Volume Title: Innovation Policy and the Economy, Volume 11

Volume Author/Editor: Josh Lerner and Scott Stern, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-47338-4

Volume URL: http://www.nber.org/books/lern10-1

Conference Date: April 20, 2010

Publication Date: March 2011

Chapter Title: Innovations in Governance

Chapter Author: Raymond Fisman, Eric Werker

Chapter URL: http://www.nber.org/chapters/c12045

Chapter pages in book: (p. 79 - 102)

4

Innovations in Governance

Raymond Fisman, *Columbia Business School and NBER*
Eric Werker, *Harvard Business School*

Executive Summary

In this paper we explore the innovations in governance that have promoted investment and growth. Some policy makers have tinkered with their country's institutions, some have undertaken wholesale changes, and others have attempted to influence the rules in other countries. We survey past attempts at governance innovation, from private governance in India's industrial cities to cross-border government efforts, such as Singapore's Suzhou Park outside of Shanghai, from norm-changing mimes in Bogota to rule of law–enforcing anticorruption authorities in Hong Kong. From these recent experiences, we try to extract a few key principles that characterize governance innovations that encourage investment and growth. These include competition, which puts pressure on policy makers to improve institutions; information, which provides necessary knowledge to citizens that can help them push for improved governance; trade in institutions, which allows effective institutions to move across borders; and shifting culture, that is, the jolting of norms to be rule compliant. Finally, we use these principles combined with historical precedent to describe the potential consequences of some recent proposals for governance innovation.

Innovation is usually framed in terms of paradigm-shifting scientific discoveries and technological applications. Indeed, in a world with scarce resources, it is also critical to staying one step ahead of diminishing returns in boosting incomes and human welfare (Romer 1990). Yet much of the world is so far from any technological frontier that income gains for most are driven by accumulation of capital (both human and physical) rather than pioneering inventions (Mankiw, Romer, and Weil 1992).

This then poses the question why some nations accumulate capital whereas others remain mired in poverty. The proximate answer is that some countries have better rules—the norms and laws that govern how people interact—for promoting investment and growth. Of course, there are many rules that achieve this same end. Commercial agreements may

978-0-226-47337-6/2011/2011-0004$10.00

be enforced through social sanction or court of law. Laws may be followed for fear of prison time or because of norms of behavior. Unless a society develops rules that promote contract enforcement and rule of law, people will not invest, fearing theft or destruction of the fruits of their labor; economic stagnation ensues.

In this paper we explore the innovations that have been adopted to promote investment and growth. Some policy makers have tinkered with their country's institutions, some have undertaken wholesale changes, and others have attempted to influence the rules in other countries. While our survey of noteworthy innovations in governance is drawn from disparate countries with varying circumstances, we attempt to synthesize their lessons into a set of consistent advice. Governments can encourage capital accumulation and growth by developing policies that adhere to a common set of principles: competitive pressures, free flow of information, trade in ideas and technologies, and a focus on shifting norms and culture.

These elements to governance reform partly correspond to the conditions required for the efficient functioning of goods markets. Just as competition crowds out monopoly rents in goods markets, competition across jurisdictions prevents leaders from extracting political rents. Information allows the citizenry to make better-informed choices among leaders and rules and to apply pressure when they learn of underperformance. Trade facilitates learning across countries and also may permit countries to trade governance technologies according to comparative advantage. And norms that deter opportunism may prevent corruption in governing institutions, just as such norms prevent unraveling in markets with asymmetric information. How much do the institutions that define the rules and norms governing economic behavior matter? In figure 1 we present the correlations among various measures of effective contract enforcement and income per capita, using data from the World Bank's *Doing Business* report 2009. Across a range of indicators, there is a clear positive relationship between institutional quality and income, a fact that has been noted by numerous scholars (Barro 1991; Acemoglu, Johnson, and Robinson 2001). Producing wealth for the population, then, appears to be highly correlated with improvements in the "technology" of governance.

But why does the United States, for example, have economic institutions that promote investment and growth, whereas in sub-Saharan Africa corruption and weak governance are widespread? And how have the Asian Tigers managed to join the club of wealthy nations in a few short decades whereas the once-wealthy economies of Latin America have stagnated for nearly a century?

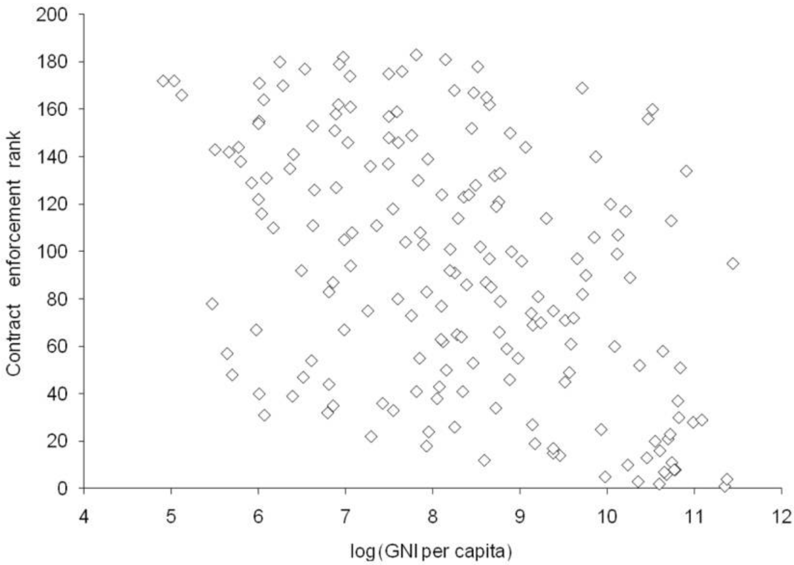

Fig. 1. Income per capita and contract enforcement

We will not delve into the morass of history to try to answer these enormous and profound questions, which have occupied many lifetimes of research in economics and political science. These transformations have had many interlinked components involving not only the technology of governance but also the nitty-gritty of building political coalitions to implement sometimes unpopular reforms. Rather than trying to understand these complex, macroeconomic reforms, we will take a concentrated look at the technology of governance innovations of recent history.

We begin by surveying recent cases in governance innovation that have been used to change the rules of economic transactions. These range from a very light touch, such as aid conditionality programs, to the heavy hand of military invasion. They span reforms including private governance in India's industrial cities and cross-border government efforts, such as Singapore's Suzhou Park outside of Shanghai, norm-changing mimes in Bogota, and rule of law–enforcing anticorruption authorities in Hong Kong.

From these recent experiences, we try to extract a few key principles that characterize growth-enhancing governance innovations. These include competition, which puts pressure on policy makers to improve institutions; information, which provides necessary knowledge to citizens that can help them push for desired changes in governance; trade in institutions, which allows institutions shown to promote growth in one locale to move across borders; and shifting culture, that is, the jolting of norms to be rule compliant.

Finally, we will use these principles—combined with historical precedent—to describe the consequences of some recent proposals for governance innovation. These include our own proposal of private government, special governance zones (S. J. Wei), and charter cities (Paul Romer).

I. Innovation in Rules

One natural starting point in trying to understand where growth-enhancing rules come from is to look at the United States or Denmark and describe how its business environment facilitates capital accumulation and innovation. At any point in its history one will find a host of legislative acts, court judgments, and business-government meetings that reinforce the country's commitment to capitalism. In turn, entrepreneurs, consumers, lawmakers, and lobbyists all share the view that there are a set of rules to govern commercial activity, that other actors in the economy have a similar interpretation of how those rules work, and that the rules will be enforced.

However, policy makers in countries struggling to create an environment conducive to capital accumulation, or institution builders employed by outsiders who are attempting to turn fragile states into stable members of the international order, will want more than a description of successful capitalist states. They will want implementable policies, specific in nature, that can be applied to their situations. This may be based on precedent: a comparable country facing similar circumstances that employed interventions that were successful in improving the rules that govern productive activity. Potentially more important, we would argue, is experimentation with new, potentially replicable, innovations that are well designed to address the peculiar circumstances of weak states.

II. Growth-Enhancing Governance Innovations

We begin by describing a range of innovations that, when successfully applied, have appeared to lead to an increase in capital accumulation and wealth. Most of these policies are incremental improvements that can be employed even as the background institutions remain significantly flawed; some are wholesale changes that spur a complete rebuilding of those institutions.

A. *Working within the System*

These incremental innovations can be divided into five broad areas: auditing, ring-fencing, norm-based change, media pressure, and outsourcing.

1. *Auditing*. Sometimes countries are endowed with a set of laws that, in theory, promote economic activity. However, in practice those laws may be consistently violated by businessmen exploiting weak enforcement and by politicians or bureaucrats taking advantage of opportunities for personal enrichment. One method for improving the enforcement of rules that are frequently ignored is to install a high-powered auditor. This auditor may be focused on everything from tax compliance to reducing bribe taking by government officials. The International Monetary Fund (IMF), for example, has put a focus on large taxpayer units that are split off from the rest of the revenue authority—with separate incentives and control structures—with the mission of extracting payment from a relatively small number of high-income individuals or organizations (see Baer, Benon, and Toro [2002] for an overview).

Separate anticorruption enforcement authorities—aiming to crack down on lawbreakers within government—have their modern precedent in Hong Kong's Independent Commission against Corruption (ICAC), which was put in place in 1974, when Hong Kong reputedly had a level of corruption comparable to that of mainland China. The ICAC was independent, reported directly to the governor-general of Hong Kong, recruited employees from the civilian population (rather than the police), and paid relatively high salaries (see Manion [2004] for details). The transformation brought about by the ICAC was remarkable: Hong Kong now ranks twelfth in Transparency International's corruption perceptions index (CPI), just behind Norway, and seven spots ahead of the United States. Its model has been widely copied, replicated in large part in countries such as Kenya, Nigeria, and Sierra Leone (Heilbrunn 2004), but without the same degree of success.

In Kenya, the government of Mwai Kibaki came to power in 2002 on an anticorruption platform, appointing muckraking journalist John Githongo as anticorruption czar. Soon, however, Githongo found himself investigating senior members of the new regime and was forced into exile in 2005 (see Wrong [2009] for details). In the case of Nigeria, anticorruption efforts were implemented under retired general Olusegun Obasanjo, who came to power in 1999, through two entities: the

Independent Corrupt Practices Commission in 2000 and the Economic and Financial Crimes Commission (EFCC) in 2003. There have been some indications of improved enforcement, in particular, the prosecution of a number of high-profile politicians and businessmen. However, the country remains near the bottom of Transparency's corruption rankings, and by all accounts the 2007 election of Umara Yar'Adua was tainted by fraud. The celebrated first head of the EFCC, Nuhu Ribadu, was mysteriously sent for a reeducation course in Plateau State in late 2007 and removed from his post.

We would argue that this relative lack of success is hardly surprising and owes in large part to Hong Kong's unique governance relative to weak African states. Even independent enforcement agencies ultimately report to a higher authority, and the powers delegated to them—as within any hierarchy—are merely on loan (Aghion and Tirole 1997). (In the case of Nigeria's EFCC, the president has the legal right to remove the head of the EFCC without further check.) So the interests and objectives of the country's leader are critical. Hong Kong's governor-general reported to the prime minister of England, a well-monitored leader in a well-governed state. Hence the effectiveness of the independent authority is ultimately limited by leaders' commitment to reform.

2. *Ring-fencing*. While a critical challenge in countries such as Nigeria and Kenya may have been enforcement of existing rules, in others the rules themselves have been primarily to blame. As market inefficiencies have been institutionalized, for example, in Communist or closed-door economies, powerful business groups or political coalitions arise that oppose the legislation and enforcement of rules that may erode their advantage, even if the new rules would benefit the economy at large. In these countries, red tape is not just a hassle for all firms; it may exist precisely to protect incumbent firms from competition, hurting the potential growth of the industry. Commercial courts are ineffective not only because of the backlog of cases but because political stalemates have prevented legal reform. In these countries, getting all the laws changed to make a difference in the business environment may be beyond the power or political interests of any government.

A second-best option to a countrywide change in the rules can be ring-fencing a small part of the country and granting it a unique set of rules that are more friendly to capital accumulation. These ring fences go under different names such as special economic zones (SEZs) or export processing zones and have varying attributes—ranging from industrial production zones to semi-autonomous regions. These economic zones all provide a geographically limited area with outward orientation, exposing the economy to global market pressures, and also the infrastructure—both physical and institutional—to encourage efficient production.

The most prominent examples of SEZs are those established as part of the broader efforts of Deng Xiaoping to bring about economic (but not political) reform in China. Under Deng, coastal areas of southern China were developed as separate entities, granted province-level authority with economic agendas independent of national planning. SEZs were given economic freedoms that were unavailable elsewhere: marginal property rights, tax incentives for foreign investment, and financial incentives for establishing Sino-foreign joint ventures and partnerships. In Shenzhen, the first and fastest-growing of China's SEZs, GDP grew at an average annual rate of 26% from 1980 to 2007. Moreover, much of this growth was the consequence of foreign capital: in 2006, US$3.3 billion of foreign capital flowed through Shenzhen, including investment from 141 of the world's top 500 multinational companies (Guo and Feng 2007).

As with the independent auditors described above, these efforts also hinge on a commitment to noninterference by higher powers. Chinese SEZs were still under the ultimate jurisdiction of the central party bureaucracy, but one that has shown a commitment to experimenting with economic reforms (see Khanna [2009] for a description of the Chinese authorities' commitment to policy experimentation). So SEZs are surely subject to the same conditions of noninterference as the independent enforcement bodies we described previously.

3. *Norm-based change*. Legal enforcement, whether through auditing or ring-fencing, is a means of improving the efficacy of laws and enforcement of contracts through formal institutions. The same ends may be achieved by changing norms of behavior around governance: if businessmen, consumers, and politicians expect laws to be upheld and contracts to be adhered to—as in the United States or Denmark—then those laws and contracts are much easier to enforce. If, however, rules are seen as barriers to be overcome and contracts are seen as mere suggestions, then improvements in governance can be made by altering economic actors' expectations of rules and their role. (It is worth noting, as well, that local enforcement institutions will be staffed by those steeped in the local culture, so norm-based change may actually be complementary to the governance innovations described above.)

Yet it is an enormous challenge to switch from a weak rule of law "equilibrium" to one of strong legal compliance. If others take or pay bribes, it lowers the cost of bribe paying (in terms of both probability of detection and social sanction), making gradual change difficult. We have few success stories of cultural transformation to point to.

One striking example occurred in the mid-1990s in Bogota, Colombia, under the leadership of Mayor Antanas Mockus. Mockus came into office with a 70% vote share and used his mandate to implement a range of "cultural" reforms in the city. He is best known for one of his first acts as mayor, stationing mimes on busy street corners. The mimes did not carry guns, nor could they issue tickets. They laid down the law using methods that are traditional to the vocation of the mime but not usually associated with policing (or at least good policing): mimicry and ridicule. Later interventions included the distribution of cards with a thumbs-down printed on them. Concerned citizens could flash the card, soccer referee style, at jaywalkers or other lawbreakers (and conversely flash a thumbs-up in response to positive acts of citizenship).

Mockus emphasized the importance of cultural change as a necessary complement to reforming formal institutions: it is hard to uphold the law with enforcers that are immersed in a lawbreaking culture. He further understood the critical element of public display and participation in effecting large-scale social change. If culture is indeed an equilibrium phenomenon, then it is crucial that all are aware of the changes afoot and, furthermore, that everyone know that everyone else is changing at the same time. (Mockus's 70% vote share was also surely critical, as the citizenry all knew that there was a mandate for change.)

4. *Media pressure*. Complementing each of the above approaches, a free and active press can bolster efforts for legal change, legal enforcement, and also changing norms. A compelling illustration of the effectiveness of information provision comes from Reinikka and Svensson (2006), who study the impact of revealing the leakage of school funds in Uganda. As part of a World Bank Public Expenditure Tracking Survey, they compared the school funds transferred by the central government to those received by schools in a survey conducted in 1995. The median leakage rate was 100% and the mean over 80%. They carried out a follow-up survey in 2001, after the fund leakage problem had seen extensive coverage in Ugandan newspapers. In this second wave, the average leakage rate had declined to about 20% (with the greatest reductions seen in areas with high newspaper penetration rates).

Of course, if the media themselves are owned by the state, the scope for pressure to effect change is limited (except in the cases in which the government has actively chosen to reform itself). As Djankov et al. (2003) note, government media monopolies are very common: in their sample of 97 countries, 60% of television stations are state owned and over 70% of radio networks. Further, knowledge of a problem may be necessary but not sufficient for reform: rules that allow popular sentiment to bring about change, like democratic elections, are a necessary complement to media exposure.

5. *Outsourcing*. Auditing can work only if the auditors cannot be corrupted, ring-fencing can help only certain sectors of the economy, and norm-changing and media pressure can effect change only beyond a certain tipping point of popular support. When a country may not have the capacity to establish a corruption czar and when it lacks a free press (or its journalists are themselves corrupted), it can still access technology to improve the enforcement of rules. Governments have often outsourced functions of government that are particularly tricky to carry out. Particularly in recent years, this outsourcing has gone to international private firms.

These private firms "export" their reputations, governance, and controls to weak states or institutions, which may borrow effective enforcement and potentially reform their own local institutions in the process. One British company, Crown Agents, has taken over the customs—a branch of government often prone to corruption—in several notoriously corrupt countries, including Angola, Bulgaria, Latvia, and Mozambique. The company took over Mozambican customs in 1996, and one of the authors of this article had the opportunity to spend some time in that country in 1999. At that point, customs reform was seen as a qualified success: British legal compliance had reduced corruption through a combination of better control mechanisms, higher salaries, and punishment for violations. But the price was high: the cost of compliance was borne disproportionately by smaller businesses because of the fixed costs of navigating the new bureaucracy. (And in general, it is worth keeping in mind that effective enforcement sometimes feels like a million dollar safe built to protect a thousand dollar necklace.)

The customs were handed back to domestic control in 2006. One recent study (Mosse 2007) suggests that the reforms continue to have a lasting effect, despite the removal of direct Crown Agent involvement, as a decade of Crown control had established rules and norms that were hard to undo. Some discussions of Crown Agent reform of customs in Angola draw similar conclusions (Maurer and Mitchener 2008). However, it seems that the Bulgarian reform has been less successful in generating lasting normative change. The new head of the Bulgarian Customs Agency, Vanyo Tanov, reported to local media in late 2009 that contraband still constitutes 30%–40% of Bulgarian imports, and a December

2009 Eurobarometer survey indicated that more Bulgarian citizens still believe that corruption is more widespread in customs than in any other government agency.

Customs is hardly the only example of a function vulnerable to corruption. During the civil war in Liberia, timber revenue was used to buy arms, fueling the conflict (Global Witness 2002). In order to lift a United Nations embargo on timber exports, the postwar government enacted wide-reaching reforms to the forestry sector to bring transparency and oversight to the once-lawless activity. Competitive bidding processes, capital requirements, community rights, and model contracts were all introduced by the government of Liberia. However, policy makers knew that laws on the books would not ensure compliance. Liberia's vast and unpopulated forests could not be monitored and patrolled by a new government whose total revenue was only $80 million.

A creative solution was found by cooperating with the Swiss inspection and verification firm Societe Generale de Surveillance (SGS). Partnering with Liberia's governmental forestry agency, SGS monitors and tags every log exported from Liberia's forests and audits all financial payments between a logging concessionaire and the government. To practice sustainable logging in the tropics, only trees of a certain diameter can be legally felled, and once an area has been logged, sufficient time must be allowed for regrowth. SGS's tagging enforces the minimum diameter, and the plot auditing ensures that the foresters do not extract more wood than is physically possible from their concession (i.e., by logging unapproved areas). The company is funded with a stumpage fee on the harvested wood. Policy makers and donors are hopeful that this outsourcing of governance will save the forestry sector from itself, protecting the ecosystem and limiting the ability of this normally Wild West activity from subverting the peace-building and corruption-reducing efforts of the government.

B. Working from outside the System

We next describe incremental innovations in rules brought about by those who are not part of the government in question. Many times governments themselves resist innovation in governance, instead preferring to profit from the ambiguities around rules of business and their enforcement. Other times reformers within governments can utilize outside pressures to achieve change. Two different technologies of governance reform by outside actors include aid conditionality and international competition.

1. *Aid conditionality*. One modality of changing the rules of a country to make them more conducive to economic exchange is through financial encouragement to the country's government. Not only has foreign aid been used to fund projects with positive expected economic rates of return, such as ports, or humanitarian programs such as earthquake relief. It has also been used to provide incentives to governments to change their macroeconomic management as well as their laws governing the business environment. The donor country conditions an aid or loan package on either the recipient government's completion of a reform or the donor funds activities in the reform directly.

The best-known aid conditionality programs are the structural adjustment policies implemented by the World Bank and the IMF following the debt crises of the 1970s. The bank or the IMF would loan the recipient country sufficient funds to avoid a fiscal crisis in exchange for the country undertaking broad-reaching market reforms, including reducing the deficit, maintaining low inflation, and privatizing state-owned enterprises. The empirical evidence on the success of these policies is mixed, but the idea of conditioning assistance on the basis of policy changes to the business environment remains popular. Today, aid agencies regularly fund regulatory reforms in the financial sector or judicial reforms to make, for example, commercial courts run more smoothly.

2. *International competition*. International influence does not have to act through the checkbook alone. A recent surge in the measurement and publication of various indicators has resulted in a competition of sorts among countries for their international ranking along a particular dimension. With respect to the rules surrounding the accumulation of capital, the most publicized set of indicators is the World Bank's *Doing Business* report. The index is based on the study of laws and regulations, with the input and verification by more than 5,000 government officials, lawyers, business consultants, accountants, and other professionals who routinely advise on or administer legal and regulatory requirements. Many countries see their ranking on the report as a tool in attracting foreign investment and have task forces set up inside the government to implement the specific reforms that will improve the government's ranking. Those reforms, as figure 1 suggests, should result in an improved environment for economic growth.

Of course, as with any performance metric, *Doing Business* rankings are subject to "teaching to the test": countries may choose to focus on specific elements of reform that boost their rankings. Further, the reports have been criticized for promoting a "Washington consensus" view of good rules—flexible labor markets, ease of business entry—when in fact it may be optimal to constrain some aspects of laissez-faire capitalism. This may be true in general; however, we would argue that for many of the developing countries populating the lower rankings of the reports, government bureaucracies have erred much too far on the side of regulation, and public disclosure may be useful in pushing toward streamlining and loosening these rules-based constraints on economic activity.

C. *Wholesale Change*

Would-be reformers have not traditionally been limited to incremental innovations in governance. As the striking example of North and South Korea shows, two countries with similar preconditions yet dramatically different rules that govern commerce can quickly diverge paths of capital accumulation. In this subsection we discuss one example of reformers from the inside orchestrating a complete turnaround in the rules that promote investment and growth and compare this to cases in which reformers from the outside have attempted to change the rules.

Long before its accession to the European Union in 2007, Estonia's economic reform progressed more smoothly than most of its former Soviet compatriots. Despite emerging from Soviet control as one of the poorest and least self-sufficient former Soviet Union countries, Estonia adopted aggressive market-friendly reforms and, perhaps not coincidentally, grew more rapidly than the others. In its first appearance in the 1998 Transparency International CPI rankings, Estonia ranked twenty-sixth out of 85, far above other former Soviet countries and outranking EU member states Belgium and Italy. In 2008, Estonia ranked seventeenth in the World Bank's *Doing Business* report and twelfth out of 162 countries in the Index of Economic Freedom. More importantly, GDP per capita grew from 27% of the EU-15 average in 1993 to 61% in 2008.

The nation's first prime minister, Mart Laar, cites decisiveness and unity in applying the mandate for reform as the key elements to a successful implementation of wholesale economic reform. His coalition party, the Pro Patria Union, had a scant one-vote majority in the Riigikogu and faced a vociferous antireform opposition. This combination of circumstances led Laar to assume an almost dictatorial approach: his party needed to use its majority unilaterally and entirely. Of course, this only poses the question why some countries get leaders hell-bent on changing economic rules whereas others are saddled with corrupt dictators. Unfortunately, "wait for a benign dictator" is not an effective policy prescription for governance innovation, but the case of Estonia at least serves as an example that such large-scale change of economic institutions is possible.

Some caution is in order in making broad statements about the potential for wholesale reform based on Estonia's experiences. In Estonia, reform-coalition unity was supported by a popular backlash against the country's communist past. As Laar repeatedly recounts, if coalition members wavered or citizens protested, they could be placated by reminders that economic and political liberalization was the only way to extricate Estonia from Soviet-era poverty.

Volition matters. A government with a broad mandate for wholesale reform also has a much easier time of changing the rules for productive activity than an outside force. When the United States invaded Iraq in 2003, by removing the dictatorial Baath Party from power, it deconstructed many of the key economic relationships in the state, giving way to an unstable political system stricken by ethnic and religious sects with vastly conflicting agendas. American efforts to craft a market democracy against this unfavorable backdrop have had limited success. In 2010, as the United States begins to withdraw its troops, sectarian conflict still impedes the ability of the constituted government to legislate and enforce lasting economic and political reform. Iraq is ranked fifth-worst in corruption perception in the 2009 Transparency International CPI, tax revenues are negligible, and despite oil-led GDP growth, oil production remains below preinvasion levels. Although the U.S. invasion nominally moved Iraq toward democratic rule, by many measures of productivity Iraq was faring better as a dictatorship.

In Iraq, the nature of an externally led innovation and the lack of a unified mandate for change made implementation of wholesale reform a far more complex and volatile process than it was in Estonia. As an external force, the United States was at a disadvantage in gauging the reluctance of Iraqis to unify in reform. Moreover, the brutal and messy U.S. invasion made the mandate for change even more tenuous, as the atrocities of wartime made Iraqis wary of U.S.-led reform during times of relative peace.

This is not to say that invasion cannot rewrite the rules of a country and set it on a more productive path. Prussia's humiliating military defeats to Napoleonic France at Jena and Auerstedt and subsequent loss of territory in 1806 exposed the backwardness of the nation's army and state. In response, Prussia emulated many of the reforms of Napoleon, most significantly the emancipation of serfs and land redistribution, rapidly embarking on a path to political and economic modernization. By the time the Napoleonic Empire fell in 1815, Prussia was considered to be the dominant economic and military force in central Europe. When Commodore Matthew Perry of the U.S. Navy sailed into Tokyo Harbor in 1853, he confronted a largely closed and traditional economy. Perry demanded that Japan open its ports to American trade, and while the Japanese initially refused, they saw the writing on the wall. The initial treaties they signed, on disadvantaged terms, were accompanied by intense efforts to reform the government and the economy so as to better compete in the new world order of the late nineteenth century. These changes were carefully crafted by surveying the global landscape and choosing the best and most appropriate institutions for Japan. The so-called Meiji Restoration saw massive productivity increases in a relatively short amount of time and an explosion in Japanese capacity. Indeed, by the early 1900s, Japan had fought and won wars against the two great powers in its neighborhood. Without the threat of outside invasion, Japan in 1905 probably would have looked much like it did 1853.

III. Lessons in Innovation Policy

Thus far, we have given an overview of why rules matter for economic growth, as well as some innovations that have allowed reformers to change the rules. In this section we attempt to extract some of the key principles that resonate across various innovations in governance. Interestingly, comparable principles are often at work in other processes of innovation, from technology development to managerial efficiency.

1. *Competition*. Innovation, as seen through a Schumpeterian lens, views competition with some hesitancy. Monopolistic firms enjoy all the fruits of their innovations and so may have more incentive to innovate; yet competing for market share may be what pushes firms to remain at the technological frontier rather than leading a quiet life. (Schumpeter in fact saw big business as the source of technological innovation, in stark contrast to commonly held views today.) In nearly all the examples of growth-promoting innovations in governance that we have identified, however, competition has been a central feature. It may be the case that innovation in governance can be optimized in situations in which the innovator faces limited competition, such as in China or even Estonia. Yet even in these special cases, innovation may have been a response to forward-looking actors who saw political upheaval on the horizon if action was not taken (analogous to a contestable markets view). Further, the innovations that have emerged created additional competition among economic actors: the innovation process itself seems best stimulated through competition.

This may be most blatant in international "competitions" such as the ranking in the World Bank's *Doing Business* report. One of the authors was present, along with a half dozen cabinet members from a national government, in a choreographed videoconference among officials from the world's "top reformers." Each participating country had put together a task force designed to move it up the rankings, with all sides eagerly awaiting the news on how many spots they had gained. On a more nuanced level, many of the other innovations in governance also result from the principle of competition.

When China created SEZs, it set up two new competitions. The first was between regular jurisdictions and the SEZs. Since firms flocked to the SEZs in order to benefit from workable regulations and reliable infrastructure (not to mention political rules of access), other jurisdictions faced competitive pressure to clean up their regulatory environment and fix their infrastructure in order to serve the firms that could choose between the two options. The second competition was between China and other low-cost producing nations such as Mexico. The Chinese SEZs were set up to attract multinational exporters, who would be sure to let the Chinese officials know what kinds of institutions and rules they would require to set up shop and maintain their presence in China.

Outsourcing government functions also generates competitive forces. For the functions that remain in government, new management techniques are introduced, and pressure is brought on bureaucrats to maintain efficiency lest they be outsourced themselves. Even something so command-and-control as high-powered auditing also stimulates competition—not within government, but within the private sector. Companies that may have been able to bribe to keep their market share are forced instead to innovate.

The preceding discussion highlights the central role of free choice, by capital and labor in particular, in allowing competition to bring about change. More broadly, there is a set of preconditions analogous to those that lead to growth-enhancing outcomes as a result of competition in product markets that we expect are crucial to the effectiveness of competition in improving governance. Negative externalities—in terms of a "race to the bottom" in the choice of rules—may interfere with this channel, as well as the absence of information needed to exercise free choice.

2. *Information*. The generation and dissemination of information is a broader theme in the governance innovations we describe above and generally serves as a complement to competitive pressures. This is true in the case of interjurisdictional competition, where products such as the *Doing Business* reports provide information to capitalists on where

they are likely to earn high returns. But it also potentially plays an important role in political competition by highlighting shortcomings in bureaucrats' performance. And perhaps one broader lesson from the set of examples we describe is the critical importance of generating relatively straightforward, evocative numbers that can be held up as benchmarks and figures that may be compared across regions or countries. While there are successful examples of this across countries, fewer examples exist of within-country benchmarking exercises, which may have an even greater potential to effect change because of the relatively easy mobility of resources across subnational borders.

Information-stimulating innovations in governance that emerge from within countries have often been of an ad hoc nature. Media monitoring and pressure rely on journalists and editors to uncover and expose governance failures. High-powered auditing relies on individual technocrats and their teams to uncover violations. Even as these information-focused modes of innovation are relatively ad hoc, they nonetheless offer a powerful and flexible algorithm for changing governance.

3. *Trade*. Just as with product markets, some governance markets may produce successful innovations whereas others may be too poorly endowed with resources to generate effective products. For example, aided by its small size and strategic location, Singapore was able to develop from a swampy backwater to one of the most sophisticated governance zones in the world. Its location enabled the country to function as an entrepôt, and Singapore grew by attracting international firms to engage in assembly and trade, benefiting from huge infrastructure investments. With the size of a city-state, Singaporean leadership built support for the vision of growth and redirected the population's savings toward sustaining the model. Along the way, Singapore created a host of innovations in governance that had little chance of emerging elsewhere.

While few other places might have developed as Singapore did, its lessons and expertise might still be useful to other regions; in fact we return to the case of Singapore's governance export of Suzhou below. There is no reason for every nation to invent, or even produce, the microchip. Why should governance be any different?

Indeed, Crown Agents and SGS take their expertise from around the world and bring it to countries that have not proven themselves effective at collecting revenue or monitoring the rain forest. If these firms have a comparative advantage, innovators in governance should realize that and modify the rules so as to benefit from the innovations of others.

4. *Equilibrium*. Natural scientists speak of positive and negative feedback loops. Positive feedback arises when a small change to the system

results in its moving away from where it started. For example, when a person's skin is cut, the injured tissue releases chemicals that activate platelets in the blood. Each activated platelet releases more chemicals, causing a surge and the formation of a blood clot. A negative feedback loop, in contrast, returns to its starting point even with relatively large shocks to the system. In the human body, an increase in blood pressure activates baroreceptors, which lead to an activation of the parasympathetic nervous system and consequential reduction in blood pressure.

Economists call positive feedback loops unstable equilibria and negative feedback loops stable equilibria. While many countries can fall in between, there are at least two very stable equilibria of governance. On one end are the Afghanistans of the world, where corruption, low capacity, and low production are self-fulfilling. Even if the capital stock is temporarily increased or if bureaucrats receive world-class training, the corruptive sensors in the economy will ensure that any new output or government competence goes directly into the pockets of state cronies. At the other end are the New Zealands, where low corruption, high capacity, and high productivity are self-fulfilling. One corrupt politician will be pounced on by the legislature and the media; one recession will provoke government spending and monetary expansion.

This is not to say that stable equilibria cannot be disrupted. A patient with high blood pressure can lower it through exercise, diet, and medications, but the movement is slow and easily reversible until the patient's entire lifestyle has changed. Some of the innovations we have described above entail the painstaking change of one stable equilibrium for another.

Yet it is the nature of equilibrium phenomena that sometimes they are best shifted by shock therapy. Bogota's Antanas Mockus reformed his city through shocks to the system rather than tinkering with the formal system itself. Instead of changing the fines for traffic violations or raising police pay, he brought clowns in to ridicule violators. Were his efforts successful? If the results are to be sustained, they must be judged successful if, when the mimes are removed, drivers cease to violate traffic bylaws. Indeed, within a few months, traffic violations dropped by more than 70%. Rates of violent crime similarly dropped precipitously during Mockus's term. And underscoring the role of path dependence, Mockus was succeeded not by a backsliding politician of the old guard, but by Enrique Peñalosa, a fellow reformer. (Mockus came back into office after Peñalosa completed his term.)

One might point to the failed reform of Kenya under the Mwai Kibaki government as a cautionary note on shifting norms. Recall that

Kibaki came to power in 2002 on an anticorruption platform. With a comparable political mandate, he hired an anticorruption reformer, potentially as a public signal of commitment to change. Yet it is hard to conceive of shifting rules or norms if leaders themselves turn out to be on the take. How we get equilibrium-shifting leaders like Mockus rather than "cheap talk" reformers like Kibaki is an open question.

In providing examples and themes on innovation in governance, our focus has been on the developing world, sometimes presenting rich nations as paragons of effective governance. Yet developed countries are of course not without considerable shortcomings, and many of the principles that we outline apply just as well to governance innovation in societies at any level of economic development.

The role of information and the media, political competition, the creation of positive norms to boost rule compliance—these are all elements to reform that are also part of the policy agenda in the United States and elsewhere. The benefits to "trading institutions" are less obvious for developed economies since they are the countries endowed with effective enforcement institutions that may be exported. (Though much of global commerce involves intraindustry trade, it may be possible for developed economies to trade enforcement institutions: the United Kingdom's Crown Agents may choose to specialize in customs, whereas Switzerland's SGS focuses on measurement.)

IV. Under Research and Development

The key lessons in innovation policy rarely describe an incremental innovation, yet they certainly characterize the wholesale economic success stories such as Estonia or Japan. There may be ways to build on these lessons to improve governance. Three recent examples developed by economists illustrate practical approaches to engineering changes in the technology of governance. While these are implementable in theory, building political support in a specific country to introduce such an innovation would be no easy task; for that, they are described herein as conceptual pieces and certainly should not be construed as direct policy recommendations.

A. Private Local Government

One option to consider would be private local government. This might involve opening up the political field for administrative jobs such as mayor or district commissioner to corporations and nonprofits as well as individuals. Competition is increased by changing the rules of a protected market to allow new firms, including foreign imports. In most protected markets, innovation is stifled because there are rents to be earned by incumbents: why spend on R&D or improve customer satisfaction when you have a captive customer base?

Political competition at the local government level is often corrupt in the United States, let alone in countries with weaker governance such as Nigeria or Bolivia. As voters see politician after politician enrich himself while doing a mediocre job of fixing roads and extending sewerage lines, they grow disillusioned with the notion of competent leadership. Instead of looking for competent leaders, they often see local politicians as a means to access patronage, casting their votes for who is closest in family or tribal affiliation. But this equilibrium just ensures high rents and no innovation among the small group of politicians with the ruthlessness and connections that allow them to compete in such a market.

A game-changing equilibrium could potentially be achieved by altering the rules of the election, allowing entities (including foreign ones, highlighting the role of trade) into the market. Foreign companies such as Price Waterhouse Coopers or SGS and foreign nonprofits such as CARE or the National Democratic Institute for International Affairs actually possess some characteristics that they could bring to local government. First, many of their core tasks—management, strategy, procurement, and auditing—are also at the heart of running a municipality or a county. Unlike would-be local politicians, staff at these organizations may have world-class experience. Second, international firms and nonprofits are likely to face higher costs from corrupt activity. Besides being legally bound in their home countries from the OECD Anti-Corruption Convention, they would face firmwide reputational costs from a scandal in Lagos or La Paz. Watchdog organizations would have a much easier time holding international entities to task than local individuals, leveraging the informational stimulant for innovations in governance that might otherwise be weak.

How might this work? One way would be to change the rules governing the election of local administrative positions to allow entities as well as individuals to contest. As we discussed above in the section on outsourcing, it is already quite common to contract out to private firms what was previously the role of the state, from garbage collection to forest monitoring. However, in these cases the contracted firm is still answerable to an elected official. The main difference that would result if firms could run for office is that the range of services contracted out is much wider, and the contractor is directly responsible to the electorate.

In other words, this is procurement by the people. Unlike other privatizations of government assets, which have terms of 25 years or more, this would just be a management privatization for only as long as the electoral cycle. Any voter remorse could be rectified at the polls in short fashion.

For their part, private firms could be enticed to enter the electoral fray with the promise of profits and nonprofits with the chance to improve economic well-being and gain prestige. As part of their platforms, candidates—firms and others—would propose what they intended to achieve while in office, as well as what taxes they would levy. Voters could then evaluate the contestants on the basis of a combination of price and quality, just as any government procurement agency does when examining bids. Even a substantial profit margin could make corporations competitive if the alternative is a politician lining his pockets from public coffers while doing a poor job of administrating.

Expanding the playing field in this manner could result in new entrants and more competition from domestic competitors. Since voters would have the option of importing competence, they could break the old-boys, patronage network in favor of a performance- and governance-oriented equilibrium—even if the foreign firms never won. As with the threat of invasion to Meiji-era Japan, the threat of foreign competition could lead to a wholesale change in the local productive environment. With better infrastructure and more efficient regulations at the local level, elected politicians at the national level might follow suit.

B. Special Governance Zones

Building on the principles of SEZs (described previously), another option is the establishment of special governance zones (SGZs), as suggested by Shang-Jin Wei (1999). The distinction between SEZs and SGZs is instructive and is very much in line with our argument that a change in rules can ultimately generate stronger economic growth. In both cases, a government committed to economic progress provides a well-enforced set of policies in a circumscribed geographic area. The goal of SEZs is to boost local economic activity through economic incentives, often involving policies such as tax concessions or export subsidies. By contrast, SGZs focus on promoting development through improved governance institutions and allocations based on market forces.

Wei suggests that this distinction is critical in taking SGZs as part of a country's strategy for overall economic development. In contrast to tax holidays or export subsidies—which have a beggar-thy-neighbor element to them—SGZs may actually generate positive externalities across jurisdictions, through interjurisdictional competition. This will be the case, in particular, if the national government further permits free mobility and labor in and out of the special zones.

Wei's SGZ model also draws on the other themes on governance innovation. First, there is implicit in the approach the borrowing of growth-promoting "rules" from external authorities. In the case of China, which is Wei's focus, it involves the loaning of effective enforcement by the central government to lower levels of government that have not traditionally had the same level of rule compliance. Further, Wei suggests that the involvement of multilateral institutions such as the World Bank could further reinforce this reassignment of enforcement.

The SGZ model also relates to precedents such as Hong Kong's anticorruption commission, which walled off a particular branch of the bureaucracy to allow it to function effectively. Many of the same principles apply to a geographical delineation of good governance. Wei proposes that SGZ officials be drawn from branches of the government with reputations for rule compliance, that they be well paid, and that the bureaucracy in SGZs be streamlined to minimize the potential for rent seeking and abuse.

C. Charter Cities

Wei's SGZs presuppose a national government with sufficient resources and credibility to provide an effective contracting environment on at least a small scale. In many weak states, this may not be the case. A further variant for establishing localized enforcement is the charter city concept put forth by Paul Romer (http://www.chartercities.org). Romer begins with the observation that technological advancement is responsible for prosperity in much of the developed world. Yet in the developing world this cannot be the binding constraint: we know how to generate electric light, yet many billions do not have access to this amenity. He further suggests that just as countries such as Malaysia and Korea were able to catch up by adopting technologies from the West, so too may developing countries today improve their institutions by adopting policies from stronger states.

The specific form that he proposes is a charter city (CC) whereby a strong state government (say Canada) would sign a treaty with a state with ineffective rules (say Cuba) to charter a city on Cuban soil. Canada would provide the charter (i.e., the rules) as well as the reputation and manpower to enforce those rules. The CC model bears some similarity to SGZs in that it would represent a beachhead of good governance amid a sea of institutional dysfunction. However, in this case, the governance would be imposed (as with, e.g., Crown Agents) by an outside authority, leveraging its resources and reputation.

There are a number of precedents for the CC model. In 1994, Singapore and China signed an agreement to jointly develop the Suzhou Industrial Park, establishing a ring-fenced area near Shanghai as a 70-30 Singapore-China joint venture. In theory, Suzhou Industrial Park was conceived as a means for Singapore to impart norms of governance and management to enterprising Chinese businesspeople. However, in practice this linkage was only partially realized. After a large initial capital investment by Singapore, Suzhou Industrial Park was unprofitable for its first 5 years, largely because of lax marketing by the Chinese government. In 2001, after Singapore sold half its stake back to China, the industrial park experienced its first year of profits and has grown steadily since. Some have interpreted this turnaround as exactly the type of "holdup" problem that will undermine CC efforts: in order to obtain a larger share in the Suzhou-generated rents, the Chinese government put up barriers to Suzhou's effective development. In thinking back on the investment—now profitable—Singapore authorities may regret their initial decision of involvement.

It may also be possible for a private entity to charter an economic zone, as in the case of the Tata enclave of Jamshedpur in the Indian region of Bihar. The city of 650,000 people continues to be a company town, an oasis of effective governance in one of India's poorest states. The same concerns of expropriation and nationalization have threatened Jamshedpur over the years. Yet much as sovereign governments wishing to set up charter cities may threaten retaliation in the face of expropriating hosts, Tata possesses sufficient influence and economic might in India that it has maintained effective sovereignty.

So it appears that both models—charters by government and private entities—may be effective. What is critical is a means of convincing investors that there is minimal holdup risk.

V. Conclusion

Innovation in governance, then, can be viewed through much the same lens through which we view innovation in other products and services. However, the market for governance is quite different from the market for computers or inventory management. Producers of governance enjoy protected markets for the most part, which exclude foreign competition. They do not always face demand from discriminating consumers but instead from a combination of voters, pressure groups, and political factions—in proportions that vary depending on the market.

Even as the market supplying governance is relatively uncompetitive in the parts of the world where governance is most needed, those who are in the business of improving governance have a large tool kit to choose from. The very fragmentation of the governance market has provided a plethora of experimentation and reforms that have succeeded or failed to varying degrees. The most successful of these have usually increased competition, the supply of information, trade in ideas and technologies, and the culture of compliance and—in doing so—changed the very equilibrium in which governance is understood and acted on by members of the society.

References

Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation." *American Economic Review* 91 (December): 1369–1401.

Aghion, Philippe, and Jean Tirole. 1997. "Formal and Real Authority in Organizations." *Journal of Political Economy* 105 (February): 1–29.

Baer, Katherine, Olivier Benon, and Juan Toro. 2002. *Improving Large Taxpayers' Compliance: A Review of Country Experience*. Washington, DC: International Monetary Fund.

Barro, Robert J. 1991. "Economic Growth in a Cross Section of Countries." *Quarterly Journal of Economics* 106 (May): 407–43.

Djankov, Simeon, Tatiana Nenova, Caralee McLeish, and Andrei Shliefer. 2003. "Who Owns the Media?" *Journal of Law and Economics* 46 (October): 341–81.

Global Witness. 2002. "Briefing Document: Liberia's Logs of War: Underpinning Conflict." Press release, March 5. http://www.globalwitness.org/media_library_detail.php/255/en/briefing_document_liberias_logs_of_war_underpinning.

Guo, Wanda, and Yueqiu Feng. 2007. *Special Economic Zones and Competitiveness: A Case Study of Shenzhen, the People's Republic of China*. Islamabad: Asian Development Bank, Pakistan Resident Mission.

Heilbrunn, John R. 2004. "Anti-corruption Commissions: Panacea or Real Medicine to Fight Corruption?" Manuscript, World Bank Institute, Washington, DC. http://siteresources.worldbank.org/WBI/Resources/wbi37234Heilbrunn.pdf.

Khanna, Tarun. 2009. "Learning from Economic Experiments in China and India." *Academy of Management Perspectives* 23 (May): 36–43.

Manion, Melanie. 2004. *Corruption by Design: Building Clean Government in Mainland China and Hong Kong*. Cambridge, MA: Harvard University Press.

Mankiw, N. Gregory, David Romer, and David N. Weil. 1992. "A Contribution to the Empirics of Economic Growth." *Quarterly Journal of Economics* 107 (May): 407–37.

Maurer, Noel, and Kris Mitchener. 2008. "A History of Customs Receiverships." Working paper (November 8), Harvard Business School.

Mosse, Marcelo. 2007. "Corruption and Reform in the Customs in Mozambique." Center report. Maputo, Mozambique: Centro de Integridade Pública.

Reinikka, Ritva, and Jakob Svensson. 2006. "Using Micro-Surveys to Measure and Explain Corruption." *World Development* 34, no. 2 (special issue): 324–404.

Romer, Paul. 1990. "Endogenous Technological Change." *Journal of Political Economy* 98, no. 5, pt. 2 (October): S70–S102.

Wei, Shang-Jin. 1999. "Special Governance Zone: A Practical Entry-Point for a Winnable Anti-corruption Program." Manuscript, World Bank, Washington, DC. http://www.9iacc.org/papers/day2/ws1/dnld/d2ws1_sjwei.pdf.

Wrong, Michela. 2009. *It's Our Turn to Eat: The Story of a Kenyan Whistle Blower*. New York: HarperCollins.