

# *The Law and Development Review*

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*Volume 2, Issue 1*

2009

*Article 4*

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## Anarchy and Development: An Application of the Theory of Second Best

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# Anarchy and Development: An Application of the Theory of Second Best\*

Peter T. Leeson and Claudia R. Williamson

## Abstract

Could anarchy be a constrained optimum for weak and failing states? Although a limited government that protects citizens' property rights and provides public goods may be the first-best governance arrangement for economic development, among the poorest nations such "ideal political governance" is not an option. LDCs face a more sobering choice: "predatory political governance" or no government at all. Many predatory governments do more to damage their citizens' welfare than to enhance it. In light of this, we show that conditional on failure to satisfy a key institutional condition required for ideal political governance—constrained politics—citizens' welfare is maximized by departing from the other conditions required for this form of governance: state-supplied law and courts, state-supplied police, and state-supplied public goods. Since departing from these conditions produces anarchy and fulfilling them when government is unconstrained produces predatory political governance, anarchy is a second best.

**KEYWORDS:** anarchy, development, LDCs

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\*We thank Pete Boettke, Chris Coyne, and an anonymous reviewer for helpful comments and suggestions on a previous version of this paper. Leeson gratefully acknowledges the financial assistance of the Mercatus Center at George Mason University.

## I. INTRODUCTION

According to Foreign Policy and the Fund for Peace, nearly 14 percent of the world's countries (28 countries) have "failing states." In them, governments are on the verge of collapse, threatening anarchy.<sup>1</sup> Another 39 percent of the world's countries (78 countries) have states in imminent danger of failing. Thus, remarkably, over half of the world is on or near the cusp of state failure.<sup>2</sup>

The traditional rationale for government is rooted in the social dilemma that plagues anarchy, famously characterized by Thomas Hobbes.<sup>3</sup> According to this argument, individuals in the state of nature are prone to violence and confront collective action problems that prevent them from cooperating for mutual gain. Introducing government solves these problems. By creating a monopoly on the use of force and acting as the final arbiter of disputes, government is empowered to protect citizens' property claims and compel contributions to public goods that improve social welfare.

Nearly all social scientists have concurred with Hobbes' characterization of anarchy and his prescription of government as the solution to the social dilemma. Yet the widespread failure of governments noted above casts doubt on the accuracy of this consensus. The incredible success of a minority of states has overshadowed the fact that a majority of them are failed or in imminent danger of failing. As a result, political economists' attention has been diverted from the rule to the exception, creating the false impression that most experiments with government as a solution to the social dilemma are like those we observe in North America or Western Europe instead of those we observe in Sub-Saharan Africa (SSA) or Eastern Europe.

This paper argues that this false impression is especially problematic for considerations of economic development. It has led to a situation in which the alleged obviousness of government's desirability from the standpoint of social welfare in least developed countries (LDCs) has gone virtually unquestioned. Ironically, these countries are those in which state failure is most prominent and

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<sup>1</sup> Foreign Policy/Fund for Peace, *Failed States Index*, available at: <[www.fundforpeace.org](http://www.fundforpeace.org) and <http://foreignpolicy.com>>. Only in one country classified as a "failed state" by the *Failed States Index* has central government been completely demolished and anarchy replaced centralized rule. This country is Somalia, which we discuss below.

<sup>2</sup> This is not simply the result of many small countries in danger of collapse. Measured in terms of world population, nearly two billion people, or close to a third of the global population, "live in countries that are in danger of collapse." Foreign Policy/Fund for Peace, "The Failed States Index" (July/August 2005), available at: <[www.foreignpolicy.com/users/login.php?story\\_id=3098&URL=http://www.foreignpolicy.com/story/cms.php?story\\_id=3098](http://www.foreignpolicy.com/users/login.php?story_id=3098&URL=http://www.foreignpolicy.com/story/cms.php?story_id=3098)>.

<sup>3</sup> Thomas Hobbes, *Leviathan* (Oxford: Blackwell, 1955).

government's failure as a solution to the social dilemma should appear most obvious.<sup>4</sup> Although a constrained government in which political leaders' power is limited to protecting citizens' property and providing public goods—what this paper calls “ideal political governance”—may be the first-best governance arrangement for economic development, this is not an option for countries on the brink of state failure. These countries' governance opportunity sets do not include the full range of options enjoyed by countries such as the United States.

The full range of governance options includes “ideal political governance,” “predatory political governance,” and “no political governance,” or anarchy. However, LDCs' opportunity sets are constrained. They tend to include only the latter two, least desirable, options: “predatory political governance” and anarchy. If state predation is severe enough, government can do more harm than good. In such cases anarchy produces a higher level of development than predatory political governance. Existing research shows that this is the case for many LDCs today.<sup>5</sup> In light of this, we show that conditional on failure to satisfy a key institutional condition required for ideal political governance—constrained politics—citizens' welfare is maximized by departing from the other conditions required for this kind of governance: state-supplied law and courts, state-supplied police, and state-supplied public goods. Since departing from these conditions produces anarchy and fulfilling them when government is unconstrained produces predatory political governance, anarchy is a second best.

## **II. FIRST-BEST GOVERNANCE: THE PROTECTIVE, PRODUCTIVE STATE**

A voluminous and growing literature identifies well-protected property rights as indispensable for economic development.<sup>6</sup> As this research highlights, where

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<sup>4</sup> In a recent paper, Rodrik suggests that development economists should be weary of thinking only in terms of “first-best” solutions for the developing world. Dani Rodrik, *Second-Best Institutions*, 98 *American Economic Review* 2, 100-104. Our paper explores the idea of a second best for governance arrangements in LDCs.

<sup>5</sup> See, for instance, Peter T. Leeson, *Better Off Stateless: Somalia Before and After Government Collapse*, 35 *Journal of Comparative Economics* 4 (2007), 689-710; Benjamin Powell, Ryan Ford, and Alex Nowrasteh, *Somalia After State Collapse: Chaos or Improvement?*, 67 *Journal of Economic Behavior and Organization* 3-4 (2008), 657-670.

<sup>6</sup> See, for instance, Daron Acemoglu and Simon Johnson, *Unbundling Institutions*, 113 *Journal of Political Economy* 5 (2005), 949-995; Daron Acemoglu, Simon Johnson, and James Robinson, *Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution*, 117 *Quarterly Journal of Economics* 4 (2002), 1231-1294; *Id.*, *The Colonial Origins of Comparative Development: An Empirical Investigation*, 91 *American Economic Review* 5 (2001), 1369-1401; Gerald Scully, *The Institutional Framework and Economic Development*, 96 *Journal of Political Economy* 3 (1988), 652-662; Robert Hall and Charles Jones, *Why Do Some Countries Produce So Much More Output Per Worker than Others?*, 114 *Quarterly Journal of*

government effectively protects citizens' property, citizens prosper. Governments that protect citizens' private property rights create the security citizens need to engage in anonymous exchange, participate in complex trades that require contracts and credit agreements, and invest in new projects. Further, governments that protect citizens' property rights create incentives for citizens to engage in productive activities (and avoid unproductive ones) since they benefit from undertaking them. In turn, individuals' ability and incentive to realize the gains from widespread trade and engage in productive activities fuels economic growth and development.

We call the situation in which government protects citizens' property rights "ideal political governance." Of course, no state perfectly protects property rights. But a small number do very well in this regard. The counties of North America and Western Europe are perhaps the best examples of this. When we refer to "ideal political governance," it is government-provided property protection of this sort that we have in mind.

To achieve ideal political governance a country must satisfy four institutional conditions:

1. *Binding constraints on political rulers:* To protect individuals' private property rights, political actors require power. However, to ensure political actors do not abuse this power for personal gain, using their authority to violate citizens' property rights rather than protecting them, binding constraints on government are necessary.<sup>7</sup> We define a failure to

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Economics 1 (1999), 83-116; Steve H. Hanke and Stephen J.K. Walters, *Economic Freedom, Prosperity, and Equality: A Survey*, 17 *Cato Journal* 2 (1997), 117-146; Steven T. Easton and Michael A. Walker, *Income, Growth, and Economic Freedom*, 87 *American Economic Review* 2 (1997), 328-332; Michael A. Nelson and Ram D. Singh, *Democracy, Economic Freedom, Fiscal Policy and Growth in LDCs: A Fresh Look*, 46 *Economic Development and Cultural Change* 4 (1998), 677-696; Alfredo G. Esposto and Peter A. Zaleski, *Economic Freedom and the Quality of Life: An Empirical Analysis*, 10 *Constitutional Political Economy* 2 (1999), 185-197; Seth W. Norton, *Poverty, Property Rights, and Human Well-Being: A Cross-National Study*, 18 *Cato Journal* 2 (1998), 233-246; John A. Tures, *Economic Freedom and Conflict Reduction: Evidence from the 1970s, 1980s, and 1990s*, 22 *Cato Journal* 2 (2003), 533-542; Dani Rodrik, Arvind Subramanian, and Francesco Trebbi, *Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development*, 9 *Journal of Economic Growth* 2 (2004), 131-165; Claudia R. Williamson and Carrie B. Kerekes, *Unveiling de Soto's Mystery: Property Rights, Capital Formation, and Economic Development*, 4 *Journal of Institutional Economics* 3 (2008), 299-325.

<sup>7</sup> See, for instance, James Madison, Alexander Hamilton, and John Jay, *The Federalist Papers* (London: Penguin, 1987); Douglass C. North, *Institutions, Institutional Change and Economic Performance* (Cambridge, UK: Cambridge University Press, 1990); Douglass C. North, John Joseph Wallis, and Barry R. Weingast, *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded History* (Cambridge, UK: Cambridge University Press, 2009); Barry R.

satisfy this institutional condition as the absence of effective institutional constraints on government's behavior or, what is equivalent, a political environment in which political actors are able to wield political authority for private benefit at their discretion. In such an environment the state is a vehicle of corruption and expropriation rather than a means of private property protection.

2. *A government-supplied legal system:* To protect individuals' private property rights, government must be able to create rules that clearly define agents' property claims and provide mechanisms, such as courts, to resolve property related disputes. We define a failure to satisfy this institutional condition as the absence of a state-provided system of law and courts.

3. *A government-supplied police system:* To protect individuals' private property rights, government must be able to enforce legal rules that protect citizens' private property claims. We define a failure to satisfy this institutional condition as the absence of state-provided police.

4. *Government-supplied public goods:* To protect individuals' property rights, at a minimum, government must provide courts and police needed to satisfy institutional conditions (2) and (3) above. Additionally, the provision of critical infrastructure, such as that which connects individuals in different parts of the country, and goods, such as basic education and health, may also be required to support individuals' ability to realize the opportunities for social cooperation that government-supplied property protection creates. We define a failure to satisfy this institutional condition as the absence of critical government-provided public goods, such as those pointed to above.

Where these four institutional conditions are satisfied, ideal political governance is possible, leading to what James Buchanan calls the "protective" (in its role as protector of citizens' property rights) and "productive" (in its role as producer of wealth-enhancing public goods) state.<sup>8</sup> These institutional conditions may be thought of as institutional constraints on available governance arrangements. Unless each of them is fulfilled, ideal political governance is not possible. And, for reasons we discuss in Section III, unless institutional condition (1)—constraints on political actors—is fulfilled, fulfilling the other institutional conditions may in fact be undesirable.

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Weingast, *The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development*, 11 *Journal of Law, Economics and Organization* 1 (1995), 1-31.

<sup>8</sup> James M. Buchanan, *The Limits of Liberty: Between Anarchy and Leviathan* (Chicago: University of Chicago Press, 1977).

### **III. WORST-CASE GOVERNANCE: ANARCHY OR PREDATORY GOVERNMENT?**

The alternative governance arrangements available to a country that fails to satisfy one or more of the foregoing institutional conditions for ideal political governance depend on which of these institutional conditions it does not meet. The options available to a country that has effective constraints on political actors, state-supplied police, and state-supplied courts, but whose government has difficulty producing other public goods, for example, are different from the options available to a country that fails even to supply binding constraints on political actors.

Our analysis is concerned with LDCs that are characterized by their failure to satisfy institutional condition (1)—constraints on political actors. For this reason our analysis focuses on the case in which a country that does not achieve ideal political governance fails to do so because it fails to satisfy institutional condition (1). Legal and police institutions in LDCs also tend to be poorly and ineffectively administered from the perspective of their ostensible purpose, which is to facilitate social cooperation. However, this ineffectiveness should not be confused with these institutions' absence or their ineffectiveness in achieving the (privately beneficial but socially costly) ends to which political actors actually apply them. As we discuss below, these institutions are in fact primary tools political actors use to achieve their private ends where government is unconstrained. Their ineffectiveness from the standpoint of improving social welfare is a byproduct of the absence of binding constraints on political actors, not a result of their absence or ineffectiveness in securing the goals political actors seek with them.

A country that cannot achieve ideal political governance because it lacks effective political constraints—i.e., fails to fulfill institutional condition (1)—confronts two governance alternatives: predatory political governance and no political governance, or anarchy. Predatory political governance is characterized by political actors who systematically abuse political authority for personal benefit. Such abuse can take many forms, from expropriation to preferential treatment for a small, politically connected minority, to the persecution, arbitrary arrest, incarceration, and even execution of political enemies or other pockets of the population politicians may target. Such abuse includes both explicitly corrupt (i.e., officially criminal) acts and legalized forms of related behavior, such as the confiscation of property and participation in rent-seeking activities. Classic examples of predatory political governance include many governments in SSA,

such as Somalia's government under Siad Barre before it collapsed in 1991<sup>9</sup> and Sierra Leone's government, which we discuss below.

Countries that suffer under predatory political governance have long histories of institutional failure, which contribute to their institutional failure in the present and constrain their governance options now and in the near future. Multiple factors contribute to such histories. Some common factors include ethnic conflict, the presence of abundant natural resources, which have created long-lasting fights over control of these resources, and substantial experiences with socialism.

Histories of ethnic conflict have a close relationship to unconstrained, predatory government.<sup>10</sup> Often, members of one ethnic group had power and, absent constraints on its behavior, preyed on rival ethnic groups to benefit members of their own group. Later, one of these rival groups secured enough strength to overthrow those in power, asserting itself as government. In this capacity the ill-will shown toward its group's members was repaid in its turn at the helm and government's ability to arbitrarily wield power, which facilitated such behavior, remained intact to permit this, and so on in a vicious cycle. The result is a history of unconstrained and highly predatory government that perpetually uses its authority to extort citizens for the benefit of political rulers and those they favor.

A similar situation has often prevailed in the case of natural resource abundance. Free to exploit this low-hanging fruit, some resource-rich countries never developed effective institutional constraints on the state, such as safeguards against arbitrary government takings and other violations of citizens' private property rights. In some cases governmental constraints were deliberately eschewed to facilitate the exploitation of rich resources. As a result, a history of unconstrained government began, and alongside it, a history of struggle to gain political power so as to have greater control over the chief source of economic opportunity in the country.<sup>11</sup>

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<sup>9</sup> Christopher J. Coyne, *Reconstructing Weak and Failed States: Foreign Intervention and the Nirvana Fallacy*, 2 *Foreign Policy Analysis* (2006), 343-361; Leeson (2007), *supra* note 5; Powell, Ford, and Nowrasteh (2008), *supra* note 5.

<sup>10</sup> See, for instance, William Easterly, *Can Institutions Resolve Ethnic Conflict?*, 49 *Economic Development and Cultural Change* 4 (2001), 687-706; William Easterly and Ross Levine, *Africa's Growth Tragedy: Policies and Ethnic Divisions*, 112 *Quarterly Journal of Economics* 4 (1997), 1203-1250.

<sup>11</sup> See, for instance, Richard M. Auty, *The Political Economy of Resource-Driven Growth*, 46 *European Economic Review* 4-6 (2001), 839-846; Jean-Marie Baland and Patrick Francois, *Rent-Seeking and Resource Booms*, 61 *Journal of Development Economics* 2 (2000), 527-542; Katharina Wick and Erwin Bulte, *Contesting Resources—Rent-Seeking, Conflict and the Natural Resource Curse*, 128 *Public Choice* 3 (2006), 457-476; Halvor Mehlum, Karl Moene, and Ragnar Torvik, *Institutions and the Resource Curse*, 116 *Economic Journal* 1 (2006), 1-20; James A. Robinson, Ragner Torvik, and Thierry Verdier, *Political Foundations of the Resource Curse*, 79



The same is true of many LDCs' experiences with socialism. In the 1960s and 70s, for example, when many countries in SSA were gaining independence from their European colonizers, under the influence of the Soviet Union or of their own accord, many turned to economic central planning. As Hayek points out, central planning as a form of economic organization requires government to have the authority and discretion needed to direct national economic activity and requires political actors to have autonomy from citizens' desires that might conflict with their plan.<sup>12</sup> If government does not have ultimate authority to direct economic resources, or citizens' competing ideas about how resources should be used are allowed to interfere with the central plan, the plan's coherence is undermined and government's ability to centrally direct the economy breaks down. In short, constrained politics is incompatible with central planning. Thus the selection of this mode of economic organization in some LDCs at their time of independence, or shortly after, facilitated unconstrained government, which created an institutional precedent that persisted long after these countries abandoned full-blown central planning.<sup>13</sup>

The other governance alternative for a country that fails to satisfy institutional condition (1) required for ideal political governance is no political governance at all, or anarchy. Anarchy is characterized by the absence of an agency with a territorial monopoly on the legitimate use of force. Somalia, from 1991 to the present, is a contemporary example of this. Under anarchy individuals are left to their own devices. There is no government and therefore there is no government predation. However, neither is there a central authority to define or protect property rights, to provide public goods, and so on.

The critical question for countries that do not satisfy institutional condition (1) for ideal political governance is thus, which constrained governance alternative—predatory political governance or anarchy—is superior? A sizeable and growing literature demonstrates that individuals develop private institutional arrangements to facilitate social cooperation where government is absent. Anderson and Hill, Benson, Friedman, Leeson, Powell and Wilson and others find that life in “Hobbesian jungle” isn't nearly as poor, nasty, brutish, and short as

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Journal of Development Economics 2 (2006), 447-468; Ragnar Torvik, *Natural Resources, Rent Seeking, and Welfare*, 67 Journal of Development Economics 2 (2002), 455-470.

<sup>12</sup> Friedrich A. Hayek, *The Use of Knowledge in Society*, 35 American Economic Review 4 (1945), 519-530.

<sup>13</sup> On institutional path dependence, see North (1990), *supra* note 7; Paul Pierson, *The Limits of Design: Explaining Institutional Origins and Change*, 13 Governance 4 (2000), 475-499; *Id.*, *Increasing Returns, Path Dependence and the Study of Politics*, 94 American Political Science Review 2 (2000), 251-267; James M. Buchanan and Yong Yoon, *The Return of Increasing Returns* (Ann Arbor: University of Michigan Press, 1994).

Hobbes led us to believe.<sup>14</sup> On the contrary, both historically and today, individuals manage to exchange and maintain cooperative relations on a large scale without state involvement.<sup>15</sup> Where government doesn't exist to define or enforce property rights, or to provide public goods, private actors protect property rights and provide public goods instead. This private governance facilitates a degree of social cooperation that enhances individuals' welfare. Although anarchy may permit less exchange and therefore lower welfare than ideal political governance, anarchy does not mean lawlessness, conflict, or bloody mayhem.<sup>16</sup>

This fact, however, doesn't establish anarchy's superiority to predatory political governance. Moselle and Polak and Leeson theoretically establish conditions under which anarchy outperforms government.<sup>17</sup> The costs of government, gains to social cooperation that government produces, and degree of cooperation that private institutions enable under anarchy together determine which governance regime produces higher welfare. However, when government is predatory, state predation critically determines the cost of government and becomes the key variable that influences which constrained governance arrangement produces higher welfare. Even if private governance is only capable

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<sup>14</sup> Terry L. Anderson and Peter J. Hill, *The Not So Wild, Wild West* (Stanford: Stanford University Press, 2004); Bruce L. Benson, *The Spontaneous Evolution of Commercial Law*, 55 *Southern Economic Journal* 3 (1989), 644-661; *Id.*, *The Enterprise of Law: Justice without the State* (CA: Pacific Research Institute, 1990); David Friedman, *Private Creation and Enforcement of Law: A Historical Case*, 8 *Journal of Legal Studies* 2 (1979), 399-415; Peter T. Leeson, *Efficient Anarchy*, 130 *Public Choice* 1-2 (2007), 41-53; *Id.*, *An-arrgh-chy: The Law and Economics of Pirate Organization*, 115 *Journal of Political Economy* 6 (2007), 1049-1094; *Id.*, *Trading with Bandits*, 50 *Journal of Law and Economics* 2 (2007), 303-321; *Id.*, *Social Distance and Self-Enforcing Exchange*, 37 *Journal of Legal Studies* 1 (2008), 161-188; *Id.*, *The Laws of Lawlessness*, 38 *Journal of Legal Studies* 2 (2009), forthcoming; Benjamin Powell and Bart J. Wilson, *An Experimental Investigation of Hobbesian Jungles*, 66 *Journal of Economic Behavior and Organization* 3-4 (2008), 669-686. For a survey of this literature see, Benjamin Powell and Edward Stringham, *Public Choice and the Economic Analysis of Anarchy: A Survey*, *Public Choice* (forthcoming, 2009). For an analysis of the relative importance of private vs. public institutions of social order for economic development, see Claudia R. Williamson, *Informal Institutions Rule: Institutional Arrangements and Economic Performance*, 139 *Public Choice* 3-4 (2009), 371-387.

<sup>15</sup> See, for instance, Peter T. Leeson, *How Important is State Enforcement for Trade?*, 10 *American Law and Economics Review* 1 (2008), 61-89.

<sup>16</sup> Even in a "stateless state," there are a wide variety of private institutions, ranging from reliance on clan networks to private judicial system, that provide economic support under anarchy. For examples of such institutions, see the references at *supra* note 14 and those at *infra* note 20. For a discussion of their importance and how they emerge see, Peter T. Leeson and Peter J. Boettke, *Two-Tiered Entrepreneurship and Economic Development*, 29 *International Review of Law and Economics* 3 (2009), 252-259.

<sup>17</sup> Boaz Moselle and Benjamin Polak, *A Model of a Predatory State*, 17 *Journal of Law, Economics and Organization* 1 (2001), 1-33; Leeson, *Efficient Anarchy* (2007), *supra* note 14.

of generating a very low level of social cooperation, high levels of state predation, which destroy even these small gains, can produce lower welfare for citizens than anarchy.

We have evidence of such a situation in the poorest parts of the developing world. Leeson, for example, shows that government predation by Somalia's state before it collapsed was so severe that it depressed Somali welfare below the level Somalia was able to achieve without any government at all.<sup>18</sup> Counterintuitively, the implosion of Somalia's state and subsequent emergence of anarchy has led to an *improvement* in the average Somali's welfare on nearly every major development indicator we have data for. Table 1 reproduces Leeson's main finding. On all but four of 18 development indicators that allow comparison before and after Somalia's government collapsed, Somali welfare unambiguously improved under anarchy.<sup>19</sup>

Table 1. Anarchy as Somalia's Second Best

	1985-1990	2000-2005
GDP (PPP constant \$)	836	600
Life Expectancy (years)	46.0	48.47
One year olds fully immunized against measles (%)	30	40
One year olds fully immunized against TB (%)	31	50
Doctors and Nurses (per 100,000)	3.4	4
Infants with low birth weight (%)	16	0.3
Infant Mortality Rate (per 1,000)	152	114.89
Maternal Mortality Rate per (100,000)	1,600	1,100
Pop. with access to water (%)	29	29
Pop. with access to sanitation (%)	18	26
Adult Literacy Rate (%)	24	19.2
Combined <sup>a</sup> School Enrollment (%)	12.9	7.5
Radios (per 1,000)	4.0	98.5
Telephones (per 1,000)	1.92	14.9
TVs (per 1,000)	1.2	3.7
Fatality due to measles	8,000	5,598
Pop. with access to at least one health facility (%)	28	54.8
Extreme Poverty (% < \$1 per day)	60	43.2

Source: Leeson (2007), *supra* note 5.

<sup>18</sup> Leeson (2007), *supra* note 5.

<sup>19</sup> For an in-depth discussion of Somalia's stateless economy and how it copes without government see, Peter D. Little, *Somalia: Economy without State* (Bloomington, IN: Indiana University Press, 2003).

Table 2: Somalia vs. Sierra Leone: Key Development Indicators

	Somalia 1985-1990 <sup>a</sup>	Somalia 2000-2005	Sierra Leone 1990	Sierra Leone 2000-2005
GDP (PPP constant \$)	836 <sup>b</sup>	600 <sup>c,e</sup>	903 <sup>o</sup>	800 <sup>c,e</sup>
Life expectancy (years)	46.0 <sup>b</sup>	<b>48.47<sup>c,g</sup></b>	39 <sup>o</sup>	<b>40.22<sup>c,g</sup></b>
One year olds fully immunized against measles (%)	30	40 <sup>h</sup>		64 <sup>h</sup>
One year olds fully immunized against TB (%)	31	50 <sup>h</sup>		83 <sup>h</sup>
Physicians (per 100,000)	3.4	<b>4<sup>h</sup></b>		<b>3<sup>h,r</sup></b>
Infants with low birth weight (%)	16	<b>0.3<sup>l</sup></b>	11 <sup>v</sup>	<b>23<sup>h,s</sup></b>
Infant mortality rate (per 1,000)	152	<b>114.89<sup>c,g</sup></b>	175 <sup>o</sup>	<b>160.39<sup>c,g</sup></b>
Maternal mortality rate (per 100,000)	1,600	<b>1,100<sup>i</sup></b>	1,800 <sup>u</sup>	<b>2000<sup>i</sup></b>
Pop. with access to water (%)	29	29 <sup>h</sup>		57 <sup>h</sup>
Pop. with access to sanitation (%)	18	26 <sup>h</sup>		39 <sup>h</sup>
Adult literacy rate (%)	24 <sup>b</sup>	19.2 <sup>j</sup>		35.1 <sup>h</sup>
Combined <sup>n</sup> school enrollment (%)	12.9 <sup>b</sup>	7.5 <sup>a,f</sup>		65 <sup>h</sup>
Telephones (per 1,000)	1.92 <sup>d</sup>	<b>14.9<sup>k</sup></b>		<b>4.8<sup>q,p</sup></b>
TVs (per 1,000)	1.2	3.7 <sup>k</sup>		13.2 <sup>q,f</sup>
Extreme poverty (< \$1 per day)	60	<b>43.2<sup>k</sup></b>		<b>57<sup>t</sup></b>
Births attended by skilled health professional (%)		25 <sup>w</sup>		42 <sup>w</sup>
Children underweight for age (% under age 5)		26 <sup>w</sup>		24 <sup>w</sup>
Children under height for age (% under age 5)		<b>23<sup>w</sup></b>		<b>34<sup>w</sup></b>
Children under 5 using insect.-treated bednets (%)		0 <sup>x</sup>		2 <sup>x</sup>
Children under 5 treated with antimalarial drugs (%)		19 <sup>x</sup>		61 <sup>x</sup>
TB cases (per 100,000)		<b>673<sup>h</sup></b>		<b>847<sup>h</sup></b>
TB cases cured under DOTS (%)		<b>90<sup>m</sup></b>		<b>83<sup>m</sup></b>
Under-5 mortality rate (per 1,000)		<b>225<sup>h</sup></b>		<b>283<sup>h</sup></b>
Prob. at birth of surviving to 65, male (% of cohort)		<b>36.5<sup>y</sup></b>		<b>30.7<sup>y</sup></b>
Prob. at birth of surviving to 65, female (% of cohort)		<b>41.3<sup>y</sup></b>		<b>36.2<sup>y</sup></b>
Telephone mainlines (per 1,000)	2 <sup>z</sup>	<b>25<sup>h</sup></b>	3 <sup>z</sup>	5 <sup>h</sup>
Cellular subscribers (per 1,000)	0 <sup>z</sup>	<b>63<sup>h</sup></b>	0 <sup>z</sup>	<b>22<sup>h</sup></b>
Internet users (per 1,000)	0 <sup>z</sup>	<b>25<sup>m</sup></b>	0 <sup>z</sup>	<b>2<sup>m</sup></b>

Notes: <sup>a</sup>UNDP (2001); <sup>b</sup>1989-1990; <sup>c</sup>CIA World Factbook (2006); <sup>d</sup>1987-1990, World Bank/UNDP (2003); <sup>e</sup>2005; <sup>f</sup>2001; <sup>g</sup>2006; <sup>h</sup>2004, UNDP (2006); <sup>i</sup>2000, UNDP (2006) <sup>j</sup>2002, WHO (2004); <sup>k</sup>2002, World Bank/UNDP (2003); <sup>l</sup>1999, UNDP (2001); <sup>m</sup>2003, UNDP (2006); <sup>n</sup>refers to primary, secondary, and tertiary gross enrollment; <sup>o</sup>1990, WDI (2005); <sup>p</sup>2002; <sup>q</sup>WDI (2005); <sup>r</sup>1990-2004; <sup>s</sup>1996-2004; <sup>t</sup>1990-2003, UNDP (2005); <sup>u</sup>1990, UNDP (1999); <sup>v</sup>1990-1997, UNDP (1999); <sup>w</sup>1996-2004, UNDP (2006); <sup>x</sup>1999-2004, UNDP (2006); <sup>y</sup>2000-2005, UNDP (2006); <sup>z</sup>1990, UNDP (2006).

Further, Nenova, Nenova and Harford, Coyne, and Powell, Ford and Nowrasteh find that anarchic Somalia outperforms many SSA countries that have governments.<sup>20</sup> These countries have failed to satisfy condition (1) required for ideal political governance and, since they have not abandoned political governance, must rely on predatory political governance much as Somalia's government did before its collapse. In Table 2 above we compare the state of development in anarchic Somalia with one such country—one of the LDCs currently closest to state collapse: Sierra Leone. We consider all 28 key development indicators for which data permit comparison.<sup>21</sup> We bold the indicators on which Somalia outperforms Sierra Leone.

On 16 of the 28 indicators, anarchic Somalia has higher development than Sierra Leone. This includes life expectancy, number of physicians, infants with low birth weight, infant mortality, maternal mortality, telephones, and extreme poverty. Remarkably, anarchic Somalia outperforms Sierra Leone on 57 percent of the available indicators despite the fact that Sierra Leone receives nearly five times the amount of foreign aid that Somalia does and has a smaller population.<sup>22</sup> Equally important, on 14 of the 18 development indicators that allow for comparison within country over time, Somalia has improved. Although data limitations only allow a similar across-time comparison for Sierra Leone on eight indicators, more than a third shows a decline since the previous period, and the others show only minimal progress compared to Somalia.

The data in Table 3 below suggest Sierra Leone is not alone in regard. This table presents the main result of Powell, Ford and Nowrasteh's study, which ranks Somali welfare on 13 development indicators before and after anarchy relative to 41 other SSA countries, most of which are currently under predatory political governance.<sup>23</sup>

Compared to these countries, Somalia fares quite well. On five of the 13 development indicators that allow comparison, Somalia ranks in the top half of SSA countries. Only on three of these indicators, immunizations, infant mortality, and access to improved water sources, does Somalia fall at the bottom among its Sub-Saharan cohort. Most important, however, Somalia has been improving relative to a number of countries in its cohort since its government collapsed in 1991. Between 1990, Somalia's last year under government, and 2005, Somalia

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<sup>20</sup> Tatiana Nenova, *Private Sector Response to the Absence of Government Institutions in Somalia* (Washington, D.C.: The World Bank, 2004); Tatiana Nenova and Tim Harford, *Anarchy and Invention: How Does Somalia Cope without Government?*, Public Policy for the Private Sector Note No. 280 (November 2004); Coyne (2006), *supra* note 9; Powell, Ford, and Nowrasteh (2008), *supra* note 5.

<sup>21</sup> In comparing current Somalia and current Sierra Leone, we draw on the most recent data available for each indicator at the time data were collected.

<sup>22</sup> CIA, *CIA World Factbook*, available at: <<https://www.cia.gov/cia/publications/factbook/>>.

<sup>23</sup> Powell, Ford, and Nowrasteh (2008), *supra* note 5.

has improved its ranking relative to the other Sub-Saharan countries considered in Table 3 on four of seven indicators that allow for comparison across time. Together with Tables 1 and 2, these data demonstrate that if state predation under predatory political governance is severe enough, anarchy can produce higher welfare. Further, these data suggest that many LDCs in SSA currently find themselves under predatory political governance of this severity and may be able to improve their welfare by “going stateless.”

**Table 3: Somalia and its Cohort: Anarchy, Government, and Development**

	Rank Among 42 SSA Countries		
	2005	1990	1985
Death Rate (per 1,000)	17	37	30
Infant Mortality (per 1,000)	38	32 <sup>b</sup>	31
Life Expectancy (years)	18	37	34
Child Malnutrition (% of children underweight)	20 <sup>a</sup>		
Telephone-Main Lines (per 1,000)	8	29 <sup>d</sup>	33 <sup>b</sup>
Mobile Cellular Phones (per 1,000)	16		
Internet Users (per 1,000)	11		
Households with TV (% households)	27 <sup>c</sup>		
Immunization, DPT (% children 12-23 months)	41	38 <sup>d</sup>	21 <sup>c</sup>
Immunization, Measles (% children 12-23 months)	42	38 <sup>d</sup>	19 <sup>f</sup>
Improved Sanitation Facilities (% of pop. w/ access)	24		
Improved Water Source (% of pop. w/ access)	41		
Tuberculosis (per 100,000)	31	40	

Source: Powell, Ford, and Nowrasteh (2008), *supra* note 5. Data from closest year preceding listed date was used when data was unavailable. The 42 countries included in the full ranking are: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Rep., Chad, Congo, Dem. Rep. of, Congo, Rep. of, Cote d’Ivoire, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea-Bissau, Kenya, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe. Italics indicate a tie for the rank given with at least one other country. a. ranking out of 36; b. ranking out of 41; c. ranking out of 40; d. ranking out of 30; e. ranking out of 37; f. ranking out of 36.

#### IV. ANARCHY AS AN APPLICATION OF THE THEORY OF SECOND BEST

In their seminal article, R.G. Lipsey and Kevin Lancaster outlined what they called “The General Theory of Second Best.”<sup>24</sup> As they developed this idea:

[T]he general theorem for the second best optimum states that if there is introduced into a general equilibrium system a constraint which prevents the attainment of one of the Paretian conditions, the other Paretian conditions, although still attainable, are, in general, no longer desirable. In other words, given that one of the Paretian optimum conditions cannot be fulfilled, than an optimum situation can be achieved only by departing from all other Paretian conditions. The optimum situation finally achieved may be termed a second best optimum because it is achieved subject to a constraint which, by definition, prevents the attainment of a Paretian optimum.<sup>25</sup>

Lipsey and Lancaster’s theory is readily applicable to governance arrangements in the context of economic development. If institutional condition (1) required for ideal political governance—binding constraints on political actors—is not satisfied, the second best can be achieved only by departing from institutional requirements (2)-(4)—government provision of law, enforcement, and public goods. Stated differently, conditional on government being unconstrained if it exists, welfare is maximized if government does not exist.

The reasoning behind the logic of the second best in this context is straightforward. If government is unconstrained, and thus institutional condition (1) is not satisfied, fulfilling conditions (2)-(4) creates predatory political governance. For example, an unconstrained government may use state-supplied law to arbitrarily punish political enemies and reward friends; it may use the state-supplied police to enforce its arbitrary will on citizens and suppress dissenting members of the population; and it may use its power to produce and allocate public goods to further expand its authority, centralize control, and privilege a small minority at the expense of the majority. Indeed, as Coyne, Leeson, and Powell, Ford and Nowrasteh discuss, in countries with unconstrained governments, such as Somalia before its state collapsed, political rulers used precisely these means to exploit their citizens.<sup>26</sup> If institutional condition (1) is

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<sup>24</sup> R.G. Lipsey and Kevin Lancaster, *The General Theory of Second Best*, 24 *Review of Economic Studies* 1 (1956-1957), 11-32.

<sup>25</sup> *Ibid*, p. 11.

<sup>26</sup> Coyne (2006), *supra* note 9; Leeson (2007), *supra* note 5; Powell, Ford, and Nowrasteh (2008), *supra* note 5. For a discussion of anarchy and predation, see Edward Stringham, *Overlapping Jurisdictions, Proprietary Communities, and Competition in the Realm of Law*, 162 *Journal of Institutional and Theoretical Economics* 3 (2006), 516-534 and Peter T. Leeson, *Anarchy*,

unfulfilled, fulfilling conditions (2)-(4) provides unconstrained government the means to prey on the population.

On the other hand, failing to fulfill institutional conditions (2)-(4) required for ideal political governance when institutional condition (1) is unfulfilled produces anarchy. A “government” that does not provide, let alone have a monopoly on the provision of, law, courts, police, or public goods is not a government. Where the state does not perform any of these even most basic functions, there is no state—no agency with a monopoly on the use of force and final arbiter of disputes. The resulting anarchy provides and enforces rules, supplies public goods, and so on through private institutional arrangements, such as those that have emerged to provide private governance in stateless Somalia, in the international arena, and in other formally ungoverned environments past and present.<sup>27</sup> The extent of social cooperation, and thus the level of welfare, enabled through such means is limited compared to that possible under first-best governance (the protective, productive state). However, given that anarchy produces higher welfare than predatory political governance, since not fulfilling institutional conditions (2)-(4) when institutional condition (1) is unfulfilled produces anarchy, and fulfilling conditions (2)-(4) when condition (1) is unfulfilled produces predatory political governance, anarchy is a *second best*.

Note that the fact that the first-best governance arrangement for economic development is a protective, productive state is irrelevant. Such ideal political governance is not part of the opportunity set faced by countries that have not satisfied institutional condition (1)—namely, LDCs on the brink of state failure. Note also that we are not arguing that anarchy-as-a-second best for economic development in LDCs means these countries will perform as well as countries that are able to satisfy institutional conditions (1)-(4) and thus can achieve ideal political governance, the first-best outcome. By definition, they cannot. Anarchy, if it is allowed to emerge, will certainly leave many development obstacles in the countries in which it emerges. However, the relevant basis of comparison is *not* how anarchy will perform in these countries relative to the unattainable first-best outcome of ideal political governance—the comparison many policymakers are tempted to make. The relevant basis of comparison is how anarchy performs relative to the governance alternative actually available to these countries—

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*Monopoly, and Predation*, 163 *Journal of Institutional and Theoretical Economics* 3 (2007), 467-482.

<sup>27</sup> See, for instance, Avinash K. Dixit, *Lawlessness and Economics: Alternative Modes of Governance* (Princeton: Princeton University Press, 2004); Robert C. Ellickson, *Order without Law: How Neighbors Settle Disputes* (Cambridge, MA: Harvard University Press, 1991); and the references at *supra* note 14.



predatory political governance—a comparison in which, as Section III showed, anarchy fares favorably.

## V. CONCLUDING REMARKS

Is anarchy a constrained optimum for LDCs on the brink of government collapse? Because of the international community's efforts aimed at preventing these governments from totally imploding, we only have only one country that, despite such efforts, has operated under statelessness for any period of time. Somalia's comparative experience under predatory political governance and anarchy, however, suggests that it might be. Somalia remains extremely undeveloped, but it is more developed today without government than it was 17 years ago under predatory political governance.

Somalia's experience is suggestive that rather than being the worst of all possible governance options, anarchy may in fact be superior to many failing states' realistic alternative, which is continued predatory political rule. The broad similarity between Sierra Leone's experience under government and Somalia's superior development performance without government suggests that allowing government to crumble and anarchy to emerge in Sierra Leone may actually improve its state of development as well. This possibility appears less incredible when one recognizes that if a government is predatory enough, it can actually depress development below that level attainable without any government at all. If Somalia's experience under predatory government versus anarchy can be at all generalized, a number of other LDCs in SSA may also benefit from embracing anarchy as a constrained optimum.

In thinking about the political economy of LDCs, researchers must be careful to not let the best be the enemy of the good. Although it is difficult to stand by while the state of development remains abysmally low in many parts of the world and allow existing governments to collapse under the weight of their own predation, as Coyne highlights, policymakers must be wary of committing what, in a different context, Harold Demsetz called the "nirvana fallacy."<sup>28</sup> Policymakers must ask themselves if something like what we have called ideal political governance is a realistic option in currently weak and failing states. We have argued that a sober assessment will in many of cases reveal that the answer to this question is no. If this is so, policymakers must ask themselves what the realistic alternatives are. Our analysis suggests there are two: predatory political

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<sup>28</sup> Coyne (2006), *supra* note 9; Harold Demsetz, *Information and Efficiency: Another Viewpoint*, 11 *Journal of Law and Economics* 1 (1969), 1-21.

governance, which means the governments that have ruled weak and failing states up to this point, and anarchy.

The Theory of Second Best as applied to the institutions of economic development suggests that if ideal political governance is unattainable because of constraints that prevent rule-bound, non-predatory government, deviating from the other conditions of ideal political governance, namely state provision of law, enforcement, and public goods, is required to achieve the second-best outcome, which produces anarchy. Our argument does not suggest that any degree of political predation (i.e., the absence of perfectly effective constraints on government) requires the abandonment of government. Not even the most successful developed countries, such as those in North America and Western Europe, satisfy this impossible benchmark. Our analysis focused on the total absence of constraints on government and thus unchecked political predation, which we observe in the poorest parts of the world. When this is the case, government generates more costs for citizens than benefits and the potential for anarchy's relative superiority reemerges. The task then becomes identifying for which specific countries this potential is a reality. At least for the poorest of the LDCs, where government often hangs on only by a thread that is provided by the international community, it seems that such a reality is probable. For these countries, it may make more sense to welcome anarchy than to fear it. If, as our analysis suggests, predatory government is the worst-case governance arrangement, the poorest of the LDCs are already at the bottom of the institutional barrel. Under anarchy, there is nowhere for development to go but up.

## REFERENCES

- Acemoglu, Daron and Simon Johnson, *Unbundling Institutions*, 113 *Journal of Political Economy* 5 (2005).
- Acemoglu, Daron, Simon Johnson, and James Robinson, *The Colonial Origins of Comparative Development: An Empirical Investigation*, 91 *American Economic Review* 5 (2001).
- Acemoglu, Daron, Simon Johnson, and James Robinson, *Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution*, 117 *Quarterly Journal of Economics* 4 (2002).
- Anderson, Terry L. and Peter J. Hill, *The Not So Wild, Wild West* (Stanford: Stanford University Press, 2004).
- Auty, Richard M., *The Political Economy of Resource-Driven Growth*, 46 *European Economic Review* 4-6 (2001).
- Baland, Jean-Marie and Patrick Francois, *Rent-Seeking and Resource Booms*, 61 *Journal of Development Economics* 2 (2000).

- Benson, Bruce L., *The Spontaneous Evolution of Commercial Law*, 55 *Southern Economic Journal* 3 (1989).
- Benson, Bruce L., *The Enterprise of Law: Justice without the State* (CA: Pacific Research Institute, 1990).
- Buchanan, James M., *The Limits of Liberty: Between Anarchy and Leviathan* (Chicago: University of Chicago Press, 1977).
- Buchanan, James M. and Yong Yoon, *The Return of Increasing Returns* (Ann Arbor: University of Michigan, 1994).
- Coyne, Christopher J., *Reconstructing Weak and Failed States: Foreign Intervention and the Nirvana Fallacy*, 2 *Foreign Policy Analysis* (2006).
- CIA, *CIA World Factbook*, available at: <[www.cia.gov/cia/publications/factbook/](http://www.cia.gov/cia/publications/factbook/)>.
- Demsetz, Harold, *Information and Efficiency: Another Viewpoint*, 12 *Journal of Law and Economics* 1 (1969).
- Dixit, Avinash K. *Lawlessness and Economics: Alternative Modes of Governance* (Princeton: Princeton University Press, 2004).
- Easterly, William, *Can Institutions Resolve Ethnic Conflict?*, 49 *Economic Development and Cultural Change* 4 (2001).
- Easterly, William and Ross Levine, *Africa's Growth Tragedy: Policies and Ethnic Divisions*, 112 *Quarterly Journal of Economics* 4 (1997).
- Easton, Steven T. and Michael A. Walker, *Income, Growth, and Economic Freedom*, 87 *American Economic Review* 2 (1997).
- Ellickson, Robert C., *Order without Law: How Neighbors Settle Disputes* (Cambridge, MA: Harvard University Press, 1991).
- Esposito, Alfredo G. and Peter A. Zaleski, *Economic Freedom and the Quality of Life: An Empirical Analysis: An Empirical Analysis*, 10 *Constitutional Political Economy* 2 (1999).
- Friedman, David, *Private Creation and Enforcement of Law: A Historical Case*, 8 *Journal of Legal Studies* 2 (1979).
- Foreign Policy/Fund for Peace, *Failed States Index*, available at: <[www.fundforpeace.org](http://www.fundforpeace.org) and <http://foreignpolicy.com>>.
- Hall, Robert and Charles Jones, *Why Do Some Countries Produce So Much More Output Per Worker than Others?*, 114 *Quarterly Journal of Economics* 1 (1999).
- Hanke, Steve H. and Stephen J.K. Walters, *Economic Freedom, Prosperity, and Equality: A Survey*, 17 *Cato Journal* 2 (1997).
- Hayek, Friedrich A., *The Use of Knowledge in Society*, 35 *American Economic Review* 1 (1945).
- Hobbes, Thomas, *Leviathan* (Oxford: Blackwell, 1955).
- Leeson, Peter T., *Better Off Stateless: Somalia Before and After Government Collapse*, 35 *Journal of Comparative Economics* 4 (2007).

- Leeson, Peter T., *Efficient Anarchy*, 130 *Public Choice* 1-2 (2007).
- Leeson, Peter T., *Anarchy, Monopoly, and Predation*, 163 *Journal of Institutional and Theoretical Economics* 3 (2007).
- Leeson, Peter T., *An-arrgh-chy: The Law and Economics of Pirate Organization*, 115 *Journal of Political Economy* 6 (2007).
- Leeson, Peter T., *Trading with Bandits*, 50 *Journal of Law and Economics* 2 (2007).
- Leeson, Peter T., *Social Distance and Self-Enforcing Exchange*, 37 *Journal of Legal Studies* 1 (2008).
- Leeson, Peter T., *How Important is State Enforcement for Trade?*, 10 *American Law and Economics Review* 1 (2008).
- Leeson, Peter T., *The Laws of Lawlessness*, 38 *Journal of Legal Studies* 2 (2009).
- Leeson, Peter T. and Peter J. Boettke, *Two-Tiered Entrepreneurship and Economic Development*, 29 *International Review of Law and Economics* 3 (2009).
- Lipsey, R.G. and Kevin Lancaster, *The General Theory of Second Best*, 24 *Review of Economic Studies* 1 (1956-1957).
- Little, Peter D., *Somalia: Economy without State* (Bloomington, IN: Indiana University Press, 2003).
- Madison, James, Alexander Hamilton, and John Jay, *The Federalist Papers* (London: Penguin, 1987).
- Mehlum, Halvor, Karl Moene, and Ragnar Torvik, *Institutions and the Resource Curse*, 116 *Economic Journal* 1 (2006).
- Moselle, Boaz and Benjamin Polak, *A Model of a Predatory State*, 17 *Journal of Law, Economics and Organization* 1 (2001).
- Nelson, Michael A. and Ram D. Singh, *Democracy, Economic Freedom, Fiscal Policy and Growth in LDCs: A Fresh Look*, 46 *Economic Development and Cultural Change* 4 (1998).
- Nenova, Tatiana, *Private Sector Response to the Absence of Government Institutions in Somalia* (Washington, D.C.: The World Bank, 1994).
- Nenova, Tatiana and Tim Harford, *Anarchy and Invention: How Does Somalia Cope without Government?*, *Public Policy for the Private Sector Note No. 280* (November 2004).
- North, Douglass C., *Institutions, Institutional Change and Economic Performance* (Cambridge, UK: Cambridge University Press, 1990).
- North, Douglass C., John Joseph Wallis, and Barry R. Weingast, *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded History* (Cambridge, UK: Cambridge University Press, 2009).
- Norton, Seth W., *Poverty, Property Rights, and Human Well-Being: A Cross-National Study*, 18 *Cato Journal* 2 (1998).

- Pierson, Paul, *The Limits of Design: Explaining Institutional Origins and Change*, 13 *Governance* 4 (2000).
- Pierson, Paul, *Increasing Returns, Path Dependence and the Study of Politics*, 94 *American Political Science Review* 2 (2000).
- Powell, Benjamin, Ryan Ford, and Alex Nowrasteh, *Somalia After State Collapse: Chaos or Improvement?*, 67 *Journal of Economic Behavior and Organization* 3-4 (2008).
- Powell, Benjamin and Edward Stringham, *Public Choice and the Economic Analysis of Anarchy: A Survey*, *Public Choice* (forthcoming, 2009).
- Powell, Benjamin and Bart J. Wilson, *An Experimental Investigation of Hobbesian Jungles*, 66 *Journal of Economic Behavior and Organization* 3-4 (2008).
- Robinson, James A., Ragner Torvik, and Thierry Verdier, *Political Foundations of the Resource Curse*, 79 *Journal of Development Economics* 2 (2006).
- Rodrik, Dani, *Second-Best Institutions*, 98 *American Economic Review* 2 (2008).
- Rodrik, Dani, Arvind Subramanian, and Francesco Trebbi, *Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development*, 9 *Journal of Economic Growth* 2 (2004).
- Scully, Gerald, *The Institutional Framework and Economic Development*, 96 *Journal of Political Economy* 3 (1988).
- Stringham, Edward, *Overlapping Jurisdictions, Proprietary Communities, and Competition in the Realm of Law*, 162 *Journal of Institutional and Theoretical Economics* 3 (2006).
- Torvik, Ragnar, *Natural Resources, Rent Seeking, and Welfare*, 67 *Journal of Development Economics* 2 (2002).
- Tures, John A., *Economic Freedom and Conflict Reduction: Evidence from the 1970s, 1980s, and 1990s*, 22 *Cato Journal* 2 (2003).
- UNDP, *Human Development Report 1999* (New York: Oxford University Press, 1999).
- UNDP, *Human Development Report 2001-Somalia* (New York: UNDP, 2001).
- UNDP, *Human Development Report 2004* (New York: Oxford University Press, 2004).
- UNDP, *Human Development Report 2005* (New York: UNDP, 2005).
- UNDP, *Human Development Report 2006* (New York: UNDP, 2006).
- UNDP and World Bank, *Socio-Economic Survey 2002-Somalia* (Washington, D.C./New York: UNDP and World Bank, 2003).
- Weingast, Barry R., *The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development*, 11 *Journal of Law, Economics and Organization* 1 (1995).
- WHO, *WHO Mortality Database*, available at:  
<[www3.who.int/whosis/menu.cfm?path=whosis,mort](http://www3.who.int/whosis/menu.cfm?path=whosis,mort)>.

- WHO, *WHO Somalia Annual Report 2003* (Somalia: WHO, 2004).
- Wick, Katharina and Erwin Bulte, *Contesting Resources—Rent-Seeking, Conflict and the Natural Resource Curse*, 128 *Public Choice* 3 (2006).
- Williamson, Claudia R., *Informal Institutions Rule: Institutional Arrangements and Economic Performance*, 139 *Public Choice* 3-4 (2009).
- Williamson, Claudia R. and Carrie B. Kerekes, *Unveiling de Soto's Mystery: Property Rights, Capital Formation, and Economic Development*, 4 *Journal of Institutional Economics* 3 (2008).
- World Bank, *World Development Indicators Online* (2005).