

THREE ESSAYS ON PROPRIETARY CITIES

by

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A Dissertation
Submitted to the
Graduate Faculty
of
George Mason University
in Partial Fulfillment of
The Requirements for the Degree
of
Doctor of Philosophy
Economics

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Date: _____ Summer Semester 2016
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Three Essays on Proprietary Cities

A dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy at George Mason University

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DEDICATION

This is dedicated to my parents and grandparents. Thanks for your support throughout grad school. I couldn't have done it without you.

ACKNOWLEDGEMENTS

I would like to thank my parents for putting up with me, Spencer MacCallum for starting me down this intellectual path, and Donald Boudreaux for guiding me through the process and encouraging me.

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ABSTRACT

Three Essays on Proprietary Cities

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This dissertation contains three essays on proprietary cities. Proprietary cities have three defining features: (1) a private, for-profit entity (the proprietor) retains land ownership; (2) the city has substantial legal and regulatory autonomy from the host country; and (3) the proprietor has a meaningful role creating and enforcing a new legal and regulatory system. The first essay offers an introduction to the idea of proprietary cities, investigating the incentives facing the proprietor and the policies the proprietor is likely to adopt. The second essay investigates governance in proprietary cities. It examines the literature on monopolies, private dispute resolution, and private police to better understand how proprietary cities might act. The third essay places proprietary cities in an institutional context. It develops an understanding of why such substantial policy changes might be allowed, and how to think about proprietary cities with regard to the new institutional literature.

INTRODUCTION

According to the UN, the world's urban population is expected to grow by 2.5 billion people by 2050, reaching 6.5 billion. The additions to the population will be concentrated in developing countries, with China, India, and Nigeria accounting for 37 percent of the growth (UN2014, 1). Many people will move to existing cities, while others will stay and turn sleepy towns into booming new cities.

The coming urban migration presents humanity with a challenge. Will the new urban dwellers live in slums? Will their property rights be protected? Will they be able to engage in the global marketplace? Will they have access to clean water? Will they have access to quality education? Will they have the freedom to trade, contract, and acquire capital?

In addition to coping with rapid urbanization, humanity faces another challenge: reducing poverty. Nearly 900 million people live in extreme poverty: under \$1.90 per day. Over 2.1 billion people live on less than \$3.10 a day (World Bank 2015). While economic growth has greatly reduced poverty over the last few decades, some people have been left behind, while others get stuck in a middle-income trap.

My dissertation proposes a new type of governance that can help cities accommodate new residents as well as provide a framework for economic growth. This new type of city governance is autonomous, for-profit cities, which I will call

“proprietary cities.” Proprietary cities have three defining features: (1) a private, for-profit entity (the proprietor) retains land ownership; (2) the city has substantial legal and regulatory autonomy from the host country; and (3) the proprietor has a meaningful role creating and enforcing a new legal and regulatory system.

Each of the three features is important. Owning the land, which entails being the residual claimant on land value, incentivizes the proprietor to promote economic growth. Legal and regulatory autonomy from the host country ensures the proprietor can opt out of laws and regulations that reduce growth. And because the proprietor is the residual claimant, it has the incentive to create a legal and regulatory system that promotes growth, and to enforce the laws and regulations efficiently and justly.

Two other aspects of proprietary cities are important: size and location. First, a proprietary city must be sufficiently large to gain from economic freedom. Second, a proprietary city should be established on uninhabited land. This reduces opposition from interest groups and limits the risk of creating territorial disputes.

Proprietary cities should not be thought of as public-private partnerships. Government’s only role should be to provide the initial autonomy as well as the infrastructure linking the city to the rest of the country. Infrastructure inside the city, including major transit centers such as airports and ports, should be built, owned, and operated by the proprietor.

Keeping proprietary cities separate from the host country is important for two reasons. First, government spending interferes with the profit mechanism. Second, without clearly defined legal and regulatory autonomy, the host country is likely to subtly influence how the proprietary city, including the legal and regulatory system, develops.

Proprietary cities are similar to charter cities (Romer 2009). In charter cities, a developing country sets aside a tract of land and contracts with a developed country to administer the land, including applying its own laws and regulations. Importing good laws and regulations should attract investment and promote growth.

The logic behind proprietary cities is similar. They provide a way to opt out of harmful laws and regulations in order to develop a new legal and regulatory regime that promotes economic growth. Like charter cities, proprietary cities are newly constructed cities. One difference is that the proprietor, rather than a developed country, has to create a new legal and regulatory system, or copy one from elsewhere, as territorial governance is currently monopolized by states.

Proprietary cities differ from the typical special economic zone (SEZ). Many SEZs simply cut around the edges of existing laws and regulations. SEZs might offer lower taxes or quicker business registration. Proprietary cities, as well as charter cities, instead seek to replace the entire legal and regulatory system.

Rather than starting with existing laws and regulation and seeing what to streamline or cut, proprietary cities start with a blank slate then consider what to keep. Ultimately, the extent of a proprietary city's autonomy will likely be worked out in negotiations with the host country. Alternatively, a country could create an impersonal procedure for the creation of proprietary cities.

Throughout my dissertation I assume the proprietary city is autonomous, except for its criminal law and criminal courts. This makes the proprietor responsible for policing as well as civil law, commercial law, and regulations. Admittedly, a proprietary city is unlikely to have such a high level of autonomy. However, the arguments I make also apply to proprietary cities with lower levels of autonomy.

Proprietary cities are more likely to be established in the developing world for two reasons. First, poor governance in developing countries presents greater opportunities for improvement, and therefore profits, than improving governance in the developed world. Second, large rural populations mean more potential residents for a proprietary city.

The idea of proprietary cities originates from the literature on proprietary communities (Heath 1957; MacCallum 1970). A proprietary community is a community living on land owned by a profit-seeking entity. So proprietary cities are a subset of proprietary communities. The difference is twofold: (1) the legal and regulatory

autonomy of a proprietary city; and (2) the creation of an alternate legal and regulatory system.¹

The core of the logic of proprietary cities is the same as for proprietary communities: land ownership internalizes externalities. A proprietor, because it is the residual claimant on land, has the incentive to promote economic growth to increase the value of the land. Landownership aligns the incentives of the proprietor with those of the residents.

My contribution is to expand this logic beyond where it is typically applied—what we can term traditional public goods; for example, lighting, open spaces, and garbage collection. I apply the logic to laws and regulations. If land ownership incentivizes the proprietor to provide roads and sewers, would landownership not also incentivize the proprietor to provide good laws and regulations?

The methods I use in this dissertation are akin to a literature review. But instead of reviewing the literature on an established idea, I introduce a new idea and compile distinct, but relevant strands of literature. While the evidence leads me to support proprietary cities, I do my best to offer the strongest economic arguments against them and cite literature that weakens my case.

¹ While malls and other proprietary communities do have governance rules, such rules cannot be classified as laws and regulations. In contrast, a proprietary city will likely have autonomy from, for example, business regulations in the host country and will likely create a simplified business-registration process for its residents.

The first chapter introduces proprietary cities. First, I argue that they align proprietors' incentives with the residents'. Second, I review the evidence that suggests proprietary cities are viable now or in the near future. Third, I offer an overview of the policies a proprietary city would have an incentive to adopt.

The second chapter investigates the governance of proprietary cities. I review empirical evidence regarding the private provision of police and dispute resolution.

The third chapter focuses on institutions and the interaction between a proprietary city and a host country. I develop a taxonomy to explain why a proprietary city is an effective mechanism for institutional change. Then I review certain strands of the literature on institutions and discuss how proprietary cities relate to those strands.

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AN OVERVIEW OF PROPRIETARY CITIES

Introduction

According to an old joke about economists, if you put five of them in a room, you will find six opinions. Nevertheless, economists have reached a near consensus on what policies are important for generating economic growth. Broadly speaking, these policies consist of property rights, economic freedom, and rule of law.

Unfortunately, relatively few countries have implemented these policies. The fundamental difficulty is that a government strong enough to protect property rights tends to be strong enough to violate them. Ensuring a government does not violate property rights requires an institutional structure that aligns the incentives of the governing body with those of the governed. In most developing countries, this institutional structure does not exist, which leads to policies inhibiting economic growth.

Proprietary cities are a way to align the incentives of those doing the governing with those being governed. The proprietor, owning the land on which the proprietary city is constructed, is the residual claimant on any increase in the land's value. Given that economic activity increases land value, the proprietor therefore has the incentive to promote economic growth.

This chapter is split into eight additional sections. First, I review the incentives facing the proprietor. Second, I discuss the viability of proprietary cities. Third, I consider how proprietary cities might generate revenue. Fourth, I give a brief overview of the institutions literature and its relation to proprietary cities. Fifth, I review policies which proprietary cities will be incentivized to adopt. Sixth, I consider local governance issues relating to proprietary cities. Seventh, I consider how proprietary cities might innovate in governance. Lastly, I conclude.

Incentives

The incentives facing a proprietor are the same incentives that face the owner of a shopping mall. The proprietor and the mall owner are both profit seekers. To increase the value of the land they rent, they offer public goods. In the case of the mall owner these public goods might include parking, open spaces, restrooms, lighting, and even security. In the case of the proprietor, the public goods would include roads, water, electricity, and sewage, as well as laws and regulations.

The profits of both the mall owner and the proprietor depend on the quality of the public goods they provide. Few people will attend a mall without bathrooms or inviting public spaces. Similarly, few companies want to build factories in cities with regulations expensive to comply with or with excessively high taxes.

Demsetz (1967) shows that property rights emerge to internalize externalities. The tragedy of the commons is a useful illustration of how. Without property rights, every farmer has an incentive to graze their sheep in the commons. If one farmer abstains, the other farmers benefit and the abstaining farmer gains nothing. The result is the commons are overgrazed, putting the survival of the herd at risk.

Private property, on the other hand, ensures people benefit or suffer the consequences of their actions. By privatizing the commons, the farmers become responsible for their own land. If a farmer overgrazes, they suffer the consequences and their cattle go hungry—and hence their personal wealth declines. Stated differently, under a system of private property self-interested individuals act in ways that further the public good. Private property aligns the incentives of individuals to increase the welfare of society.

Proprietary cities, by their nature, force the proprietor to internalize functions typically left to the city or national government. When governments work, they can provide rule of law, protect property rights, and provide public goods. Unfortunately, all too often, especially in developing countries, the government does not act in this manner, instead suppressing development through the corrupt application of bad laws. Proprietary cities would be most effective in these situations.

The desire of proprietors to increase land prices motivates them in four ways. First, proprietors try to attract residents. Second, they try to attract businesses. Third, they

try to keep the host country happy. Fourth, proprietors are incentivized to preserve their reputation.

Attracting residents and businesses can be classified as entrance. This is a similar concept to exit, an idea explored by Hirschman (1970). However, because proprietary cities are likely to be built on uninhabited land, the first generation of residents and businesses must opt in to the city, making entrance a more apt term.

Though related, entrance is conceptually different from exit. However, most scholarly research has focused on exit, rather than entrance. The evidence supporting exit as a constraint on local governance is limited. Tiebout (1956), in his now-famous model, found that, under certain assumptions, governments will provide the optimal level of public goods. Empirical testing, however, has found that exit is, at best, a marginal constraint on local governments (Dowding et al. 1994).

Proprietary cities, however, face different conditions. Rather than needing to retain residents and businesses, proprietary cities must attract them. This changes the calculus. With developing countries' rapidly urbanizing populations, proprietary cities would compete with existing cities for potential residents.

The rise of Shenzhen offers a glimpse into the importance of good governance in attracting new residents. In 1980, when Shenzhen was declared an SEZ, it was a fishing village of 30,000 people. Currently the metropolitan population of Shenzhen is 18

million. The population growth was largely driven by internal migration in China—rural farmers looking for life in a new city. They chose Shenzhen because the SEZ created an institutional environment that promoted jobs and economic growth.

Proprietary cities seeking to attract rural residents need to ensure better jobs opportunities exist there. This requires a legal and regulatory environment that promotes economic growth.

Businesses interested in investing in proprietary cities would face similar constraints to new residents. They would have to opt into the proprietary city. Attracting them would require a fair and efficient legal and regulatory regime.

The literature on global investment flows strongly supports the contention that laws and regulations play an important role in attracting foreign direct investment. Globerman and Shapiro (2002), for example, find that good governance, defined in part by open and transparent legal and regulatory regimes, is an important determinant of foreign direct investment. In a subsequent paper examining American foreign direct investment, Globerman and Shapiro (2003) find similar results.

Bénassy-Quéré et al. (2007) reach similar conclusions. They find that good institutions increase foreign direct investment. Cheng and Kwan (2000), examining China, find that SEZs have a positive effect on foreign direct investment.

To attract foreign direct investment, proprietary cities have to offer a high-quality legal and regulatory system. Doing so can lead in turn to rapid economic growth.

The third reason to expect proprietary cities to improve governance is that they need to have good relations with the host country and citizens not residing in the city. There is always the possibility that the host country will renege on the initial agreement by forcibly taking control of the proprietary city.² Good governance leads to economic growth and job creation in the proprietary city, making it politically difficult for the host country to renege.

Honduras illustrates the extent of potential opposition to a proprietary city. Honduras passed a law that allowed the creation of *zonas de empleo y desarrollo economico* (ZEDEs).³ Brian Doherty (2014) reports that ZEDEs can opt out of much of the Honduran legal and regulatory system, making them largely analogous to proprietary cities.⁴

There has been a great deal of Honduran opposition to the ZEDEs. For example, I lived in Honduras for six months. I was advised by friends not to mention the ZEDEs as my opinions might lead to me getting assaulted by Honduran citizens who were against the law. The primary complaint I heard was that ZEDEs were an infringement on

² I further discuss how a proprietary city can protect itself from such expropriation in the third chapter.

³ “*Zonas de empleo y desarrollo economico*” translates as “zones of employment and economic development.”

Honduran sovereignty. In addition to the contentious climate ZEDEs have created, there have been a number of small-scale protests (*Prensa* 2013). These issues have all arisen even before construction has begun in a single ZEDE.

Such protests can potentially be very damaging to a proprietary city. A politician can choose to capitalize on them by campaigning on shutting down the proprietary city. Even if the protests are insufficiently big to support a political candidate, non-violent protests blocking key roads can harm the economy of a proprietary city.

The best way to limit protests and potential expropriation by the host country is twofold. First, ensure eminent domain is not used to force people off land in order to build a proprietary city. Second, disprove the critiques that proprietary cities are corrupt and primarily for the rich. Having a fair and efficient legal and regulatory system that creates the infrastructure for job creation and promotes growth will limit opposition.

The final reason proprietary cities will provide good governance is reputation—to increase future opportunities for the proprietor. The host country and other countries will closely watch the development of a proprietary city. If the proprietary city is successful, the host country will be more inclined to allow the creation of a second or third city. Further, if the proprietor is able to improve governance and generate economic growth, the proprietor will also be in a better position to win contracts in other countries.

⁴ A law allowing for the creation of ZEDEs has been passed. However, the implementation of the law has been slow and as of this writing no ZEDEs have been created.

China demonstrates this principle. After the success of the four initial SEZs, the model was copied throughout China. A forward-thinking proprietor would look beyond its first city. The long-run goal is not a single city, but a large network of them.

Lee Kuan Yew, the former prime minister of Singapore, understood the importance of Singapore's reputation. He said, "If we had first world standards, then businessmen and tourists would make us a base for their business and tours" (Yew 2013, 14). He also understood that Singapore's success was due to "not only the world class infrastructure. More important is the expertise, the software programmes, the Singapore brand name we have built for trustworthiness, efficiency, speed, and reliability" (Yew 2013, 14).

Viability

Even if you agree that proprietary cities have the incentive to promote economic growth, the question remains, are they viable? This question can be split into two parts. First, can private companies raise the capital necessary to build a new city? Second, is there evidence to suggest a country will grant legal and regulatory autonomy to a for-profit company? The answer to the first question is a definite yes. The answer to the second is a qualified yes.

Building a new city can be a multibillion-dollar project. There are, of course, ways to start small. However, there are currently numerous examples of private

companies embarking on multibillion-dollar projects to build new cities—private cities—which proves that capital is not the constraining factor in building new cities.

Lavasa, for example, is a small city being built in India meant to house 300,000 people over 100 square kilometers. It is being built by and will be governed by Hindustan Construction Company. The estimated price tag of the project is \$30 billion (Kennard and Provost 2015).

Songdo International Business District in Korea was a \$35 billion project meant to be the centerpiece of Songdo, a new city near Incheon. The Incheon Free Economic Zone was meant to give Songdo a competitive advantage, which could lower taxes to attract foreign companies (Nam 2013). However, the company building Songdo International Business District, Gale International, had no influence on the creation or administration of the Incheon Free Economic Zone.

The King Abdullah Economic City in Saudi Arabia dwarfs the aforementioned two and arguably counts as the first proprietary city. Its website states, “Our customs, our infrastructure and our regulatory environment have all been designed for faster, smoother, sustainable business” (King Abdullah Economic City 2015). CNBC labeled King Abdullah Economic City the “world’s first publicly listed city” and estimated the price tag of the city at \$100 billion (Morris and Gamble 2014). What remains unclear is

the extent to which Emaar Properties, the developer, is involved in the creation and governance of the regulatory system of King Abdullah Economic City.⁵

Whether or not King Abdullah Economic City counts as the first proprietary city, there have been several private projects costing tens of billions of dollars to build small cities, or in the case of Songdo International Business District, the downtown of a city.

The second question is whether a country would grant legal and regulatory autonomy to a for-profit company. The answer is a qualified yes. King Abdullah Economic City may already be a proprietary city. Honduras passed a framework for the creation of ZEDEs, which are largely analogous to proprietary cities.

More generally, SEZs are, in some ways, similar to proprietary cities. SEZs create local pockets where certain national laws and regulations do not apply. Of course, the primary difference is that the autonomous legal and regulatory system of an SEZ is governed by a government body, not a for-profit one. Nevertheless, given their similarities, the prevalence of SEZs can be considered a rough indicator of the possibility of autonomous proprietary cities.

Over the last thirty years, there has been an explosion in the number of SEZs. Ireland founded the first one in 1959. For the next twenty years, growth in the number of SEZs was relatively slow. However, in the '80s, growth accelerated. Currently there are over 4,000 SEZs worldwide. An *Economist* (2015) article documenting this notes that the

⁵ I contacted Emaar Properties regarding this question and did not hear back.

trend could continue toward “privately run charter cities and other so-called ‘special governance zones’ gain[ing] traction. The idea is to create enclaves that write their own rules in all business matters, from labour regulation to anti-corruption codes.”

These two trends, the creation of special economic zones and the creation of private cities with no legal or regulatory autonomy, suggest proprietary cities are possible in the near future. Perhaps they already exist, as witness King Abdullah Economic City. If not, maybe Honduras will accelerate its process for the creation of ZEDES. Another possibility is that a private-city developer will realize that laws and regulations are important in attracting businesses. Such a developer could use its multibillion-dollar investment as leverage for autonomy. Alternatively, a startup could convince a country to grant autonomy then raise the necessary funds.

Revenue

The proprietor of a proprietary city is a for-profit company. As such, it expects economic returns. In this section I discuss how a proprietary city might generate revenue.

First, note that proprietary cities cannot be said to tax, because they are not governments. Nevertheless, as a provider of territorial governance, proprietary cities have revenue-generating mechanisms functionally equivalent to taxes. Given functional equivalence, and because I do not know a better word, I use “tax” to describe a revenue-generating mechanism of proprietary cities.

Proprietary cities have incentives to tax in ways that minimize deadweight loss. As the residual claimants of land prices, which are highly influenced by economic activity, the proprietor is therefore the residual claimant to deadweight losses. Money spent avoiding taxes or changing behavior is money that would otherwise benefit the proprietor.

Accordingly, the primary source of revenue for proprietary cities is likely to be a land-value tax. A land-value tax raises money based on the unimproved value of land. Land-value taxation can raise sufficient revenue and leads to minimal deadweight loss.

Land-value taxation, originally a Georgist idea, has drawn support from across the political spectrum. Milton Friedman wrote, “In my opinion, the least bad tax is the property tax on the unimproved value of land, the Henry George argument of many, many years ago” (Hooper 2016). Joseph Stiglitz has argued similarly: “One of the general principles of taxation is that one should tax factors that are inelastic in supply, since there are no adverse supply side effects. Land does not disappear when it is taxed” (Stiglitz 2014).

Singapore and Hong Kong generate much of their revenue through land-value taxes. The Hong Kong government owns all the land in Hong Kong, while the Singaporean government owns four-fifths of the land. Phang (2000) writes, “Hong Kong and Singapore capture economic rent primarily by nationalizing land and leasing it out.”

In a city with predefined boundaries, there is a fixed amount of land. So, unlike a tax on labor, land-value taxation will not reduce the amount of available land. Further, because land-value taxation is difficult to avoid, there will be little deadweight loss from those attempting to hide their wealth.

Proprietary cities can raise revenue through a Pigouvian tax—a tax on negative externalities. Pigouvian taxes discourage negative externalities and raise revenues. For example, congestion pricing raises revenue and reduces traffic. The basic idea is to charge cars for using roads during peak hours. Driving a car produces small externalities, both by polluting and by creating traffic. By more closely aligning the social cost and the private cost, congestion pricing ensures resources are better allocated, making people better off (Lindsey 2006).

Ultimately the proprietor decides how to raise revenue for any proprietary city. However, because of the limited deadweight loss of a land-value tax, a proprietor has an incentive to adopt it. Similarly, a proprietor is likely to adopt a Pigouvian tax to reduce externalities.

Institutions

The clearest expositions of the importance of laws, regulations, and the processes that determine them can be found in two books: *Why Nations Fail* by Acemoglu and Robinson and *Violence and Social Orders* by North, Wallis, and Weingast. Both books

offer similar frameworks to explain differences in wealth among countries. Acemoglu and Robinson distinguish between extractive and inclusive institutions, while North, Wallis, and Weingast contrast natural states and open-access orders.

Acemoglu and Robinson argue that inclusive institutions lead to economic growth, while extractive institutions prevent it. They write that inclusive institutions are those that allow and encourage participation by the great mass of people in economic activities that make best use of their talents and skills and that enable individuals to make the choices they wish. To be inclusive, economic institutions must feature secure private property, an unbiased system of law, and a provision of public services that provides a level playing field in which people can exchange and contract; it also must permit the entry of new businesses and allow people to choose their careers. (Acemoglu and Robinson 2012, 74-75)

North, Wallis, and Weingast differentiate between open-access orders and natural states. Open-access orders are roughly analogous to inclusive institutions. They include “impersonal property rights, more transparent institutions structuring decision-making processes, and legal support for a wide range of organizational forms, including political parties and economic organizations” (North, Wallis, and Weingast 2009, 2). Elaborating, they explain that open-access orders also include “open entry and competition in many markets, free movement of goods and individuals over space and time, the ability to

create organizations to pursue economic opportunities, [and] protection of property rights” (North, Wallis, and Weingast 2009, 2).

Similarly, the World Bank, in a 2006 report, *Where Is the Wealth of Nations?: Measuring Capital in the 21st Century*, finds that the wealth of high-income countries is held primarily in intangible capital: “If a country has a very efficient judicial system, clear property rights, and an effective government, the effects will result in a higher total wealth and thus a *higher intangible capital residual*” (World Bank 2006, xviii, emphasis in original).

Hong Kong, Singapore, Dubai, and Shenzhen illustrate how good institutions can lead to rapid economic growth in cities. In the immediate aftermath of the Second World War, both Hong Kong and Singapore were poor, while Dubai and Shenzhen can hardly be said to have existed. Since then, primarily because of their embrace of a legal and regulatory regime promoting growth, they have all become world-class cities.

Singapore had a GDP per capita of \$2,500⁶ in 1960 (World Bank 2016). Previously a British colony, Singapore joined Malaysia in 1963, only to be expelled two years later. With race riots in 1969 and no natural resources, few foresaw the rise of Singapore. However, Singapore, which routinely scores at or near the top in most governance indices, including the Doing Business Index, adopted policies that allowed it

⁶ GDP numbers for both Singapore and Hong Kong are in 2005 US dollars.

to rapidly grow, lifting its citizens out of poverty. The current per capita GDP is \$38,000, among the world's highest (World Bank 2016).

Hong Kong followed a path similar to Singapore's. A British colony until 1997, it had a GDP per capita of \$4,700 in 1960 (World Bank 2016). Luckily, the British adopted a policy termed positive non-intervention toward Hong Kong. The resulting growth led to Hong Kong having a current per capita GDP of \$34,000 (World Bank 2016).

While Singapore and Hong Kong demonstrate how institutions matter for economic development, Dubai and Shenzhen offer models more applicable to proprietary cities. Both began as sparsely populated areas, but through the creation of special economic zones attracted millions of residents to become what they are today.

As noted above, in 1980 Shenzhen was a fishing village near Hong Kong of 30,000 people. Now, the greater metropolitan area has 18 million residents. This extraordinary rise began in 1980, when Shenzhen was designated a special economic zone, which facilitated foreign direct investment. During the first year of its existence, the Shenzhen attracted over 50 percent of all foreign direct investment in China (Zeng 2011, 9). By creating a system of laws that encouraged investment and growth, Shenzhen, in a period of thirty years, became one of the largest cities in the world, improving the lives of both the initial residents and new residents.

Dubai in 1968 had a population of 58,971 (Heard-Bay 2001); by 2015, the number had soared to 2,439,289 (Dubai Statistics Center 2015). Dubai's success, especially compared to its United Arab Emirate neighbors, is largely attributable to the creation of special economic zones. For example, to become a leading financial center, Dubai created the Dubai International Financial Centre, hiring a British judge to serve as chief justice (Strong and Humber 2009).

As these examples show, good institutions are an important condition for spurring strong economic growth, and, in certain scenarios, sufficient to lead to the creation of a new city in a sparsely populated region. A proprietary city, built with an understanding of what contributed to the success of the examples, could achieve something comparable.

Growth Policies

In the previous section I detailed the importance of institutions and several examples of cities experiencing rapid economic growth because of their adoption of good laws and regulations. In this section I describe more specifically what those laws and regulations might be, giving an overview of the effects of the legal system, business licensing, regulations, and labor laws on economic growth and how a proprietary city could improve them.

Legal

Legal autonomy in the commercial and civil spheres is the most important type of autonomy. Laws are the infrastructure for human interaction, and commercial law provides the backdrop behind which all commercial transactions take place. A fair and transparent commercial and civil legal system encourages businesses to invest in the territory of a proprietary city. Further, an independent judiciary sends a strong signal from the host country that it is fully committed to a proprietary city.

The Doing Business Index illustrates the inefficiency of contract resolution throughout the developing world. It reports that in South Asia, enforcing a contract takes an average of 1,076 days. In Latin America and the Caribbean, the average is 736 days, and in sub-Saharan Africa, North Africa, and the Middle East, contract enforcement takes an average of 653 days. Further, in South Asia, East Asia, sub-Saharan Africa, and Latin America and the Caribbean, enforcing a contract also costs an average of over 30 percent of the value of the claim (Doing Business 2015).

Dispute resolution in developing countries is actually more difficult than the above facts suggest, if one considers not only the cost in time and money but the outcome. In fact, courts in many developing countries are biased, likely to deliberately favor one party over the other. In sum, in much of the developing world, enforcing a contract takes nearly two years, costs 30 percent of the value of the claim, and may not even deliver a just outcome.

A number of studies have confirmed the importance of legal institutions for economic growth. Levine (1998) finds that creditor rights and rigorously enforced contracts were “positively and robustly associated with per capita growth, physical capital accumulation, and productivity growth.” Clague et al. (1999) find that higher enforceability of contracts is positively related to investment and growth. La Porta et al. (1997) compare civil and common law countries, finding that common law countries have stronger investor protections and better-developed capital markets.

A proprietary city can create a legal system by borrowing from successful systems. As previously mentioned, Dubai, in creating the Dubai International Financial Center, hired a British judge to administer common law (Strong and Hember 2009). A proprietary city can hire an esteemed common law judge to give itself credibility and help assure potential investors that their contracts would be enforced.

Starting a business

De Soto (2002, 2003), in studies that would inspire the Doing Business Index, finds that many undeveloped and developing countries essentially excluded large segments of the population from the formal economy by making the registration of informal businesses prohibitively expensive. For example, several countries require fees of over 100 percent of per capita GDP to start a business. These barriers suppress the dynamism of the market.

The countries in sub-Saharan Africa, for example, on average require over 53 percent of per capita income to register a business. In Latin America, the figure is 31 percent; in the Middle East and North Africa, 25 percent; and in East Asia and the Pacific, 23 percent (Doing Business 2015).

These barriers to entry suppress entrepreneurship. Bruhn (2011) finds that licensing reform in Mexico increased the number of registered businesses by 5 percent, increased the fraction of wage earners in the population by 2.2 percent, and decreased prices by 1 percent. In a literature review, the World Bank (2014, 39) concludes that “cumbersome, poorly functioning regulatory business environments undermine entrepreneurship and the economic performance of firms and economies.” Similarly, Djankov (2009), in a survey, finds that “evidence so far uniformly shows benefits from simplified entry regulation.”

On a macro level, barriers to entry and regulations also have a substantial impact on economic growth. Djankov et al. (2006) find that improving from the worst quartile to the best on the Doing Business Index⁷ is associated with a 2.3 percentage-point increase in economic growth. Eifert (2009) examines the effect of regulatory reform, finding that growth in developing countries increases by 0.4 percentage points in the year following the reform, and 0.6 percentage points in the year after that.

⁷ The Doing Business Index does not measure only the cost of registering a business. It considers ten different factors. Starting a business is one of those factors, and registering a business is one factor in starting a business.

To take advantage of entrepreneurship a proprietary city could create its own business-licensing office and process. As the highest-rated countries show, it is possible to license businesses within three or fewer days, costing the applicant around 1 percent of per capita income. In fact, one of the recommendations of FIAS, a branch of the World Bank, for special economic zones is to “install streamlined procedures for business registration that embody a simple declarative investment registration system rather than any sort of investment approval regime” (FIAS 2008, 56).

Regulations

Regulations can also inhibit growth. Ideally regulations serve to correct externalities. However, especially in the developing world, regulations often unnecessarily raise costs and reduce efficiency. Incumbent firms capture the regulatory process, using it to limit competition (Djankov et al. 2002). Even if the regulation was enacted in good faith, with rapidly changing technology old regulation quickly becomes outdated and can slow or even stop progress.

Quantifying the effect of regulations on economic development is difficult.⁸ Regulations affect industries differently. As such, cross-country comparisons are of little use. Nevertheless, several salient examples demonstrate how regulations can impede innovation.

Amazon, for example, has been testing the use of drones to deliver packages. However, because the Federal Aviation Authority (FAA) was slow to act in creating regulations governing drone use for Amazon, Amazon instead took its drone-testing program to Canada (Pilkington 2015).

Another example of regulations stifling innovations involve the Food and Drug Administration and 23andMe, a company offering genetic tests. The FDA banned 23andMe from offering customers disease risk assessments based on their genetic information.

American regulatory bureaucracy does not just deter startups. Sergey Brin, cofounder of Google, stated, “Generally, health is just so heavily regulated, it’s just a painful business to be in. It’s not necessarily how I want to spend my time. Even though we have some health projects, we’ll be doing it to a certain extent. But I think the regulatory burden in the U.S. is so high, I think it would dissuade a lot of entrepreneurs” (Entis 2014).

Admittedly, these problems do not directly apply to proprietary cities in a developing country. Proprietary cities must play catch-up growth instead of pushing the technological frontier. Nevertheless, the examples illustrate how regulations can limit entrepreneurship in the developed world. Given that the governance problems of

⁸ One successful attempt comes from the Competitive Enterprise Institute, which estimates regulations cost the United States \$1.88 trillion in lost productivity and higher prices

developing countries are often worse than developed countries, it is reasonable to infer that regulation can be a barrier to economic growth in parts of the developing world.

Labor

Labor laws are another impediment to growth in some countries. Raising the cost of employing workers results in less employment. Making workers more difficult to fire makes businesses less likely to hire workers, or more likely to substitute capital for labor. While well intentioned, often labor laws end up harming those they try to help.

Over-regulation of the labor market has large effects in the developing world. Besley and Burgess (2004), for example, find that in West Bengal from 1958 to 1992, manufacturing output per capita declined by 1.5 percent per annum, though it would have grown at 2.2 percent per annum had restrictive labor reforms not been passed.

Djankov and Ramalho (2009), in a literature review, find that “developing countries with rigid labor regulation tend to have larger informal sectors and higher unemployment, especially among young workers. Some studies also find that rigid labor regulation results in an increase in urban poverty, fewer business start-ups, foregone benefits from other (particularly trade and licensing) reforms, and in female unemployment [sic].”

(Crews Jr. 2015).

Given the consequence of rigid labor regulations a proprietor has a strong incentive to limit them. A more open labor market will attract employees and employers, boosting productivity and leading to long-term increases in social welfare.

Taxes

The final important national policy over which a proprietary city would need autonomy is taxes. Complex taxes lead to deadweight loss. High taxes discourage investment and job creation.

Mooij and Ederveen (2003) review the literature on the elasticity of foreign direct investment. They find the elasticity of taxes on foreign direct investment is -3.3. That means a one-percentage-point increase in taxation decreases foreign direct investment by 3.3 percent.

Lee and Gordon (2005) study the effects of corporate taxes on economic growth in a cross-country survey from 1970 to 1997. They find that raising corporate tax rates by ten percentage points leads to a decrease in economic growth between one and two percentage points.

Having low taxes is key to attracting investment and creating jobs in a proprietary city. Accordingly, the proprietor has an incentive to keep tax rates low.

Local Governance

In addition to legal and regulatory issues that will need to be negotiated with the host country, a proprietary city also makes decisions typically made at the city level because the proprietor owns the land. The latter decisions concern land titling, zoning, ridesharing apps, corruption, clean water, schools, and randomized control trials. In this section I offer comments on why these issues are important and how a proprietary city might approach them.

Land titling

The UN (2003) estimated that 924 million people live in slums. Durand-lasserve and Selod (2007), in a literature review, write that in developing countries, “usually between 20% and 90% of a city’s population live in informal or illegal settlements.” Because they lack title to land, these residents are often unable to fully integrate into the world economy.

De Soto (2003) argued that property titles and strong ownership rights would give inhabitants security to invest in their property and the ability to take out loans against their land. Several studies (e.g., Galiani and Schargrodsy 2010) have supported De Soto’s arguments. Durand-lasserve and Selod (2007), reviewing the evidence, write that “formalisation programmes improve land-market efficiency and can have beneficial socio-economic effects,” though they are also critical of the current state of the literature, writing that “quantified evaluations are very scarce and subject to a set of methodological assumptions.”

The proprietors have a strong incentive to ensure every resident has clearly defined land rights. Doing so helps integrate residents into the proprietary city and ensures the proprietor can collect taxes efficiently.

*Zoning*⁹

Zoning and other land-use regulations keep housing prices artificially high by limiting supply. Glaeser and Gyourko (2003), for example, find that “zoning and other land use controls, play the dominant role in making housing expensive.” Without zoning and land-use controls, most housing prices approximate the construction cost. Jason Furman (2015), chair of the Council of Economic Advisers in the Obama administration, agrees, arguing further that land-use restrictions impede economic mobility.

One place characterized by such restrictions is New York City, long known for high housing prices. The Real Estate Board of New York (2013) finds that 27 percent of Manhattan is designated as landmark, raising the cost of repair as well as limiting owners’ ability to construct new buildings. Such restrictions privilege those living in the area above those considering moving there.

Zoning and land-use regulations are not exclusive to developed countries. Huang (2015) argues that high housing prices are a key reason why India lags behind China in

⁹ A proprietor must engage in zoning at some level, leasing its land out to residents and businesses. However, in this case I am considering artificial building restrictions. These include top-down decisions on which areas are residential, which are commercial, and which are industrial, as well as restrictions on building height.

urbanization caused by land use restrictions and housing regulations. In Shanghai and Beijing, despite decades of record-breaking economic growth, housing prices are half as high as in New Delhi and Mumbai. The *Wall Street Journal* (Bellman 2014) reports that a three-bedroom apartment often costs even more in Mumbai than in New York.

A proprietary city has the incentive to zone only in extreme cases, allowing the market to decide how many houses to build and ensuring housing costs remain relatively low. This benefits low-income workers and their families by lowering their living expenses and allowing them to live in areas they would otherwise be priced out of.

Ridesharing Apps

Ridesharing apps, Uber and Lyft being the two most prominent, illustrate another area where proprietary cities can be expected to outperform most cities. Cities around the world have banned, or tried to ban, Uber. This raises the cost of transportation, benefiting taxi drivers and the owners of medallions while harming the consumer. Paul Graham (2012), a Silicon Valley venture capitalist, tweeted that “Uber is so obviously a good thing that you can measure how corrupt cities are by how hard they try to suppress it.”

New York City, for example, restricted taxi supply to such an extent that a medallion sold for \$1 million (Grynbaum 2011). The restricted supply, combined with fixed prices, led taxis to discriminate, especially against black residents, and to refuse to drive to poorer neighborhoods. In spite of the well-known deficiencies of the New York

taxi services, it still took Uber five years to defeat legislative attempts to limit what services they could offer (Griswald 2015).

A proprietary city is less beholden to special interest groups than most cities today. Because of the link between land prices and revenue, a proprietary city has an incentive to spurn such groups and take actions that increase land value. This includes allowing ridesharing apps.

Corruption

Many undeveloped countries today face the problem of corruption. Typically, corruption exists because public bureaucracy is ineffective. But many countries find it difficult to strengthen bureaucracy or create an independent body to fight corruption (Svensson 2005).

While creating an independent body to fight corruption is often difficult, eliminating corruption once that body exists is straightforward. For example, Fisman and Miguel (2007) investigate the effect of legal sanctions for not paying parking tickets. Until 2002, diplomatic immunity protected UN diplomats: they could violate parking laws with no sanction. In 2002, parking authorities gained the right to confiscate diplomatic plates. As a result, diplomats quickly began following traffic laws better and paying tickets.

As residual claimants, the owners of a proprietary city have strong incentives to ensure city officials abusing their office are punished. Independence from the host country, as well as the profit motive, tend to ensure that a proprietary city can minimize corruption in its administration.

Water and Sanitation

Many of the urban poor, especially in developing countries, lack access to clean water and sanitation. This increases the incidence of disease, in turn increasing child mortality. Montgomery and Elimelech (2007, 19) write that “nearly 60% of infant mortality is linked to infectious diseases, most of them water-, sanitation-, and hygiene-related” and that “globally, diarrhea is the third largest cause of morbidity and the sixth largest cause of mortality.”

Access to clean water and sanitary disposal of waste can eliminate these problems. Modern plumbing, which rarely exists in rural areas in developing countries and is often lacking in slums, can eliminate waterborne illnesses.

Decreasing disease incidence will improve productivity by decreasing the amount of time employees are sick. More importantly, clean water will reduce infant mortality. As such, a proprietary city has a strong incentive to provide clean drinking water.

Schools

Education is another area where a proprietary city can offer substantial improvements. While free public education is close to universal today, it is often education in name only. For example, half of the Zimbabweans in grade 6 are innumerate, while a third could not read (Pritchett 2015). Similarly, in Uttar Pradesh, a state in northern India, “less than half of surveyed children in fifth grade could read a story intended for second graders” (Lowrey 2013).

Proprietary cities can offer substantial improvements to education. By opting out of the host countries’ educational system, they can free themselves from powerful teachers’ unions or other institutional impediments to change. For example, Mexico’s teachers loudly, and sometimes violently, protested a law that would prevent them from selling their jobs (*Economist* 2013).

While one cannot describe in advance the best education model, proprietary cities can experiment to find it. They might follow the lead of Bridge Academies, for example, which provides education to 100,000 students in Kenya for around \$5 a month. Alternatively, a proprietary city could institute a voucher system and allow the market to conduct the experiment.

Randomized Control Trials

One way to continuously improve governance services is to adopt randomized control trials. Any proprietary city faces an array of problems to which there is no

obvious best solution. Testing the different policies allows it to determine which policy best suits its goals (see Banerjee and Duflo 2012 for an overview of how randomized control trials have been used to fight poverty).

Because of political concerns, governments rarely use randomized control trials to determine policy. Established bureaucracies are typically resistant to change, making reorganization in light of evidence difficult. A proprietary city does not face those constraints.

Take policing. Cities can adopt either of two general strategies for lowering crime: first, community policing, where some police officers walk a beat; or, second, problem-oriented policing, where police officers respond to the highest-priority crimes (Development Services Group 2010). Each approach has advantages and disadvantages, and it is not clear which one lowers crime more effectively. Under community policing, the officer builds trust with the community, which could increase trust between the community and the police department and make the community more willing to report crimes and cooperate in investigations. Under problem-oriented policing, more officers are available to respond to critical situations.

A randomized control trial could determine which strategy better protects neighborhoods. It would identify two similar neighborhoods, randomly assign one neighborhood community policing and the other problem-oriented policing, then compare crime rates after one year.

Similarly, consider the challenges and methods of helping a rural population integrate into city living and find work. The proprietor could evaluate different methods—advertising campaigns, free classes, and working with community leaders, for example.

Randomized control trials can offer substantial savings for the proprietor. Police and education, typically two of the highest-budget items for a city, are quite amenable to randomized control trials. Savings of as low as 10 percent could translate into tens of millions of dollars annually, benefiting the proprietor as well as the city’s residents.

Innovation

A proprietary city can innovate in governance, something governments rarely do. Because the proprietor is a residual claimant, a proprietary city has an incentive to continuously improve governance at the margin. In several cases, where governments have been slow to innovate, a proprietary city might move faster.

For the examples in this section I will use better adapting to new technologies as examples of innovation. However, innovation is a broader concept. Because of the nature of innovation, how proprietary cities and other governments will innovate is difficult to predict.

Perhaps the most telling example in the United States of the failure of governance innovation is that, according to the FCC, “most consumers cannot reach 911 by sending a

text message from their wireless phone” (FCC 2015). Cell phones have been ubiquitous for over a decade, but most local governments have yet to adapt one of their most essential services, policing, to fully take advantage of cell phone capabilities.

In several situations a potential victim of crime would want to text rather than call the police. During a home invasion where the homeowner is hiding in a closet, calling the police would make noise, which would draw the attention of the invaders. Texting, on the other hand, would allow the homeowner to remain undiscovered. Similarly, during a terrorist attack, a victim might want to convey to the police the location of the attackers or whether the attackers are executing hostages.

Ensuring police departments can read and respond to 911 texts is not a complex technological problem. It is unclear why so few departments have added such a service. However, what is clear is that the failure to do so exemplifies a stagnant view of the world that unfortunately sometimes pervades city bureaucracies.

In New Orleans, for example, it was left to a private citizen, with his own money, to improve police response times. Sidney Torres, a local businessman, spent \$380,000 to create an app and employ off-duty police officers in an effort to reduce a crime wave. The idea was simple: give the off-duty police officers the app and a Polaris, essentially a glorified golf cart, and have them respond to crime.

With GPSs in the cars, as well as a different administrative structure, it was easy to create a sense of accountability. Dispatchers always knew where officers were, ensuring they could be rewarded for responding quickly to crime, or disciplined for not responding. Citizen would call in crimes, and Torres's organization would dispatch the closest Polaris. Officers who resolved dangerous situations were rewarded with gift cards. The City of New Orleans later found several grants to continue to employ the off-duty police officers (Amsden 2015).

To put in perspective the \$380,000 price tag, the New Orleans Police Department had a budget in 2015 of no less than \$138,000,000 (New Orleans Budget 2015). Not only did the department, not to mention other police departments, fail to innovate, the *New York Times* reports the New Orleans Police Department is keeping the program separate from regular policing and funding it through grants. A major police department is either unwilling or unable to fully integrate a technology which clearly increases the efficiency of that police department (Amsden 2015).

More generally, government is too often static. The laws are passed, and the government enforces them. As technology improves we should expect government to use that technology to better provide its services. Police departments have existed for at least a century in most major cities. They adapted to cars and telephones. They should adapt to the Internet, GPS, and smartphones.

Estonia has taken the lead in this regard. It collectively terms its online governance services e-Estonia and offers citizens the ability to go online for everything from paying taxes, voting, and registering a business to buying tickets for public transportation. First, and perhaps most importantly, it created a unique identification for every citizen. With the personal ID Estonia can be sure no one is voting twice or otherwise abusing the system (Tamkivi 2014).

Perhaps most interestingly, Estonia is trying to recruit e-residents and encourage them to register their businesses in Estonia. E-residents of Estonia are able to take advantage of Estonia's many online public and private resources. E-residents can digitally sign contracts and confirm the signatures of others, and establish a business in Estonia (Estonia E-residency 2015).

It is difficult for developing countries to emulate Estonia. Many developing countries lack an effective, impartial bureaucracy that could implement Estonia's scheme. Further, residents in developing countries, especially the rural areas, often lack Internet access. Ensuring residents have Internet access is simpler in a city. The provision of Internet services does not create an unequal playing field.

Government has been slow or unable to adapt to new technologies. Given the financial incentives of the proprietor, it is reasonable to believe proprietary cities would embrace innovation more than many current governments have.

Conclusion

In this chapter I considered challenges facing our rapidly urbanizing world. I offered a new category of city governance, proprietary cities, that can help meet that challenge. I define a proprietary city as a city meeting three conditions: a proprietor owns the land, the city has a degree of legal and regulatory autonomy, and a proprietor has a say in constructing the city's own legal and regulatory system.

The first section details the incentives facing proprietors. Because the proprietor is the residual claimant on the land on which the city is constructed, the proprietor is incentivized to promote economic development.

The next two sections focus on generating revenue and viability. I argue that proprietary cities are likely to use a land value tax to generate revenue. Then I illustrate, through recent trends in SEZs and private, non-autonomous, city development, that proprietary cities are likely to be built in the near future.

The next sections, institutions, growth policies, and local governance focus on how proprietary cities might promote economic growth. What policies are they likely to adopt, what are the most important laws and regulations to opt out of, and what other actions can proprietary cities take. The last section considers how proprietary cities might innovate in governance.

Whether proprietary cities will be built or not remains to be seen. However, I hope this essay leads to increased discussion of city governance, urbanization, and how to improve legal and regulatory systems in developing countries.

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GOVERNANCE IN PROPRIETARY CITIES

Introduction

The first chapter focused on how landownership incentivizes proprietary cities to adopt policies to support economic growth and what those policies are. In this chapter I go deeper into the governance of proprietary cities. What do economic theory and empirics tell us about how proprietary cities might act? Will proprietary cities apply their laws fairly and justly, not favoring one group over another?

Laws and regulations are traditionally thought of as belonging solely in the realm of government. In the traditional idealized model, government is presided over by representatives of the people who act in the public interest. Government, through creating and enforcing laws and regulations, as well as providing public goods, provides the framework for the private sector to work within.

Unfortunately, the idealized model of government is often inaccurate. Developed countries do tend to have governments that, by and large, promote the public good. Developing countries, on the other hand, rarely have benevolent governments. Instead their governments are often predatory, protecting politically connected friends from competition and redistributing wealth to allies. Such governments have little

accountability, ensuring they can avoid creating the necessary conditions for economic growth.

Proprietary cities can potentially create substantial improvements in governance in developing countries. At the same time, by introducing profit into what has traditionally been the public sphere, proprietary cities represent a challenge to the current consensus on the proper role of the government and the private sector. Whether proprietary cities are a worthwhile idea depends, to a great extent, on whether they can improve the standard of living for residents of the host country.

The primary difference between proprietary cities and current governments is that proprietors are residual claimants on the land they govern. If they govern well, increasing the value of the land above their costs, they profit. If not, they lose money. Through landownership, the proprietor internalizes externalities, thereby becoming incentivized to provide public goods.

This link between landownership and the provision of public goods is likely to appear compelling only to those already sympathetic to proprietary cities. Others may say that economic models with unrealistic assumptions and devoid of context are easy to make, though often wrong or applicable only in trivial scenarios.

In this chapter I make the case for proprietary cities more robust. To do so I find parallels between topics scholars have already researched and proprietary cities. What

does the literature on natural monopolies tell us about proprietary cities? What about the literature on private police, or private dispute resolution?

The rest of the chapter is organized as follows. First, I review evidence regarding the performance of companies with natural monopolies in the developing world. Second, I discuss the nirvana fallacy, pointing out that the relevant comparison for a proprietary city is the host country. Third, I review the evidence on private dispute resolution. Fourth, I consider the literature on private police. Lastly, I conclude.

Monopoly

Proprietary cities are monopolies. By definition, proprietary cities create and administer laws and regulations in a given territory. Leaving a proprietary city requires relocation. In this sense, they can be considered roughly analogous to a utility company, such as water or electricity, though proprietary cities will have far greater authority than utilities.

Traditionally natural monopolies are administered by the state or highly regulated. The fear is that without government ownership or regulation, the utility will charge a monopoly price. The difficulty is that developing countries tend to have dysfunctional governments, making effective ownership or regulation of utilities less likely.

Much of the advantage of proprietary cities resides in their ability to opt out of existing governance structures. However, the more autonomy a proprietary city has, the

greater their ability to exploit their residents. The high cost of exit, compared to switching insurance companies for example, makes it possible for proprietary cities to abuse their authority.

In this section I review empirical evidence regarding whether proprietary cities would abuse their authority. To do so I examine two examples of private monopolies, private water utilities in developing countries and company towns.

Private water utilities in developing countries and company towns are both comparable to the incentive structure faced by proprietary cities. There is a private company with a territorial monopoly, water and the town, with a relatively ineffective state to regulate it. As such, the extent to which private water utilities and company towns abuse their authority should be roughly similar to the extent proprietary cities abuse their authority.

Water Utilities

Beginning in the 1990's, numerous developing countries allowed private companies to operate their water utilities. The rationale for bringing in the private sector was largely based on city governments facing cash constraints and the hope that private investment would make up the difference. In 2009, about 7% of the urban population in the developing world was served by private operators, rising from only six million in 1991.

The most comprehensive overview of public private water supply in the developing world is *Public-Private Partnerships for Urban Water Utilities* by Philippe Marin. He estimates that public private partnerships (PPPs) have expanded water access to an additional 24 million people since 1990.

Marin analyzes four aspects of water utility performance, access, quality of service, operational efficiency, and tariff levels. He finds that PPPs have “substantially improved service quality” (2009 3), “operational efficiency appears to be the area in which the positive contribution of private operators has been the most consistent” (2009 4), and that the literature on tariffs is inconclusive. Marin’s concludes that PPPs “can be a viable option to improve urban water utilities in developing countries” (2009 146).

The experience of PPPs in providing water utilities in developing countries suggests predation by a proprietary city to be unlikely. That being said, there are several prominent differences between urban water utilities and proprietary cities.

The first difference is scope. Proprietary cities will likely provide or regulate water utilities, electric utilities, roads, and legal and regulatory services. Marin does note that a learning process was involved in improving PPPs provision of water utilities. The learning process for proprietary cities is likely to be steeper.

The second difference is the relation between the government and the company. Marin investigated public private partnerships. The public sector was involved in

ensuring the company did not abuse their monopoly power. This raises the question of the proper scope of government involvement in a proprietary city. The tradeoff can be thought of as oversight vs. overregulation. Will government involvement improve proprietary cities through oversight or reduce their autonomy and link the unsuccessful institutions of the host country to the city?

It is impossible to definitively answer that question without more information. The experience of PPP provision of water utilities suggests government involvement, even in developing countries, is helpful. However, proprietary cities are substantially more complex than water utilities, making oversight more difficult and overregulation more likely. For this reason, I am inclined to prefer less government involvement until more information becomes available.

Company Towns

Company towns are typically thought of as illustrating the dangers of private governance. The usual narrative is that the company would exploit workers who were forced by circumstance to patronize the company store and rent company housing. By monopolizing all goods and services in a geographical area the company would pay low wages, charge high prices for goods and rents.

Alternatively, company towns can be thought of as overcoming transaction costs. In remote regions, for coal mining for example, workers would need to relocate. Building

a town is inherently risky. The coal company is better equipped to deal with this risk as it has more information about the viability of the mine.

More generally, by building the town the coal company internalizes the cost of coal production. If a small town can only support a single general store, an independent general store could charge monopoly prices. However, if the general store is owned by the coal company, it has less incentive to raise prices as it is part of compensation offered by the coal company.

Most of the empirical work on company towns focuses on mining towns. The literature is split. Some suggests that the services provided by company towns were comparable to services provided by similar incorporated towns. However, other evidence does imply that company towns acted monopolistically.

Fishback and Lauszus (1989) investigate the quality of sanitation in company coals towns in the 1920s. They find that the water and sanitation were provided at statistically similar levels in both company towns and incorporated towns.

Fishback (1986) examines stores in company towns. He finds miners were paid in cash, scrip was used as an advance on payday. Prices were generally higher at company stores. However, the difference in price can be explained through higher transport costs.

Alternatively, Boyd (1994) finds that company towns had higher prices and lower wages than area without company towns. The difference in wages was higher among those who had limits on mobility, primarily the young and the elderly.

There are several important differences between company towns and proprietary cities. Company towns were typically geographically isolated. The company was the sole employer and often the sole supplier of housing, goods and services. Proprietary cities are unlikely to be geographically isolated. Further, there will be multiple employers, and providers for goods and services.

Nevertheless, the evidence regarding company towns does weakly suggest proprietary cities will abuse their monopoly power. Further involvement of the host country could reduce the potential of abuse of monopoly power, however further involvement carries its own risks. It is also important to note that proprietary cities can still be an improvement on the host country even with the potential for monopolistic abuse.

Nirvana Fallacy

The proper benchmark for comparing the policies and governance of a proprietary city is the policies and governance of the host country. If a proprietary city has better policies and governance than the host country, we can consider it, at the very least, a

partial success. If a proprietary city fails to improve on the policies and governance of the host country, we almost certainly must count it a failure.

Unfortunately, this point is often overlooked. Instead of comparing two realistic options, one public and one private, people compare a realistic private option to an idealized government option. People tend to recognize market failure far more often than government failure. Demsetz (1969) terms the tendency to compare market failures to ideal government solutions the nirvana fallacy.

Romer (2015), for example, commits this error. He says, “And my rule is that I will not support any public policy initiative for a new city if it is not the kind of place that I would be willing to go live or where I would want my children and grandchildren to live.” Rather than use the existing option as a comparison, Romer uses himself, his children, and grandchildren as the metric by which to judge policies.

Romer and his family are well off and have far better options than most. For example, Zimbabwe could create a new city with better policies than Harare. The new policies could fall below the standards of Romer, his children and grandchildren, but still be an improvement for most Zimbabweans. Precluding policy improvements which do not meet an arbitrarily high standard risks trapping people in poverty.

The set of choices of a Zimbabwean, and rural farmers in the developing world, is circumscribed compared to Romer’s. Some policy improvements would benefit those

living in the developing world but still not raise policy to the standards of the developed world. Preventing such improvements because they are not ideal restricts the opportunities of those who need them the most.

Proprietary cities aim to raise citizens' standard of living above the status quo. Ideally this would mean catch up growth to the developed world, but such a goal could be unrealistic. There are many potential improvements which could raise living standards, even if those living standards remain below those of developed countries.

Consider Honduras, for example, which passed a law allowing for the creation of proprietary cities (Doherty 2014).¹⁰ Suppose the new cities brought policy and governance to the standards of neighboring El Salvador, and that doing so raised citizens' income commensurately. Starting from a per capita GDP equivalent to \$2,435, increasing Hondurans' per capita GDP to the level of El Salvador, \$4,149, would constitute a 70 percent increase (data from World Bank 2016).

Even if improving policies and governance to the standards of El Salvador closed the income gap by only half, Honduran citizens would still see substantial gains, with their per capita GDP rising by 35 percent. Salvadorian levels of governance would be a substantial improvement in Honduras, but a downgrade in Mexico. As such, when

¹⁰ Though the law passed, implementing the law has been slow, and no proprietary cities are currently under construction.

judging the potential of a proprietary city, it is important to remember the quality of governance in the host country.

Given the importance of making the proper comparison of governance in evaluating proprietary cities, it is useful to offer an overview of governance in developing countries. Education is a useful indicator. Providing education is technologically simple: build schools; design a curriculum; hire teachers and administrators, and let them teach. The formula has remained relatively unchanged over the last century. Further, it is easy to test the output of education policy: international tests make cross-country comparisons meaningful and straightforward.

How well a government can educate its citizens also provides insights into other areas of governance. If a government cannot create a working education system, it is unlikely it will be able to write and enforce fair laws and regulations. Problems often associated with schools in developing countries—teachers not showing up for work, for example—indicate larger problems associated with government.

Pritchett (2013, 23) reviews schooling outcomes. He finds that in the Indian state of Andhra Pradesh, which has some of the most comprehensive testing in the developing world, only 35 percent of second-grade children can complete a first-grade math problem: adding two single-digit numbers. Even worse, of the 65 percent of students who did not learn how to do the problem in first grade, only half will learn over the next three grades.

The problem with education is not too few years in school—the world has achieved nearly universal primary schooling. It is that schooling does not necessarily imply education. Education, at a minimum, requires that teachers show up and engage students, and be held accountable when they do not.

Pritchett (2013, 53) estimates that in Ghana in 2007, only 9.7 percent of a cohort of children were able to score above the global bottom 20 percent. Even with universal schooling through grade 9, over 80 percent of Ghanaian students would still be in the global bottom 20 percent in math capability.

Such problems are not unique to Ghana and India. Public schools struggle throughout the world. The problems with public education in developing countries are often so severe many impoverished families pay to send their children to low-cost private schools (Tooley 2013).

Much of the problem in education lies in government's inability to ensure teachers show up, much less teach. Tooley (2013), summarizing a report on education, writes that in a random sample of public schools in India, during an unannounced visit, in only half was anyone teaching. The principal was absent in one-third of the schools visited. On the other hand, in private schools, schooling meant education.

The failure of developing countries to provide education indicates other governance failures. If a government cannot ensure its teachers go to work it is likely to

be ineffective in other areas. Similarly, if a proprietary city can educate its residents better than the host country, it will likely have other administrative advantages.

It is important to remember governance quality in the host country when evaluating a proprietary city. As proprietary cities will be built primarily in developing countries, the policies and governance of those countries are the relevant comparison. Therefore, during my discussion of police and dispute resolution, I reference relevant statistics and other information pertaining to the quality of governance in developing countries.

Commercial and Civil Justice

The most important determinant of success for proprietary cities is their ability to administer commercial and civil justice fairly. As previously stated, autonomy in commercial and civil law is one of the foundational elements of autonomy more generally. However, autonomy alone is not enough; proprietary cities must also build a trustworthy commercial and civil judicial system.

Romer, a critic of what he terms private cities, argues that proprietary cities would not be fair. Instead, they would favor big players¹¹ over the average residents. In an interview, Romer (2015) says,

¹¹ I use “big players” to refer to influential companies and individuals in a proprietary city. Some examples include companies that own and operate factories in the proprietary city, and politicians of the host country.

The track record of private police forces and private judicial proceedings is very bad. We have some of these in the United States run by private, but non-profit, universities. If the university has a sports program that generates lots of revenue and prestige, the university tends to protect athletes, typically men, who commit sexual violence, typically against woman. They do not offer anything like “equal protection under the law.” It is a telling illustration of how police and judicial proceedings can be bent to support the mission of the organization, even one like a university that we usually think of as being well intentioned, and fail to protect the people it is responsible for.

Romer makes an important point, but he overstates his claim. First, proprietary cities have residual claimants. Universities do not. Second, he does not compare the relevant alternatives. If, for example, the son of a mayor of a traditional city gets arrested for possession of illegal drugs, would he be treated differently from the average resident? The answer is almost certainly yes.

More generally, Romer shows a lack of understanding of the literature on both private governance and actual governance in developing countries. In this chapter I show that private governance is better than Romer supposes, as well as that the quality of governance in developing countries is worse than he implies.

First, I consider the theory of private governance. Second, I review the literature on commercial legal systems in developing countries. Third, I look at the empirical evidence relating to private governance.

Theory

Many observers believe the state to be the primary provider of dispute resolution. For example, Rajan and Zingales (2004, 293) write, “Markets cannot flourish without the very visible hand of government, which is needed to set up and maintain the infrastructure that enables participants to trade freely and with confidence.” Such observers commonly claim that people can effectively trade in small, homogenous groups but that state enforcement is necessary for high-social-distance exchange. By high social distance, I mean that two parties do not interact other than for exchange.

To the following extent, these observers are correct. In small, homogeneous groups, exchange is typically self-enforcing. If a member of the group defects, cheating another member, members can ostracize the defector. Because the benefits of remaining in the group are typically higher than the benefits of a single defection, cheating is rare.

High-social-distance exchange changes the dynamics. Monitoring is costlier. Ostracism is less effective. And recovering damages from cheating is more difficult. Therefore, the mechanisms that enable trade in small, homogenous groups do not necessarily apply to high-social-distance exchange.

Economists typically go on to say the absence of state-provided justice and enforcement would greatly reduce the extent of commerce. The logic is that a one-shot prisoner's dilemma accurately describes high-social-distance exchange. It is in both parties' interest to defect, leading to a suboptimal outcome.

These economists often make two claims. First, a neutral third party is needed to resolve disputes; otherwise, people would trade less often. Second, an enforcement body is necessary to punish defectors and reimburse those who were cheated. Punishing defectors is an essential element of dispute resolution.

A third claim, made less often, is that good dispute resolution has a positive externality. Accordingly, the market would under produce good dispute resolution. The benefits of good dispute resolution extend beyond the two contracting parties. Simply knowing that dispute resolution is fair and efficient lowers the cost of commerce.

But neither of the first two claims necessarily invalidates the possibility of private dispute resolution. It is simple to designate a third party to resolve the contract in case of a dispute. Further, even if private dispute-resolution systems are unable to fine defectors, other mechanisms of punishment exist.

Regarding the third claim, proprietary cities have one important difference with most private dispute-resolution mechanisms. Proprietary cities are territorial, making them comparable, in certain ways, to states. The territoriality of proprietary cities ensures

they capture some of the positive externalities from good dispute resolution. Therefore, the claim would only partially apply to proprietary cities.

The territoriality of proprietary cities also makes contract enforcement easier. Most contracting parties would have physical assets in the proprietary city that could be seized if they did not pay the fine.

More generally, high-social-distance exchange often more closely resembles a repeated prisoner's dilemma because of innovations in private governance. In a one-shot prisoner's dilemma, the incentive is for both parties to defect. However, in a repeated prisoner's dilemma, it is possible to punish prior defections, making cooperation the best strategy. For example, Axelrod (2006) found that a tit-for-tat strategy was the best for playing a repeated prisoner's-dilemma game.

One way to turn a one-shot prisoner's dilemma into a repeated game is by lowering the cost of acquiring information about the reputation of both parties. Then the benefit of defection must be weighed against the cost of lost future exchange opportunities. In the lab, Tullock (1999) found that allowing players to choose their partners, communicate, and change partners led to high degrees of cooperation in a prisoner's dilemma. Outside the lab, Amazon's system for third-party vendors, and eBay's system, has demonstrated that a simple rating system suffices to maintain exchange among people over high social distances. And AirBnB shows that with a rating system, people are even willing to entrust strangers with their homes.

Similarly, both eBay and Amazon have dispute-resolution mechanisms for their third-party vendors. Amazon, for example, guarantees purchases from third-party vendors for up to \$2,500.

Reputation is similarly important for companies that provide dispute-resolution services. If one party believes the private dispute-resolution service is biased in favor of the other party, they will not sign the contract.

Romer or another critic might respond that a proprietary city or another private dispute-resolution body might favor big players. If a big player provides a disproportionate amount of business to a private dispute-resolution body, the private dispute-resolution body might be inclined to favor the big player at the expense of companies and individuals that provide less business.

Ultimately, though, theory cannot answer this question. The decision factors for a private dispute-resolution are difficult to predict or quantify. These factors include the cost of potential clients acquiring information related to the propensity of the private dispute-resolution body to favor big players. However, empirical evidence, which I review later in this section, suggests that even when big players have disputes with one-time clients, private dispute resolution tends to be fair.

Government Dispute Resolution in the Developing World

Whether or not private mechanisms have their merits, government dispute resolution in the developing world is rarely efficient or fair. Mancur Olson (1996, 22), for example, writes, “Though the low income societies obtain most of the gains from self-enforcing trades, they do not realize many of the gains from specialization and trade. They do not have institutions that enforce contracts impartially, and so they lose most of the gains from those transactions that require impartial third party enforcement.” Similarly, Douglass North (1990, 59) writes, “There is an immense difference in the degree to which we can rely upon contract enforcement between developed countries and the third world.”

Part of the World Bank’s Doing Business Index consists of a ranking estimating the time, percentage of contract cost, and number of procedures for enforcing contracts. This part of the index demonstrates how difficult contract enforcement in low-income countries can be. For example, in twenty countries, it takes over 1,000 days to resolve a contract. In five countries, it takes over 100 percent of the contract value to resolve the contract.

Given the quality of government dispute resolution in the developing world, the hurdle for proprietary cities is relatively low. They do not have to offer better dispute resolution than developed countries. To be successful, they merely have to offer better dispute resolution than the host country.

Empirics

Empirical evidence shows that private dispute resolution can and does resolve disputes fairly and efficiently, including disputes over complex contracts. A telling historical example of private adjudication is the emergence in Amsterdam of the first stock market (Stringham 2015, ch. 4). The Dutch had to invent contractual forms that are now common, futures and shorts being two prominent examples. At one point, the Dutch government banned shorts. Despite the ban, contracting parties continued to pay what their contracts dictated. A party's failure to do so, even for illegal contracts, would have led the stock market to ban them for life.

In modern times, Peter Leeson (2008) found, the Convention on the Recognition and Enforcement of Foreign Arbitral Awards, better known as the New York Convention, which obligated states to enforce international contracts, only increased trade by 15 to 38 percent—a substantial margin, but small enough to indicate the high level of trade prior to the convention. Private dispute resolution, even without being able to enforce contracts, was already doing much work. Leeson (2008, 64) writes, “An estimated ninety percent of all international commercial contracts include arbitration clauses.”

Given this state of affairs, private adjudication in the shadow of the state is more relevant to private cities than enforcement mechanisms outside the shadow of the state.

Today there are numerous reasons to choose arbitration over state courts. In the international sphere, the advantages of arbitration include enforcement, speed, price,

neutrality, confidentiality, and expertise (International Arbitration Attorney Network 2015).

The primary advantage of international arbitration over state judges is that most countries are only required to enforce the outcome of international arbitration. No treaty forces countries to recognize the rulings of state judges in another country. But if countries A and B have both signed the New York Convention, those countries are required to settle a dispute between a company from country A and a company from country B.

Speed and price have been two traditional arguments in favor of arbitration. However, doubts have recently been raised whether this is still true. In arbitration, the parties have to pay for not only their own legal team, but also the arbitrators and the venue, which raises costs. On the other hand, if the dispute is resolved in a timely manner, companies could save money on their legal team (Bergsten 2005, 15; Buruma 2013, 12-13).

In international disputes, if companies use a state court, the company based in that state likely has an advantage. That company is more familiar with the legal practices and procedures of the court, not to mention the language. Having an international arbitrator ensures a neutral party will hear the claim (Buruma 2013, 10-11).

International arbitration can be confidential. This can be advantageous for companies, but is arguably disadvantageous for social welfare. Public decisions are a public good because they create case law, which helps clarify future disputes.

Last, arbitrators tend to have greater expertise than state judges. Because the two parties in the initial contract choose the arbitrator, they can ensure an arbitrator with sufficient knowledge of the relevant industry resolves any disputes. Complex multimillion-dollar contracts are best decided by arbitrators with knowledge of the standards and norms of the industry, rather than by outsiders (Bergsten 2005, 14-15; Buruma 2013, 11).

Companies prefer international arbitration to state courts to resolve international disputes. This is strong evidence that private commercial courts can be effective. Admittedly, though, the fact that the New York Convention exists for enforcing judgments while no comparable treaty exists for state-court judgments limits the usefulness of a direct comparison.

Even if a direct comparison were possible, it would not necessarily apply to a proprietary zone. International arbitration typically involves large established companies. The interactions of these large companies are better modeled as a repeated rather than a single-shot prisoner's dilemma. An interest in future business ensures interest in cooperation. This same model is not necessarily universal for arbitration. Nevertheless,

international arbitration shows that private dispute resolution can handle complex contracts.

Employment arbitration illustrates another side of arbitration. Assume a company is making arbitration clauses a requirement for employment. This creates an inherently different dynamic than international arbitration. The company is a repeat customer of the arbitrator, but each of the employees is a one-shot customer. So there is a risk that the arbitrator will favor the business over the employees to ensure the company will continue to purchase its services. In this way, employment arbitration is roughly analogous to the civil and commercial courts in a proprietary zone.

The Federal Arbitration Act of 1925 (FAA) was the first national law that explicitly stated that arbitration clauses are enforceable (Haydock and Henderson 2002). A series of Supreme Court decisions have since made it clear that “arbitration is an acceptable, and perhaps preferable, way for parties to choose and use to have their disputes resolved” (Haydock and Henderson 2002, 141). A majority of studies have found that employment arbitration is fair, though several have found it biased in favor of employers.

Lamare and Lipsky examine the Financial Industry Regulatory Authority (FINRA), a non-governmental, non-profit regulatory agency that rules on employment disputes. They find “no evidence that the repeat pairings of an arbitrator and an employee

respondent in the securities industry results in outcomes that favor the employer” (Lamare and Lipsky 2014, 131).

Maltby (1999) finds that “analysis of available data shows that employee-plaintiffs generally fare as well in arbitration as they do in court” (Maltby 1999, 63). Bingham (1995) examines arbitration in non-union scenarios. She concludes that “employees recover a higher proportion of the damages they claim, or have a better outcome than employers, notwithstanding the theory that an arbitrator will rule in favor of employers,” and that “these findings tend to contradict the theory that employment arbitrators will be biased in favor of employers in a non-union setting (Bingham 1995, 369).

Hill’s (2003) research “indicates that AAA employment arbitration offers affordable, substantial, and measurable due process to employees arbitrating pursuant to mandatory arbitration agreements and to middle- and lower-income employees” (Hill 2003, 824).¹² Eisenberg (2004) finds his “results are consistent with arbitrators, at least those participating in AAA sponsored arbitration, not acting in a materially different fashion than in-court adjudicators” (Eisenberg 2004, 53).

I was only able to find two empirical studies with results that showed a disparity between employment arbitration and traditional litigation. Gough finds that “analysis of approximately 700 contemporary employment discrimination cases shows outcomes in

arbitration are starkly inferior to outcomes reported in litigation: employees are nearly forty percent more likely to win and receive average awards nearly twice as large in cases adjudicated in the civil litigation system compared to those that are arbitrated” (Gough 2014, 112).

Colvin finds stronger evidence against arbitration: “The results provide strong evidence of a repeat employer effect in which employee win rates and award amounts are significantly lower where the employer is involved in multiple arbitration cases” (Colvin 2011, 1).

Note that the literature on employment arbitration focuses on the United States. As the United States is a developed country with an effective and fair judicial system, it is a high standard to meet. If private arbitration was comparable to US courts, or even if it was slightly lower quality, it would still be an improvement for much of the world.

In general, the evidence surrounding arbitration is mixed but favorable. International arbitration shows private arbitration can handle complex contracts, though because the New York Convention only applies to arbitration no direct comparison to state arbitration is possible. The literature on private arbitration in the United States weakly supports the notion that private arbitration is as fair as public dispute resolution.

Given this evidence, it is reasonable to believe that most proprietary cities would improve dispute resolution in developing countries. Proprietary cities would be able to

¹² AAA is the American Arbitration Association.

handle complex contracts and would be unlikely to favor big players at the expense of the average resident.

Police

A more difficult question than private dispute resolution is private police. Police are defined by their legal authority to use force and detain suspects. In a worst-case scenario police in a proprietary city could be used as a tool of oppression. Ensuring police do not abuse their powers is one of the hallmarks of a liberal state.

In this section I assume a proprietary city, not the host country, provides policing services. The city hires officers to enforce criminal law as well as local rules on nuisances such as noise pollution. I assume police are employed and trained by the proprietor and have powers and authority comparable to police not in the zone, including arresting powers. Criminal law and criminal courts are still provided by the host country.

This section has three parts: the theory behind private police; how police act in developing countries; and the empirics of private police.

Theory

The theory behind private police is similar to the theory behind private dispute resolution. Private police need customers and will thus be focused on customer welfare. This includes lowering the cost of their services as well as lowering the risk of property damage. A private police force that does not provide a service will quickly go out of

business. Benson (1998) offers the clearest theoretical distinction between private and public policing.

The primary reason to expect private police to provide quality services is incentives. A private police force that doesn't would quickly go out of business, or in a proprietary city, lower property values. If the proprietary city employs police, the police will serve the proprietor. Given that the proprietor aims to increase the value of the land on which the city is built, the police have an incentive to act in ways that raise the value of land.

Police in the Developing World

It is especially important to remember the nirvana fallacy in this section. Police occupy a unique, often idealized place in the public's mind in many developed countries (See Blackstone and Hakim (2013) for a discussion of trends in private policing in the United States). However, this idealized notion rarely corresponds to the reality of police in developing countries.

First, while usually a tool for maintaining order and enforcing laws, police are sometimes used for oppression. Eastern Germany and the Soviet Union, for example, would have been better off with fewer police. So it is useful to think of types of policing as existing along a continuum. On one end, police are purely oppressive state agents; on

the other, they are working purely for the public good. Evidence suggests in many developing countries police are closer to the former.

Now, imagine you, the reader, are in a developing country when a threat is made on your life. Whom do you contact, and in what order: the police, hotel security, or your embassy? I suspect most readers would not contact the police first, but rather, most likely, the embassy. Depending on the country, you might even suspect the police are complicit in the threat. Unfortunately, residents of such a country do not have the option of calling their embassy.

For a more concrete example, several Honduran friends of mine have stated they fear the police more than they do the gangs. Mind you, these are middle-income friends and at the time Honduras was the murder capital of the world. These friends fear police, who are ostensibly there to protect them, more than some of the most dangerous gangs in the world. The data show such sentiments are not uncommon.

The World Justice Project found that in sub-Saharan Africa 64 percent of people believed all or most police were engaged in corrupt practices. In South Asia and in Latin America and the Caribbean the numbers were 63 percent and 50 percent (World Justice Project 2015, 34). In sub-Saharan Africa 58 percent of households had a member who had to pay a bribe after being stopped and detained by police during the previous three years. Both in South Asia and in Latin America and the Caribbean, in 27 percent of households a member had to pay a bribe to police in the previous three years; 43 percent

of households in Central Asia and Eastern Europe had the same experience (World Justice Project 2015, 35).

The World Justice Survey (2015, 39) reports, “In nearly all Western European and North American countries, a majority of respondents believe that being of a different ethnic group than the police officers involved or being a foreigner would put suspects at a disadvantage.” While they do not report the results for other countries, it is hard to imagine respondents there would be less likely to have that belief than in such high-income countries.

Indeed, most people in most developing countries perceive police to be unaccountable, even predatory—conversely for developed countries. In Nigeria, only 21 percent, 23 percent, and 24 percent of people perceive police to act according to the law, respect the rights of suspects, and be likely to be punished for violating the law. In Honduras such perceptions are more prevalent, at 59 percent, 55 percent, and 54 percent. And almost all or all people in New Zealand perceive police to act according to the law, respect the rights of suspects, and be likely to be punished for violating the law—100 percent, 100 percent, and 99 percent (World Justice Project 2015, 49).

I averaged these numbers for various regions. I found that in Latin America and the Caribbean the numbers were 51 percent, 46 percent, and 46 percent. In sub-Saharan Africa the numbers were 50 percent, 44 percent, and 51 percent. In South Asia the numbers were 50 percent, 39 percent, and 42 percent. In summary, in large parts of the

low-income world, majorities or near majorities perceive that police do not act according to law, do not respect the rights of suspects, and are not punished for breaking the law.

The lawlessness of police is also related to their general ineffectiveness. The World Justice Project surveyed whether, in the last three years, any member of the household was burglarized, the victim of an armed robbery, extorted, or murdered. In sub-Saharan Africa 27 percent of households had been burglarized, 13 percent had a member who was the victim of an armed robbery, 13 percent had a member who was extorted, and 7 percent had a member who was murdered. In Latin America and the Caribbean, the numbers were 15 percent, 18 percent, 8 percent, and 5 percent respectively. In comparison, in North America and the countries in the European Free Trade Commission the numbers were 11 percent, 2 percent, 4 percent, and 1 percent respectively.

Empirics

In short, it is fair to say that police in developing countries are ineffective at best, and predatory murderers at worst. Of course, private police could be worse. However, the evidence above and below suggests private police outperform public police. The remainder of this section examines private police, primarily in the United States, as that is where the majority of research has been done. These police are privately employed, have the power of arrest, and are regulated by state governments. With these qualities, they serve as a useful predictor of how private police would behave in a proprietary zone.

Unfortunately, the relevant literature on private police is relatively sparse. Much of the literature focuses on trends and summary statistics. Similarly, research into historical instances of private police—the Pinkertons, for example—is not relevant to today because the role of police has shifted.¹³ But, of the relevant literature that does exist, the empirical comparisons between public and private police suggest private police outperform public police, even in the United States.

The most illuminating study on private police was done by Edward Stringham (2015, ch. 13). Stringham surveyed customers of the San Francisco Patrol Special Police, a private service. Though the service was stripped of its full police powers in 1994, it is still useful enough to be hired by businesses.

When Stringham asked, “Why did you not simply rely on the local S.F. Police Department to meet your safety needs?” responses ranged from “They scare me—Trust Issues” to “They take too long to arrive” to “That’s a joke right? I have little confidence in S.F.P.D.”

When respondents were asked, “Why did you hire a Patrol Special Police officer?” the answers were illuminating, including the following: “Faster service, personal touch”; “Protect our clients and customers”; and “Officers become familiar with the businesses and the potential problems” (Stringham 2015, 123).

¹³ The primary difference between the nineteenth century and today is the great increase in wealth. The Pinkertons were often employed as strike breakers, forcefully increasing the

These businesses were hiring the San Francisco Patrol Special Police even after paying taxes for, and having access to, the San Francisco Police Department. So, even in the developed world, in one of the wealthier cities, competing with a zero-price service, there is still a demand for private police.

Stringham conducted a similar survey in North Carolina, finding similar results. When asked why clients of a private police force did not simply use the public one, respondents said they were “dissatisfied with local agency” and that “the County Sheriff’s office is over committed.” In contrast, when asked why they hired the private agency, customers responded that “they assist us in many ways, most importantly, they make the staff feel more secure” and that they provide “someone to meet my need” (Stringham 2015, 126). Implicit in the latter response is that the public police were not meeting their needs.

Another example of private police coexisting with public police is provided by Benson (1997, 153-55). He reviews several studies about Starrett City, New York. Starrett City is a complex in the East New York section of Brooklyn with 5,881 apartments and about 20,000 residents. At the time of the study, Starrett City employed fifty-four private security guards.

bargaining power of corporations. Today, especially in developing countries, productivity increases are a far more important source of wealth than an increase in bargaining power.

The security guards created an absolute and relative perception of safety inside Starrett City: 88 percent of residents felt safe inside, while only 44 percent of residents felt safe nearby. The perception of safety was warranted because Starrett City had lower crime rates than nearby areas.

Perhaps most informative is that residents and business owners preferred calling private security to calling the New York City Police Department (NYPD). Among residents, 77 percent said they would report a crime to the security service, while only 12 percent would report it to the NYPD. Business owners felt similarly, with 97 percent saying they would call the security force if they had a problem, and only 3 percent saying they would call the NYPD.

The case for private police is, however, limited. Private police in the United States are constrained by the American justice system. Further, their efforts tend to focus on preventing crime, rather than responding to it. So it is possible that abuses could become prevalent if private policing shifted toward responding to crime to fill the full role public police currently do. For example, the abuse of suspected criminals could become more common.

In general, the evidence regarding private police is limited. There are few examples where private police have comparable powers to public police. Even when they do, private police often fill a different role, making direct comparisons difficult. However, the limited direct comparisons show private police outperforming public police

in the United States. Given that, as well as evidence regarding the performance of police in the developing world, proprietary cities should consider providing police rather than relying on the host country.

Conclusion

In this chapter I reviewed evidence on governance relating to proprietary cities. There are four main sections, monopoly power, the relevant comparison, private dispute resolution, and private police. The general conclusion is that evidence suggests private governance is generally comparable and sometimes superior to public governance.

First, I consider the monopoly power of proprietary cities. To do so I investigate private water provision in the developing world and company towns. I find mixed evidence, private water provision was generally successful, while company towns did partially abuse their monopoly power. However, the general degree of abuse was more limited than common perception.

Second, I argue that the relevant comparison for the governance of proprietary cities is their host country. Proprietary cities should not be held to an arbitrarily high standard. Rather we should ask, do proprietary cities improve governance relative to the host country.

Third, I review evidence of private dispute resolution. I find that historical and modern examples of private dispute resolution demonstrating private dispute resolution

achieves comparable results to dispute resolution in developed countries. As such, I conclude that the criticism that proprietary cities will be beholden to big players to be overblown.

Fourth, I review evidence of private police. I find the evidence of private police is far more limited than private dispute resolution, and not as directly applicable to proprietary cities. Nevertheless, the limited evidence does suggest private police can offer better services than public police in limited circumstances.

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PROPRIETARY CITIES AS A MECHANISM FOR INSTITUTIONAL CHANGE

Introduction

In the first chapter I focused on the policies a proprietary city would have an incentive to adopt. In the second chapter I discussed governance, examining theory and empirics of private governance and the implications they have for proprietary cities. In this chapter I shift my attention to structural questions. Rather than focusing on how proprietary cities might act, I investigate why a host country would allow autonomy for a proprietary city, and what the literature on institutions can tell us about proprietary cities.

North (1991) defines institutions as “humanly devised constraints that structure political, economic and social interaction.” Though policies and governance are institutions, the idea of institutions goes deeper. Institutions also include the culture, traditions, and norms that subtly govern human interaction, as well as the power relations among interest groups that often determine political outcomes.

Adopting and sustaining new policies and governance often requires institutional changes. However, institutional changes often happen over decades, even centuries. For example, Hough and Grier (2015) go back 1,000 years to explain England and Spain today. Williamson (2000), in a survey of the institutions literature, argues that polities, judiciaries, and bureaucracies form over decades to centuries. That institutions typically take such a long time to form is referred to as institutional path dependence.

Institutional path dependence may inspire pessimism. If growth-promoting institutions require centuries of statehood and agriculture, as argued by Spolaore and Wacziarg (2013), the prospects for much of sub-Saharan Africa are dim. Even if we assume modernity has changed the time necessary to build growth-promoting institutions, sub-Saharan Africa could remain mired in poverty for decades more.

Proprietary cities offer grounds for optimism. A proprietary city can import institutions from developed countries, accelerating institutional improvement and in turn leading to economic development.

Proprietary cities offer advantages over traditional methods of institutional improvement because of two factors. First, the proprietary city is built on land where few special interests have taken root. Second, the proprietor is an independent body with an incentive to create good policies and provide good governance.

Both of these factors increase the probability that proprietary cities will change, not just policies or governance, but institutions. The prospect of locating proprietary cities on land without special interests increases the likelihood that the proprietor will gain the necessary autonomy to build a proprietary city. Similarly, the proprietor being an independent body with an interest in promoting economic development allows proprietary cities to avoid traps that doom reforms.

This chapter is split into six further sections. First, I develop a taxonomy of institutional reform to explain why proprietary cities are more likely to create lasting institutional change. Second, I argue that proprietary cities reverse the logic of collective action. Third, I review important strands of the institutions literature and how the idea of proprietary cities relates to those strands. Fourth, I discuss how proprietary cities can reduce the likelihood of expropriation. Fifth, I explain why proprietary cities, if successful, are likely to be replicated. Lastly, I conclude.

A Taxonomy of Institutional Reform

The first step in building a proprietary city is gaining legal authority to opt out of policies of the host country. The fact that would-be proprietors' prospective city would be built on uninhabited land with few special interests means they are more likely to be granted that autonomy. In this section I develop this idea, constructing a taxonomy of institutional reform.

First, however, a point of clarification. This section is entitled "A Taxonomy of Institutional Reform." Nevertheless, I use some examples that are policy reforms, not institutional reforms. I do this because for some parts of the taxonomy there are few, if any, good examples of institutional reforms. However, the logic behind those examples also applies to institutional reform.

In previous chapters, and in other sections of this chapter, I have assumed government is a uniform body. While a useful simplifying assumption to explain certain phenomena, other phenomena require a more complex and accurate model of government to be understood. Institutional change is one of the latter phenomena.

For this section I assume government—or more precisely, the actions of government—is the outcome of a complex, ever-changing network of different interest groups. These interest groups include groups outside government—businesses, private unions, consumer-rights groups—as well as groups inside government, such as the army, the legislature, and various bureaucracies (see North, Wallis, and Weingast [2009] for a more in depth explanation of this model).

The interest groups support government in exchange for rents. By exchange I do not mean formal contracts; rather I mean implicit guarantees of support in exchange for the policy preferences of the favored group. One example is the longtime support of the Democratic Party by labor unions. However, the implicit agreement can run deeper and be more insidious. The Turkish army, for example, long saw itself as a protector of Turkish liberalism, removing several democratically elected governments.

The difficulty in any type of economic reform, and especially institutional reform, is forming a coalition that supports the reform. This is especially difficult in developing countries, where rents for interest groups are typically higher. Further, reforms that boost

growth typically require opening markets, which would reduce the rents of existing interest groups. So it is no surprise that interest groups often block beneficial reforms.

Special economic zones (SEZs), which proprietary cities can be considered a subset of, overcome some of the obstacles that typically block reform. Namely, by being built in areas with low population and few interest groups, SEZs have little direct immediate effect on the rents of interest groups or the political equilibrium. To better understand this I created a taxonomy shown in table 1.

Table 1 A Taxonomy of Institutional Reform		Territorial size	
		National	Subnational
Reform type	Broad based	Poland (1989)	Shenzhen (SEZ)
	Focused	Affordable Care Act	Export processing zone

The taxonomy has two categories, the type of reform and the size of the territory. Reform can be either broad based or focused. Broad-based reform affects all or most aspects of an economy. Focused, or industry-level, reform affects only one industry or a specific government bureaucracy.¹⁴ The reform can apply to either the entire country (national), or an area inside the country (subnational). This framework helps reveal how interest groups are likely to respond to different types of reforms.

Broad-based reforms, by their very nature, affect most segments of the economy. Accordingly, to the extent they disrupt existing rents in the economy, they are opposed by the interest groups receiving rents. It is possible for the reform to increase rents for some groups, though. For example, Cuba's recent trade liberalization probably helps tourist destinations.

Focused reforms are typically opposed by the relevant industry or bureaucracy. But sometimes a government will craft the reform in a way that benefits the industry. For example, most health-insurance providers supported Affordable Care Act because Americans were required to purchase their product. However, in most scenarios—removing a telecommunications monopoly, for example—the affected industry opposes the reform.

¹⁴ Admittedly, the distinction between broad based and industry level is blurred. A tax reform, for example, affects all industries, but I would not consider it broad based. On the other hand, because Shenzhen is an SEZ, I consider its opening itself to foreign investment broad based.

Subnational reforms—reforms made on a national level that only apply to a limited area of the country—are less likely to encounter opposition than national reforms. National reforms affect more rents than do subnational reforms.

I do not consider here the optimal size of the governance system (see Alesina and Spalore [2005] for the most comprehensive treatment). Instead, I am interested in better identifying the conditions under which growth-enhancing reforms might be implemented.

The following sections go into greater detail regarding the relative levels of ease in various types of reform, and how each type of reform might stimulate growth.

National, Industry-Level Reform

National, industry-level reform is the most common method of improving institutions. It targets a single sector—for example, telecommunications, education, oil, mining, or healthcare. The object of the reforms is often to weaken, what is usually government supported, monopoly power. Alternatively, the reforms can improve the provision of government services—education, for example.

The problem with national, industry-level reforms is it is often very slow. Aside from the Asian Tigers, there have been few modern success stories. Much of the recent increases in living standards come from China's rise. Other regions have seen less success. Sub-Saharan Africa, for example, has seen little economic growth since decolonization in the 1960s (Artadi and Sala-i-Martin 2003).

The difficulty in achieving national, industry-level reforms is that such reforms often threaten the rents of existing interest groups. Take, for example, the tenure of Michelle Rhee as chancellor of Washington, DC, public schools. Her fight to improve DC public schools illustrates the difficulties of reforming a system with powerful special interest groups.

Rhee was appointed chancellor by Adrian Fenty, an incoming mayor in 2007, and given a mandate to improve the public school system. At the time, DC was spending the third most per pupil in the country. Despite this, “only 43 percent of students entering the ninth grade in a D.C. public school graduate within five years, and only 9 percent get a college degree within five years of leaving high school. In 2007, Washington ranked last among 11 urban school systems in math and second-to-last in reading on the National Assessment of Educational Progress” (Risen 2008).

Acting on her mandate, Rhee took action, firing underperforming principals and teachers, and closing failing schools. However, the most astonishing part of her tenure is her fight over teacher pay. She designed a system where high-performing teachers could make over \$130,000 annually. As a concession to the union, she made her performance-based pay system opt-in. Teachers who wanted performance-based pay would give up tenure, and those wanted to keep tenure would remain on the old pay scale. The union rejected her proposal (Smith 2009).

To summarize, the union rejected substantial increases in teacher pay, with no short-term cost, out of fear that the long-run effects would reduce their influence and rents. The subsequent election, which Fenty lost, was largely about Rhee. Vincent Gray, Fenty's successor, decided not to keep Rhee.

Importantly, education was the defining issue of Gray's tenure as mayor. In five years, he was unable to reform the education system, which was widely acknowledged to be underperforming. If we assume there are five industries or bureaucracies a developing country must reform for sustained economic growth, and reforming each industry or bureaucracy takes ten years, it would take a developing country fifty years to fully reform its industries and bureaucracies. And this scenario ignores the possibility of failed reforms or successful reforms backsliding.

Given the intensity of the political fight for better schools in Washington, DC, it is not difficult to understand why national, focused reforms are so difficult. No organization will voluntarily give up rents and most will fight tooth and nail to keep them. On a macro scale, national, focused reforms have been unsuccessful in most of the developing world.

National, Broad-Based Reform

National, broad-based reforms are the ideal option for undeveloped and developing countries. If, for example, Somalia or Zimbabwe could instantly adopt a fully

functioning Danish or Swiss institutional structure, they would likely experience decades of rapid catch-up growth.

Unfortunately, such an adoption is unlikely. There are two prerequisites for national, broad-based reforms that lead to economic growth: an exogenous shock, and the culture and local knowledge necessary to support the new institutions. Without an exogenous shock, national, broad-based reforms do not happen. Without the prerequisite culture and local knowledge, national, broad-based reforms do not stick.

Olson (2008) has the best treatment of national, broad-based reforms. He argues that only after severe crises, exogenous shocks, are such reforms possible. Severe crises weaken existing interest groups, allowing radical change that would not be possible in normal circumstances. After such changes occur, assuming no further severe crises, interest groups gain power over time, precluding the possibility of further national, broad-based reforms.

Olson's thesis is confirmed by the evidence. Consider Japan and Germany after the Second World War. Both countries were devastated, their national institutions destroyed and an occupying force willing to force change upon them. The result was national, broad-based reforms that spurred the postwar miracle.

The fall of the Soviet Union is another illustration of the extreme circumstances necessary for national, broad-based reform. In a six-month period, all eleven member

states of the Soviet Union seceded. Former member states then embarked on a series of privatizations and reforms. Some reforms were successful—as in Poland, for example—while others were not. However, the necessary precondition for the reforms to take place was the fall of one of the most militarily powerful governments the world has ever seen.

Iraq and Afghanistan are both examples of the difficulties of successful national, broad-based reforms (Coyne 2007). Both were invaded by the United States and had their governments deposed. However, the reforms did not stick. Neither Iraq nor Afghanistan became a liberal democracy.

Boettke et al. (2008, 338) use the concept of *metis*—“skills, culture, norms, and conventions, which are shaped by the experiences of the individual”—to understand why some institutions stick and others do not. Reforms that are not based in local knowledge, and do not reflect the experiences of those living there, will not take hold. For example, one feature of liberal governments is an unbiased bureaucracy. However, in societies where the primary identity is linked to tribe, clan, or family, implementing an unbiased bureaucracy is fraught with difficulties.

Djankov et al. (2003) use a similar concept, civic capital, to develop their idea of an institutional possibilities frontier. The level of civic capital determines the extent of possible reforms. Countries with high levels of civic capital have the potential for better institutions than countries with low levels of civic capital.

Both frameworks illustrate why some national, broad-based reforms stick while others do not. Germany and Japan, for example, both had long histories of statehood and as industrial economies. Afghanistan, on the other hand, is a tribal society. The history of a country shapes the range of institutions the country can have.

Subnational, Industry-Level Reform

Subnational, industry-level reform is reform passed by the national government that affects only a portion of the country as well as only a specific industry. Most SEZs can be classified as subnational, focused reform. For example, an SEZ might offer tax breaks for a specific industry.

Honduras offers a useful illustration of the potential for subnational, focused reforms (Engman 2011). Honduras established a free-zone / *maquila* program in 1976. A *maquila* is a factory or zone, typically in Latin America, that allows the duty-free importation of the raw materials needed to assemble the final product, which is typically sold to the United States. In Honduras the *maquila* industry primarily exports textiles.

For businesses, the primary benefit of Honduran free zones is the fiscal incentives provided by the Honduran government. The free zones are exempt from import duties, export taxes, local sales taxes, net asset taxes, and municipal taxes.

The free zones in Honduras are a relative success story. They created more jobs—over 100,000—than most other SEZs. However, because the reforms were not broad

based, only targeting a single industry, they did not create the necessary conditions for economic growth. Honduras remains one of the poorest countries in Latin America.

Subnational, Broad-Based Reform

Subnational, broad-based reform has the potential to lead to lasting institutional improvements. China is a prime example of this. In this subsection I focus on why subnational, broad-based reforms are easier to pass. In a later section I discuss how proprietary cities can lead to broad-based changes.

SEZs have long been recognized as policy laboratories (FIAS 2008, 12). By virtue of being subnational, more-radical reforms can be passed. By virtue of being broad based, such reforms are more likely to include the necessary legal and regulatory elements to spur economic growth.

Shenzhen best demonstrates the potential of subnational, broad-based reforms. As noted in the first chapter, Shenzhen in 1980 was a fishing village of 30,000 people, lucky enough to be located near Hong Kong. Now the greater metropolitan area has 18 million residents. The extraordinary rise began in 1980, when Shenzhen was designated as a special economic zone, allowing it to attract foreign direct investment.

China's SEZs, including Shenzhen, had broad-based reform. They "were established primarily to attract foreign direct investment (FDI), expand China's exports, and accelerate the infusion of new technology" (Yeung et al. 2009, 223). Further, the

SEZs “comprised large areas within which the objective was to facilitate broadly based, comprehensive development” (Yeung et al. 2009, 223).

Shenzhen and the other “SEZs were deliberately located far from the center of political power in Beijing, minimizing potential risks should any problems or political effects be generated during their functioning” (Yeung et al. 2009, 223). Given the political situation in China at the time, it would have been impossible to pass national reform as comprehensive as the SEZs. Incidentally, Deng Xiaoping, the Chinese leader most often associated with the SEZs, did not support them until 1983-84, several years after their introduction (Crane 1990, 156).

Another advantage of subnational reform, of both the focused and broad-based types, is that subnational reform makes it easier to create new, distinct legal and regulatory bodies. Changing existing organizations is difficult. It can be easier to simply start new ones.

Assume a country has a corrupt judiciary. Assume the country also recently elected a new president who campaigned on reforming the judiciary to eliminate the corrupt elements. Reforming the judiciary at the national level would be difficult. The judiciary has likely been benefiting from the corruption, making it resistant to change.

Subnational reform, on the other hand, would mean creating a new judiciary, or other legal or regulatory bodies. The president could simply appoint a judge known to be

honest to head the new judiciary. Changing an existing body is unnecessary. More generally, creating new legal and regulatory bodies can be easier than reforming existing ones.

Reversing the Logic of Collective Action

Rapid institutional improvements are inherently difficult. They require undeveloped or developing countries to suddenly and substantially improve governance. In a sense it is like expecting coal to turn into a diamond without outside pressure. Why should a body that cannot provide quality education suddenly improve education? Why should a government that has promoted trade barriers suddenly lower them? Why should a government that previously reneged on commitments begin to keep them?

The proprietary aspect of proprietary cities can partially overcome this difficulty. The proprietor, benefiting from the higher land value that results from increased economic activity, has an incentive to ensure the legal and regulatory body governing the city is designed to boost economic growth. Further, before establishing the proprietary city, the proprietor has an incentive to lobby for legal and regulatory autonomy. The proprietor, in effect, reverses the logic of collective action (Olson 1965).

Typically, the logic of collective action is used to explain the passage of inefficient policies. Sugar tariffs are a classic example. The price of sugar in the United States has been almost twice as high as elsewhere in the world since the 1970s. This is

because the United States has sugar tariffs, which raise the cost of importing sugar, privileging American sugar producers over American sugar consumers. Wohlgenant (2011) finds the additional cost to American consumers is \$2.4 billion per year, while American sugar producers gain \$1.4 billion per year, leaving a deadweight loss of \$1 billion per year.

Sugar tariffs persist because there are fewer sugar producers than sugar consumers. As a result, it is far less costly for sugar producers to organize and lobby to ensure tariffs continue. The tariffs cost sugar consumers an average of \$8 a year. Because the cost for consumers is so low, and the cost of organizing to fight sugar tariffs so high, the tariffs remain in place.

Institutional improvements in a country benefit most residents. The total gains outweigh the losses. However, because the gains are dispersed while the losses are concentrated, institutional improvements are under produced.

Some gains from institutional improvements are concentrated. For example, liberalization of telecommunications laws makes it likely one or more telecommunications company will benefit. However, it is difficult, if not impossible, to identify the beneficiary prior to the reform. Sometimes the beneficiary does not even exist yet. Proprietary cities change this. Because the proprietor captures some of the gains from the autonomy and improvements, and because the proprietor is known prior to those

institutional improvements, the incentives that prevent institutional improvements are reversed.

Though not a city, Walt Disney World demonstrates how a developer can successfully lobby for legal autonomy. Located southeast of Orlando, it was founded in 1971 and occupies 45 square miles, an area comparable to San Francisco.

To lower costs, Disney managed to “obtain perhaps the greatest autonomy of any major proprietary community in the USA” (Foldvary 1994, 118). Being subject to the whims of a local government could have made Walt Disney World unprofitable.

Negotiations between Disney and government officials began in 1965. The then governor of Florida assured Disney that Florida would cooperate. The following year the government formed the Reedy Creek Drainage District. A year later, at Disney’s behest, the Reedy Creek Drainage District was radically changed by the state government, becoming an “improvement district.” This change “abrogated nearly all state laws” (Berliner 1978, 4) by setting up a single authority with powers that had traditionally been reserved for separate districts.

Foldvary (1994, 119) writes, “The District has control over water, waste disposal, airport facilities, transportation, public utilities, and roads.” Five supervisors govern the district, elected by the landowners, with ownership of one acre entitling the owner to one

vote. Because Disney owns approximately 98 percent of the land in the district, it controls the board.

Walt Disney World's legal exemptions go beyond controlling just the Rainy Creek Drainage District. Disney is also exempt from some countrywide and statewide regulation. The district is a special road district. This means, with the exception of two state roads, the district's authority over roads in the region supersedes that of Florida's State Road Department. And "the roads which cut through Walt Disney World are not considered to be part of the state or county public road systems" (Foldvary 1994, 120). Another exemption is finance, with the district not being subject to disclosure requirements of Florida laws.

Other exemptions from the Florida government include that "traffic and safety shall be exclusive to any and all codes, ordinances, requirements, plans, or other regulations of the respective Boards of County Commissioners of Orange and Pensacola Counties ... with respect to zoning, building, and construction, planning with respect to the subdividing of land, regulation of building safety, regulation of escalators, elevators, and other lifting or transportation devices, regulation of amusement and recreation parks and facilities, regulation of plumbing and electrical installations and other safety or sanitary codes" (Foldvary 1994, 120).

Walt Disney World has hardly abused its legal autonomy either. It continues to be widely viewed as a very attractive tourist destination. More importantly, Walt Disney

World demonstrates how a proprietor can successfully lobby for a degree of legal and regulatory autonomy.

Proprietary Cities and Institutional Analysis

In the previous sections I argued that proprietary cities are a good mechanism to achieve institutional change. I focused on the transition. In this section I shift my focus to after a proprietary city has been established.

A proprietary city is a substantive structural change for a host country's economics and politics. Both economic and political power are decentralized and shifted to an unconventional authority, the proprietor. In the following four subsections, I review the literature on robust political economy, institutional stickiness, state capacity, and market-based federalism, seeing how proprietary cities fit into those strands of literature.

Robust Political Economy

Economists often assume government is both benevolent and omniscient. Unfortunately, these assumptions are not true. Robust political economy examines institutions without assuming benevolence or omniscience (Boettke and Leeson 2004; Leeson and Subrick 2006; Pennington 2011). An institution is robust if, when actors are self-interested with limited knowledge, the institution performs at comparable levels to when its actors are benevolent and omniscient.

Robust political economy draws from two strands of economics, public choice and Austrian economics, particularly the latter's contribution to the socialist calculation debate. Public choice questions the assumption of benevolence. Austrian economics questions the assumption of omniscience.

Public choice is, as noted by James Buchanan, politics without romance. Public choice introduced economic tools into political science, thereby acknowledging that public officials, like private actors, are self-interested. Before public choice was developed by Buchanan and Tullock (1962), questioning the motivations of public officials was viewed as unscientific.

Mises (2010) and Hayek (1945) pioneered social thought about knowledge, and how knowledge is generated. The importance of knowledge in society developed during the socialist calculation debate. Mises and Hayek argued that socialism was impossible: without exchange there would be no prices, and without prices there could be no rational economic calculation. It is the market process which generates the knowledge and information that make modern capitalism possible.

Robust political economy combines these two strands of thought and applies them to institutions. Relying on officials to act against their self-interest means an institution is not robust. Similarly, having to expect officials to act on information they do not possess means an institution is not robust.

Communism is an example of a form of government that is not robust. From each according to their ability, to each according to their need means that greater productivity is not rewarded. As such, socialism relies on a New Soviet Man. Similarly, without prices, officials in a communist society cannot rationally allocate resources. They have no way to know whether steel should be used to build railroads, factories, or tractors.

The idea of proprietary cities was developed within the robust political economy framework. The proprietor has an incentive to promote economic growth because such growth will raise land prices, increasing the profits of the proprietor. And the process of constructing a proprietary city, including buying the land and attracting businesses, will generate knowledge that would otherwise be unavailable to the proprietor.

Through the lens of robust political economy, a proprietary city can be contrasted with a traditional SEZ, where there is no residual claimant. Moberg (2015) analyzes the latter through this lens. She finds SEZs often fail because of rent seeking. Rather than creating zones to encourage investment and growth, governments create SEZs as handouts to politically connected businesspeople. And SEZs can fail because the government has insufficient knowledge of market conditions. A government might create an SEZ for an uncompetitive industry, or create a zone in a territory where transportation costs are too high.

The governance structure of proprietary cities helps overcome both problems. The gains from increased land value dwarf most government subsidies, helping ensure the

proprietor focuses on long-run growth rather than redistribution. Further, negotiating for autonomy, creating a legal and regulatory system, and building a proprietary city all create knowledge that in other circumstances would not even exist.

Institutional Stickiness

Another challenge in attempting successful institutional change is ensuring the institutions stick. The United States successfully created liberal democracies in Germany and Japan after World War II, but has been unsuccessful in Afghanistan and Iraq. What explains the difference? More generally, why do some institutional reforms stick, while others don't?

Boettke et al. (2008, 338) argue that institutions are more likely to stick the closer they are to *metis*, the “skills, culture, norms, and conventions, which are shaped by the experiences of the individual.” Legislative acts unconnected to the lived experiences of a population are more likely to be rejected by both the inhabitants and those enforcing the legislation.

Proprietary cities are an example of rapid institutional change. Success therefore depends on whether the change is accepted by the population. While the literature on institutional stickiness might seem to suggest proprietary cities, like most examples of institutional change, are unlikely to stick, there are three reasons to believe institutional changes in proprietary cities are more likely to stick than other examples of institutional

change. First, the proprietor has an incentive to ensure the reforms stick. Second, the proprietary city's residents opt in. Third, the proprietor is better equipped than government to ensure officials properly implement the reforms.

First, the proprietor is incentivized to ensure the reforms stick. To do so it can ground the reforms in the culture of the host country. After negotiating autonomy, but before developing the new legal and regulatory system, the proprietor can investigate the local culture to ensure the legal and regulatory system will respect the culture of the population and encourage economic growth.

Imagine, for example, a society where tribal elders have traditionally played an important role in dispute resolution. A proprietary city can use the knowledge of tribal elders in determining civil law. Further, it can either hire the elders as judges or use them as advisers to judges. By integrating part of the judicial system with local culture and norms, residents will be more likely to view the proprietary city as legitimate.

Another example is the hiring of police officers. Ensuring the police are members of the community in which they patrol will help improve relations between the community and the police and make the community more likely to accept other aspects of the proprietary city.

After building the proprietary city, the proprietor can continue to take action to increase the probability the institutional changes will stick. One example concerns

community outreach. If many of the residents come from rural regions, they will not be familiar with many aspects of urban life. Partnering with community leaders and giving free classes—on interacting with banks, for example—will engender goodwill for the proprietor.

The second aspect of a proprietary city that increases the probability reforms will stick is that the initial residents must opt in. They all move there of their own volition. The proprietary city will therefore have legitimacy because these residents explicitly consent to their governance.

The opt-in nature of a proprietary city increases the probability of the institutional reforms sticking for two reasons. First, the population self-selects. Second, residents view the proprietary city as legitimate.

A proprietary city does not impose changes; it merely offers a new opportunity. Potential residents who dislike the policies of the proprietary city will not move there. Those who like the policies will move there. This ensures the residents will be more inclined to support the policies than citizens of the host country are to support their country's policies.

Second, residents see the institutional reforms as voluntary, not imposed. When institutions are imposed, people view them as illegitimate. When institutions are adopted

voluntarily, on the other hand, they are more likely to be viewed as legitimate and to be accepted.

The final reason institutions are more likely to stick in a proprietary city is that because the proprietor is a for-profit company, it does not face political and bureaucratic constraints on institutional reform. One aspect of ensuring the reforms stick is ensuring the officials responsible for implementing the reform are capable of and willing to do so. A proprietary city, as a for-profit organization, would quickly fire officials who are corrupt or derelict in their duty.

Consider a corrupt country. Legally getting a business license might take almost a year; however, bribing an official might get you a business license in a week. Now imagine the requirements for receiving a business license are greatly reduced, such that one can legally get a business license in a week. The problem is that now the bureaucrats who grant licenses just lost an income stream. They are unlikely to fully commit to the new requirements because it would be against their financial interest.

Ensuring the bureaucrats adopt the changes requires a strong government, willing to fire and replace bureaucrats who do not comply. If the bureaucrats are unionized, the government faces additional challenges.

A proprietary city, in contrast, is run as a business. As a result, employees who are ineffective or corrupt can be quickly removed, ensuring the reforms are introduced

quickly and cheaply. Further, because a proprietary city starts with a blank slate, no interest groups pre-exist within its governance structure. The barriers to implementing institutional reforms are therefore lower than if there was an existing government.

The first two reasons why institutional reforms are more likely to stick in a proprietary city relate to the residents who are governed. The third relates to those doing the governing. If a population rejects institutional reforms, the reforms are unlikely to stick. And if a government does not fully commit to implementing institutional reforms, the reforms are also unlikely to stick.

Market-Preserving Federalism

The literature on market-preserving federalism (Montinola et al. 1995; Qian and Weingast 1996; Weingast 2009) examines the conditions under which federalism stimulates economic growth. The literature argues that market-preserving federalism, defined by five conditions, is largely responsible for the recent economic growth of China, as well as the historical success of the United States and Britain.

Market-preserving federalism helps overcome the fundamental dilemma of government. A government must be strong enough to protect property rights, but also commit to not violating them. Market-preserving federalism means allowing competition among authorities at subnational levels to limit predation, but keeping a common market to encourage trade.

Five conditions must be met for federalism to be market preserving: (1) a hierarchy of governments; (2) subnational governments with primary authority over their economy; (3) a common market; (4) hard budget constraints; and (5) institutionalized authority. A proprietary city meets the conditions.

Several of the conditions imply more than one subnational authority. If a proprietary city is introduced in a country with a unitary government, the country will not have full-fledged market-preserving federalism. The country will, however, have a degree of market-preserving federalism, which is better than none.

The first condition is a hierarchy of governments with a delineated scope of authority. A host country with a proprietary city is a hierarchy of governance bodies. A proprietary city is not a government in the traditional sense, but it is largely analogous. Further, a proprietary city has clearly defined authority distinct from the host country's authority.

Next, subnational governments must have primary authority over their economy. A proprietary city meets this condition. To be sure, the extent of authority of a proprietary city depends on the initial conditions in its founding. However, a proprietary city, by definition, has a degree of institutional autonomy.

Third is a common market. Proprietary cities do not necessarily meet this condition. Nothing in the definition of proprietary cities requires a common market with

the host country. However, given the advantages of free trade, neither a host country nor a proprietary city is likely to desire barriers to trade.

The fourth condition is a hard budget constraint. A proprietary city has a hard budget constraint. Host countries are unlikely to bail out a proprietary city because the city is a for-profit entity. Bailing out local governments tends to be politically acceptable, while bailing out companies can ignite a populist anger.

Finally, authority must be institutionalized, it must be durable and resistant to outside interference. A proprietary city has institutionalized authority. If the proprietor controls garbage collection, for example, it will be difficult for the host country to impose its will on the city as the proprietor could retaliate by letting trash pile up. If the proprietor employs police, or is the primary tax collector, the ability of the host country to impose its will is further constrained. The host country would have to create its own police and tax force to replace the proprietors.

One or more proprietary cities can therefore help promote governance innovation at the local level while, in all likelihood, preserving a common market. The literature on market-preserving federalism argues that meeting such conditions can generate economic growth. As such, the literature suggests that proprietary cities could spur economic growth.

State Capacity

Peter Thiel (2012), founder of PayPal and the first outside investor in Facebook, pointed out in an interview, “Just outside my office is the Golden Gate Bridge. It was built under FDR’s Administration in the 1930s in about three and a half years. They’re currently building an access highway on one of the tunnels that feeds into the bridge, and it will take at least six years to complete.”

Thiel is illustrating state capacity, the “state’s ability to implement a range of policies” (Besley and Perrson 2010, 1). A state with low capacity, sometimes called a weak state, is unable to effectively provide public goods or administer its territory. A state with high capacity, sometimes referred to as a strong state, can do so relatively cheaply and effectively.

For a simple example, consider how long it takes different types of governments to do a technologically simple but administratively complex task such as building a highway. Lower-capacity states generally take longer and build the highway at a higher cost. Higher-capacity states, on the other hand, build a highway relatively quickly and cheaply.

State capacity can also be linked to investor trust. Multinational corporations might not trust a state with low capacity even if the state passes legislation that promises to benefit them by opening markets and encouraging trade. Low state capacity means even such commitments, which could encourage growth, are not credible because the evidence suggests to investors that the commitments will not be implemented correctly.

While high state capacity is an important factor in creating good institutions, developing state capacity can take centuries. For example, Tilly (1992) traced the rise of state capacity in Europe to the violent interstate competition during the Middle Ages. Summarizing his research, Tilly famously wrote, “War made the state and the state made war.”

Proprietary cities offer a way to improve state capacity without centuries of war. A proprietary city allows a country to subcontract governance with a private body in an uninhabited area. The proprietor lacks the internal constraints that often prevent the host country from rapidly improving state capacity.

One interesting example comes from Liberia during the Ebola crisis. Harvel is a company town, a rubber plantation owned by Firestone, with 80,000 residents. As such, it is comparable to a proprietary city, despite Harvel not having legal or regulatory autonomy.

When Firestone discovered the first Ebola case, it went into “crisis mode.” In the end, one patient died, but Ebola was successfully contained (NPR 2014). The success of Firestone was so striking the CDC (Reaves et al. 2014) used it as a case study of how to effectively control the disease.

Reeves et al. (2014) list five important features of Firestone’s response: “1) rapid establishment of an incident management system; 2) active and enhanced passive

surveillance for Ebola; 3) immediate isolation of Ebola patients in a dedicated unit; 4) management of contacts according to the nature of their exposure; and 5) allowing for voluntary quarantine in dedicated facilities for exposed, asymptomatic contacts with provision of health education, personal protective equipment, sanitary supplies, and essential resources to maintain a sense of normalcy (e.g., meals, communications, and prayer services).”

However, the important aspect of Firestone’s response is not the nature of the procedures, but rather that it was able to effectively implement them. It was effective implementation that saved Harvel from the worst of Ebola while Liberia and Ghana were ravaged. A proprietary city would have a similar administration to Harvel, which suggests it would be similarly effective.

Preventing Expropriation

Once a proprietary city is built, the greatest threat is expropriation by the host country. I define expropriation as the host country reneging on its initial agreement. An extreme case is nationalization of the proprietary city. A mild case is an increase in marginal tax rates.

The first and best way for proprietary cities to reduce the risk of expropriation is by stimulating economic growth and providing jobs. Actions that eliminate jobs are always politically unpopular. Similarly, as in the case of China’s SEZs, economic growth

can provide legitimacy to political institutions. Evidence suggests countries are unlikely to expropriate SEZs.

Bangladesh is one example. In 2009, its SEZs employed over 200,000 people. However, the SEZs got off to a slow start. It took three years from when the law was passed, in 1980, before the first one was founded. It was not until the 1990s that they took off. However, since then, they have attracted a disproportionate share of foreign direct investment.

Even with their success, and the large amount of foreign capital invested, SEZs in Bangladesh have been largely free from interference from their government. The only notable exception is the passage in 2004 of a law allowing some collective action among the workers. Prior to the law unions had been banned. Passage of the law does not seem to have significantly affected employment in the zones (Shakir and Farole 2011).

Honduras is another country with a successful SEZ scheme whose SEZs have not been expropriated. Similarl to what happened in Bangladesh, its SEZs were established early, in 1976, but were not very successful until the 1990s. At their peak, before the financial crisis of 2008 the SEZs in Honduras employed 134,000 people. Employment has since fallen, but like Bangladesh, the SEZs in Honduras were never at serious risk of expropriation (Engman 2011).

In addition to providing jobs and spurring economic growth, proprietary cities can protect themselves from expropriation in other ways. A proprietary city can ask for types of autonomy that make expropriation more difficult. For example, a proprietary city can ask for the authority to collect taxes. If the host country wanted to expropriate the proprietary city, it would have to create its own tax infrastructure for the city. This would be costly for the host country, which would decrease the likelihood of expropriation.

A proprietary city can also reduce the risk of expropriation by making the city indispensable to the ruling elite of the host country. If prominent individuals from the host country have a vested interest in the success of the proprietary city, they are less likely to support expropriation. Ensuring factories owned by the ruling elite are built in the proprietary city can help accomplish the feat. Similarly, borrowing from local banks ensures those banks have an interest in the continued success of a proprietary city.

Eliminating the possibility of expropriation is impossible. However, given how few SEZs have been expropriated, as well as strategies to make expropriation more difficult and align members of the ruling elite with the interests of the SEZ, the risk seems relatively low.

Spreading Institutions

A final important aspect of proprietary cities is that they can act as a mechanism of institutional change throughout the host country and even influence nearby countries.

Success will cause elites and citizens of the host country and nearby countries to become more amenable to institutional change.

Introducing subnational reforms and, if successful, copying the reforms throughout the country is a well-known strategy of institutional reform. Litwack and Qian (1998) and Moberg and Tarko (2015) build models to explain the necessary conditions for reforms to snowball. Romer (2009) similarly uses Hong Kong's influence on China to explain how a single example of institutional success can inspire a country to change.

China demonstrates how good subnational institutions can spread throughout the country, leading to economic growth and poverty reduction. Shenzhen, in the first year of its existence as an SEZ, accounted for over 50 percent of China's foreign direct investment (Zeng 2011, 9). Its success, along with that of less successful SEZs, led China to introduce more SEZs. From 1984 to 1988, fourteen more SEZs were created, and in 1992 another 35 were created (Zeng 2011, 9). By 2008 92 percent of municipalities had an SEZ (Wang 2013, 136).

Two mechanisms allow subnational reforms to stimulate countrywide institutional change. First, successful subnational reforms demonstrate to a country its potential. Second, successful, subnational reforms offer a new tax base for the political elite.

People tend to define the set of possibilities on past experiences. If a population has no experience with economic development or modern capitalism, they are unlikely to

demand it. Simply seeing pictures on TV of successful countries is not enough. A proprietary city can help change that.

A proprietary city would show residents of a host country that rapid economic growth is possible. It would show the country an opportunity, the chance for a better future, even for those who do not move there. This would change what the population considers feasible. Proprietary cities would disrupt the status quo.

After seeing the success of a proprietary city, residents of the host country would be more willing to accept the creation of more proprietary cities, or other types of SEZs, or broader institutional reform. Residents of the host country would begin to expect their government to copy certain traits of a proprietary city, to reduce red tape, and to more efficiently deliver services.

The second mechanism is that if a proprietary city is successful it will influence the ruling elite. The elite who initially supported the proprietary city would become more powerful, making them more likely to support additional proprietary cities. Other elites could view new proprietary cities as ways to increase support in their respective regions.

This dynamic would spread outside the host country. The elite of nearby countries would see the success of the proprietary city and want to emulate it. This would encourage proprietary cities to spread beyond the border of the initial host country.

Even if proprietary cities do not spread, one proprietary city could still cause institutional changes. Countries often have rivalries with their neighbors. Unexpected success in one could initiate institutional reform in another as the latter attempts to catch up.

Conclusion

In this chapter I reviewed the institutional dynamics that make proprietary cities a mechanism for institutional change. I also discussed proprietary cities in relation to several strands of the institutions literature. Last, I reviewed how a proprietary city can protect itself from expropriation and how a proprietary city might lead to institutional change outside the city itself.

I argued that proprietary cities, because they are built on unoccupied land with few special interests, and because the proprietor is interested in economic development, offer better opportunities for institutional change than alternative mechanisms. Proprietary cities are likely to be relatively unopposed by interest groups. And the proprietor has an incentive to promote autonomy and policies that encourage economic growth.

The second half of this chapter was dominated by a discussion of different strands of the institutions literature. I found that most strands suggest the proprietary city will be

successful. The one exception is institutional stickiness, which a proprietary city is nevertheless better equipped to achieve than other types of institutional changes.

I briefly discussed the risk of expropriation, arguing that based on the history of successful SEZs, the risk is overstated, as well as offering a few strategies a proprietary city can adopt to reduce the risk. I also elaborated on how a proprietary city might induce further institutional changes outside the city.

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BIOGRAPHY

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