of univariate analysis (Column (1)) and multivariate analysis (Columns (2) through (7)) of URBAN as dependent variable and the following main independent variables: the logarithm of UNESCO, GDP, HEALTHCARE, EDUCATION, INCOMEEQUALITY and HUMANRIGHTS (all defined in Appendix Table 2).

Variables	(1) URBAN	(2) URBAN	(3) URBAN	(4) URBAN	(5) URBAN	(6) URBAN	(7) URBAN
UNESCO	2.717** (1.262)	1.891*** (0.616)	1.685*** (0.536)	1.916** (0.814)	2.174* (1.256)	3.639*** (1.253)	1.778*** (0.515)
GDP		0.440*** (0.0513)					0.192*** (0.0436)
HEALTHCARE			0.460*** (0.0386)				0.328*** (0.0342)
EDUCATION				6.835*** (0.781)			0.184 (0.906)
INCOMEEQ					-0.314*** (0.0730)		-0.0493 (0.0384)
HUMANRIGHTS						-2.064*** (0.442)	-0.564** (0.249)
CONSTANT	57.73*** (2.559)	51.52*** (0.952)	32.69*** (2.444)	32.97*** (2.687)	71.15*** (3.386)	61.12*** (2.860)	39.69*** (4.525)
OBSERVATIONS	124	124	124	124	110	114	101
R-SQUARED	0.055	0.559	0.659	0.387	0.138	0.223	0.766