Competition for Investment
Causes and Consequences of the Rise of the Special Economic Zone

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Abstract

Why do national and subnational governments enact special economic zones (SEZs)? My dissertation uses cross-national statistical analysis, country-case studies, and municipal-level comparisons to examine why governments enact SEZ programs. I created an original dataset of SEZs for all countries from 1970 to 2014, testing several theories of SEZ enactment. I find that countries with a fixed exchange rate are more likely to enact SEZs as they open their financial system. There is also a statistically significant relationship between regime type and SEZ enactment, but I do not find support for the hypothesized regime type mechanisms. Counterintuitive to conventional SEZ wisdom, democracies are more likely to enact zone programs than non-democracies.

Using the cross-national findings as a foundation, I then ask, how is enactment different in a set of national- and subnational-level case studies? Case studies relied on field research in China, Jordan, and the United Arab Emirates (UAE), where I collected primary source materials and interviewed local leaders. Additional case studies of the Dominican Republic, Mauritius, and Sri Lanka utilized the secondary literature. Using four national-level case studies, I examine the role of regime type and external actors in SEZ enactment. Mauritius and Sri Lanka are examples of how regime type shapes the impetus for SEZ creation. In Mauritius, leaders responded to electoral demands from constituents thus illustrating labor demand arguments consistent with the current FDI literature. In contrast, Sri Lanka's initial SEZ enactment coincided with a shift away from democracy, as leaders centralized both economic and political control. In Jordan and the Dominican Republic, external actors played a key role in enactment. The United States encouraged zones in Jordan and the Gulf and Western corporation spearheaded SEZs in the Dominican Republic.

In China, early SEZ enactment (occurring between 1978-1984) is consistent with the macroeconomic logic tested in the cross-national study. However, later phases of enactment are not explained by international macroeconomic factors. Instead, we must look to domestic explanations for later waves of SEZ program expansion. In the 1990s, land-use policy in China and the commodification of land explains a decade-long period of “zone fever.” Since the mid-2000s, the latest phase of SEZ creation has been focused on centralization of political control over economic and financial policy. The final set of cases focus on the role of local leaders and land politics showing how authoritarian patterns of land-use may not be unique to China. I examine the role of land and SEZ enactment in Aqaba, Jordan; Dubai in the United Arab Emirates; and Shanghai, China, to show how local leaders shape SEZ policy.

The creation and implementation of SEZs is not monolithic. However, there are macroeconomic and political patterns associated with the use of the policy. The rise of the special economic zone is associated with financial opening, fixed exchange rates, and regime type. While strong correlations exist between macroeconomic factors and enactment, the explanations for SEZ creation are not complete without also examining external (foreign) actors and the influence of local authorities. China once served as the model for using SEZs, and is now exporting that model across the developing world. Understanding the scale and scope of SEZs is critical for current debates on trade, exchange rates, investment, and export-oriented growth strategies. SEZs are also an ideal microcosm of local-global interaction and highlight the growing role of China in the global economy.

Dedication

This dissertation is dedicated to my father, Jeffrey Alexander Herlevi.

He never had the opportunity to see me graduate nor accomplish my other academic achievements. Yet, he instilled in me a love of learning and valued education deeply, which is why I know he would be proud to hear the words, Dr. Herlevi.

Acknowledgements

Once my PhD coursework was complete, and I began to think seriously about a dissertation topic, I knew more about the approaches I would use than the topic itself. I had extensive qualitative and quantitative experience so I knew the project would be multi-method. Being a pragmatist, I identified a gap in the literature that was primarily empirical. The project would require quantitative analysis as well as case studies. Inordinate amounts of analysis have been produced on special economic zones over the past 30 years. Yet, there was still no systematic cross-national empirical analysis of trends. I now know why. The data on SEZs is universally awful. While my own measure of SEZs is far from perfect, we now have at least the beginning of a more systematic understanding of the scale and scope of SEZs worldwide. Despite the painful process of building a dataset, engaging scholars and informing policymakers is the dual motivation that kept me laboring away at this question despite the drudgery of completing a dissertation.

I would like to thank my family, friends, dissertation committee, and colleagues for helping me through this journey. First, I need to sincerely thank my family for the joy and suffering associated with a PhD program. My spouse and step-daughters suffered through long absences at many points during the PhD and I simply cannot express in words how grateful I am for their love and support over these past six years. The journey was not easy and I know that my dedication to research and scholarship took a toll on them. Being a graduate student also afforded us tremendous opportunities, including living in the United Arab Emirates. I never thought Abu Dhabi would feel like home; but with my partner by my side, it did. Ray and I married during the first semester of graduate school and neither of us fully understood the choice we were making. The PhD was easily one of the most challenging endeavors I – or *we* – could have pursued. Ray provided me an opportunity to take my research to the Middle East and explore the real-world beyond the Ivory Tower. For that opportunity, I am eternally grateful. Now it is time to begin the next adventure!

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Finally, I want to express my appreciation to the Department of Politics. My dissertation committee had the most direct impact on the completion of the PhD, but the entire department shaped my thinking on international relations, comparative politics, political economy, methods, and the wide range of topics that graduate students must master. David Leblang told me early in the program that sometimes you "have to take a leap of faith." I took a leap of faith by asking him to be my committee chair and he did not disappoint. David provided encouragement and support through good times and bad and will always remain a mentor. Sonal Pandya always challenged me to do more. While I may not have always met her expectations, I appreciate her commitment to scholarly excellence. Brantly Womack improved my China research and is an incredible teacher. Brantly's dedication to his students is a model for how a professor should be. Shirley Lin provided regional expertise, an understanding of real-world perspectives, and keen insights on how to make my scholarship useful to policymakers and practitioners alike.

There are others to thank, but it is time to move on to the substance. For my final acknowledgement, thank you to the University of Virginia for making me a Wahoo.

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Introducing Special Economic Zones

Why Study SEZs?

Growing economically and managing the national government has never been easy but changes in global production and the speed with which financial markets move make sustainable growth even more problematic. One important strategy for growth pursued by national governments, and one discussed extensively in the policy literature, is for developing countries to attract foreign direct investment (FDI).[1] FDI is preferred by many countries because it creates jobs[2] and is viewed as less volatile than other types of capital flows. In particular, greenfield investment is viewed as a more stable form of FDI and can be an important source of technology acquisition for countries with limited research and development (R&D) capacity.[3] The World Bank's "Innovation Guide" claims that "FDI constitutes a major channel for technology and knowledge transfer."[4] For these reasons and many others, countries desperately want FDI and local and national governments will go to great lengths to attract investment and bring projects into their jurisdiction.

1 Farole and Akinci (2011); Oliver (2013). Media outlets have also caught onto the trend with the *Financial Times* now publishing both *FDI Magazine* and a series of FDI reports meant to provide investors information on the best destinations for investment.

2 Pinto (2013).

3 Wellhausen (2013).

4 World Bank (2009, 109).

This dissertation examines the intersection of political institutions and economic development strategies. However, instead of focusing on broad sweeping categories, such as export-led growth or import-substitution strategies, I focus more narrowly on one specific, measurable policy instrument: special economic zones (SEZs). I do so for several reasons. First, the intersection between politics and economics has always been deeply intertwined, but the origins of specific policy instruments is understudied. Policy-oriented studies of SEZs focus heavily on assessing success, but rarely examine the origins of zones. Moreover, despite some case-oriented research on zone origins, no cross-national empirical study has tested why countries enact SEZs.

Second, SEZs are now ubiquitous globally. Figure 1 depicts the dramatic change in the number of countries that have enacted zones worldwide. In the mid-1970s, approximately 20 countries had a SEZ program in place. By 2014, that number had reached 138 countries.[5] The World Bank touts SEZs as an important channel for growth and countries such as the US and China have both funded overseas zones as part of their foreign economic policy. There are over 3,000 special economic zones worldwide,[6] and SEZs continue to be an important component of domestic economic development strategies.

Scholars and policymakers need to understand subnational economic enclaves and investment promotion for three reasons. These policies have implications for changes in global production, the foreign policy strategies of emerging market countries, and legal rules for international trade and investment. First, economic policymakers need to understand global production patterns in order to forecast future trends. In the past three decades "gross FDI as a percentage of total world production increased seven-fold from 1.2 percent to 8.9 percent."[7] The rise of SEZs coin-

5 This number does not include the 15 countries who have abolished programs during this timeframe.
6 Singa-Boyenge (2007).
7 Elkins, Guzman and Simmons (2008, 220). The data referenced here is from 1970-2000.

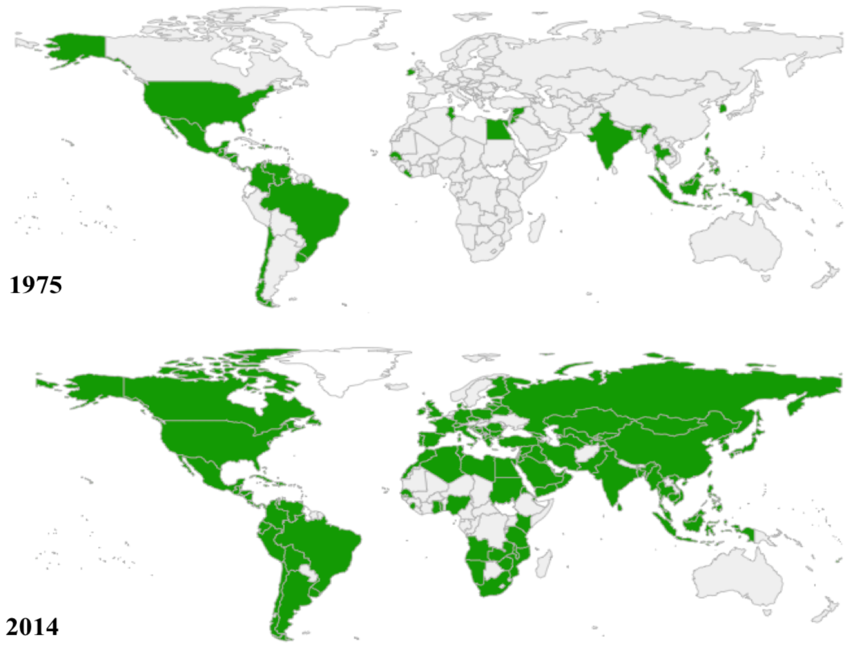

Figure 1: SEZ Enactment Over Time, 1975 versus 2014

cides with the fragmentation of production and dramatic increase in foreign investment worldwide. Declining transportation costs fostered the enormous trade interdependence of the US and China,[8] but is that change permanent? Properly mapping variation in production and efforts to attract FDI across nations improves our ability to identify and predict future manufacturing changes.

Second, there is an increasing intersection between SEZs and foreign policy. The global financial crisis and structural changes have prompted some countries to look to emerging market economies for an alternative model of development. China is expressly using SEZs as a component of its foreign economic policy. In 2006, China announced that it would establish 50 overseas trade and investment zones and has seven active programs in Africa.[9] Understanding the role and influence of emerging economies is crucial for US businesses. Third, the treatment of investment incentives has implications for international trade agreements and future negotiations within the

8 Autor, Dorn and Hanson (2013).
9 Brautigam and Tang (2011a); Brautigam and Tang (2011b).

World Trade Organization (WTO). The 1994 Agreement on Subsidies and Countervailing Measures (SCM) was an initial attempt to control trade subsidies but investment incentives have only grown since that time.[10] For least developed countries, SEZs are allowed in the WTO by clauses for "special and differential rules"[11] but other trade agreements explicitly deny preferential treatment to products emanating from a "special regime" such as an SEZ.[12] Investigating and cataloging these incentive schemes allows us to articulate what provisions should be maintained or re-negotiated in future multilateral and bilateral trade agreements.[13]

What do we know about SEZs?

Before discussing the research question and how I will study SEZs, it is worth briefly reviewing what we know about SEZs. SEZs are an increasingly popular signal meant to attract foreign (and sometimes domestic) investors. In this analysis, an SEZ is any geographically-demarcated area where the rules for trade and investment are different from the national-level legal regime.[14]

SEZs are a good proxy for investment incentives for several reasons. First, the various subsidies offered therein are unilateral efforts that any country can enact and capture both rule-based and incentive-based methods for competition.[15] Second, SEZs are more transparent than a pure financial offer would be and thus easier to measure. SEZs have a physical and legal presence, which

10 Oman (2000); Hanson (2001).

11 Thomas (2011, 140). Without the clause for least developed countries, EPZs would be classified as an export subsidy.

12 Granados (2005, 80). The Southern Common Market (MERCOSUR) and the Caribbean Community (CARICOM) both limit exports from EPZs.

13 The World Economic Forum (2013) has called for an international legal regime for investment similar to the WTO.

14 Throughout this paper the terms EPZ and SEZ will be used interchangeably to refer to these enclave areas.

15 Oman (2000) differentiates between incentives that are purely fiscal or financial and those based on improving the regulatory environment, categorizing EPZs in the latter. However, EPZs have fiscal, financial, and regulatory components thereby capturing disparate types of incentives in one administrative structure.

allows us to better characterize the scale and scope of the incentive package. While definitional issues remain problematic, SEZs are a transparent policy in an arena where transparency is typically lacking. SEZs capture the geographic component of investment that distinguishes it from more mobile forms of capital and helps us examine where foreign firms actually setup operations. Third, SEZs more accurately reflect the local-global interaction that occurs in FDI bargaining. According to Oman (2000), foreign MNCs employ a two-stage process when selecting FDI sites. Foreign firms first develop a list of potential countries or jurisdictions based on market fundamentals and then, once they have agreed upon a "short list," they negotiate with candidate jurisdictions to determine the final choice.[16] It is in this second stage of the decision-making process that incentives matter most.

The macroeconomic reasons for adopting SEZs are to begin a process of trade and financial opening. Many developing countries, since the 1970s, have attempted to open their financial markets in the interests of promoting trade and allowing access for foreign direct investors. However, domestic interests also want certain forms of protection and governments may not want to fully open their financial markets out of fear of the volatility of international capital flows. Thus, enacting an SEZ is a way to partially open the economy but without allowing full liberalization immediately. More open capital and ownership policies can be allowed in zones thereby allowing access to the economy without making the entire economy vulnerable to international financial crises. Thus, countries in the process of financial opening are more likely to enact zones. The second macroeconomic reason for selecting zones rather than full financial opening is the exchange rate. Frieden does not overstate the point when he says, "The exchange rate is the most important

[16] Oman (2000) defines "fundamentals" as general characteristics such as market size, market access, and political and economic stability.

price in any economy, for it affects all other prices."[17] While there are many reasons for selecting a particular exchange rate regime, most countries in the midst of initial financial opening are likely to opt for exchange rate stability over flexibility.

The desire for FDI has sparked a so-called "investment arms race"[18] consistent with global theories of the "race to the bottom." Both OECD and non-OECD countries engage in this competition.[19] For example, among jurisdictions in the United States, state and local governments offered close to $47 billion in investment incentives,[20] which accounted for nearly 45 percent of inward FDI flows in that same year.[21] This is up from estimates of investment incentives in the mid-1990s of approximately $26.4 billion, roughly 31 percent of inward FDI in that year.[22] Global FDI has increased dramatically over the past three decades with "gross FDI as a percentage of total world production increas[ing] seven-fold from 1.2 percent to 8.9 percent between 1970 and 2000."[23]

However, despite the dramatic increase in incentives worldwide there is still considerable debate about their efficacy. On the positive side, those who view these bidding wars as consistent with a national competition for the ideal mix of taxes and public goods, this is simply the Tiebout (1956) model raised to the international level. The basic argument is that this competition promotes efficiency and may encourage public goods provision.[24] Another economic argument in favor of using incentives is in the context of strategic trade theory.[25] If a government has an effective

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17 Frieden (2015, 1).
18 Rogers and Ellis (2000).
19 Oman (2000, 10).
20 Thomas (2011, 96).
21 Author calculations based on the incentive figure from Thomas and inward FDI flows for 2005 from UNCTAD. In 2005, inward FDI to the US was $104 billion as measured in current US prices.
22 The incentive estimate is also from Thomas (2011, 8) and the UNCTAD estimate of FDI was $84 billion in 1996.
23 Elkins, Guzman and Simmons (2008, 220).
24 Wildasin (1989); Wildasin and Wilson (1998).
25 Krugman (1994).

trade policy, early use of incentives may be a pillar to support this policy. Ignoring the potential economic benefits of an incentive strategy, some argue that incentives are purely a device for pandering to the electorate. For example, Jensen et al. (2014) argue that governors in US states are able to take credit for investment that enters their state if they offered incentives to attract it. On the negative side, these bidding wars for investment may simply be a prisoner's dilemma for competing countries.[26] This has particularly important distributional implications for developing countries if they are competing with developed countries or wealthier jurisdictions within their own country. Other negative sum arguments see incentives as rent-seeking,[27] while others simply acknowledge that tax incentives are not effective.[28]

For developing countries, attracting FDI via SEZs has been a particularly important trend prompting emerging markets to get in the investment incentive game. FDI was less than one percent of GDP for developing countries in the 1970s but by the 2000s it was averaging approximately 2.5 percent of GDP.[29] When China first opened to foreign investment in the early 1980s, over $650 million (USD) was invested in infrastructure in the Shenzhen special economic zone (SEZ) alone.[30] Cross-national estimates of the total amount of incentives are lacking, but the UN Conference on Trade and Development (UNCTAD) conducted a survey of 103 countries in the mid-1990s and found "that competition for FDI with incentives is 'pervasive' and even more intense in the 1990s than in the 1980s."[31] There is no indication this competition has abated and recent analysis of large emerging markets indicates that both cross-national and sub-national competition for investment

26 Oman (2000); Thomas (2011).
27 Krueger (1974).
28 Jensen (2007); Wellhausen (2013).
29 Büthe and Milner (2008, 741).
30 Chen (1993, Table 2, 263).
31 Oman (2000, 27).

remains fierce.[32]

On the supply side of FDI, firms care most about market potential and proximity to customers[33] but also cite the political climate as an important factor.[34] In a recent survey of the motivation for over 2800 FDI projects, the regulatory and business climate of the host country ranked third in importance for investors after market potential. Business climate ranked above factors such as the availability of a skilled workforce and the quality of life in the host country.[35] Firms want a stable environment and countries are willing to offer an enormous package of incentives to meet this demand. If countries are so apt to offer these incentives this raises additional questions about the efficacy of these policies. In particular, what are the range of incentives a government is likely to offer and what are the opportunity costs of using different types of incentive strategies? This raises a related question: how do we measure, categorize, and evaluate the extent of incentives worldwide?

The Research Question: Origins of SEZs

The fundamental research question that this dissertation seeks to answer is, why do national and subnational governments enact special economic zone programs? Up until now, there had been no systematic data that catalogs SEZs in a comprehensive set of countries. To evaluate why countries enact zones, we need cross-national data to first inventory these programs, and then a series of tests to evaluate competing explanations.

In the cross-national study, I focus on the political and economic factors that correlate with

32 This is especially true in large countries such as Brazil and China. However, smaller countries, such as Vietnam, have been known to compete internally as well as with their neighbors in the region (Thomas 2011, Chapter 5).

33 Blonigen and Piger (2012).

34 Henisz (2000); Henisz and Zelner (2010); Jensen (2006).

35 fDi Intelligence, The fDi Report 2014: Global Greenfield Investment Trends, 16.

enactment. I find that countries which are opening financially are more likely to enact SEZs than countries which are financially closed. Relatedly, I show that the interactive effect of financial opening and the desire to maintain a fixed exchange rate is strongly correlated with the propensity to enact SEZs. I also find, contrary to conventional wisdom, democracies are more likely to enact zones than non-democracies. I conduct a series of tests of demand for labor and job creation, but none of these results are statistically significant. As such, the reasons for different propensities to enact based on regime type are inconclusive, thus prompting a more thorough analysis at the country-level to develop further explanations for zone enactment.

Using the cross-national data and the findings from the empirical study, I then ask, how is enactment different in a set of four country case studies? The four country cases were selected because they all follow the macroeconomic logic tested empirically. However, these countries, differ on other political characteristics. The four national-level case studies are the Dominican Republic (DR), Mauritius, Jordan, and Sri Lanka. Two of these countries were democracies at the time of enactment (the DR and Mauritius) and two were non-democracies (Jordan and Sri Lanka). In this analysis, I show that the role of external actors is important in some country cases. In the Dominican Republic and Jordan, it is unlikely zone programs would have taken the shape they did had foreign actors not been heavily involved in domestic economic development policy.

After analysis of zone enactment at the national-level, I shift to a country that is not only iconoclastic, but one which has a myriad of distinct zones: China. Depending on the time period under study, China has had anywhere from four to over 6000 separate zones. What explains this massive variation in zone numbers and the evolution over time? In the case of China, the macroeconomic logic effectively explains the initial period of enactment (1978-1984) and the most famous zones in China, such as Shenzhen. However, the macroeconomic logic does not explain the creation of additional zone programs in China and the explosion of SEZs in the 1990s, known as "development zone fever." To explain these periods of enactment, we must look to domestic explanations and the role of provincial and local governments.[36]

The examination of zones over time in China highlights the key role of local actors in the creation of SEZs. In the case of China, provincial and municipal governments are key to understanding the explosion of zones. Local-national interaction is key to understanding enactment in a variety of cases beyond China. To illuminate the role of local actors, the final substantive chapter examines three cases of zone enactment at the city level.

Answering the Question: How will SEZs be studied?

Given the vast uncertainty about the efficacy of SEZs, much more systematic research needs to be done to understand both the domestic and international impetus for this policy instrument. This proposal is one small step to examine how SEZs fit in the broader debate about foreign direct investment and investment incentives. This project will provide valuable theoretic, empirical, and policy insights that will increase our knowledge of domestic policy choices in a highly competitive investment environment.

This dissertation uses a multi-method approach and examines SEZs at multiple levels of analysis. Chapter 1 addresses key elements of the academic analysis of SEZs, focusing on the FDI literature, economic efficiency, policy-oriented assessments, property rights, and urban planning. Chapter 2 is dedicated entirely to research design. Despite a growing literature about SEZ efficacy,

[36] See Herlevi (2017) for an analysis of why national SEZs and provincial/local SEZs should be examined separately in China.

to my knowledge, there has been no attempt to empirically test why countries enact SEZs as this dissertation does. Chapter 3 delves into the dataset created to conduct the cross-national empirical tests of zone enactment. In that chapter, I demonstrate evidence for macroeconomic theories of enactment, but also show a series of tests related to political, labor, and other determinants of SEZ creation. Chapter 4 shifts from a cross-national comparison to an examination of zone enactment in four country case studies. Given the complexity of national-level zone enactment in particular countries, Chapter 5 evaluates zone enactment over time in one country case: China. Chapter 6 then shifts the level of analysis. Instead of focusing on national-level actors, Chapter 6 examines local actors and how they interact with national-level authorities by examining creation of zones in three cities: Aqaba, Jordan; Dubai in the United Arab Emirates; and Shanghai, China. The conclusion summarizes the policy implications of this research and identifies areas for further analysis.

Theory and Research Design

Chapter 1

Theories of SEZ Efficacy without Understanding Origins

1.1 Introduction

The purpose of this dissertation is not to evaluate the efficacy of SEZs nor their effects on FDI, job creation, or other economic outcomes. Instead, I focus entirely on the causally prior question of why enact a special economic zone in the first place. What other options do countries have to achieve their political and economic goals and why has this particular policy instrument become so popular? What are the fundamentals underlying program enactment? Do economic theories of labor and capital provide an explanation or are political factors more important? Is there an overarching set of characteristics that explains enactment of these programs or are the patterns too diverse? What are the unique set of circumstances within each country which result in this policy choice? Do states learn from one another and, if so, how do international and domestic factors interact to produce this particular policy?

This chapter will focus on several bodies of research that discuss SEZs, as well as some of the flaws with these literatures. The problems in these literatures, which have driven the focus of this dissertation, center around two main issues. First and foremost, most studies focus almost exclusively on the question of whether or not SEZs are successful. These studies ask, is this policy sound in economic theory and/or do they work in practice? While a cursory summary of program origins is often included in these studies, none examine the question of origins in-depth nor address it systematically. Economic and policy analysis helps us evaluate the efficacy of zone programs, in at least some contexts, but we have no generalizable theory of SEZ enactment that has been tested empirically. Second, the bulk of more recent analysis is primarily policy-oriented and thus contributes little to theories of enactment or efficiency. Analysis from the World Bank, USAID, and other development organizations is incredibly valuable for its level of detail and description of individuals zones, but this body of research lacks theoretic underpinnings and a method to identify generalizable patterns. We know a lot about individual zones, but we know very little about broader patterns. This dissertation is meant to begin to fill that gap.

There are at least four main bodies of scholarship that address SEZs and EPZs. I broadly categorize these disparate groups into macroeconomic conditions, economic reform, governance, and urban planning. Section 1.2 of this chapter addresses macroeconomic conditions, including aspects of the global financial system and exchange rate policy. Section 1.3 addresses economic reform, by which I mean the policy decisions that domestic political leaders can control, focusing on capital controls, financial policy, and property rights. In Section 1.4 the focus shifts to governance issues and the political conditions which may shape SEZ policy. Within the governance section, I also address the urban planning literature, focusing on issues of sovereignty and land control and how those aspects of the property rights regime influence SEZ policy. Section 1.5 briefly addresses the role of external (foreign) actors in SEZ enactment and the final section concludes.

1.2 Macroeconomic Conditions

Omar and Stoever (2008) categorize the literature on SEZs into three main perspectives: the neoclassical school, new growth theory, and life cycle approaches. The first, neoclassical theory, uses a public choice framework to highlight the inefficiencies of zone policies arguing that SEZs "distort free-market mechanisms."[1] The second perspective, new growth theory, acknowledges the importance of knowledge creation by virtue of spillovers into the larger economy and argues SEZs are one method of encouraging these spillovers.[2] For example, the highly influential development economist Dani Rodrik highlights the use of an EPZ in the economic development of Mauritius, noting that if done correctly, SEZ policies can be quite effective at facilitating economic growth.[3] Life cycle approaches take new growth theory one step further by arguing that the role of SEZs should evolve over time.

Hamada (1974) was one of the first to examine early duty-free zones. Using a factor-based model, Hamada argues that from a comparative advantage perspective these types of zones are inefficient and welfare reducing for a country.[4] While not explicitly about SEZs, Baysinger, Robert B. Ekelund and Tollison (1980) examine mercantilism, which is directly relevant to debates in economics about new growth theory and the viability of export-led growth strategies. Baysinger, Robert B. Ekelund and Tollison (1980) ask whether mercantilism, is about using trade surpluses to achieve state goals or if this policy is caused by the "demand for regulatory rents by domestic economic agents,"[5] The question of domestic rent-seeking raises those questions long-addressed

1 Omar and Stoever (2008, 137).
2 Dowla (1997) uses cost-benefit analysis to evaluate zones the effect of zones in Bangladesh.
3 Rodrik (2007).
4 Hamada (1974); Madani (1999, 21).
5 Baysinger, Robert B. Ekelund and Tollison (1980, 236).

by the public choice school about whether rent-seekers generate policy or whether policies arise and then generate interests from those incentives and benefits. This raises the issue of whether a simple Heckscher-Ohlin (Stolper-Samuelson) model fully accounts for sector-based or locational circumstances. One prominent response to the simplicity of the factor-based models is the importance of spillover effects of FDI and the role EPZs may have in providing larger learning benefits for skilled and unskilled labor.[6] Most of these studies build on the edifice of public choice theories that government intervention in the economy is nearly always negative. Whether true in theory or practice, the fact is that governments intervene in the economy despite theories recommending otherwise. Despite the basic assessment that SEZ policies are distortionary and likely build avenues for domestic rent-seeking, it is also readily acknowledged that "FDI incentives may well be needed to overcome the various obstacles faced by foreign investors."[7]

The arguments in favor of zone policy programs are relatively straightforward from the perspective of comparative advantage. Using a Heckscher-Ohlin (H-O) model, "wages in [a] more-developed economy are uniformly higher than those in the less-developed country."[8] Thus, poor countries want to take advantage of their low cost labor advantage but have neither the capital nor technical expertise necessary to participate in the global supply chain. Eventually, productivity improvements in the FDI-demand economy (typically the developing country) may create upward pressure on wages but that effect takes time to occur and for at least some period of time countries with low-cost labor will remain competitive.[9] Factor endowments help explain the early adopters of SEZs and may explain the changing landscape of countries employing SEZs at subsequent stages

6 Jayanthakumaran (2003) cites Johansson (1994) on the examination of EPZs using new growth theory.

7 Blomstrüm and Kokko (2003, 8).

8 Grossman and Rossi-Hansberg (2006, 80).

9 Obviously this depends on labor supply in each country but Grossman and Rossi-Hansberg's application of the H-O model assumes "incomplete specialization; factor growth can be accommodated by a change in the composition of output in each country, without any impact on factor prices" (81). See also Leamer (2006).

of development. In the 1960s and 1970s, signals from developing countries were not necessarily credible so countries undertook reforms to signal property rights protection in a limited geographic and regulatory space.

1.2.1 New Growth Theory

Economists skeptical of the validity or usefulness of formal models or those which prefer to analyze policy as it actually exists in practice have typically opted for evaluating the effectiveness of zones. Under the broad category of new growth theory, there is a growing literature in economics typically described as "place-based politics."[10] According to a recent review, place-based incentive policies are "government efforts to enhance the economic performance of specific areas within their jurisdiction."[11] Neumark and Simpson (2015) argue that most "enterprise zone" policies are about creating jobs but note that the results remain mixed. The key difference between place-based policies and other incentives is that they are tied to a specific geographic area rather than being sectoral, firm, or individual-specific subsidies. Some of this literature is consistent with an emerging body of scholarship on "bidding wars" within the US to attract firms and FDI as well as the desire for politicians to "claim credit" for bring home the FDI bacon.[12] Despite the potential economic inefficiency of investment incentives, Jensen et al. (2014) argues that in democracies, "the electoral calculus makes it such that offering incentives is a winning strategy independent of competition from other locations."[13]

As with formal economic models, the focus is almost exclusively on outcomes - do

[10] See Wang (2013) and Peters and Fisher (2002) for prominent examples of this literature.
[11] Neumark and Simpson (2015, 1).
[12] Jensen et al. (2014).
[13] Jensen et al. (2014, 434).

location-specific subsidies or enterprise zones create jobs, generate knowledge spillovers, attract investment, or positively effect some other measure of economic well-being? Little to no analysis is done on why specific programs are enacted. This is a glaring omission given that programs of this nature need to be evaluated based on the goals they are intended to achieve. For example, if the primary goal of an SEZ is to provide public infrastructure for private firms, then the creation of roads, buildings, water and sewer systems, and other types of infrastructure is sufficient for assessing whether the zone was "successful." On the other hand, if the primary purpose of the zone is job creation, then the program should be evaluated on those grounds alone.[14] However, few studies take time to analyze either origins or the program or its intended purpose. This is partially because many programs provide a laundry list of goals and objectives and do very little to prioritize these policy objectives. However, without a clear understanding of the purported goals of an individual program it is not surprising that the results of their effectiveness remain mixed.

1.2.2 Financial Opening and Exchange Rate Policy

Another prominent macroeconomic reason for adopting SEZs is to begin the process of trade liberalization and financial opening. Most countries, especially developing countries facing major challenges in building up their own economy, wanted to open up their financial markets in the interests of promoting trade and allowing access for foreign direct investors. However, domestic interests often demanded certain forms of protectionism and governments may not want to fully open their financial markets out of fear of the volatility of international capital flows. Thus, enacting an SEZ is a way to partially open the economy but without allowing full liberalization at the

[14] Neumark and Simpson (2015) focus on employment and note "that state enterprise zone programs [in the US] have generally not been effective at creating jobs" (Neumark and Simpson 2015, 1).

outset. More open capital and ownership policies can be allowed in zones thereby allowing access to the economy without making the entire economy vulnerable to international financial crises. Thus, countries in the process of financial opening are more likely to enact zones.

However, directly tied to overall financial policies and capital controls is the exchange rate. Frieden argues that, “the exchange rate is the most important price in any economy, for it affects all other prices.”[15] While there are many reasons for selecting a particular exchange rate regime, most countries in the midst of initial opening or attempting to develop their economy are likely to opt for exchange rate stability over flexibility. As Krugman and Obstfeld (2006) note, exchange rate stability is more important for emerging economies than it is for advanced economies because “keeping inflation in check and avoiding financial stress” is vital for countries in the midst of economic development.[16] Moreover, fixing or pegging the exchange rate can help reduce transactions costs for foreign firms hoping to trade or invest in a particular country.[17] Thus, for many countries in the midst of economic reform or transition, they have multiple competing policy imperatives. They want to open financially but want to do so in a controlled manner that reduces volatility.

Questions of volatility and stability also directly relate to the political factors that may influence SEZ enactment. Most early enactors, other than Ireland, were non-democracies. When South Korea and Taiwan first enacted their SEZ programs, neither of these countries had transitioned to democracy. The lack of both democratic protections and well-developed labor laws prompted scholars and external observers to question the motive of these development enclaves, arguing that SEZs were primarily meant to repress labor by limiting both labor protection and preventing col-

15 Frieden (2015, 1).
16 Krugman and Obstfeld (2006, 630).
17 Broz and Frieden (2001); Pelc (2011, 629).

lective bargaining. The logic generated the conventional wisdom that SEZs were primarily a tool of non-democratic countries to increase exports and exploit their cheap labor. Current analysis indicates that this early conventional wisdom may be flawed[18] but thus far we have been unable to fully adjudicate debates about the relationship between regime type and the use of SEZ programs.

1.2.3 Flaws and Tests

Despite the unrealistic political realities of pursuing large-scale reform in many countries, the policy-oriented development literature seems to have fully adopted the mantras of the economic models. The main problem with the economic models is the starting point for their analytic framework. SEZs may well be sub-optimal from an overall economic efficiency perspective but they are often a first-best solution politically. Political elites want to be able to control the pace, scale, and nature of reform. To think of China in 1978 as ready for complete economic liberalization from a communist planning system is not only unrealistic but borders on the absurd.

Hamada's model is a useful benchmark but the assumptions about consumption activities within the zone are too restrictive and Hamada himself acknowledges that the spatial aspects of the zone are abstracted entirely.[19] Instead of liberalizing the entire economy, governments enact reforms and liberalization policies in only a limited, geographic area. Is this to attract foreign capital while protecting domestic enterprises? In the case of SEZs, a regulatory framework may be consistent with a sector-based framework for interests.[20] Particular industries may be favored by restricting foreign entry into that sector while opening industries to competition that are not

18 For example, Kucera (2002) finds that countries with poor labor practices do not attract more FDI; in his models, he also controls for the use of SEZs, finding that labor violations in zones do not increase FDI. However, this result is not statistically significant.

19 Hamada (1974, 227).

20 More along the lines of the Ricardo-Viner model.

represented in national policy decision-making. Or, it may be the explicit choice of the government to use SEZs to balance openness with control over other segments of the economy. In the case of rent-seeking, the Stigler model assumes that policymakers want to maximize both votes and money but must make trade-offs.[21] In the case of authoritarian regimes, rent-seekers may attempt to alter policy choices but may do so by appealing to elements within the bureaucracy vice an electoral mechanism.

1.3 Economic Reform

A key factor for development, or at least a primary goal for many developing countries, is turning current account deficits into current account surpluses. To do so, countries need to increase exports, decrease imports, or do both simultaneously. Using Williamson's original conception of the Washington consensus, several of his recommended policies were directly related to the desire for countries to increase trade. For example, Williamson recommended that "quantitative trade restrictions [should] be rapidly replaced by tariffs" and that the exchange rate should be "sufficiently competitive to induce a rapid growth in nontraditional exports."[22] Related to trade and exchange rate policies, more general financial liberalization was recommended, such as the "abolition of barriers impeding the entry of FDI" into the country.[23] Essentially, the focus was on "macroeconomic discipline, outward orientation, and the market economy."[24]

21 Mitchell and Munger (1991).
22 Williamson (2004, 196).
23 Other policy changes such as privatization, tax reform, and ensuring secure property rights were also recommended.
24 Williamson (2004, 197).

1.3.1 Financial Liberalization

Policy recommendations largely under the purview of the Washington consensus were meant to open an economy financially. In this sense, SEZs were viewed as one way to encourage opening but in a slow, deliberate, and initially limited fashion. Early on, SEZs were conceptualized as either a temporary measure or an attempt at partial reform. Instead of reforming all aspects of the economic system simultaneously,[25] countries could enact SEZs as one method of incremental reform. Instead of opening the financial system completely, markets could be opened in one or several distinct enclaves that could be separated from the rest of the country and thus more easily controlled. In fact, early zones were often physically as well as legally separated from the rest of the country's economy. This meant fences around the perimeter of the zone so that the entry of people and goods could be monitored and managed. In the UAE, officials and business people recalled long lines could seen each morning and afternoon on the one road entering and exiting the Jebel Ali Free Zone during the 1980s.[26] Only certain workers were given access to the zone and goods exiting the zone were closely monitored by customs authorities. In its early stages, the Shenzhen SEZ in China was fenced off for similar reasons (see Figure 1.1). Today, the Aqaba SEZ in Jordan remains completely separated from the neighboring jurisdiction by a long fence, replete with barbed wire to prevent entry (or exit) from the zone. Moreover, a restrictive financial policy in the broader economy could be maintained while allowing capital flows and FDI into the approved SEZs only. As such, countries which are liberalizing financially should be more likely to enact SEZs as one method of reform but one that does not require full capital mobility, at least at the outset.

[25] Sometimes referred to the "big bang" theory of reform (Williamson 2012).
[26] Author Interviews, Abu Dhabi, 2015.

Figure 1.1: Creating Shenzhen: Separate and Not Equal

The second characteristic of importance is monetary policy. In a closed financial system, it is relatively straightforward to maintain a fixed exchange rate. Monetary policy, capital controls, and control over the domestic economy are not separate and distinct realms but instead "capital controls are used as part of an overall policy of financial repression."[27] In order to maintain some modicum of control over their own domestic economy, "Governments use capital controls in an attempt to maintain a fixed exchange rate and to sustain an independent monetary policy; that is, to protect the value of their currency and to maintain an interest rate that diverges from the world interest rate."[28] Thus, countries that maintain a fixed exchange rate should be less likely to enact SEZs since SEZs represent an effort to liberalize the financial system.

27 Leblang (1997, 436).
28 Leblang (1997, 436).

1.3.2 Property Rights

The concept of property rights has been addressed in a wide variety of literatures, but it is the economics, policy, and business literatures that have espoused the benefits of property rights for promoting FDI and GDP growth most fervently. While there is evidence to support to the view that, on average, countries with more secure property rights have better economic outcomes there are two problems with this literature as it relates to SEZs. First, most studies focus primarily on the Western European development model. Qualitative studies focus on the gradual progression of the legal regime in Great Britain while quantitative studies have relied on the cross-section of countries with the most readily available data. Both methods of research tells us a great deal about property rights in a particular set of countries but we still cannot say definitively whether these observations hold for the vast majority of the rest of the world. As Acemoglu and Johnson (2005) note, despite Douglass North describing both contract institutions and redistributive (or "predatory") institutions, most analysis of property rights highlights "the importance of a 'cluster' of institutions that include both contracting and private property protection elements."[29] In much of the developing world, however, few countries have had the slow gradual progression of property rights. More commonly, laws are passed with very little time for the accompanying institutions to be properly implemented.

Second, in non-democratic countries, the concept of traditional property rights is somewhat flawed. In many authoritarian regimes, the state owns the land and as such there is a collective ownership and/or control of the land. This complicates the analysis because one individual does not hold the decision-making authority but instead it is either a state or local government or other entity

[29] Acemoglu and Johnson (2005, 950).

that has management over that resource. Thus, there are a large number of stakeholders involved in any decision to control, consume, or sell that property. Take China as an example where rights over land, property, finance and investment, and corporate enterprises all differ. In the reform era, there is certainly now property rights as it relates to consumable goods. Chinese citizens have the right to buy nearly anything they would want in the marketplace and once purchases have been made, citizens are able to consume as they choose. It is in this aspect of private property rights that China has truly made the transition to a capitalist marketplace.[30] However, property rights over land and investment are not nearly as secure.

So how does this relate to incentive and land-use policies? Protection of property rights and assets of foreign firms are important components of the legal protections inherent in the SEZ but this dimension varies greatly across the spectrum of zones. The first modern SEZ, in Shannon, Ireland, already had a solid legal framework in place and the SEZ law created a public-private company which was given wide latitude to enact local development policies.[31] On the other extreme, China's early SEZs were the only localities in the country that formally protected property rights of any kind.[32]

Property rights decrease uncertainty but the process that unfolded in Great Britain did so over a century or more. In China, and many other emerging market countries, that process has only had thirty to forty years. In the early 1980s, few US, European, or Japanese MNCs invested in Shenzhen because property rights were not sufficiently well-developed for those investors to know

30 In the China scholarship, this process is often termed "marketization" (Huang et al. 2015) rather than privatization because of the negative connotations associated with the term "private" in the Chinese context.

31 The Shannon Free Airport Development Company, or SFADCo, (Farole and Akinci 2011, 186).

32 In fact, formal property rights were not recognized "until a constitutional amendment in 2004" was passed which applied to areas outside of the SEZs (Wang 2013).

whether or not their assets would be protected.[33] Hong Kong and Taiwan firms were the primary external investors because those individuals and firms had other mechanisms by which to reduce uncertainty including culture and language similarities and geographic proximity, which fostered local knowledge. As Acemoglu and Johnson (2005) describe, contracting institutions are meant to guide interactions between private individuals or interests. However, if a country primarily has state-owned land, then no land sales are "private" even though there could be a set of contracting institutions that have arisen to better manage allocation. For example, while all land in China is owned by the state (or rural collective), firms can obtain the use rights to those lands and the rules for doing so have now been codified.

The development of property rights and changes in land-use also point to key differences over time. These differences are most pronounced in China but are also visible in other non-democratic, developing countries. As Huang (2008) describes, the 1980s were rural and entrepreneurial. This period of reform was also highly experimental resulting in both vibrant and highly varied developmental strategies. In Zhejiang Province, Wenzhou and its shareholding economy was simply one of many "models" of reform that unleashed rapid growth. In the 1980s, the use of SEZs - most famously, Shenzhen - was simply one method of creative reform. However, this trajectory fundamentally changed in the 1990s. Huang (2008) attributes this to the post-Tiananmen aftermath. While Tiananmen is a clear inflection point, many of the patterns that emerged in the 1990s had their seeds sown in the late 1980s, prior to the Tiananmen interlude.

[33] I define the "early period" of Shenzhen development as roughly 1978 to 1984.

1.4 Governance and Political Considerations

Political science scholarship has focused primarily on labor issues,[34] taken a public choice perspective, or used a neo-Marxist framework to critique the use of zones in development policy. Early critiques of SEZs focused on poor labor standards or the use of zones as potential "agents of imperialism."[35] However, as FDI became a more popular form of development assistance, countries began to court foreign corporations by using SEZs. In the 1990s, more countries decided to enact SEZ policies and international organizations even more actively promoted zones as a form of development.[36]

1.4.1 Redistributive Models

If all competition for FDI was among the subnational jurisdictions within one country, then a Tiebout (1956) framework might be appropriate. However, the competition for capital from abroad is not the same across local jurisdictions. In many countries the legal regime governing SEZs is so different from other jurisdictions in the country that it is less about internal competition and more about competition in the international market for FDI. Weingast, Shepsle and Johnsen (1981), hereafter, WSJ, argue that "geography is the hallmark of distributive politics"[37] and define distributive policy as "a political decision that concentrates benefits in a specific geographic constituency and finances expenditures through generalized taxation."[38] In essence, this is precisely what SEZs do. National governments provide preferential treatment to a specific geographic jurisdiction. WSJ

34 Milberg and Amengual (2008); Singa-Boyenge (2007); Dowla (1997).
35 Sklair (1986, 753).
36 Engman, Onodera and Pinali (2007); World Bank (2008); Zeng (2011); Farole and Akinci (2011); Oliver (2013).
37 Weingast, Shepsle and Johnsen (1981, 644).
38 Ibid, 644.

also show that the politically optimal amount of public goods is not necessarily the same as the economically efficient amount. Their model is ostensibly focused on legislators with geographic districts but the voting element does not seem to be necessary for their framework to operate. In a system where local officials are not electorally beholden to a local constituency it does, however, raise the issue of what form of accountability will operate.

Avinash Dixit and Victor Norman build on Hamada's early work on the economic efficiency of duty free zones by embedding it in the gains from trade literature. Building off an earlier formal model of international trade, Dixit and Norman (1986) compare lump sum transfers to different forms of taxation and subsidies and argue "that a government empowered to use only commodity taxation can implement a free trade outcome that is not worse in the Pareto sense than the autarky equilibrium."[39] Facchini and Willmann (1999) evaluate both the Dixit-Norman and Kemp and Wan (1972) redistribution schemes and develop a rank ordering between autarky and free trade based on the welfare benefits of the redistribution scheme. Facchini and Willman note that the stylized ideal of "free trade with lump sum transfers presupposes that the government knows the welfare position of each single agent before and after liberalization."[40] The government may not know the position of every individual but interest groups often attempt to provide information of this type, albeit biased toward their particular position.

The free trade ideal and closed economy autarky models provide a range of possible options about the potential policies to be employed and an enacted zone is likely to be somewhere between these two extremes. The free trade and autarky benchmarks allow us to evaluate the economic efficiency of different redistribution schemes but do not take into account the incentives of

39 Dixit and Norman (1986, 115).
40 Facchini and Willmann (1999, 410).

political actors shaped by the institutional features of the system in which they operate. WSJ show us, using a model of geographic constituencies and public goods, that "political institutions transform the economic basis of costs and benefits into political costs and benefits" and these political calculations often diverge from the economically efficient choices.[41] Geographic-based incentives may not be the most efficient economically but they may be politically efficient. Politicians cannot necessarily commit to future policy decisions so inefficient methods of distribution may be a way to credibly commit.[42] The redistributive models focus on geography generally but do not fully address why it would be necessary to create a legally-separate enclave if redistribution was the ultimate goal of the program.

1.4.2 Demand for FDI: Incentives Policy

In terms of institutional characteristics, the FDI incentives literature begins from a separate vantage point. Nathan Jensen finds that democracies are associated with higher FDI inflows[43] but Li and Resnick (2003) argue that democracy has conflicting effects on FDI inflows. The constraints placed on elected leaders reduce the ability of host governments to offer generous incentives thereby reducing FDI; however, majority elections and democratic institutions contribute to effective contract enforcement and secure property rights which would increase FDI.[44] Thus, these cross-cutting effects must both be examined to see which wins out. Other scholars argue that it is specific aspects of the political process which are more important. Henisz (2000) contends that it is the ability of the government to overturn policy that matters[45] whereas Staats and Biglaiser

41 Weingast, Shepsle and Johnsen (1981, 643).
42 Acemoglu and Robinson (2001).
43 Jensen (2003); Jensen (2006).
44 Li and Resnick (2003, 177).
45 Henisz (2000); Henisz and Zelner (2010).

(2012) argue that even within democracies there is substantial variance depending on the nature of the courts. Democracies with higher levels of judicial strength will attract larger FDI flows.[46]

Pablo Pinto critiques this literature noting that while institutional differences associated with regime type are likely to be related to FDI "these explanations treat host governments as passive actors: either they have the features that investors like or not, but there is nothing they can do about it."[47] The notion that national governments are passive in the global competition for FDI is inconsistent with the large increase in the number of zones worldwide. Thus, democracies may not need to use incentives restricted to a SEZ in order to attract FDI, but authoritarian regimes may use SEZs to provide an enclave with property rights and a more stable legal environment that is not present in the country as a whole.

1.4.3 Regime Type

As highlighted in the FDI incentives literature, regime type remains a key explanatory variable for the global distribution of FDI. Increasingly, the FDI literature has also found that democracies attract more capital, which then comes into contrast with earlier thinking about SEZs. The conventional wisdom in the SEZ literature, especially the early writing on zones that shaped later analysis, is that autocracies are more likely to enact zones. The early conventional wisdom is primarily driven by neo-Marxist theories that argue SEZs were used as one method of suppressing labor. Given these contradictory theories, I examine regime type as one potential determinant of the propensity to enact SEZs and find that being a democracy correlates with SEZ enactment.

In democracies, citizens are connected to their leaders via elections. Elected leaders want

46 Staats and Biglaiser (2012, 194).
47 Pinto (2013, 5).

to be able to take credit for successful economic policies, especially policies that can claim job creation. Jensen et al. (2014) term this tendency "electoral pandering" and describe it as the situation "whereby politicians endorse popular policies that provide short-term political gain at the cost of lower economic performance over the long term."[48] If politicians are able to create jobs and can reasonably take credit for that policy then they more likely to be elected. This is likely to be one mechanism by which SEZs become a prominent policy instrument in democratic countries. As it relates to FDI and democracy, Pandya (2014*a*) finds that the trend towards increasing democratization is partly responsible for the increasing demand for FDI. FDI not only creates jobs in countries but also creates better paying jobs and thus is a boon to labor. In a democracy, labor interests can push for FDI-friendly policies with this goal in mind.[49]

The democratic institutions theory is based on three mechanisms: information, representation, and credibility. The idea behind the first mechanism is that in an imperfect market one major problem is asymmetric information. In the case of FDI, the asymmetry is between a firm or investor's knowledge of government policy and the likelihood of policy continuity. In domestic political systems, policy deliberations are somewhat more transparent and this provides a channel for firms to obtain information about present and future policy changes (or continuity). In terms of representation, the conventional wisdom in the 1980s[50] was that MNCs would rather negotiate with authoritarian regimes but there has been limited evidence that this is true. Jensen (2006) argues that lobbying may be the preferred method for policy influence. The third mechanism is credibility and this relates to policy stability and veto players. The greater the number of veto players the more stable policy will be in a given country.

48 Jensen et al. (2014, 434).
49 Pinto (2013); Kucera (2002); Hanson (2001).
50 Evans (1989).

Democracies use elections to connect constituents to political leaders but, ”What is the equivalent of the electoral connection in . . . authoritarian systems?”[51] Without elections, what are the mechanisms by which the public is connected to the political leadership, it at all? This question is slightly more problematic for non-democracies since this category is really only a residual category that combines a variety of different political systems.[52] For non-democracies the choice is not whether to enact a zone or do nothing, but rather between partial and full reform. In the economic jargon, autocratic leaders are selecting a sub-optimal economic policy, rather than complete economic liberalization. Some leaders recognize that liberalization is a long-term strategy, but few are actively thinking about achieving the "free trade ideal." If a regime is pro-FDI and understands that attracting that FDI is a long-term commitment, then enacting a zone policy could be seen as a long-term endeavor. Most zones accomplish very little in their first 3-5 years of operation so a leader should not assume quick economic gains from a zone policy. But if the leader has a long-term time horizon[53] then we could expect leader tenure in autocracies to be positively correlated with SEZ enactment.

1.4.4 Urban Planning and Control Over Land

The urban planning literature highlights two distinct themes in their analysis of SEZs. First, there are numerous debates on the use of space both in terms of theory and practice. Theoretically speaking, there is a broad debate about how a society uses its land; these debates grapple with the conversion of agriculture to industry and the "commodification of space"[54] both within and

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[51] Shirk (1993, 70). The omitted portion of the quote is where Shirk references communist systems but I think this question strikes at the heart of all non-democratic systems.

[52] Geddes (2003); Magaloni and Kricheli (2010); Wallace (2014). Others to cite in the authoritarian regimes lit?

[53] Such leaders could include Deng Xiaoping in China and Sheikh Zayed in the United Arab Emirates. Both realized that quick gains from zones may not possible and planned for longer-term development goals.

[54] Cavanagh (2013, 235).

across countries. This type of "spatially selective development"[55] pits various localities against one another in a competition for resources and benefits from the central government. In a sense, this is either the "race to the bottom" operating at the intra-national level or a "race to the top" in terms of political patronage, i.e. which area or jurisdiction can garner the most benefits from national politicians.

The second theme is the concept of an SEZ "life cycle." Some of these debates emerge from the development policy and development economics literature and are tied to debates about industrialization. Thus, some of the debate centers around which patterns of industrial development (clusters, etc.) are most conducive to growth. For example, geography scholars have reinvigorated debates about "Marshallian industrial districts" and what the "optimal" pattern of industrial areas should be.[56]

In theory, SEZs are meant to be a temporary or transitional policy. However, this is rarely the case in practice. Early scholarship on zones acknowledged multiple phases in the development process, but this aspect of analysis never gained much traction in mainstream economic analysis. The SEZ enactment process typically has two phases, a period of initial construction and a period in which the legal and regulatory rules are created. Omar and Stoever (2008) describe the SEZ life cycle as a four-step process. In their model, the first phase is initial construction, which leads to "an inflow of FDI." In the second stage, exports expand. Then, the growth of exports slows and eventually, in the fourth stage, foreign firms divest. While this framework may properly characterize small-scale EPZs, the most common type in the 1970s, it is problematic for two reasons. First, it ignores zone creation thereby underemphasizing the legal framework or reasons for enactment.

55 Debruyne (2013-2014, 209).
56 Wei, Li and Wang (2007, 422).

Initial construction may be the first physical realization of a zone but the legislation or official policy guidance often begins much earlier. To understand origins we must examine how the initial idea becomes a formal legal and regulatory framework.

The second problem with current "life cycle" models is that local leaders have been actively pursuing industrial upgrading policies. Wei, Li and Wang (2007) examine upgrading in their study of Wenzhou, China. Wenzhou has been a model of locally led private development during the early reform era, but zones were not crucial to Wenzhou's family-owned business model. After the city's initial success in the 1980s, growth slowed due to intense competition from foreign and domestic firms. In the early 2000s, the Wenzhou government focused on a strategy of industrial relocation. Firm clusters were maintained in Wenzhou but many operations moved to more favorable locations such as Shanghai and Hangzhou. In Wei, Li, and Wang's survey of Wenzhou firms, "industrial land, provided mainly by development zones, was ranked as the most important factor in relocation." Not only do zones have life cycles but may attract firms from other jurisdictions where land is more scarce. Thus, models of the SEZ life cycle that end with firms divesting may not accurately capture the long-term evolution, and durability, of SEZs.

The business and economics literature extensively addresses why firms want to maintain control over their physical and intellectual assets but the issue of government control over land, especially as it relates to industrial development policies, is less clear. In the case of SEZs, land and investment policy are inextricably linked, especially in developing economies and in those cases where agriculture has a strong voice.[57] Firm and sector-based incentives do not fundamentally threaten the territorial integrity of a country but selling land does, especially if the land is sold to

[57] Bates (1981).

foreign enterprises. In many non-democracies the government owns the land.[58] Land is power and rulers fear losing control of the territorial integrity of their country because they know that it could be detrimental to their political career. Democracies have regularized methods of succession but in autocracies losing control over the physical territory could result in the overthrow of the leader.[59]

The comparative politics literature also notes the linkage between land, SEZs, and national sovereignty. Keshavarzian (2010) argues that free trade zones in the Arabian/Persian Gulf are a potential threat to sovereignty and uses the case of the Kish free port in Iran to show the problems inherent in this form of development.[60] In China, early zones were especially controversial as they were seen as selling out communism to foreign capitalists. These early debates are sometimes overshadowed by the success of China's economic reform, seen forty years later. At the outset though, even the name for these type of areas was contested. Shekou, the initial starting point for what became Shenzhen, was initially called a trade cooperation area but this was viewed as giving too much clout to foreign interests, in a country extremely sensitive to foreign intervention. Even calling Shenzhen an export area was considered too controversial so Deng Xiaoping and leaders in Guangdong eventually agreed on the relatively neutral, if also vague, "special" economic area as the proper term for these experimental initiatives.

[58] State ownership of land is the case all of the non-democratic countries examined in this research, although this was not the reason for their selection at the outset of the project.

[59] Chiozza and Goemans (2011) discuss the propensity of an autocratic leader to initiate conflict and a loss of territory would certainly damage the political credibility and legitimacy of any autocratic leader. Chiozza and Goemans describe this mechanism as "gambling for survival."

[60] The Kish FTZ was created in the late 1960s under the Shah. Keshavarzian argues that this area was created due to the changing balance of power in the Gulf due to announcement by the UK of its impending departure (at least in terms of colonial possessions) from the area.

1.5 External Actors

The final driver of SEZ enactment is external actors. Actors are broadly defined as foreign countries, foreign multinational corporations (MNCs), or international organizations (IOs). Foreign aid is one significant channel of funds that could help foster zone enactment. In terms of an individual country, the United States was the key actor throughout the Cold War era, and this included key development institutions, such as the World Bank. In the early 1970s, World Bank President Robert McNamara began to change the way in which the World Bank dispensed foreign aid[61] and these changes coincided with financial opening across many countries and the use of SEZs to open gradually. In a recent history of McNamara's tenure at the World Bank, Sharma (2017) argues,

> Although the specific advice the Bank dispersed varied by country, its basic approach remained focused on promoting stability, growth, and international economic integration. It thus encouraged governments to remove barriers to foreign investment, relax trade restrictions, adopt anti-inflationary monetary policies, and reduce public expenditures.

It is these policies, removing barriers to foreign investment and stable monetary policy, which will be tested in the next chapter. So, while we have no explicit measure to test external involvement directly, the cross-national macroeconomic tests directly fit the logic of economic integration and financial opening that was promoted by the US and global financial institutions from the 1970s onward.

The use of SEZs as an instrument of foreign economic policy exists along several dimensions. Throughout the Cold War, the US used foreign aid to help achieve political objectives. Today, China is using zones for its own economic and global agenda. Domestic SEZs have been a critical method for increasing China's integration in the East Asian regional economy. Shenzhen

[61] Sharma (2017).

fostered ties with Hong Kong prior to its political return while Xiamen (in Fujian Province) connected Taiwan industrial manufacturing to the mainland. These economic ties altered the triangular dynamics of US-China-Taiwan relations. China now also hopes to integrate with neighbors on via land borders and other parts of Southeast Asia through the China-ASEAN free trade agreement. Changes in the global economy have also prompted some countries to look for an alternative model of development. China is expressly using SEZs as a component of its foreign economic policy proposing 50 overseas trade and investment zones, with 19 approved thus far.[62] Overseas investment zones may be a new tool for China but may also reflect strategic learning from the US. The US has used Qualifying Industrial Zones (QIZs) in Egypt, Jordan, and Israel to promote Middle East peace.[63] While the goals of China's foreign SEZs and the US QIZ program may be distinct, the basic notion of using trade and investment to promote a country's foreign policy is strikingly similar.

While the US and its foreign aid policies certainly played a role in financial opening and thus the desire of many countries to use SEZs to do so, the US is no longer unique in this respect. China is now directly involved in creating overseas economic development zones and has explicitly stated that promoting these overseas zones is facet of its One Belt, One Road foreign economic policy.[64] China's foreign policy is evolving and SEZs provide a unique window into the economic dimension of China's "going out" strategy. Economic enclave policies within China are intended to foster ties in the region but China's new efforts to export its development model go far beyond production linkages in East Asia. Even in authoritarian regimes where top-level leaders heavily influence macroeconomic policy, the way resources are allocated is part of a bargain between the

[62] Bräutigam and Tang (2011*a*); Bräutigam and Tang (2013).
[63] Peters (2009).
[64] National Development Reform Commission (2015).

government, private sector, multinational firms, and local consumers.

At this time, there is no readily available measure of the external actors directly involved in economic policy implementation in another country so this aspect of SEZ creation will not be examined in the cross-national tests. However, during the process of coding the enactment dependent variable, it is clear that external actors were involved in a substantial set of cases. As such, the set of case studies examined in Chapter 4 will address this dimension of variation.

1.6 Moving Forward

What do these disparate perspectives on SEZs tell us about general patterns in SEZ enactment?

I focus on zones first because they are policy. I am not focused on why firms locate in zones but why countries view this policy instrument as the method by which they can achieve their objectives. I argue that policymakers enact these zones for a variety of reasons that are shaped by the type of regime, characteristics of leadership, and other political incentives. While I acknowledge that labor, capital, and infrastructure are all critical to the *success* of zones they do not seem to have as much to do with the process of selecting this policy.

SEZs have been touted as a way to create jobs, attract investment, and increase exports and imports and business competitiveness. For laissez-faire economists the question is simply why not liberalize whereas development economists acknowledge some role for state intervention. As noted above, the canonical economic models abstract away from the individual choices made by actors in that society and either focus on broad macroeconomic trends or generic measures of economic growth. Moreover, much of the development literature treats "the government" as one monolithic (and often passive) entity that carries out its policies in a frictionless economy. These aggregated views of policy mask the myriad individual choices that shape the policy outcome. At the end of the day, the government is made of individuals and the combination of politicians and citizens leads to the enacting of policies that serve the interests of those individuals and their respective groups.

While economists focus on an abstract place called the free trade ideal and business-scholars focus on the incentives of firms, I focus on the incentives of political actors. Politicians may have ideological or policy preferences but, ultimately, political actors want to remain in power.[65] Consistent with the large body of probabilistic voting models "politicians are opportunistic in the sense of being purely office-motivated: they strive to maximize their vote share or, alternatively, the probability of winning."[66] In a democratic system elections are the means by which the winners are selected but autocratic leaders also have to maintain a sufficient support base to gain access to power or prevent being ousted.[67]

In the next chapter I go into more depth describing the research strategies used to complete this dissertation drawing upon the wide variety of literatures described in this chapter. I now turn to discussing the multi-method research strategy.

65 In this paper, I refer to politicians as political actors or policymakers; all three terms are used interchangeably.
66 Persson and Tabellini (2000, 32).
67 Losing an election may be a setback for a political leader or party but being overthrown in a coup may result in loss of life, imprisonment, or exile (Chiozza and Goemans 2011).

Chapter 2

Uncovering the Origins of SEZs, A Research Design

2.1 Introduction: Explaining SEZs

Moving away from analysis of SEZ efficiency to an understanding of SEZ origins required a multi-pronged approach to identify patterns of enactment cross-nationally and to trace the enactment process at the national and subnational level. Both strategies were necessary to answer the question, why do national and subnational governments enact special economic zones? As the theory chapter indicates, the literature on SEZs is broad, disjointed, and overly-focused on efficiency with very little focus on zone creation, enactment, and implementation. Analysis of those key initial steps would improve analysis of efficiency and situate SEZs in the broader political economy literature.

In theory, SEZs are meant to be a temporary or transitional policy but this is rarely the case in practice. Building zones was a popular policy throughout the 1970s and 1980s, and has only continued to grow in popularity as an instrument for economic development. Often it does not matter whether the zone is successful or not; once the interests associated with the geographic area and business interests are established, those who benefit are unlikely to want to "end" the policy or preferential incentives. Even if the importance of the specific enclave diminishes over time, a business community is created and government leaders have an interest in maintaining the system. As the power of government officials or business interests persists (or increases in some cases), those officials and businesspeople have more leverage in negotiations with the national government.[1] For example, in the case of Aqaba, Jordan, the policies remain in place because they are a conduit for foreign aid and the national government relies heavily on foreign aid as a source of funding. In China, SEZs have become a key venue for bargaining between the central government and localities.

This chapter begins by addressing three major research challenges: terrible data, how to define and measure enactment, and the levels of analysis problem. In the next section, I discuss each of these research challenges. In section three, I describe how to tackle each challenge starting with the creation of a cross-national dataset and statistically testing alternative theories of zone enactment. I then shift to a discussion of field research, describing the necessity of national and subnational case studies, and how interview and archival research contributed to each. The final section describes some of the limitations of this study.

2.2 Research Challenges

Despite an enormous literature on SEZs, across numerous disciplines, to-date, there has been no comprehensive cross-national comparisons of why countries enact zones. Moreover, even in the studies of SEZ efficiency, rarely has there been an examination of results in more than a handful of

[1] As The Economist notes, ”free-trade zones are more popular than ever - with politicians, if not economists” (The Economist 2015).

countries.[2] The reason for the lack of cross-national testing is the lack of data. Moreover, the vast majority of data and information on zones is utterly terrible.

As an illustration, for over a decade, the *Financial Times* has provided rankings of SEZs worldwide. Since at least 2010, fDi Magazine, an FDI-oriented magazine by the *Financial Times*, has been publishing a report titled, "Global Free Zones of the Future."[3] The publishers provide information about the "best" zones in the world. A similar publication by the same company also ranks cities of the world for their investment environment, but those ranking are based on data about business start-ups, job growth, and other concrete data. In contrast, the global free zone rankings are done entirely by self-nomination from individual zones.[4] Essentially, getting on this list is purely through self-selection with very little ability for the editors to verify the data provided.

Another major problem with our understanding of SEZs is that much of the conventional wisdom was developed in the 1970s and 1980s. Despite logical theoretic underpinnings to this work, scholars did not have the data to systematically test these theories. Thus, this conventional wisdom gained traction despite little knowledge of how widespread the theory could be applied or under what conditions the model could be applied. A case in point is the notion that SEZs are primarily used by authoritarian regimes as a method for repressing labor. Despite a growing body of literature that shows that countries have begun replacing traditional aid flows with FDI,[5] and that an increase in democratization globally has facilitated this trend, the first generation of literature on SEZs remains influential. Kucera (2002) has found that the conventional wisdom is

2 For example, one of the most comprehensive studies of zone effectiveness is Farole and Akinci (2011). In this study, the "large-sample dataset" compares quantitative data on zones across 25 countries, and includes a set of business surveys in 10 countries to assess the investment climate within zones. While both segments of the study are far more comprehensive than other analyses, they are selected on the dependent variable and do not cover a substantial cross-section of all countries.

3 Hegarty (2010).

4 Personal interview, Editor of fDi Magazine, 1 February 2016.

5 Kosack and Tobin (2006).

incorrect; FDI does not seek out countries with poor labor practices. We now know that countries that have democratized also tend to have lower restrictions on FDI. However, the conventional wisdom that SEZs are about repressing labor and thus are more likely to be found in authoritarian regimes persists.

Conventional wisdom proved to be problematic in devising my research strategy. Constructing a comprehensive dataset of SEZs was a crucial component of my the plan, but the need to obtain funding for field research meant I had to select cases prior to the completion of the dataset and empirical tests. Since the conventional wisdom was that SEZs were far more common among authoritarian regimes, I selected a series of non-democracies to study. The non-democratic cases differed on various economic dimensions that were likely to have driven enactment. Doing so removed at least one variable, regime type, and helped narrow the scope of the analysis.

However, after completing the dataset and conducting the empirical analysis, I found that zones were correlated with democracy and that labor repression was not related to zone enactment. My field research was already complete or funded, so midway through the research phase I had to add several democratic cases in order to better understand the enactment process across a range of regime types. That being said, far more research in this dissertation has been conducted on non-democratic cases than democratic ones. I point out this fact because adherence to conventional wisdom based solely on theories or qualitative assessments inhibits our ability to identify more wide-ranging patterns. As such, it was imperative that I combine quantitative data analysis with a qualitative understanding of zone enactment to adequately answer the questions of why countries enact zones.

2.2.1 Cross-National Comparison: Utterly Terrible Data

While I made substantial progress in disentangling many aspects of SEZs, the data coding proved to be far more difficult than originally anticipated. Had one comprehensive source for all SEZs been available I would have used it but I soon discovered that even sources that claimed to be authoritative had underlying problems. For example, since at least the mid-2000s, the US Department of State (in conjunction with the Department of Commerce) have included a section on free trade zones in their annual investment climate statements (ICS). However, when attempting to use this data as a source I found numerous inconsistencies in the definition of a "free trade zone" (FTZ). Some of the inconsistencies were within a given year, across different countries, and other inconsistencies were in comparing data for the same country across different years. In the majority of instances, the FTZ section referred to enclaves in a country with distinct investment laws and special privileges, which was consistent with my definition of an SEZ. However, in some instances, particularly with the countries in Africa, the FTZ section was used to describe *regional* (i.e. inter-country) trade agreements instead of zones within a country. I suspect this discrepancy could be due to the fact that some reports used the "FTA" acronym, which is ambiguous. An FTA could be a free trade *agreement* or a free trade *area*.[6] The ICS were but one example of inconsistent or incomplete data from a government source.

Originally, I planned to code not just the presence or absence of a program in a country, but also the number of zones in each country. One purpose of the case studies was to evaluate the feasibility of doing so but I found that the data quality issues were simply too great to generate

[6] While I still used the Investment Climate Statements as one source, in instances where the FTZ section report referred to a regional free trade agreement, I relied on other sources to verify the presence/absence of a zone program in those countries.

a cross-national variable that had any reliability. To give one example from China, depending on how you chose to make the coding decisions, the number of zones in China vary greatly even in only a one-year time slice. In 2006, China either had 5 total zones, 222 zones, 1355 or 1,577 in the country.[7] The magnitude of these differences is obviously great. The first number represents only the "original" special economic zones, which are the most expansive in terms of the incentives offered therein. The second figure, 222, represents the number of national-level zones, which are officially approved by the State Council. However, China also has a vast array of provincial-level zones. The provincial-level zones offer a less generous package of incentives, but using my definition of SEZs, provincial zones still constitute a zone. Thus, the total number of zones in the country would reach nearly 1,577. To add insult to injury, the state-level and provincial-level zones often overlap physically and legally so it would have been necessary to examine the geographic bounds of each of these enclaves to determine what the macro-spatial unit would be if we only wanted to examine the physical geography.

2.2.2 Zone Origins: What Constitutes Enactment?

Another major inconsistency in the literature on SEZs is what constitutes enactment. Some studies consider the first ground-breaking the initial start of the zone, while others do not consider the zone officially open for business until all rules and regulations have been implemented and operations have begun. A standard, consistent binary variable that captures zone enactment, as will be discussed further below, across all countries for over 40 years is a major improvement on the inconsistent reports and disparate evidence accumulated on SEZs. However, a binary variable coded at the national-level annually captures almost nothing about the process of zone enactment.

[7] This issue will be discussed further in the levels of analysis section below.

As such, the purpose of the various case studies is to analyze in-depth the process prior to enactment. In the context of a variable that captures a discreet start date, the origins phase is essentially the *t - 1* stage of development. Thus, while the cross-national data is used for empirically testing hypotheses about general patterns of enactment, the cases are in support of theory building. In the process of coding the cross-national data, I realized that there were far more discrepancies in (or conflicting information about) the number of zones or date of enactment in each country, which prompted me to focus my attention on coding an accurate date of enactment first.

The issue of legal versus operational enactment matters for empirical testing because of concerns about reverse causality. For example, a test to examine whether SEZs increase FDI will look at the amount of FDI in the period following legal enactment. However, if firms were interested in that particular market, they may have already invested prior to the law. Thus, we would see no effect on FDI in the years following the legal enactment since the operational enactment played a larger role in the investment decisions of foreign companies. For most countries, legal enactment precedes operational enactment, but in some cases, the zone was actually operational long before a legal framework was formally put in place. The creation of zones, without a legal framework, is most clear in the United Arab Emirates, but also occurs in countries such as China where the legal regime regularly changed over the life cycle of various zones.

2.2.3 Levels of Analysis: Which zones are comparable?

As already discussed, does China have 5, 222, or 1577 economic development zones in the country? Are zones in Jordan comparable to those in the United Arab Emirates? Is the Shenzhen SEZ in southern China a good model for zone development in Kenya? These are the range of questions that arose during the process of coding the cross-national dataset. Something as conceptually simple as the number of special economic zones a country has should be a relatively straightforward question, but this is not the case in most countries with more than one zone program.

The level of analysis issue is one that is relevant for many countries but is particularly problematic in China, is choosing the level of analysis. If not clearly articulated, it is not always readily apparent whether the focus is on "national" or "local" policies.[8] National, provincial, prefectural, and municipal authorities have all created zones in China; I differentiate between each by referring to them as national,[9] provincial, or local zone programs (see figure below). State-level zones are those that are officially approved by the central government. Provinces and direct-control municipalities[10] also have the authority to establish enclaves and these often overlap with state-level zones. While many of the infrastructure-related incentives are the same in provincial zones, other preferential policies are supposed to be more limited.[11] Below the provincial-level, prefectures and municipalities also have the authority to establish zones.

2.3 Multi-Method Solutions

To address the three research challenges above, I employed several inter-related solutions. To deal with the lack of consistent data, I created an original, globally comprehensive dataset of SEZ programs that covers the period from 1970 to 2014. To deal with the question of enactment, I

8 Rithmire (2014).

9 In China, national level policies are also referred to as "state" level or policies from the "center" with both referring to the central government.

10 The direct-control municipalities are at the same administrative level as provinces and include Beijing, Shanghai, Tianjin, and Chongqing.

11 According to the State Administration of Taxation, "policies given to the province-level development zones should not be comparable to those given to the state-level ones" (Alder, Shao and Zilibotti 2013, 8). Provincial zones are supposed to be more industry-specific and only maintain incentive programs for certain sectors but, to my knowledge, the sectoral composition of zones has not been examined empirically.

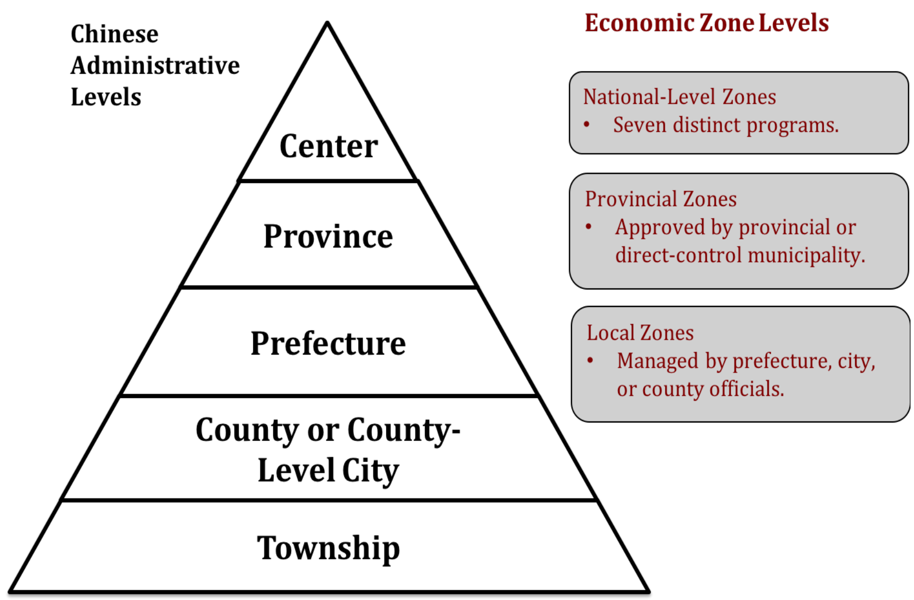


Figure 2.1: Levels of Analysis in China

utilized a simple model of zone creation that informed both the quantitative data coding as well as the in-depth case studies. The binary SEZ variable developed for the time-series, cross-sectional (TSCS) dataset helps alleviate concerns about the level of analysis problem, and the levels issue is addressed head-on for several of the country cases.

There are three key theoretic areas addressed in the literature on SEZs: macroeconomic factors, political determinants, and external actors (as depicted in the top row of Figure 2 below). Macroeconomic factors are forces that shape economic policy within the country and are thus operationalized as international constraints. In the cross-national study, these international constraints are operationalized as measures of the exchange rate regime and capital controls. While domestic political leaders decide the exchange rate and the level or types of capital controls, many of these choices are constrained by international financial markets.

The second major theoretic area to consider is political determinants. In this case, I focus on regime type since it is the most prominent explanation in the political economy literature on

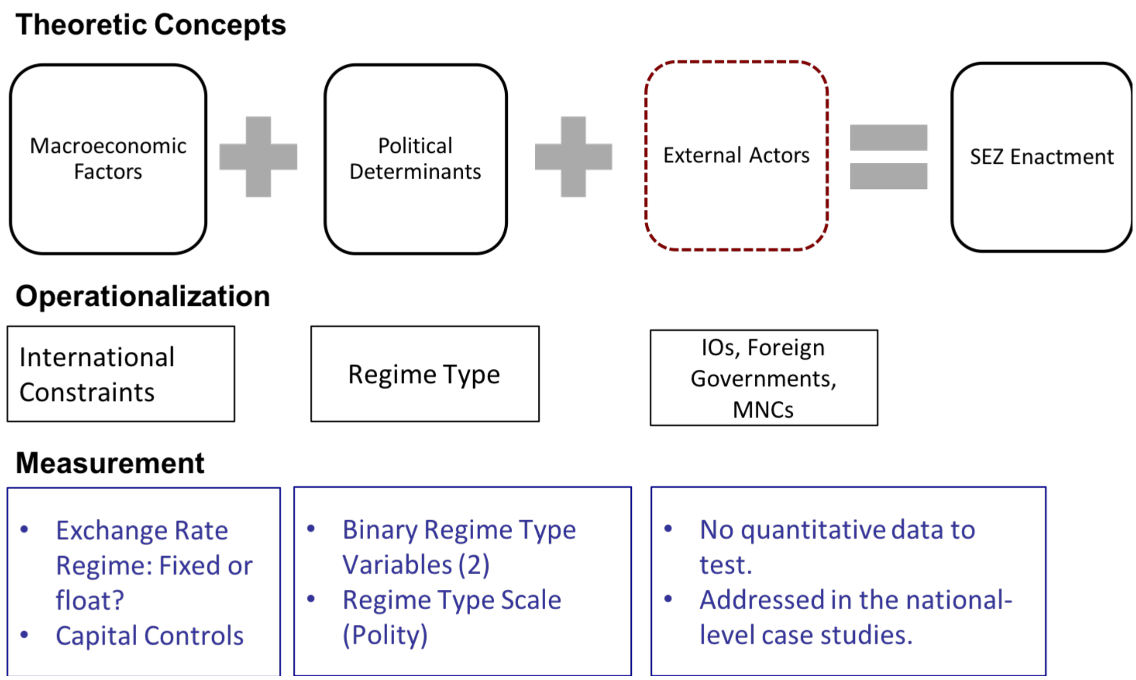


Figure 2.2: SEZ Enactment: Key Concepts, Variables, and Measures

both FDI generally and SEZs more specifically. In order to measure this component, I used a variety of regime type measures that will be discussed in further detail in Chapter 3. The final theoretic area of study is the role of external actors. During the coding of the quantitative data as well as field research, the role of external actors proved to be incredibly important. However, this box is shown in a red dashed line because there was no readily available data by which to statistically test this portion of the theory. As such, this factor was considered in the case studies, but is not an explicit component of the cross-national empirical tests.

In terms of coding the quantitative data and providing a "stopping point" for case study analysis of SEZ origins, I developed a conceptual framework to show what officially constitutes "enactment" of a zone. Figure 3 depicts the process of zone creation. In short, someone, either a person or an organization, has the idea for a zone in the country. But an idea is not sufficient for realization of the process; those actors with an incentive to do so must lobby for the policy,

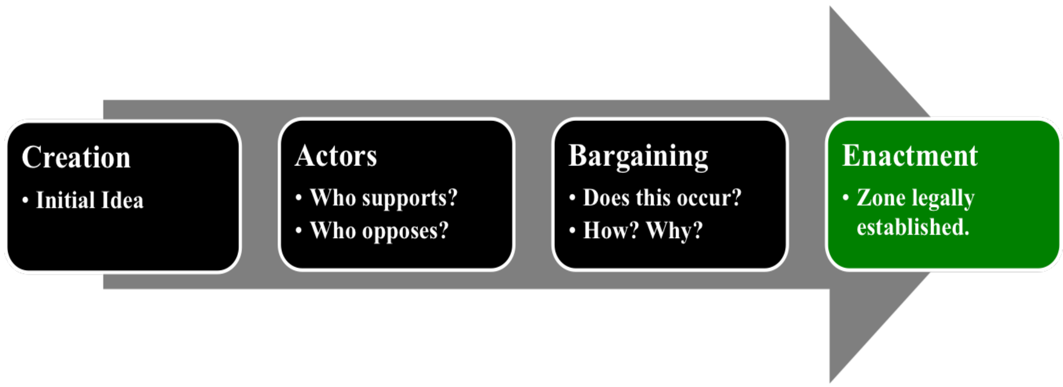


Figure 2.3: SEZ Origins, From Idea to Official Enactment

often with policymakers at the national-level. A period of bargaining occurs, sometimes between various actors at the national-level, and in other instances the bargaining is primarily between local and national officials. Once a bargain is reached, then the zone is legally established either through the legislative body or via an official decree from the relevant executive or other authority.

The cross-national binary variable captures the last stage in this process - official enactment (denoted by the green box) - which is based on the date of the legal decree or the year in which the legislation is passed. In democracies, legislation typically precedes zone implementation but in non-democracies this is often not the case. As such, this variable is somewhat noisy but selecting the legislative enactment date was the best date for broad comparability across countries and political systems. Selecting legal enactment is also a concrete measure that allows for external verification and replicability. However, as is clear from the graphic, coding at this discrete point does not capture decision-making during the implementation phase and after the law has been passed. As such, the country and zone-level case studies flesh out the processes that occur before and after enactment.

2.3.1 Cross-National Dataset

For the cross-national statistical analysis, I utilized the TSCS dataset of countries from 1970 to 2014. The data is worldwide so that countries with zones can be compared to countries without zones. A couple points warrant stating up front.[12] First, I relied heavily on qualitative data to produce the coding scheme. In many instances, I had to weigh a variety of qualitative sources and quantitative indicators to make decisions about which coding choices were most consistent with the overall empirical strategy. Second, during the course of fieldwork, I gained added context that made me realize some of my early coding decisions were flawed. I used those insights to tailor the coding scheme and then went back through the dataset to make sure all country-cases were coded in accordance with the revised schema. Thus, I view the process of fieldwork as fundamentally intertwined with accurate coding of the quantitative data. In short, there were not separate quantitative and qualitative portions of my dissertation research. Instead, there was one large iterative process that was essential to all aspects of the dissertation project.[13] Third, during my field research I collected both quantitative and qualitative data; thus, my case studies are not exclusively narrative nor qualitative. Instead the case studies themselves used a variety of analytic techniques, each tailored to the context and data challenges (or opportunities) provided by that field site.

To be frank, the cross-national quantitative indicators are fewer and more narrowly scoped than I would have like or envisioned at the outset of the project. Initially, I kept the potential frame

[12] The data coding section describes the sources used for the process, but does not include individual country decisions. For a complete list of all countries in the dataset and how they were coded for the TSCS dataset, see the data coding appendix.

[13] Kapiszewski, MacLean and Read (2015) highlight that one of the key values of field research in political science is iteration and the ability to revise both the research design and framing of the project while in the field.

broad hoping that I would be able to use a wide variety of indicators to measure SEZs, and thus be able to test theories in which SEZs served as both an independent and dependent variable. As the focus of the project shifted primarily to origins, it became apparent that I would have to settle on a binary variable, at least at this stage, because other possible measures were either unreliable or infeasible.

Coding of SEZ existence (i.e. the presence or absence of a zone in a given country) began using two initial source documents in order to create two one-year cross-sections. The first document was the International Labor Organization's 2007 report, *ILO Database on Export Processing Zones*. Despite the title, this report was not a manipulable database but instead a spreadsheet-like list of zones along with various characteristics of those zones. The list of zones contained in this report served as the baseline for a cross-section of global zone programs for 2006. The second initial source was Fröbel, Heinrichs and Kreye (1980). Overall, this was an extremely useful source of information about early EPZs writ large; in particular, the book had a relatively comprehensive "EPZ Appendix."[14] The Fröbel, Heinrichs and Kreye (1980) appendix was used to generate a cross-section of zones for 1975. Based on these two mini-coding projects, I was able to ascertain a rough order of magnitude of the overall increase in zones over time and began to see glimpses of the changing location of zones over time.

In the early phase (i.e. the 1970s), unsurprisingly, the zones were concentrated in Latin America and a particular set of countries in Asia, namely the East Asian Tigers (Japan, Korea, Singapore, and Taiwan). This corresponds both with the various development models popular during that time period as well as a focus of scholarly research. ISI strategies remained important

14 I would like to thank Herman Mark Schwartz for pointing out this valuable resource to me early in the research process.

in Latin America, but countries in Asia were increasingly looking to an export-led growth model in what became prominent models of the developmental state. After obtaining these two year cross-sections, I realized there were substantial discrepancies in terms of the enactment date of the zones so I needed additional sources to verify and confirm the year of enactment. The first version of the complete dataset[15] was coded using the World Bank (2008) and the State Department Investment Climate Statements (ICS).[16] I used these two reports to verify whether a program was active in the year 2006. I took this step to ensure a secondary reference to corroborate the information contained in the ILO report. Thus, for all coding decisions there would be, at a minimum, two sources verifying the existence of a zone program and the date of enactment. In most cases, there were 2-3 sources used (ILO, World Bank, and the State Department ICS).

However, in some cases, none of these initial sources sources contained the year of enactment, in which case I went directly to country-specific information. To do so, I often consulted websites for the country's SEZs in order to obtain the enacting legislation or decree. In some instances, as many as 5 or more sources were necessary to verify the enactment year and the appropriate enactment law(s). Often, multiple laws were passed governing these programs so I had to decide which law to consider as the "first," and whether subsequent legal regimes were substantively different from the first.

In addition, since the total number of zones was much smaller for 1975 this data was used to create a size variable at the zone-level in order to obtain a crude measure of the average size of zones. This process was relatively simple for the 1975 cross-section, but upon further analysis and a pilot study to verify the size estimates for these zones, I found the Fröbel, Heinrichs and

[15] As opposed to the more limited one year cross-sections used for the dissertation prospectus.
[16] The ICS is included in the larger Country Commercial Guides produced by the Department of Commerce.

Kreye (1980) estimates to be wildly off. Moreover, identifying the geo-coordinates for zones and obtaining better estimates of the size for zones took approximately two hours per zone (searching for sources, cross-referencing sources, and pinning accurate geo-coordinates in Google Maps or Google Earth). I decided that while feasible for the 1975 cross-section of only about 80 zones this was not an effective use of my time for the later years when the number of zones ranged between 1500 and 2000. In the future, it there is a way to automate this process via web scraping or other technologies I may revisit this project. In the interim, I have calculated estimates of zone size in specific case study countries (China, Jordan, and the UAE).

The purpose of quantitative statistical tests is to determine whether the proposed factors (exchange rate regime, capital controls/financial openness, and regime type) correlate with the primary dependent variable (presence of an SEZ). The primary focus of these empirical tests is cross-sectional variation. However, SEZ creation, enactment, and implementation have an extremely important temporal dimension.[17] In the cross-national tests, I control for time but many of the most prominent tools[18] for doing so will hide the effects of slow-moving independent and dependent variables. For example, the binary SEZ variable is based on the date of enactment[19] but it often takes several years for implementation of these programs. Even after the zone is operational, subsequent periods of reform are not easily captured in the quantitative data so the case studies are meant to address the evolution of SEZs over time.

[17] Büthe (2002).

[18] Time (year) fixed effects remain the most common strategy for controlling over time change.

[19] Either the year the legislation was passed (in a democracy) or the decree promulgated (in a non-democracy).

2.3.2 Case Selection

Field research was conducted in China, Jordan, Sri Lanka, and the United Arab Emirates. After completion of the quantitative study and the democracy findings in the empirical tests, I then added two democratic cases. Mauritius and the Dominican Republic are important democratic cases of enactment, but these two cases are based entirely on the secondary literature. I focus on developing countries (or at least those countries that were developing at the time of initial SEZ enactment) because qualitative assessments of zone program use by the World Bank and other international organizations indicate that countries early in the stage of development are more likely to employ SEZs than advanced industrial democracies.

All of the case study countries (six in total) have more than one zone or zone program in place thus allowing me to examine zones cross-sectionally within one country and to trace program expansions over time. In Chapter 4, in support of theory-building and evaluation of the quantitative results, I focus on national-level comparisons between the Dominican Republic (DR), Jordan, Mauritius, and Sri Lanka. To compare similar political systems, two of these are democracies (the DR and Mauritius) and two are non-democracies (Jordan and Sri Lanka). Two of these cases also explain the prominent role of an external actor in SEZ enactment (the United States in the case of Jordan, and a foreign multi-national corporation in the case of the DR).

For practical reasons, I selected cases where I could actually conduct interviews and field research. Jordan, Sri Lanka, and the UAE all have large English-speaking populations, especially in the business and economic communities, making it feasible for me to conduct interviews there. For China, the focus of research was on acquiring written materials (archival research) that could be used to verify basic facts about provincial-levels zones and show how national-level zones emerged from very different political circumstances over time. Conducting fieldwork on all zones or zone programs in China was simply not feasible. Even attempting in-depth research on 1 percent of China's total zones would have resulted in a minimum of 15 zone-level case studies. So instead of randomly selecting cases, I chose a set of locations that were not part of the initial enactment period. I did so because ample information already existed on early zones in the secondary literature. Hangzhou, China was selected as the field study site because I could examine a cross-section of zones in one province (Zhejiang) and this location also made Shanghai easily accessible for additional research.[20] China presented a particularly challenging problem for the levels of analysis issue, but those analytic challenges will be discussed further in Chapter 5.[21]

2.3.3 Field Research

Despite my strong belief in the necessity of statistical analysis to identify broad patterns, the coding of SEZs convinced me that in its first iteration, the dataset could not properly address change over time nor the process leading up to zone enactment in any one individual case. A binary variable is an initial starting point, but could not provide sufficient context in order to understand the process of creating either an overarching policy program nor an individual level zone. In some cases, such as Mauritius and the Dominican Republic, there was a body of secondary literature that addressed zone enactment in sufficient detail to flesh out the origins process. In the case of China, there was sufficient data on certain zones, such as the Shenzhen SEZ, but the secondary literature had almost nothing on provincial-level zones or less studied national-level zones. In the case of Jordan, a

20 Shanghai is one of the zone-level cases described in Chapter 6, along with Aqaba, Jordan, and Dubai in the United Arab Emirates.

21 Analysis of provincial-level zones based on this research can be found in Herlevi (2017).

great deal of policy-oriented literature exists on Aqaba from the mid-1990s onward, but almost no secondary literature was available on the initial start of Aqaba in the early 1970s. In these cases, field research was necessary to build the longitudinal analysis of zone creation, enactment, and implementation.

Longitudinal analysis is necessary for two reasons. First, it is necessary to outline the exact timing and sequencing to evaluate any causal claims related both the origins and outcomes associated with SEZs. For example, if one argues that foreign entities are partially responsible for the enactment of a zone but those foreign entities were not active in a country until after a zone was already in place (at least legally, since that is the initial starting point for my cross-national coding) then that explanation fails a simple test of temporal precedence. While proper sequencing does not establish causation it is a minimal necessity. Second, longitudinal analysis is necessary because administrative and governance changes are not easily observed or explained using quantitative data, at least not yet. Since my cross-national dataset is the first academic attempt to establish a comprehensive dataset of SEZs I could only tackle a bare minimum of the possible ways to measure SEZs. While my current binary measure of SEZ enactment is a necessary first step, it entirely masks the nuance associated with program changes or "rebranding" of zones under a new name or government structure. The case studies allowed me to delve into particular zones to evaluate whether a different (or better) coding scheme could be devised in the future that more accurately incorporates administrative changes to a zone over time. As such, this component of the case studies can be viewed as pilot study for evaluating future iterations of the cross-national coding project.

Longitudinal analysis is also necessary to address differing levels of analysis. Focusing on program evolution means examining how the legal rules have changed over time. For one individual zone, the legal apparatus and attendant regulations may evolve, as well as on the ground characteristics such as infrastructure, firms, employment, and geographically delimited features. To illustrate with an example, Bangladesh's program has evolved significantly from the its first EPZ in Chittagong.[22] The original EPZs in Bangladesh were all public but in 2010 the government passed a new law, the Special Economic Zone Act, laying the groundwork for a series of privately-owned and managed zones.[23] In addition to the 9 original EPZs, created in the 1980s, there are now 5 privately-run zones in Bangladesh. Although each zone is managed separately, the overall program falls under the purview of the Bangladesh Economic Zones Authority.[24]

According to Kapiszewski, MacLean and Read (2015), field research is simply "leaving one's home institution in order to acquire data, information, or insights that significantly inform one's research."[25] For my dissertation, field research meant visiting the country cases to conduct interviews or archival research. Field research was conducted in China, Jordan, Qatar, Sri Lanka, the United Arab Emirates, and the US. Interviews were conducted in all of these locations and archival research was conducted in China, Jordan, and the US. The methods used to trace enactment, implementation, and reform of zone programs in each country-case included interviews, historical reconstruction, and archival sources. There is a strong descriptive component to the cases given the dearth of theories explicitly focused on SEZ origins. Thus, "construction of a chronological narrative" was an important first step for subsequent theory building.[26] The case studies will have limited external validity given the narrow scope conditions[27] and, as such, the cases may more

22 *The Bangladesh Export Processing Zones Authority Act* (1980).
23 US Department of State (2015*a*).
24 US Department of State (2015*a*).
25 Kapiszewski, MacLean and Read (2015).
26 George and Bennett (2005, 89).
27 This is the primary reason for pairing case studies and cross-national tests; the statistical analysis provides

closely reflect plausibility probes rather than theory testing or process tracing.[28]

Interviews

Much of the empirical analysis in this dissertation could be classified as positivist in nature. However, the interview methods used during fieldwork were heavily influenced by insights from both positivist and interpretivist research traditions.[29]

The figure below is a variation of the creation diagram shown above. Instead of breaking down the steps that lead to official enactment of the policy, enactment is shown as the second step in the process. The case studies address the more in-depth model depicted here, and the purpose of the graphic is to show that still much occurs after official enactment. Moreover, in the interviews conducted in each of the field locations, implementation was often pointed out as an important component of the process. National legislation provided the authority to enact the SEZ, but almost immediately upon building the legal and physical infrastructure, issues arose that often prompted later reforms. These reforms, as well as aspects of the implementation phase, are addressed in each of the longitudinal case studies.

In terms of sampling, I used both purposive and snowballing sampling techniques.[30] The sampling was purposive in the sense that only certain individuals and particular institutions could have knowledge of SEZs in a country. Snowball sampling, as noted by Lynch (2013), "is a method for gradually accumulating respondents in a sample based on recommendations from earlier in-

generalizability not available with the case studies alone.

28 George and Bennett (2005, 75). While earlier definitions of process tracing, such as George and McKeown (1979), focus on the decision process, Waldner (2014) adopts a more stringent definition. My cases will likely not meet this more stringent definition of process tracing so I prefer to use the term plausibility probe.

29 Mosley (2013); Wedeen (2010); Schwartzman (1993).

30 Lynch (2013).

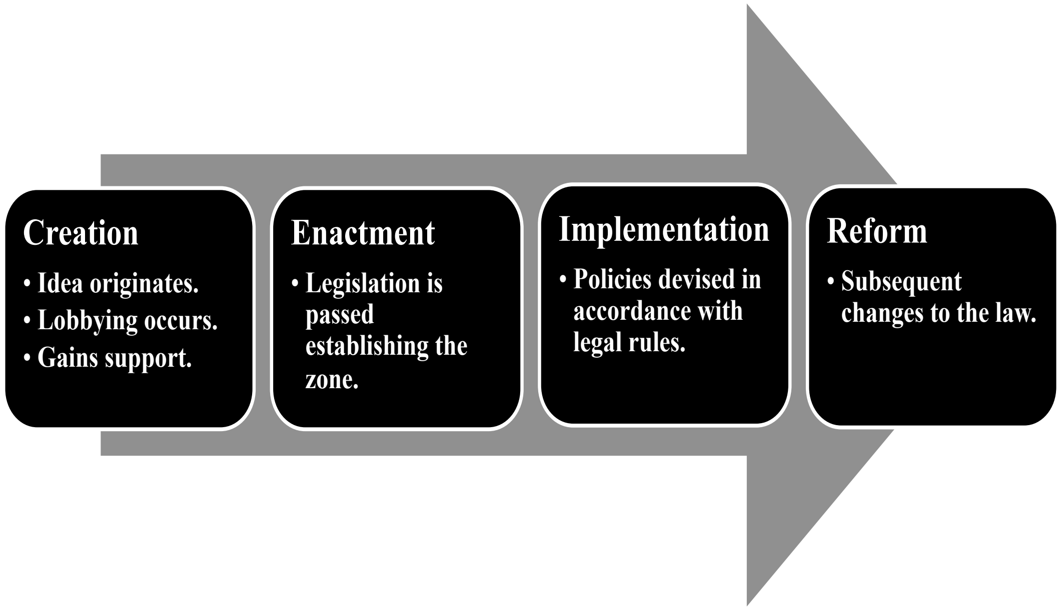


Figure 2.4: SEZ Evolution, From Idea to Implementation

terviewees."[31] I chose these methods for several reasons. First, the purpose of the case studies is theory building and, as such, it is more important to talk to policymakers responsible for or familiar with the programs than to obtain a random sample, which would be necessary for theory testing. Second, operating in a new context requires background and knowledge about the dynamics of each political and economic context. Gaining initial access to subset of people, and asking them for their recommended contacts, builds a network more effectively.

Examining specific zones in-depth also stems from the data challenges described above. Each of the cases below are either a developing economy or emerging market and "data from most developing countries are prone to substantial errors, and statistical accuracy is a problem in transitional economies because the magnitude of change is so large."[32] For each country case, I will discuss the data quality deficiencies specific to that case in the relevant chapter. Data challenges exist across the developing world but instead of eschewing these cases as problematic or eliminat-

31 Lynch (2013, 41).
32 Naughton (2007, 141).

ing them altogether to data unavailability, I think this makes it even more important for scholars to examine these cases. There is no shortage of analysis on China but many other countries are simply removed (listwise deletion) because there is no data. However, this missingness is most certainly not random and by not including developing countries in cross-national studies, we risk biasing the sample and mis-identifying global trends. While this project is only one small attempt to deal with these issues, I think the concerted effort to improve data quality for emerging and developing countries should be an important objective of political economy research.

Archival Research

The bulk of archival research was conducted in China, but primary source materials were obtained in Jordan and the US as well. Before I delve into a fuller discussion of the China research, I will summarize these other sources. In 2015, I visited the Brookings Doha Center in Qatar and was able to interview several experts on Jordan. These scholars recommended I take advantage of the resources available at the American Center for Oriental Research (ACOR). ACOR houses foreign scholars and does so for an extremely reasonable price. I assumed ACOR would be my home base to operate from while conducting interviews in Amma. However, ACOR turned out to be so much more. ACOR has been investing in its library, and the resources therein proved to be instrumental. The primary source documents acquired at ACOR allowed me to reconstruct the early history of Aqaba (1968-72), and without those materials I would not have been able to fully describe this time period. Moreover, since Jordan was actively attempting to cater to foreign governments and investors, most of the materials were in English.

In the United States, I was greatly assisted by the Library of Congress (LOC). Chinese SEZ yearbooks and other materials were accessible from the Library of Congress Asian Reading

Room. Not only was the work environment at the LOC fantastic, the librarians assisted with searching databases and pulling a wealth of hard copy materials. The materials were extremely useful and working at the Asian Reading Room gave me a chance to practice my Chinese speaking despite being in America.

In some cities in China there is a secondary literature as well as ample English-language primary sources, which map the trajectory of some of the most important SEZs in China. This is the case in terms of important models of development, such as in Shenzhen and Wenzhou. However, when I began my project and decided to hone in on Zhejiang Province - partially because of the excellent studies on Wenzhou within the China scholarly community - there was very little English-language primary source materials and almost no secondary literature whatsoever. Thus, to map the trajectory of SEZs in these cities, I need to establish basic facts. In some respects, this part of my field research may have resembled that of an economic historian. When did the zone begin? How was it originally setup? Who was in charge of the zone? I utilized local sources to verify this information. The benefit of using local yearbooks was the fact that they were written in close succession to when the actual events took place. Thus, while they are explicitly the perspective of the government (and not other societal actors) they are written as the events took place and thus offer the perspective of that time period. The proximity of the perspective to the period of origins is in contrast to many of the museums, which often portray a stylized version of what occurred.

Post hoc analysis in which current leaders attempt to shape the narrative of development is problematic, so while I used all of these resources, I triangulated the historic accounts with more contemporary versions. For the contemporary perspective, I relied on media reporting, academic analysis, and City Planning Exhibition Halls. City planning museums in particular are especially fruitful for establishing the narrative of reform, but are also somewhat biased. Throughout China, there has been a trend to use City Planning Halls to both re-create the story of the past as well as provide a glimpse into visions of the future. City planning museums have emerged all over China in the past decade and are part history museum and part vision for the future. The reason I include these as a separate source is because the museums within these venues are a story of the past written by today's leaders. Unlike the messy process of the past, these museums to try to put a selection of events into a coherent narrative as if everything followed a clear, preconceived plan. Not only is this not the case but the attempt to reconstruct the past in this manner matters for today's political economy. The story of glorious economic development built by a benevolent government is vastly different from a story of confiscating land from rural peasants in order to enrich developers and construction firms.

This is an especially important issue in China where not only is the history still being written but the leaders in power have a political agenda in which the story of reform influences current political reform debates. For example, the city of Shenzhen is now touted as a "model" city and the vision for the future. While these are all impressive achievements for a city that was only a small, rural county four decade ago, as scholars, we need to be clear how this process emerged if we are to evaluate whether the trends seen here are generalizable elsewhere. A recent volume dedicated entirely to Shenzhen correctly notes the crux of the matter. O'Donnell, Wong and Bach (2017) agree that Shenzhen is "a pivotal case study" for both domestic and international audiences but aptly note that the actual reform process and the narrative now being told of reform are in conflict. The authors state, "While the official perspective lauds the [Shenzhen] model as the logical result of coherent policies and plans, we argue that nothing of the sort took place.

In fact, the model emerged out of a period of illicit (and often outright politically unapproved) experimentation . . . "[33] The Shenzhen Museum, which is essentially a modern history of the city, is consistent with the effort by current city leaders to tell a clear, consistent story about the process of reform. Walking through the museum, it seems as if it was all planned from the start. Shekou is developed, then the areas around the Luohu border crossing, policies and regulations are passed or approved by Beijing, and then development ensues. But the reality at the time is much messier and confusing. When we look to Shenzen as "a model" we must assess both the events as they were perceived at the time and the current narrative.

To uncover these facts, I relied almost entirely on yearbooks and other official government sources obtained from archives, libraries, and local documents reading rooms. For non-China specialists, local document reading rooms are typically attached to or within the various national, municipal, or local libraries, but the material therein is distinct as are the procedures for accessing these materials. Typically, you must be granted permission to use these materials and fill out paperwork describing your research and what materials you intend to access. However, in my own field research, I found that the procedures varied from library to library. Local document reading rooms typically are much less restrictive than archives but there may be duplication in some of the materials therein, as both contain policy documents from earlier time periods. However, some archives are becoming increasingly open and easy to access (while others are becoming more restrictive and difficult to access). In terms of openness, the Hangzhou City Archives are currently in the process of digitizing policy materials and making them freely available on their website. In my own research on local development zones in Hangzhou, I found policy documents online dating back to 2006. Yet, my research was primarily focused on the period of origins, which was

33 O'Donnell, Wong and Bach (2017, Introduction).

in the late 1980s or early 1990s, so I had to rely primarily on the hard copy materials available from local libraries.

2.4 Limitations of the Research Design

Taking history into context and utilizing local resources is necessary for understanding past patterns of behavior but to delve into current events, it is also necessary to rely on interviews. Interviews add analysis of current patterns and allow local actors to explain policies and the political process using their own frames, terminology, and vernacular. Quantitative data can be compiled and analyzed to attempt to discern an objective reality but even the most advanced analytic techniques are still simplifications and models of that world. Unless we are able to get at the internal perceptions of policymakers and map out how and why actors made the choices that they did, it is not truly a causal story. I think these two aspects of interviews are important to putting quantitative data and analysis into context and are the real value of adopting a multi-method approach. Thus, all quantitative indicators are in some sense simply a descriptor of some underlying, latent phenomenon. For this reason, I think it is vital to supplement statistical and quantitative analysis with some sort of method that gets at these underlying propensities and decision-making process with either surveys or interviews.

As currently coded, I think the cross-national binary variable is more comprehensive and consistent than any other previously available dataset of EPZ/SEZs. However, several issues remain that should be taken into consideration when this data is to be used as a variable. Since I needed to use a definition that would be consistent across countries and time periods, I opted for official legislative (or government) enactment of the requisite law or policy guiding the development and management of zones. However, and this is particularly the case for non-democracies, the official declaration of policy sometimes came long after the zone was already in operation. In a democracy, the executive branch cannot typically began enacting a policy until the legislature has passed the law. This is not always the case in non-democracies. For example, the official law and policy to establish the Jebel Ali Free Zone in the UAE was decreed in 1984. However, any observer of Dubai and the economic history of the UAE knows that the activities associated with Dubai generally and the Jebel Ali Free Zone in particular long-preceded the 1984 official decree.[34]

Overall, this research contributes to our understanding of an increasingly prominent policy tool for attracting FDI, creating jobs, and solving political bargains between local and national officials. This contributes to our understanding of the demand-side of FDI and shows us how FDI attraction strategies are mediated through the domestic political economy. The original dataset of SEZs produces fundamentally new knowledge about the countries that enact zones, raising questions about the conventional wisdom of SEZs. Democracies are also prone to use SEZs so the case studies examine enactment in a set of democracies as well as the non-democracies. Also, since there was no measure available for examining the role of external actors in zone enactment, I use the case studies to illuminate that component of the enactment process. Analysis of China sheds light on enactment, change over time, and the levels of analysis challenges inherent in studying SEZs. The final chapter provides additional detail, from the perspective of local actors, on bargaining between local and national-level policymakers.

Let's begin.

[34] I address this issue more fully in Chapter 6, in the section on the UAE.

Empirical Analysis

Chapter 3

Financial Liberalization, Exchange Rates, and Democracy: Cross-National Analysis of SEZ Origins

3.1 Testing Origins

Countries cite a wide variety of reasons for enacting special economic zones (SEZs) including attracting foreign direct investment (FDI), creating jobs, or implementing certain types of economic reforms. There is a growing literature on whether SEZs achieve these objectives but the most prominent gap remains systematic analysis of why countries enact zones. Economists cite efforts to partially liberalize the financial system and the need to access foreign exchange while neo-Marxist scholars argue that SEZs are way to give privileged access to foreign multi-national corporations (MNCs) aligned with the ruling regime. While any one of these explanations may work in a single case, without testing empirically across a broad cross-section of countries we are still unable to determine whether the empirical reality is consistent with any of these predicted relationships. Thus, I begin to address this gap by testing a theory of SEZ enactment. The most prominent explanations in the economics literature remains financial opening policies, the desire to access foreign capital, and factors such as trade and the size of the economy. The political economy literature on FDI, however, has shown us that democracies are better at attracting FDI than non-democracies. Therefore, I test each of the potential explanations and find that macroeconomic and political explanations jointly explain a country's propensity to adopt an SEZ policy.

The biggest impediment to testing why countries enact SEZs has been the lack of data. During interviews with the World Bank and business leaders in various countries, I repeatedly asked whether they have or maintain any data on SEZs. The World Bank has begun conducting surveys of firms operating in zones, but this data only covers approximately 10 developing countries.[1] Thus, while providing insight about firm behavior within zones, this data does not provide systematic cross-level data necessary for testing broad patterns of enactment. Business publications such as the *Financial Times* have shown increasing interest in worldwide SEZs; their flagship magazine, *fDiIntelligence*, now publishes an annual report on the best SEZs globally.[2] However, because data on SEZs remains so fragmented, inconsistent, or entirely absent, the *Financial Times* is unable to generate zone rankings in the same way in which they rank cities on their business and investment climate.[3] Zone authorities simply submit a letter detailing their qualifications.

To resolve some of these data limitations, this chapter introduces an original, cross-national dataset of SEZs. Prior to this data, there has been no comprehensive catalog of SEZs worldwide. For clarity, an SEZ is any geographically-demarcated area where the rules for trade and investment are different from the national-level legal regime. In order to determine whether any of the patterns identified in single-country studies of SEZs are generalizable across a broader range of countries,

1 Farole (2010).
2 See for example, Financial Times (2016).
3 Personal Interview; Editor-in-Chief, FDI Magazine and Head of Content, FDI Intelligence; 1 February 2016.

we need a consistently coded dataset of zones. With this dataset now complete, we can determine whether any of the causes associated with enactment in individual cases are operating in a larger cross-section of countries. Essentially, we are now able to determine what economic, political, and demographic factors, on average, correlate with a country's propensity to enact an SEZ.

In terms of the political economy literature, there are two primary deficiencies. The first has been the lack of cross-national empirical data by which to test the propensity to enact zones, as already discussed. The second problem is the fixation primarily on outcomes associated with using zones. Examining how SEZs influence economic outcomes such as growth, GDP, FDI, job creation, and/or productivity is relevant and important but we must also understand the impetus for their creation, how they are implemented, and why they are used. Previous research has noted the association of both ISI and ELG with SEZs but each of these growth strategies has very different goals. Thus, it is not surprising that the literature on whether SEZs are effective remains inconclusive. We first need to identify which characteristics are associated with zone enactment because this will allow us to disentangle the reasons for enacting the program and thus better understand their goals. Different program goals tells us about the impetus for enactment in the first place. When combined with other evidence outlining the enactment process, can lead us to more nuanced theories of when, where, and why these programs will be effective.

The primary contribution of this chapter is to statistically test the hypotheses identified in the theory chapter. I focus entirely on the initial decision to enact a zone program. Thus, this chapter will not address questions such as how many zones a country enacts or their size, sectoral composition, or other characteristics. The empirical analysis in this chapter will focus on why countries enact SEZs honing in on macroeconomic and political theories of why countries utilize this policy instrument. The two most prominent macroeconomic reasons for adopting SEZs is to begin a process of trade and financial opening. Most countries, especially developing countries facing major challenges in building up their own economy, want to open up their financial markets in the interests of promoting trade and allowing access for foreign direct investors. However, domestic interests also want certain forms of protection and governments may not want to fully open their financial markets out of fear of the volatility of international capital flows. Thus, enacting an SEZ is a way to partially open the economy but without allowing full liberalization. More open capital and ownership policies can be allowed in zones thereby allowing access to the economy without making the entire economy vulnerable to international financial crises. Thus, countries in the process of financial opening are more likely to enact zones.

As Krugman and Obstfeld (2006) note, exchange rate stability is often more important for emerging economies than it is for advanced economies because "keeping inflation in check and avoiding financial stress" is vital for countries in the midst of economic development.[4] Moreover, fixing or pegging the exchange rate can help reduce transactions costs for foreign firms hoping to trade or invest in a particular country.[5] Thus, for many countries in the midst of economic reform or transition, they have multiple competing policy imperatives. They want to open financially but want to do so in a controlled manner that reduces volatility.

Questions of volatility and stability also directly relate to the political factors that may influence SEZ enactment. Most early enactors, other than Ireland, were non-democracies. The lack of democratic protections and well-developed labor laws prompted scholars and external observers at the time to question the motive of these development enclaves, arguing that SEZs were primarily

4 Krugman and Obstfeld (2006, 630).
5 Broz and Frieden (2001); Pelc (2011, 629).

meant to repress labor by limiting labor protections and preventing collective bargaining. The logic generated the conventional wisdom that SEZs were primarily a tool of authoritarian regimes to increase exports and exploit cheap labor. Current analysis indicates that this early conventional wisdom may be flawed[6] but thus far we have been unable to fully adjudicate debates about the relationship between regime type and the use of SEZ programs.

Overall, I find that the macroeconomic explanation provides the most consistent and robust explanation for why countries enact. Regime type is also statistically significant with democracies being more likely to enact than non-democracies. However, using several variables to test theories of why these regime type differences exist, I do not find support for job creation as an explanation for why democracies have a higher propensity to enact. Similarly in authoritarian regimes, labor repression - measured by restrictions on internal migration proxying for unmet labor demand - do not correlate with enactment. The regime type results may be due to the inadequacy of the measures used but also indicate that the political economy literature has not yet fully addressed why countries use SEZ policies. This avenue of inquiry should be pursued further to better understand why democracies are more likely to enact than non-democracies.

This chapter will proceed as follows. First, I will summarize the basic logic for testing the macroeconomic and political characteristics associated with SEZ enactment. Then in the empirical section, I will first discuss the dependent variable as operationalized in this dissertation I then summarize the key independent variables and controls used in the empirical models and discuss methods used and models tested. Results are then described outlining four categories of tests and concluding with a joint model that takes into account both macroeconomic and political explana-

[6] For example, Kucera (2002) finds that countries with poor labor practices do not attract more FDI; in his models, he also controls for the use of SEZs, finding that labor violations in zones do not increase FDI. However, this result is not statistically significant.

tions for SEZ creation. I conclude with a summary of the macroeconomic and political logic and describe the limitations of the analysis as way to guide further research.

3.2 Theory of Enactment

There are over 3,000 special economic zones worldwide.[7] The World Bank estimates the number of publicly-funded zones at 872 and privately-funded zones at 1429, for a total of over 2300 zones.[8] The wide discrepancy in these estimates stems from multiple causes. First, there is no agreement on what should or should not be considered a special economic zone. The ILO includes single-factory programs in its database numbers, which accounts for much higher number of zones than the World Bank.[9] As the FDI and EPZ graph shows, the number of countries using export-processing zones (EPZs) and SEZs has steadily increased over the past forty years along with the increase in FDI. Even within the European Union (EU), which is ostensibly designed to be an open market, 74 zones have been approved.[10]

Unlike FDI studies that focus on FDI as an aggregate outcome, I am focusing on the government policies meant to influence inward FDI into a country. SEZs are not a perfect proxy for FDI attraction policy but nearly all countries explicitly cite attracting FDI as a key goal of their zone programs.[11] Moreover, at present, we have very few systematic measures of FDI incentives.[12]

7 Singa-Boyenge (2007).
8 World Bank (2008).
9 I use year of legal enactment for coding of the binary variable. As such, single-factory programs are included if they are part of the legal regime.
10 de Jong (2013).
11 Use of SEZs as a FDI attraction strategy is discussed more explicitly in the Theory chapter.
12 Jensen et al. (2014) use a survey experiment to evaluate how offering incentives is perceived by voters. Venkatesan and Varma (1998) examine intra-state incentive competition in India. *fDiIntelligence*, a subsidiary of the *Financial Times*, ranks free trade zones based on the incentives offered and other criteria but these rankings are based primarily on self-nomination.

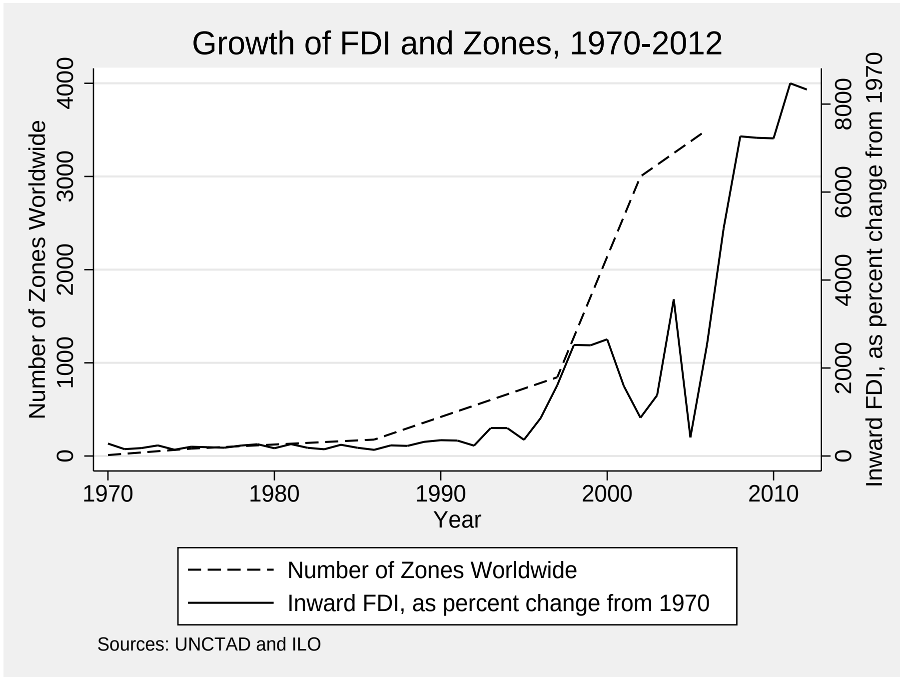


Figure 3.1: Growth of FDI and Zones Globally

Even if the link between SEZs and increases in FDI are yet to be proven,[13] Most importantly, analysis of why countries enact zones and whether those policies are effective are distinct questions. We need to understand why countries enact SEZs if we are to devise causal identification strategies for the connection between SEZs and economic outcomes.

3.2.1 Macroeconomic Logic

Macroeconomic, political, and demographic factors all play a role in economic policy and thus are likely to matter for zone enactment in any individual country. However, despite extensive study of ISI, export-led growth (ELG) strategies, and single-country analysis of zone programs, we still know very little about the general propensity to enact zones or the characteristics associated with countries who enact SEZs as tool for economic growth and attracting FDI.

[13] The success of early EPZ programs in Mexico, Korea, and Taiwan were largely the result of domestic firms and preferential financial policies and FDI was not prominent at the outset. However, these three cases all adopted their zone policies in the 1960s, which is outside the scope of this empirical analysis.

Single-country studies of special economic zones provide some useful explanations for why a country may enact an SEZ program. In Latin America in the 1950s and 1960s, zone were typically associated with import-substituting industrialization (ISI). In Asia, in the 1960s and 1970s, zones were more commonly associated with export-oriented measures intended to increase trade. For example, throughout the 1960s, Bangladesh pursued an ISI strategy but this "inward looking strategy did not solve the fundamental problem of unemployment and poor economic growth."[14] Then, in 1976, World Bank President Robert McNamara proposed the idea of an export-processing zone to the president.[15] In 1980 Bangladesh's parliament passed the Bangladesh Export Processing Zone Authority Act and the Foreign Private Investment Act, both of which paved the way for SEZs and an export-oriented growth strategy.[16]

Economic growth is one of the most sought after goals of any politician, whether democratically elected or appointed. The biggest challenge for poor or developing countries is the lack of internal demand and the lack of products or resources necessary to create products for sale in export markets. However, poor countries have one thing in abundance: low-cost labor.[17] Thus, poor countries want to take advantage of their low cost labor but do not necessarily have the capital nor technical expertise to participate in the global supply chain. Because developing countries do not have export goods, they are forced to import many commodities, resources, and goods. The reliance on imported goods generates chronic balance of payment issues. To rectify these problems, many countries pursue ELG strategies, especially after the success stories of ELG in East Asia.[18] While ELG growth was first associated with the small East Asian "tigers" of South Korea

14 Dowla (1997, 561).
15 Dowla (1997, 562).
16 *The Bangladesh Export Processing Zones Authority Act* (1980).
17 Lewis (1954); United Nations (2008).
18 To be clear, balance of payments crises are not unique to countries that want to pursue ELG. Hirschman (1968) noted that balance of payments problems were also a problem with ISI.

and Taiwan, this development strategy is now often associated with China. John Williamson, the economist who originally coined the term "Washington consensus,"[19] includes export-led growth as one of the five characteristics that now define the more recent "Beijing consensus."[20]

Policy recommendations largely under the purview of the Washington consensus were meant to open an economy. In this sense, SEZs were viewed as one way to encourage opening but in a slow, deliberate, and initially limited fashion. Early on, SEZs were conceptualized as either a temporary measure or an attempt at partial reform. Instead of reforming all aspects of the economic system simultaneously,[21] countries could enact SEZs as one method of incremental reform. Instead of opening the financial system completely, markets could be opened in one or several distinct enclaves that could be separated from the rest of the country and thus more easily controlled. In fact, early zones were often physically as well as legally separated from the rest of the country's economy. Moreover, a restrictive financial policy in the broader economy could be maintained while allowing capital flows and FDI into the approved SEZs only. As such, countries which are liberalizing financially should be more likely to enact SEZs as one method of reform but one that does not require full capital mobility, at least at the outset.

Proposition 1: *Countries that are opening financially, as measured by a reduction in capital controls, are more likely to enact SEZs than countries which remain closed financially.*

The second characteristic of importance is monetary policy. In a closed financial system, it is relatively straightforward to maintain a fixed exchange rate. Monetary policy, capital controls,

19 See Williamson (2004) for both the original meaning of the term as well as the ways in which the term has evolved over the past several decades. The term now is much broader than Williamson's original conception but has also been used by critics to denote the negative aspects of the role of international financial institutions in development.

20 Williamson defines ELG in the context of China "as relying on a large current-account surplus as a source of demand to drive the economy."(Williamson 2012, 6).

21 Sometimes referred to the "big bang" theory of reform (Williamson 2012).

and control over the domestic economy are not separate and distinct realms but instead "capital controls are used as part of an overall policy of financial repression."[22] In order to maintain some modicum of control over their own domestic economy, "Governments use capital controls in an attempt to maintain a fixed exchange rate and to sustain an independent monetary policy; that is, to protect the value of their currency and to maintain an interest rate that diverges from the world interest rate."[23] Thus, countries that maintain a fixed exchange rate should be less likely to enact SEZs since SEZs represent an effort to liberalize the financial system.

Proposition 2: *Countries with a fixed exchange rate are less likely to enact zones. Thus, a fixed exchange rate, by itself, should be negatively correlated with SEZ enactment.*

Given the capital mobility hypothesis and the inherent interaction between currency policy, monetary policy, and the capital account, we must also examine the interactive effect of financial liberalization and currency policy. Most countries do not simply open their capital account with one major reform package but gradually alter the legal environment, allowing their financial system to open slowly over time. In this case, we can think of SEZs as representing one form of partial liberalization. However, as the country opens, "to preserve exchange-rate stability, governments will be compelled to limit either the movement of capital (via restrictions or taxes) or their own policy autonomy."[24] So even though the country may be gradually opening, some restrictions will likely remain in place so that government leaders are able to maintain control over monetary and currency policy. Thus, in a country that wants to maintain a fixed exchange rate, we should see an interactive effect between the exchange rate regime, i.e. countries that fix or peg, and increasing financial openness.

[22] Leblang (1997, 436).
[23] Leblang (1997, 436).
[24] Cohen (1993) quoted in Cohen (1996, 280-281).

Proposition 3: *Countries opening financially, as measured by a reduction in capital controls, which maintain a fixed exchange rate are most likely to enact zones. The interactive effect of financial opening and a pegged exchange rate should be positively correlated with the propensity to enact.*

3.2.2 Political Logic: Regime Type and the Conventional Wisdom

In terms of political factors, there are two competing logics as it relates to the potential relationship between regime type and SEZs. The first logic is derived from what could be characterized as the first generation of FDI scholarship. Essentially, this conventional wisdom argues that SEZs, especially the EPZs of the 1960s and 1970s, are about labor repression. Labor repression and limitations on labor, such as the ability to organize unions, are much higher in autocracies. EPZs are a classic example of vertical rather than horizontal (or market access) FDI.[25] Vertical FDI is meant to take advantage of cheaper labor in developing countries. Thus, the conventional wisdom is that autocracies that wish to repress labor *and* attract FDI will do so by using SEZs. Inside SEZs, autocratic leaders are better able to control personnel movements into and out of the zone, internal labor markets, and inward FDI. However, the second generation of FDI scholarship has determined that democracies attract more FDI than non-democracies.[26] Pinto (2013) and Pandya (2014*a*) build on this democracy and FDI link by examining *why* democracies receive more FDI. Pandya (2014) argues that FDI restrictions have decreased over the past 40 years because democracies favor labor over capital. Pinto (2013) focuses on the demand-side of FDI and the distributional consequences of FDI finding that "labor-based [political] coalitions receive more FDI than those

[25] At the outset many developing countries did not have a large enough domestic market to make market-oriented FDI the focus of foreign MNCs. China is the exception to this trend as many firms established operations in China in the hopes of later market access.

[26] Jensen (2003); Li and Resnick (2003); Jensen (2006).

countries whose ruling coalitions are built around domestic capital owners."[27] Kucera (2002) finds poor labor standards in an EPZ have a negative effective on FDI, rather than a positive effect as predicted by theories of a global "race to the bottom."[28]

Based on these competing logics, I predict that regime type should be correlated with SEZ enactment. If the labor repression arguments are correct, then autocracies should have a higher propensity to enact than democracies. If the labor-coalition argument is correct then democratic leaders are creating SEZs as a mechanism for job creation and catering to labor constituencies. Thus, rather than controlling labor, SEZs are about attracting FDI to benefit labor. In this case, democracies should be more likely to enact zones than authoritarian regimes. In the end, an empirical test is necessary to adjudicate which theory is more accurate.

Proposition 4a: *If SEZs are primarily about labor repression, then autocracies will be more likely to enact zones than democracies.*

Proposition 4b: *Alternately, if SEZs are about liberalization and favoring domestic labor, then democracies should be more likely to enact than non-democracies.*

There are several other mechanisms underlying the regime type arguments. If SEZs are primarily about job creation, what pathways might we expect to show this relationship? I examine two distinct pathways that could indicate that demand for jobs is driving the regime type connection. First, general strikes in a country may indicate unmet labor demand. Thus, I use data on strikes and protests to examine whether unmet labor demand is correlated with regime type effect. However,

27 Pinto (2013, 9).

28 Kucera also finds that the relationship between EPZs and FDI is not statistically significant. Kucera's index is a binary variable that captures whether or not worker violations have occurred within an EPZ in that particular country. Kucera also uses measures that capture freedom of association and collective bargaining based on criteria from various international labor agreements (Kucera 2002, 40-43).

in an authoritarian regime, strikes and anti-government protests may not be allowed to take place and are of limited value in evaluating this pathway in a non-democratic setting. Politicians in non-democracies are also concerned about fostering employment but the political pathways linking job creation and remaining in power are not as closely linked. For example, in many authoritarian regimes, economic performance is one measure by which national and local leaders are judged. However, job creation is likely to be only one metric for assessing economic success. Other measures, such as GDP growth, revenue generation, or contracted investment, may be viewed as more important since they provide resources directly to the central or local government. Thus, the relationship between general strikes and the propensity to enact SEZ policies should be relevant for democracies but is unlikely to be allowed in an autocratic regime. Instead, in a non-democracy, migration, especially rural-to-urban migration, is a better metric of unmet labor demand. Thus, to examine unmet labor demand in the authoritarian context, I test the effect of internal restrictions on labor mobility on the propensity to enact zones. Fear of instability in authoritarian regimes is likely to prompt restrictions on internal migration.[29]

Proposition 5: *In democracies, if the reason for SEZ enactment is job creation, then we should see a relationship between unmet labor demand and SEZ enactment.*

Proposition 6: *In non-democracies, if unmet labor demand is the mechanism, then countries with internal migration restrictions will be more likely to enact zones than countries with no restrictions.*

[29] Wallace (2014) argues that the creation of the *hukou* system in China is partially due to the efforts to control rural-to-urban migration.

3.3 Empirical Analysis

The empirical analysis section will first describe the dependent and independent variables used to test the propositions outlined above. I will describe the variables used to measure capital controls, exchange rates, regime type, and unmet labor demand as well as all of the controls. I then discuss the empirical results and multiple methods used to account for temporal dependence in the data. Table 2 summarizes all the *propositions* described in the theory section above along with the measures used to operationalize each independent variable and the expected coefficient sign for that variable. The final portion of this section includes results from the macroeconomic model, the political regime types models, as well as a "complete model" that captures both the political and macroeconomic logic outlined above. I then discuss several robustness checks.

3.3.1 Bad Data & Binary Calculations: Describing the Dependent Variable

The key dependent variable is whether or not a country enacts a special economic zone program. The variable is binary and the date of enactment is based on the year in which the legislation was passed authorizing the zone program. As such, for each year, the country in question either does or does not have an SEZ program. Coding the variable in this manner was the best way to ensure consistency across countries and to capture zone enactment over a substantial time period. The current dataset covers the period from 1970 to 2014 and each observation is a country-year.

I have both substantive and technical reasons for selecting the time period from 1970 to 2014. Substantively, 1970 offers a useful cut-point for analysis of development strategies in the post-World War II era. In their volume on finance in developing countries, Haggard, Lee and

Maxfield (1993) divide the debate over finance into three phases. In the immediate post-World War II period there was an implicit assumption of a strong, capable state and thus government intervention in the economy was expected and encouraged. Subsequent success stories in South Korea and Taiwan further convinced developing countries that export-led growth, accompanied with financial policies from the government to promote those exports, was warranted. SEZs were actually a very small part of the success of South Korea and Taiwan but the notion of using SEZs to achieve growth objectives gained traction throughout the 1970s. Related to the independent variables of this study, namely financial opening, exchange rate policy, and regime type, the 1970s also represent a key change. In 1971, the US went off the gold standard changing the international environment for investment. The post-Bretton Woods era resulted in increased integration of capital markets.[30] Moreover, with the help of institutions such as the World Bank, many countries also sought to liberalize both financially and politically. Thus, the post-1970 era saw a decline in capital controls and FDI restrictions.[31] Despite more access to capital for developing countries, these changes also meant increased vulnerability to rapid fluctuations in capital flows, a major concern for many countries.

The other reason for selecting 1970 as the starting point for the data was the availability of reliable sources for coding enactment start dates. For all country-years, I used at least two official publications and often three to five sources in order to verify the date of legal enactment for each country's zone programs. In most cases, I used the International Labor Organization's 2007 report, *ILO Database on Export Processing Zones*, World Bank (2008), and the State Department's Investment Climate Statement for the country, which includes a section on export processing and

30 Leblang (2005, 168).
31 Pandya (2014*b*); Leblang (2005).

free trade zones. These three sources provided verifiable enactment dates for the 1990s and 2000s. However, to establish the enactment dates for zones created earlier I had to rely on another source. Fröbel, Heinrichs and Kreye (1980) provided the solution to establishing enactment in this earlier period since their comprehensive study of EPZs contained several data appendices extending back to the early 1970s. Thus, Fröbel, Heinrichs and Kreye (1980) was the most reliable source of country-level enactment. However, this source contained very little information on zones created in the 1960s and I was unable to find any other comprehensive or comparable sources that could be used to reliably code enactment for the 1950s and 1960s. In contrast, from 1970 onwards, I was able to use these combination of sources to establish a consistent baseline for enactment. All country-years from 1970 to 2014 have been cross-checked using these four sources. In the event that this combination of sources did not contain enactment years, I consulted country-specific sources.[32] In those cases, I either obtained the official law enacting zones in that country or used an authoritative government source from that country to confirm the year of enactment.

I choose legal enactment of the policy as the key measure for several reasons. First, most investment promotion policies are relatively opaque. Governments often negotiate behind closed doors and offer different incentive packages to different firms.[33] For example, Christiansen, Oman and Charlton (2003) note that while "FDI attraction strategies should be communicated to the enterprise sector (and civil society) in a timely and transparent manner" the realization of these strategies often occurs at the individual firm level.[34] These sort of ad hoc offers and deals are very difficult to reconstruct. To empirically test the effects of these incentives we would need not only information on approved deals but the universe of offered deals. Locating or accessing this

32 For all country-level coding decisions, see data coding appendix.
33 Oman (2000) .
34 Christiansen, Oman and Charlton (2003, 6).

information cross-nationally would be nearly impossible.

Second, SEZs are a concrete and measurable manifestation of investment promotion policy. Thus, SEZs and the policies associated with them have a higher level of transparency. That is not to say that all SEZ are completely transparent but they are a more transparent indicator than corporate tax rates or the variety of one-off deals that could be offered to potential investors. Zones are measurable in both a legal and physical sense. As described in the theory chapter, there are at least two distinct stages of progress in which you could consider a zone program to be "created." The first is the creation of the legal architecture establishing the separate and distinct rules for the SEZ. The second is the actual physical implementation of the zone, i.e. a specific geographic area is anointed as a zone. In the case of the latter, not only is a physical space demarcated to contain the zone but that area was often fenced off in order to control the movement of goods and people into and out of the zone. For the zone-level analysis, it is important to examine physical location and the building of infrastructure associated with the zone but this is a more subjective measure. At the national-level, the most consistent way to measure SEZs is based on legal enactment.

Legal presence may be established in several ways. In democracies, enabling legislation is typically passed setting out the rules for establishing the overall program. For example, in the United States, the US Congress passed legislation in 1993 which "authorized the Department of Housing and Urban Development (HUD) to award Empowerment Zones to local communities via a competitive application process."[35] This program, known as the federal Empowerment Zone (EZ) program is a series of spatially targeted tax incentives and block grants designed to encourage economic, physical, and social investment."[36] In non-democracies, SEZ programs are often announced

[35] Busso, Gregory and Kline (2013, 900).

[36] Busso, Gregory and Kline (2013, 899). In addition to the Federal Empowerment Zones, the US also has Free Trade Zones, which have been in place since the 1960s. As such, in the empirical analysis, different enactment

through a formal decree or the authority for the program is contained within another law that regulates commerce, trade, or investment. The legal authority may be contained in one individual law, as was the case with the initial export-processing zones in Bangladesh,[37] or may be a component of several different laws. For instance, in the United Arab Emirates, the legal authority for the various zone programs in the country is contained in the Commercial Companies Law, the Foreign Investment Law, and the Competition Law as well as several decrees issued by individual jurisdictions.[38] The UAE case also highlights the need to differentiate between the enacting legislation for an overall program from the rules and regulation establishing an individual zone. For example, the Abu Dhabi Global Market financial free zone began in 2013 but the legal authority that allows for individual jurisdictions to establish their own SEZs was promulgated in 1985.

Given the multiple methods by which the legal authority to enact a zone can be established, at present, I have opted for a binary measure based on the passage of the initial enabling legislation. A country is coded as having an SEZ program in place, starting from the year in which the legislation is passed. If a country has never had a zone program or if the country abolishes the zone program, then those country-years are coded as zero.[39] So what kinds of patterns can we identify with a binary outcome variable? Within the cross-national dataset, there are four categories of countries. Figure 1 illustrates the four basic cases in order to situate the empirical analysis described in the next section. The dataset begins in 1970; thus, there are countries that enter the

dates are used. In addition, to ensure that the US case is not driving the results, in one set of robustness checks, I leave the US out of the data altogether. The substantive results of the analysis do not change.

37 *The Bangladesh Export Processing Zones Authority Act* (1980).

38 In the UAE, subnational governments, called *emirates* are allowed to pass regulations concerning economic activity within their jurisdiction. For example, the Abu Dhabi government issued Federal Decree Number 15 in 2013, establishing a new financial free zone under the purview of Federal Law Number 8 (2004), which established the legal authority for *financial* free zones in the country (Khalifa Bin Zayed Al Nahyan 2013).

39 The dataset contains a binary outcome variable, *zone*, as well as separate variables which capture the start and end dates of the program (*zone_enact* and *zone_abolish*, respectively).

dataset with a zone program already in place, as depicted in the lower right quadrant by Brazil. Similarly, there are countries that have never enacted a zone program and thus remain coded as zero throughout the entire time period, as in the case of Paraguay in the upper left quadrant. Since both of these cases remain the same throughout the time period under study, they do not provide us with any substantive information in our empirical models.[40]

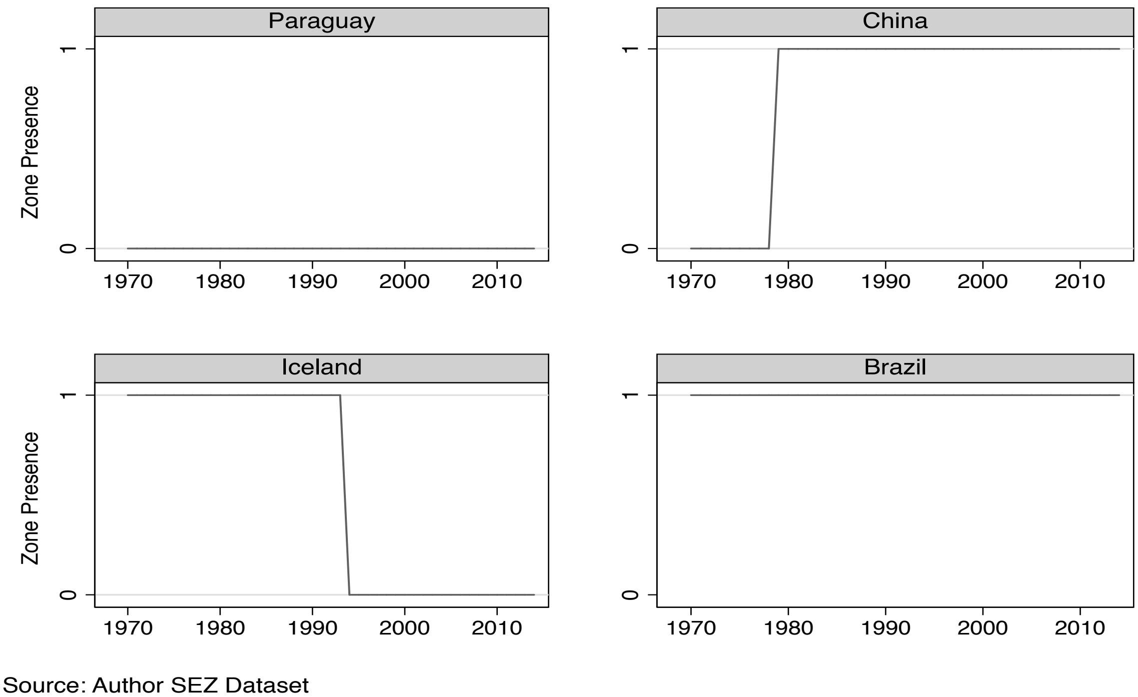
There are also a number of cases in which a country has a program but then dismantles it, such as Iceland, which is displayed in the lower left quadrant. Iceland had a program in place since 1970.[41] However, the program was discontinued in 1994 as part of the agreement to join the European Economic Area. Other countries, such as Australia, have enacted a program during the period of study, and then later decided to abolish their zone program. Thus, there is substantial variation in the data in terms of both enactment and abolishment. It is not the case that once a country enacts a zone, they will always have one.

The models tested in section three represent the cases depicted in the upper right quadrant. For example, in China, the enactment date is coded as 1979, which coincides with the approval of the Shenzhen SEZ in Guangdong Province. Since 1979, China has had a national-level zone program in place. I include these illustrative examples to show that there is more variety in the data than might be expected. As the figures show, there are different models of behavior that could be examined to help us understand SEZs. Questions of both enactment and abolishment need further study even though this paper only addresses the former. Second, unlike joining an international

[40] Obviously, I do not explicitly test a theory of SEZ enactment for countries that created their programs prior to 1970. Essentially, countries that enacted zones prior to 1970 are outside the scope of this study.

[41] Iceland's zone program was enacted in 1960, according to Pakdeenurit, Suthikarnnarunai and Rattanawong (2014). World Bank (2008) notes that Iceland had two free trade zones but mentions neither the start nor end date of the program in its report. Iceland joined the European Economic Area (EEA) and, according to the Investment Climate Statement for the country, "under the EEA agreement, free ports or foreign trade zones are not allowed" (U.S. Department of State 2014*a*, Section 17).

Figure 3.2: Select Cases from Cross-National Dataset



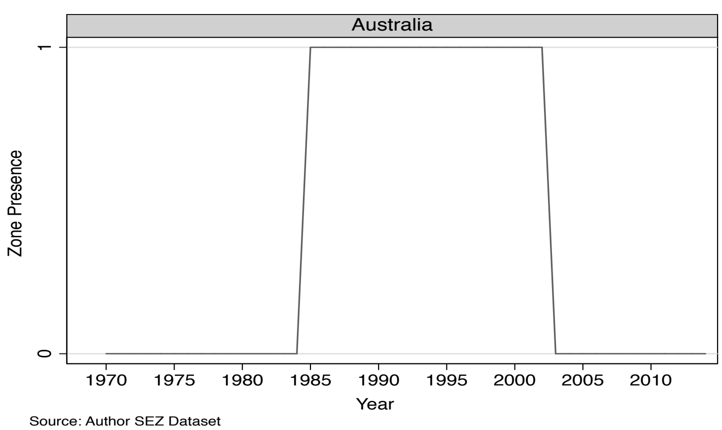


Figure 3.3: Australia: Enactment and Abolishment

organization, which rarely results in countries "leaving" the organization, countries do abolish zone programs. Countries which choose to dismantle their SEZ program are in the dataset but are not directly examined in this chapter nor are countries that have established sunset periods for their programs.

Conceptualizing zones as temporary measures to achieve limited or specific economic objectives, comports with theories of an "SEZ life cycle."[42] However, even when considered temporary at the outset, zones often have staying power. Once the zone program is created and individual zones enacted, interest groups that support those policies may build coalitions to ensure that the policies remain in place. Interests groups, especially those who want to maintain the legal benefits of the program, are likely to want to keep the policy benefits therein. Moreover, jurisdictions or agencies with responsibility over a geographic area are likely to want to ensure the longevity of their zones and the resources allocate to support them.

To summarize, we are testing a theory of the countries in the upper right quadrant to answer one key research question. In the period from 1970 to 2014, why do the countries that have enacted zones do so? This is the key scope condition for the cross-national analysis. In the conclusion, I will briefly address some of the potential reasons for expanding or dismantling programs and discuss how expanding the dataset to cover the period from 1950 to 1969 would allow us to make "out of sample" predictions and test the results found in the empirical analysis below. However, for now, we will focus on the propensity to enact zones since 1970.

3.3.2 Key Independent Variables: Financial Opening & Exchange Rates

For SEZs, the demand for foreign exchange is one reason named for countries pursuing export-oriented policies but this proposition has never been tested empirically. Moreover, demand for foreign exchange does not exist in isolation but is connected to other macroeconomic policies in the country, namely the level of capital controls and exchange rate policy. In this section, we test the effects of financial openness, as measured by capital controls, and the effect of the exchange

[42] Omar and Stoever (2008).

rate regime on a country's propensity to enact an SEZ program. The first set of propositions is based on the premise that as countries liberalize their economic and financial systems they face a distinct set of constraints. If a country wants to open its capital account but is not concerned about its currency or monetary policy, those countries should have no higher (or lower) propensity to enact zones than a country that remains closed financially. After the collapse of the Bretton Woods system of fixed exchange rate parities in the early 1970s,[43] most industrial economies shifted to floating or managed exchange rates.[44] However, many developing countries needed (or wanted) to maintain control over their exchange rate in order to prevent currency volatility.[45]

For the capital controls measure, I use the Chinn-Ito capital controls index, known as *kaopen*.[46] The Chinn-Ito Index uses the International Monetary Fund's (IMF) Annual Report on Exchange Arrangements and Exchange Restrictions (AREAR) to measure "a country's degree of capital account openness."[47] The Chinn-Ito index has two variants. The first measure varies between -1.89 and 2.39 with negative numbers indicating a less open financial system (more capital controls) and positive numbers indicating a more open financial markets (less capital controls). The second variant is the same data but scaled to fall between zero and one.[48]

Exchange rates are measured using Levy-Yeyati and Sturzenegger (2005), hereafter the LY&S measure. The LY&S measure was chosen because it measures *de facto* exchange rates rather than *de jure* regimes. This distinction is important because for our test we are less concerned about signaling or announced policies but instead want to measure *actual* exchange rate policies.

43 See Krugman and Obstfeld (2006, 507-9) for a summary.
44 Krugman and Obstfeld (2006, 447).
45 Krugman and Obstfeld (2006, 607).
46 Chinn and Ito (2005); Chinn and Ito (2008). For clarity, I will refer to the emphkaopen variable as the capital controls or financial openness index.
47 Chinn and Ito (2015).
48 In Table 1: Summary Statistics, the zero to one index is labeled as the "scaled" variant of Financial Openness.

As Levy-Yeyati and Sturzenegger (2005) argue, “many countries that *in theory* have a flexible rate intervene in exchange markets” and other countries implement “periodic devaluations of pegs . . . [with] the result . . . [that] monetary policies are inconsistent with fixed exchange rates.”[49] For our purposes, we want to evaluate the underlying motivations of the government rather than purported policies. Therefore, the LY&S measures captures the “*de facto* classification of exchange rate regimes [and] reflects actual rather than announced policies.”[50] In addition, since we are primarily concerned with fixed exchange rates, using the LY&S variable, I converted the LY&S three-way ordinal scale (float, intermediate, fixed) to a binary scale. I collapsed the LY&S coding scheme such that category three equals “fixed” and categories one and two are simply “not fixed.” For our purposes, it does not matter whether a country has a free float or a managed float. The key driver of policy is whether or not the country is attempting to maintain a fixed exchange rate.

3.3.3 Secondary Independent Variable: Regime Type

In order to examine the connection between political systems and the propensity to enact zones, I use three different regime type measures. The first two measures are binary variables coded as one for democracy and zero for non-democracies. The first binary measure is the Cheibub, Gandhi and Vreeland (2010) and the second is Boix, Miller and Rosato (2012). Both of these measures are dichotomous and thus minimalist definitions of democracy. The key difference between the Cheibub, Gandhi, and Vreeland (CGV) and Boix, Miller, and Rosato (BMR) democracy datasets are their methods of coding enfranchisement. BMR only use male suffrage for their democracy threshold whereas CGV uses universal suffrage. These differences matter for earlier periods of history but

49 Levy-Yeyati and Sturzenegger (2005, 1604).
50 Levy-Yeyati and Sturzenegger (2005, 1604).

since my analysis is only for the time period from 1970s onwards, the differences between the two datasets are minor. In addition to these two binary measures, I also conduct robustness checks using Polity.[51] Polity remains a standard measure for democracy in international relations but some scholars have voiced concerns about the way in which multiple different characteristics are combined in the Polity scale. Munck and Verkuilin (2002) argue that since the aggregation scheme combines multiple concepts the overall scale becomes conceptually muddled. Treier and Jackman (2008) use factor analysis to evaluate the efficacy of Polity but Elkins (2000) finds no substantive difference between continuous and dichotomous measures of democracy. I use all three to ensure that the findings are not driven solely by one regime type measure.

As discussed in propositions four above, there are competing theories for the relationship between regime type and SEZ enactment. These disputes are adjudicated below. Proposition 4a is based on the notion that SEZs are about labor repression and proposition 4b is based on the idea that politicians want to create jobs for their constituencies and a geographically-based incentive policy, such as an SEZ, is one effective way to do so. The jobs are created in a specific jurisdiction; thus, those politicians can quite easily claim credit for the jobs if they are associated with the SEZ policy. Since the link between elected politicians and constituents should be more tightly linked in democracies, if this logic is at work, then democracies should be more likely to enact than non-democracies.

One key challenge for testing this aspect of the theory is a measure of unmet labor demand. Employment by itself cannot be used because employment and SEZ enactment are endogenous. The implementation of zones should increase employment; thus, employment figures should not

51 In this case, Polity IV.

predict enactment. Moreover, there are no readily available measures of unmet labor demand or reliable assessments of underemployment.[52] To capture this concept, I have relied on a series of variables that capture strikes, protests, and internal migration. While not perfect proxies for unmet labor demand, each is related to labor force participation and, at this stage, are the best measures available. The strikes, protests, and anti-government demonstrations variables are all drawn from the Arthur S. Banks project now known as the Cross-National Time-Series (CNTS) Data Archive. The primary labor demand variable is *general strikes*, which is "any strike of 1000 or more industrial or service workers . . . aimed at national government policies or authority."[53] In place of *strikes*, the variables measuring *riots* and *anti-government demonstrations* were also used to examine whether labor demand is driving enactment of zones at the national-level.

Strikes, riots and protests could be a signal to national governments that there are insufficient employment opportunities for a large segment of the population and thus represent demand for jobs. This mechanism is most likely to operate in a democracy and not an autocratic regime because non-democratic regimes are more likely to ban protests, strikes, and other forms of collective action. Democracies tend to protect the right of free association and protests in a way that non-democracies do not. Moreover, authoritarian regimes may allow small-scale protests and demonstrations but are likely to repress strikes and protests on the scale of the Banks data. Thus, anti-government demonstrations in a non-democracy are unlikely to ever reach the threshold necessary to be measurable. As such, it was necessary to explore other mechanisms that might be related to the propensity to enact zones in non-democracies.

[52] It could be argued that all poor countries suffer from underemployment (Lewis 1954) but being poor, by itself, should not predict zone enactment. Political leaders have agency and decide on policy choices based on factors other than simply the country's level of development.

[53] Wilson (2016, 12).

Another indication of unmet labor demand is internal migration. For a government that is concerned about stability, they may want to control how and when domestic migration occurs. Thus, for the non-democratic models, I use a measure of restrictions on internal migration to proxy for unmet labor demand because it indicates the demand for jobs while also indicating the government's desire for social control. The domestic mobility variable is drawn from the Cingranelli and Richards (2008) project and the original measure is an ordinal classification of whether or not there are restrictions on a citizens ability to freely move about the country.[54] I have collapsed the three-category scale into a binary variable indicating that a country either has restrictions (equals one) or is unrestricted (equals zero). Thus, if restrictions on mobility are associated with a higher propensity to enact SEZs, then we should see of positive sign on the domestic mobility variable.

3.3.4 Controls and Descriptive Statistics

I include a measure of GDP per capita (GDPPC) to capture both the wealth of a country and to proxy for state capacity.[55] GDPPC is drawn from the Graham and Tucker (2016) IPE dataset because that dataset combines data from both the World Bank's World Development Indicators (WDI) and the Penn World Tables for a more complete time series.[56] Population size is included because the size of the country could be associated with the country's propensity to enact. Specifically, larger countries are more likely to enact differential investment policies across their jurisdiction.[57] A measure of trade flows in used to control for policies associated with export-led growth.

54 According to the Cingranelli and Richards (2008, 41) codebook, zero indicates severely restricted, one means that movement is somewhat restricted, and two equals unrestricted.

55 Rueschemeyer, Stephens and Stephens (1992, 16) explicitly note the importance of state capacity to understanding the relationship between democracy and development. Fearon and Laitin (2003, 80) use income per capita as "a proxy for a state's overall financial, administrative, police, and military capabilities."

56 Graham and Tucker (2016). The more complete time series data is especially important for developing countries.

57 For some models, I also included land area since countries that are physically larger should be more likely to enact given the larger space and territory to create geographically differentiated programs. However, because

In order to control for the role of trade on the overall economy, I use a measure of trade flows as a percent of GDP. Population, land area, trade, and other controls, such as external debt levels, were all obtained from the World Bank WDI. Table 1 below provides the descriptive statistics for all independent and control variables used in the primary model specifications reported below and various robustness checks.

$$f(n) = \begin{cases} Y = 1 & \text{if SEZ =1} \\ \\ Y = 0 & \text{if SEZ = 0} \end{cases}$$

The structure of the data is time-series cross-sectional (TSCS) data with a binary outcome variable as shown above. The key for modeling binary outcomes is that the models are equivalent to event history models, also known as duration models.[58] I conceptualize these tests as a duration model because we are examining the time until enactment, which is when a country switches from zero to one. A standard logit or probit model could be used but a standard model would not properly account for the duration dependence in the data. Thus, the estimates from a standard logit model would be biased. Instead, the duration model examines time until enactment. Survival and event history models use the term "hazard rate" so, in our case, the hazard rate is the probability that a country will enact an SEZ in a given year (t = 1, 2, 3 . . . *n*), given that country has not already enacted a zone.[59] Since the "hazard rate depends on time and the explanatory variables . . . [we use] the logistic regression function."[60] However, as Beck, Katz and Tucker (1998) note, binary time-series cross-sectional (BTSCS) data is "likely to violate the independence assumption

the total land area for most countries changes very little over time, at least within the time period under examination here, this variable drops out of the models that use time fixed effects.

58 Beck, Katz and Tucker (1998).

59 For a straightforward discussion of hazard rates and discrete time models, see Allison (1982).

60 Allison (1982, 72).

of the ordinary logit or probit statistical model." Thus, if we do not properly account for time, the results are likely to be biased.

To address this serial autocorrelation, I employ two methods. The first method used to control for temporal dependence is time fixed effects (FE), in this case year FE. Unlike "fixed effects" models in economics, which should more properly be labeled unit or country FE, time FE models create a dummy variable for each year. As such, these models provide us with a clear examination of the cross-sectional variation or "between" effects.[61] However, one problem with using fixed effects with a binary TSCS (BTSCS) is that the fixed effects estimator "ignore[s] . . . differences that are not captured by the independent variables" resulting in biased estimators.[62] Thus, the second method used to account for duration dependence is the Beck, Katz and Tucker (1998) solution of including temporal dummy variables, which measure time until enactment, and then use those temporal dummies as controls in the duration model. These temporal dummies were generated using the BTSCS Stata package.[63] For our initial analysis of SEZ enactment, we are primarily interested in the differences between countries rather than how these policies have changed over time. As such, controlling for time dependence allows us to focus exclusively on the cross-sectional differences.

All independent variables are lagged by one year to ensure that economic policies and political factors are driving the results rather than the reverse. Also, to account for the fact that the policy in one year is likely to influence policy in the next year, I include a lag of the dependent variable. The lagged dependent variable accounts for the fact that having a zone in the year prior

61 This is in contrast to country or unit FE models, which control for the cross-sectional variation (between effects) and thus provide us an assessment of the over time variation or "within effects."

62 Beck and Katz (2001).

63 Tucker (1999).

(t_0) is likely to be a significant predictor of whether or not a country will have a zone in t_1. To account for spacial correlation, I use robust standard errors clustered by country.

Variable	Mean	Std. Dev.	Min.	Max.	Observations
Zone (DV)	0.446	0.497	0	1	7746
Fixed Exchange Rate	0.637	0.481	0	1	4119
Financial Openness	-0.017	1.528	-1.89	2.39	6453
Financial Openness, Scaled	0.418	0.35	0	1	5708
CGV Democracy	0.441	0.497	0	1	6675
BMR Democracy	0.445	0.497	0	1	6646
Polity Score	0.911	7.463	-10	10	6622
General Strikes	0.123	0.561	0	13	7792
General Strikes, Binary	0.075	0.264	0	1	7792
General Strikes, Logged	32.16	51.71	0	257.78	585
Anti-Government Protests	0.64	2.512	0	74	7792
Anti-Gov Protests, Logged	69.47	80.34	0	432.56	1623
Anti-Gov Protests, Binary	0.208	0.406	0	1	7792
Domestic Mobility	0.433	0.495	0	1	5353
GDP per capita, Logged	799.29	158.37	393.24	1203.52	6646
Population, Logged	176.52	194.60	-321.67	722.45	6499
Trade, Percent of GDP	78.509	48.734	0.309	531.74	6782
Debt, as a Percent GDP	57.72	38.81	0.21	289.85	1176
External Debt	64.744	81.37	0	1380.77	4316

Table 3.1: Summary Statistics

3.3.5 Macroeconomic versus Political Models

For the empirical analysis, I examined four categories of duration models, denoted below as the 1) macroeconomic models; 2) democratic models; 3) authoritarian models; and 4) the "complete" model. Table 2 summarizes all of the hypothesis tests based on the propositions developed in the theory section, along with the variables used to operationalize the concepts, and expected sign on each coefficient. Substantively, the final set of models, labeled here as the complete models, are the ones that are both the most accurately assess the determinants of SEZ enactment and are the most robust theoretically since they jointly account for the economic, political, and demographic

Independent Variable	Propositions	Operationalization	Expected Coefficient Sign
Macroeconomic Factors			
Financial Openness	1, 3	Chinn-Ito Capital Controls Index	+
Fixed Exchange Rate	2, 3	LYS, Coded as binary	-
Exchange Rate & Financial Openness	3	Interaction Term	+
Political Factors			
Regime Type	4	CGV Binary Measure	-
Regime Type	4	BMR Binary Measure	-
Regime Type	4	Polity	-
General Strikes	5	Arthur Banks Data	+
Anti-Government Demonstrations	5	Arthur Banks Data	+
Domestic Mobility	6	CIRI Human Rights Data	+

Table 3.2: Summary of Hypotheses Tests

factors. However, in this section, I systematically evaluate each set of models to test the logic of each theoretic proposition. For the sake of clarity, I separately assess each set of models and results before moving to a discussion of the complete model. Since the complete model is the best representation of the theory, I have used that set of models to generate marginal effects and illustrate how financial openness, exchange rate, and regime type combine to influence the propensity to enact zones.

Macroeconomic Models

$$\begin{aligned} Zone_{ij} = \beta_0 + \beta_1 * Zone_{i,t-1} + \beta_2 * FixedER_{i,t-1} + \beta_3 * FinancialOpenness_{i,t-1} + \\ + \beta_4 * FixedER_{i,t-1} * FinancialOpenness_{i,t-1} + \beta_5 * GDPPC_{i,t-1} \\ + \beta_6 * Population_{i,t-1} + \beta_7 * Trade_{i,t-1} + \beta_x * TimeDummies \end{aligned} \tag{3.1}$$

Equation one summarizes the first set of models, which examine the macroeconomic determinants of SEZ enactment and propositions one through three. The primary model includes the lagged DV (zone in $t-1$), a binary measure of the exchange rate regime, the financial openness measure, and the interaction of the exchange rate and financial openness measure. GDP per capita (GDPPC), population, size, and trade are included as controls. Table 1 walks through the key specifications. Each independent variable is listed but has been lagged in all models. The last set of rows denotes whether time fixed effects or temporal dummies were used in that model specification and the number of observations. I have used this basic schema for all the regression tables that follow.

Macro Model 1 includes only the exchange rate and financial openness measure and both are significant with the correct signs as predicted by propositions one and two. However, this is likely due to temporality since time trends have not been accounted. I then, in Macro Model 2, include the interaction term, consistent with proposition three. Once the interaction term is included, financial openness by itself loses its significance. Since the fixed exchange rate measure remains negative and significant, this supports proposition two. The fact that the interaction term is positive is consistent with proposition three. Also, the significance of the interaction terms indicates that it is the combination of the two - desire to fix the exchange rate along with financial opening - that is driving enactment rather than just financial opening by itself. Thus, the next step is to properly account for time and see if these results hold. Models 3-5 explicitly account for temporal dependence in the data.[64] Macro Model 3 accounts for time dependence by including year FE; in this model, the lagged DV, exchange rate and interaction term remain statistically significant. Once included, the substantive results remain the same, albeit with slightly different coefficients. In Macro Model 4, I then include the time FE as well as the control variables. Again, the results remain substantively similar with the fixed exchange rate term remaining negative and the interaction term positive. The exchange rate and financial openness interaction term remain significant. Somewhat surprisingly, GDPPC and trade have no effect but these effects may be absorbed by the lagged DV and/or the time FE. The other temporal dependence correction is implemented in Macro Model 5; instead of time FE, I include the BTSCS temporal dummies. Results for Model 5 are similar to Model 4 so with two different methods to account for time, and controlling for economic and population size as well as trade, financial opening and a fixed exchange rate are jointly correlated with SEZ enactment. Thus, we find support for proposition three.

Democratic Demand for Jobs

$$\begin{aligned} Zone_{i,t-1} = \beta_0 + \beta_1 * Zone_{i,t-1} + \beta_2 * Democracy_{i,t-1} + \beta_3 * Strikes_{i,t-1} + \beta_4 * GDPPC_{i,t-1} \\ + \beta_5 * Population_{i,t-1} + \beta_6 * Trade_{i,t-1} + \beta_x * TimeDummies \end{aligned} \tag{3.2}$$

64 Coefficients are not reported for fixed effects or temporal dummies but Table 3 indicates whether or not those estimators were included in that particular model.

	(1) Macro Model 1	(2) Macro Model 2	(3) Macro Model 3	(4) Macro Model 4	(5) Macro Model 5
Lag of Zone	9.023***	9.120***	9.777***	9.538***	7.838***
	(0.439)	(0.461)	(0.575)	(0.589)	(0.692)
Fixed ER	-0.908***	-1.614***	-1.580***	-1.270***	-1.339***
	(0.244)	(0.405)	(0.408)	(0.451)	(0.452)
Financial Openness	1.143***	0.300	0.282	-0.0385	0.0282
	(0.330)	(0.453)	(0.484)	(0.560)	(0.581)
ER*Openness Interaction		1.538**	1.477**	1.644**	1.616**
		(0.663)	(0.675)	(0.742)	(0.775)
GDPPC, Logged				0.00	0.00
				(0.00)	(0.00)
Population, Logged				0.003**	0.002**
				(0.001)	(0.001)
Trade				0.004	0.004
				(0.003)	(0.004)
Constant	-3.376***	-3.040***	-1.963***	-3.445***	-3.145***
	(0.230)	(0.230)	(0.510)	(0.799)	(0.929)
Year Fixed Effects	No	No	Yes	Yes	No
Temporal Dummies	No	No	No	No	Yes
Observations	2,033	2,033	1,639	1,387	1,423

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 3.3: Macroeconomic Model Results

The second and third set of models are based on the regime type arguments. The political factors model, displayed in Equation 2, is based on the tests of whether unmet labor demand is driving SEZ creation in democracies (proposition 4b, 5). In these regression results, I only display four models because, unlike the macroeconomic models, there are no interaction terms. Model 1 includes only the two independent variables, in this case regime type and strikes. The original strikes variable ranged from zero to thirteen but is highly skewed so I made two changes to this variable.[65] The binary variable captures whether a country has strikes or not, thus collapsing the number of strikes to simply a binary variable. If a country has strikes in a particular year, it is coded as one; if not strikes met the Banks' threshold then the country is coded as zero. While the democracy variable is robust at the $p < 0.1$ level (consistent with proposition 4b), the strikes variable is not significant but the sign is as expected. In Model 2, all the control variables have been added. The level of significance on democracy increases but the sign on binary strikes now becomes negative. Model 3 includes time FE; now none of the IVs are statistically significant (although the population control variable is). In Model 4, using the temporal dummies rather than time FE, democracy once again becomes significant but throughout all of these models, unmet labor demand does not have any effect. Thus, while there is some tentative support for proposition 4b, there is no support for proposition 5, the joint effect of democracy and unmet labor demand.

Autocratic Social Control

$$\begin{aligned} Zone_{i,t-1} = \beta_0 + \beta_1 * Zone_{i,t-1} + \beta_2 * RegimeType_{i,t-1} + \beta_3 * MigrationRestrictions_{i,t-1} \\ + \beta_4 * GDPPC_{i,t-1} + \beta_4 * Population_{i,t-1} + \beta_6 * Trade_{i,t-1} + \beta_x * TimeDummies \end{aligned} \tag{3.3}$$

The authoritarian models are displayed in Equation 3. Like the other political model, regime type and controls are included but, instead of strikes, internal migration restrictions are

[65] Models were also run using a logged strikes variable but with no substantive differences.

	(1) Democratic Model 1	(2) Democratic Model 2	(3) Democratic Model 3	(4) Democratic Model 4
Lag of Zone	9.165***	8.905***	9.349***	7.987***
	(0.361)	(0.381)	(0.446)	(0.728)
Democracy	0.340*	0.552**	0.389	0.495*
	(0.199)	(0.252)	(0.258)	(0.258)
Binary Strikes	0.127	-0.118	-0.0604	-0.130
	(0.312)	(0.328)	(0.336)	(0.337)
GDPPC, Logged		-0.000614	-0.000155	-0.000360
		(0.000754)	(0.000772)	(0.000772)
Population, Logged		0.00333***	0.00309***	0.00333***
		(0.000703)	(0.000775)	(0.000745)
Trade		0.00543**	0.00309	0.00497*
		(0.00247)	(0.00292)	(0.00289)
Constant	-3.604***	-4.098***	-4.341***	-3.322***
	(0.115)	(0.536)	(0.894)	(0.828)
Year Fixed Effects	No	No	Yes	No
Temporal Dummies	No	No	No	Yes
Observations	6,165	4,992	4,992	4,688

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 3.4: Democratic Demand for Jobs: Model Results

used to proxy for unmet labor demand. Like the democratic models, regime type is statistically significant but albeit contrary to the conventional wisdom that autocracies use SEZs, which supports proposition 4b rather than 4a. In Model 1, domestic mobility is correlated with SEZ enactment but this is likely because neither time nor any controls have been included. Once the controls are included (Model 2), domestic mobility is no longer statistically significant. In Models 3 and 4, in which time dependence has been accounted for, the regime type variable remains significant but domestic mobility is not correlated with enactment in either of these models.

3.3.6 Results: Opting for the "Complete" Model

In the democratic demand and autocratic social control models, the regime type variable remains consistently significant but none of the tests of unmet labor demand show support for Proposition 5. However, one problem with this set of models is the number of observations for strikes. Out of 7792 observations, only 585 or 7.5 percent met the Banks threshold for strikes. Thus, only a small number of countries actually experience strikes and this measure is an inadequate measure of unmet labor demand. The measure of unmet labor demand for the authoritarian social control models is much less skewed[66] but may still be an inadequate proxy for unmet labor demand.

However, despite the lack of evidence for why regime type is correlated, across all three measures of democracy this result remains. In contrast to the conventional wisdom (Proposition 4a), the sign on the democracy measures is positive in all three cases. As such, I find support for Proposition 4b, rather than 4a. Basically, democracies are more likely to enact SEZs than non-democracies. One major concern with this finding is omitted variable bias. Maybe the connection

[66] Out of 5,353 observations, 43.3 percent have some sort of restriction on internal mobility while 56.7 percent of the observations have no restrictions.

	(1) Authoritarian Model 1	(2) Authoritarian Model 2	(3) Authoritarian Model 3	(4) Authoritarian Model 3
Lag of Zone	9.010***	8.727***	9.239***	7.973***
	(0.387)	(0.404)	(0.492)	(0.739)
Democracy	0.604**	0.791***	0.689**	0.685**
	(0.281)	(0.301)	(0.308)	(0.317)
Domestic Mobility	0.515*	0.484	0.527	0.421
	(0.296)	(0.327)	(0.322)	(0.308)
GDPPC, Logged		3.90e-05	0.000345	0.000314
		(0.000856)	(0.000863)	(0.000887)
Population, Logged		0.00324***	0.00312***	0.00331***
		(0.000815)	(0.000866)	(0.000895)
Trade		0.00351	0.00187	0.00282
		(0.00270)	(0.00303)	(0.00319)
Year Fixed Effects	No	No	Yes	No
Temporal Dummies	No	No	No	Yes
Constant	-3.833***	-4.834***	-3.925***	-4.186***
	(0.285)	(0.738)	(0.926)	(0.923)
Observations	2,520	1,914	1,618	1,631

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 3.5: Authoritarian Social Control: Model Results

between regime type and SEZ enactment is simply because other factors are not appropriately controlled for and thus biasing the results. To examine this, I ran a model with regime type, controls, and both country *and* time fixed effects. In this model, regime type is no longer statistically significant thus indicating that there are omitted factors that may be driving the regime type and SEZ enactment relationship. Given the relatively robust results of the macroeconomic tests (Propositions 1-3), I argue that the omitted variables are those associated with the macroeconomic conditions in the country. As such, I now turn to testing a model which accounts for both the economic and political factors that are likely to drive enactment, along with the demographic factors accounted for with the various control variables. I term this combined macroeconomic and regime type model, the "complete model."

The Complete Model

$$\begin{aligned} Zone_{ij} = \beta_0 + \beta_1 * Zone_{i,t-1} + \beta_2 * FixedER_{i,t-1} + \beta_3 * FinancialOpenness_{i,t-1} \\ + \beta_4 * FixedER_{i,t-1} * FinancialOpenness_{i,t-1} + \beta_5 * Democracy_{i,t-1} \\ + GDPPC_{i,t-1} + \beta_6 * Population_{i,t-1} + \beta_7 * Trade_{i,t-1} + \beta_x * TimeDummies \end{aligned} \tag{3.4}$$

The complete model includes the exchange rate regime, financial opening, the exchange rate and openness interaction, and regime type as the key independent variables, as show in equation four. This model also includes the lagged DV, GDPPC, population size and trade as controls and implements the temporal dependence correction methods discussed previously. Like the previous set of models, I report 5 distinct specifications. Model 1 includes all the IVs but no controls nor the interaction term. Model 2 introduces the interaction term. Model 3 includes the IVs, including the interaction term, and then uses time FE to account for time dependence. Model 4 once again uses time FE but also includes the other substantive controls associated with economic and population size and reliance on trade. Model 5 includes all IVs, the interaction term, and controls but instead of year FE includes temporal dummies generated from the BTSCS package.

In Model 1, fixed exchange rate and financial openness are both significant, consistent with Macroeconomic Model 1; however, regime type is not statistically significant. Once the interaction term is included, as in Model 2, financial openness on its own is no longer significant but the interaction term is, which is again consistent with Macroeconomic Model 2. Democracy is not significant. Incorporating year FE, as in Model 3, does not change the substantive results. However, once additional controls are included to address potential omitted variable bias, the results do change somewhat. In Model 4, which controls for both time and other economic and demographic factors, the substantive macroeconomic factors remain and now democracy is also statistically significant. For Model 5, the coefficients vary slightly but the substantive results remain the same.

Using this complete model, I then examined the marginal and predicted effects of various combinations of the independent variables. First, I examine the probability of zone enactment at various levels of financial openness (Proposition 1). For Figure 5, I use the Chinn-Ito scaled financial liberalization index where zero equals a closed financial system and one represents an open financial system. The likelihood that a country that is closed financially will enact an SEZ is less than 2 percent. Not impossible but unlikely. As financial liberalization increases, such as countries with a score of 0.5 on the Chinn-Ito scale, the propensity increases slightly. Once a country reaches one, or full economic opening, the probability of enactment increases to approximately 6 percent but the confidence interval on this estimate increases substantially, although it remains statistically significant. Thus, this provides evidence for Proposition One, as countries open financially, as measured in a reduction in capital controls, those countries are more likely to enact SEZs.

The second set of marginal effects examines the interactive effect of exchange rate choice

	(1) Complete Model 1	(2) Complete Model 2	(3) Complete Model 3	(4) Complete Model 4	(5) Complete Model 5
Lag of Zone	8.953***	9.051***	9.718***	9.506***	7.834***
	(0.433)	(0.457)	(0.573)	(0.592)	(0.721)
Fixed ER	-0.828***	-1.577***	-1.553***	-1.207***	-1.267***
	(0.257)	(0.413)	(0.414)	(0.459)	(0.461)
Financial Openness	1.037***	0.127	0.116	-0.0727	0.00213
	(0.344)	(0.465)	(0.488)	(0.568)	(0.592)
ER*Openness Interaction		1.649**	1.607**	1.851**	1.830**
		(0.676)	(0.679)	(0.750)	(0.785)
Democracy	0.359	0.409	0.387	0.724**	0.750**
	(0.260)	(0.253)	(0.256)	(0.349)	(0.354)
GDPPC, Logged				-0.000611	-0.000714
				(0.00113)	(0.00114)
Population, Logged				0.00290***	0.00281***
				(0.00106)	(0.00105)
Trade				0.00574*	0.00613*
				(0.00347)	(0.00367)
Year Fixed Effects	No	No	Yes	Yes	No
Temporal Dummies	No	No	No	No	Yes
Constant	-3.528***	-3.190***	-2.069***	-3.039***	-2.827***
	(0.269)	(0.265)	(0.537)	(0.812)	(0.943)
Observations	3,638	3,638	3,638	3,223	2,926

Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 3.6: Macroeconomic and Political Determinants of SEZ Enactment

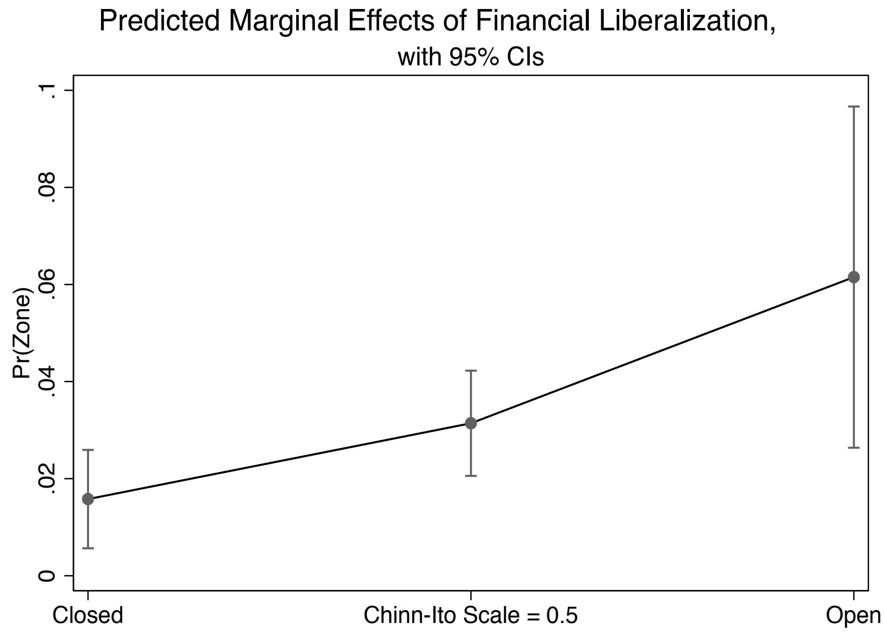


Figure 3.4: Propensity to Enact Zones as Economic Opening Occurs

and financial openness. Figure 6 shows the relationship between exchange rate regime and the propensity to enact across different levels of financial openness. The darker shaded area represents countries with a floating exchange rate. As the graphic shows, the propensity to enact across different levels of financial openness basically remains the same for countries with a fixed exchange rate. This is to be expected since less capital controls and free movement of the currency are expected to operate together. However, the interesting and substantively important relationship is the one between financial opening and the desire to peg or fix the currency. For countries that fix, shown by the dashed line and lightly shaded area (for the confidence interval), indicates that as countries move towards a move open financial system (towards one on the Chinn-Ito scale), those countries have a higher propensity to enact zones. For example, if you are a country that fixes its currency and you have a financial openness score of 0.9, then the predicted probability of zone enactment is 8.4 percent. This is in contrast to a country that has the same financial openness score

(0.9) but a floating exchange rate; a comparably financially open country but with a fixed exchange rate only has a 4.6 percent probability of enacting a zone. Having a fixed exchange rate, but a similar financial openness score, nearly doubles the propensity to enact a zone.

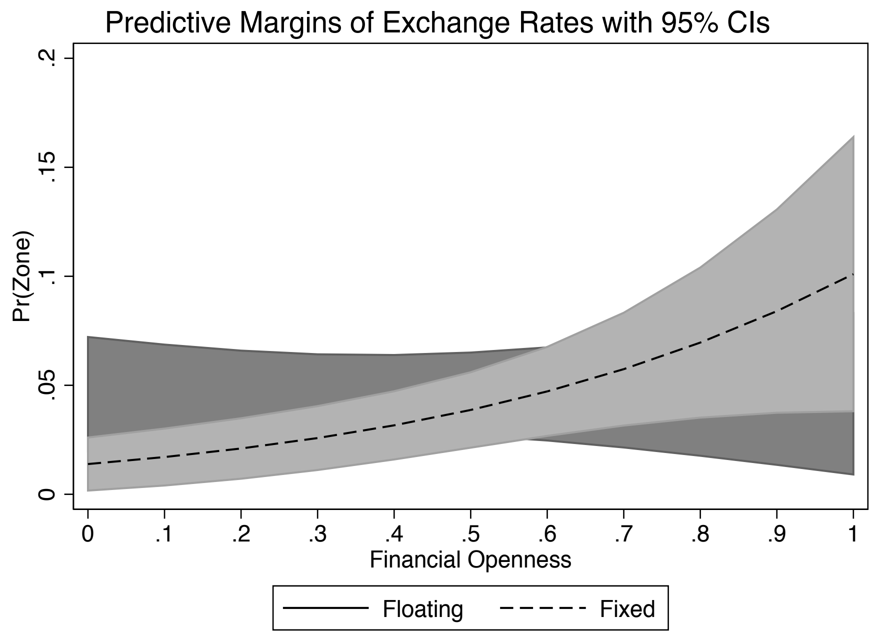


Figure 3.5: Propensity to Enact with a Fixed Exchange Rate and Financial Opening

The interaction between a fixed exchange rate and financial opening is the most important factor increasing the propensity to enact but regime type also plays a role. Holding all other factors constant at their means, a non-democracy has a 2 percent probability of enacting a zone. However, a democracy has a nearly 4 percent probability of enactment. Substantively, this is not a large increase but given the conventional wisdom that autocracies are more likely to use SEZs, this is an important finding and supports Proposition 4b. Democracy and economic liberalization are tied with the propensity to enact zones, especially for those countries hoping to maintain a fixed exchange rate. While the mechanisms for this pattern have not thus far been identified with this quantitative analysis, this is an important finding and avenue for future research to understand how specific economic and political liberalization decisions influence specific policy choices by national leaders. Future directions for this research will be discussed in the concluding chapter.

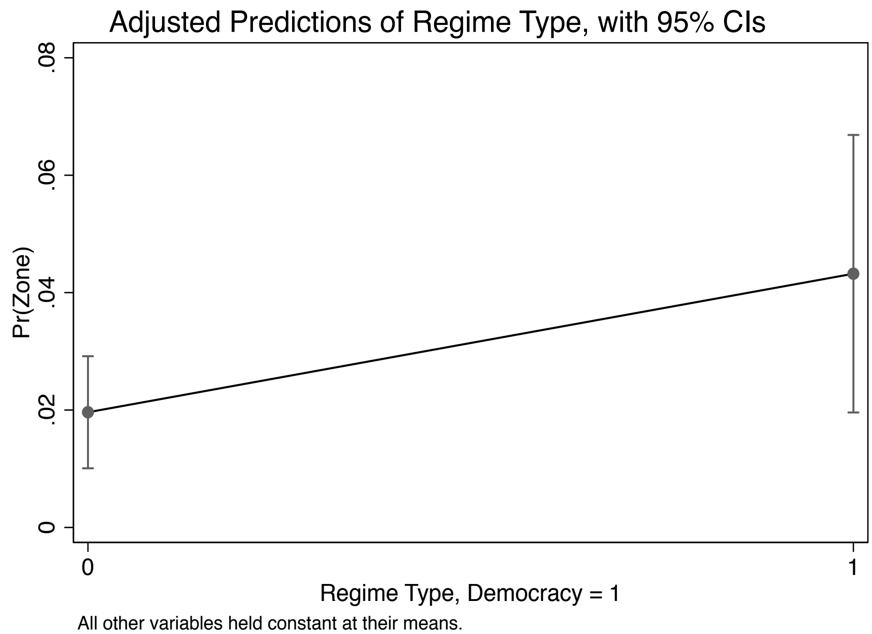


Figure 3.6: Propensity to Enact by Democracies, Accounting for Macroeconomic Factors

To summarize the quantitative analysis contained in this chapter, Table 7 outlines the basic results. Financial openness, by itself (Proposition 1), is not a statistically significant determinant of SEZ enactment. A fixed exchange rate, however, does decrease the propensity to enact a zone thus confirming Proposition 2. More importantly, though, is the interactive relationship between exchange rate choice and financial openness (Proposition 3). The interactive effect of the two is positive and statistically significant thus confirming Proposition 3. Regime type is correlated with enactment but in contrast to Proposition 4a, democracies are more likely to enact than non-democracies thus supporting Proposition 4b. All of these confirmed effects are explored further in the complete model and marginal effects plots as already described above. Propositions 5 and 6, which attempt to explain the regime type connection more fully, are not confirmed. Thus, given the current measures of unmet labor demand, we cannot argue that this is the mechanism driving democracies to enact zones.

Independent Variable	**Proposition** Number	**Expected Coefficient Sign**	**Results**	**Statistically Significant?**
Financial Openness	1	+	Not Confirmed	No
Fixed Exchange Rate	2	-	Confirmed	Yes
Fixed Exchange Rate* Financial Openness	3	+	Confirmed	Yes
Regime Type	4a, 4b	-	Positive	Yes
General Strikes	5	+	Not confirmed	No
Riots	5	+	Not confirmed	No
Anti-Government Demonstrations	5	+	Not confirmed	No
Domestic Mobility	6	+	Not confirmed	No

Table 3.7: Summary of Empirical Results

3.3.7 Robustness Checks

A variety of robustness checks were implemented including examining different regime type measures, the importance of specific cases that could be driving the results, and various specifications to account for time. In terms of regime type, all reported models use the Cheibub, Gandhi and Vreeland (2010) binary democracy measure for the regime type independent variable. All models were also run using Boix, Miller and Rosato (2012), another binary democracy measure, and the Polity scale. Using different measures of regime type did not change any of the substantive results obtained with the CGV measure. Also, as noted in the description of the democratic demand for jobs models, a binary version of the strikes measure was used for the primary specification.

However, the regular ordinal scale and a logged version of the scale were also used; none of the substantive results changed. In addition to the different variants of the strikes variable, I also ran the democratic jobs models using Banks' measures of riots and anti-government protests (two separate variables, which I also transformed to binary versions). Like the strikes measures, neither of these two measures had any statistically significant relationship to enactment.

One concern is the coding of particular cases. Given the importance of the US case as a model for global economics, I ran several robustness checks in order to ensure that the US case was not driving the results. For example, in the SEZ dataset, the US is coded as a country with an SEZ program because of the existence of Free Trade Zones[67] and the federal Empowerment Zone (EZ) program.[68] However, zones in the US are neither as spatially restrictive as zones in some countries nor are they incentives or infrastructure benefits as high. As such, there may be concerns that such a prominent democracy could be driving the regime type results. As such, I ran the models with an alternate coding of the dependent variable where the US was coded as zero rather than one. Substantive results for the models did not change based on this alternate specification. In addition to the Federal Empowerment Zones, the US also has Free Trade Zones, which have been in place since the 1960s. As such, in the empirical analysis, I also used different enactment dates are used. Finally, to ensure that the US case is not driving the results, in one set of robustness checks, I left the US out of the data altogether. The substantive results of the analysis did not change.

Also, as seen in the all the models, the lagged dependent variable is a strong predictor of having an SEZ in the following year. Including the lagged DV accounts for this dependency but, in order to isolate only those countries that shift from zero to one in a given time frame, I also ran a

67 Full the list of approved FTZs in the US, see Department of Commerce International Trade Administration, http://ita-web.ita.doc.gov/FTZ/OFISLogin.nsf, last accessed 23 March 2015.

68 For analysis of the EZ program, see Busso, Gregory and Kline (2013).

series of models that isolated the switch. To do so, I included the lagged DV but also ran the model on only those countries that were shifted from zero to one. As such, instead of testing persistence of SEZs, in those models only countries which had no zone in t_0 but shifted to having a zone in t_1 are examined. Results from these models are not substantively different from the models displayed above.

3.4 Future Cross-National Empirical Research

The models tested above are the first empirical analysis of the characteristics associated with zone enactment across countries worldwide. While much more analysis needs to be done in order to understand the patterns associated with regime type, we now have a far better understanding of why countries enact special economic zones. In the statistical analysis above, I focused on the simplest measure of SEZ policy as a method for initial theory testing. Given the dearth of cross-national analysis of SEZs this was a necessary first step. While the macroeconomic explanation is clear and straightforward, and supported by the empirical evidence, the political factors driving the regime type results are much less clear.

For future research on SEZs, there are several lines of inquiry that could be pursued. First, as stated in the theory section, the models detailed in the empirical section above do not test for zone enactment prior to 1970. The dataset only begins in 1970 so these empirical models cannot explain zone enactment in Brazil, Ireland, South Korea or Taiwan, all of which are canonical cases of the use of SEZs for either ISI or ELG strategies. As such, the results derived thus far could be used to make out-of-sample predictions for the patterns of SEZ enactment in the 1950s and 1960s. If this dataset was expanded to cover the time period from 1950 to 1969, the hypotheses described above could be tested on only that time period to see whether these trends are unique to the post-1970 period or whether they existed in the earlier time period. Moreover, a full dataset of zones from the 1950s onward would include the iconic cases (Ireland, Korea) that are so often referenced in analysis of other zones. Bringing these countries into the scope of the current quantitative analysis would allow us to test the durability of these macroeconomic and political explanations and determine whether these patterns are time contingent.

For future analysis, whether cross-national or more limited in scope, there are several other dimensions of variation that could be explored. For example, the size, number, and location of zones are all key dimensions of variation as well as policy variables such as the number of programs in the country and the administrative authority responsible for the program and/or zone. One of the first ways to build upon a binary classification of zone presence is by calculating the number of zones per country. If a cross-national measure of the number of zones was created, then we would not be limited to binary logit models but could assess the impetus for initial enactment *and* later program expansion. I attempted to pursue this line of inquiry initially but the data was more problematic than I expected. For example, according to the ILO, Taiwan has 5 SEZs but the World Bank states that it has 14.[69] In a more extreme example, the World Bank (2008) reports that Vietnam has 191 economic development zones but the 2014 Investment Climate Report for Vietnam states that over 270 SEZs are now active in the country.[70] In the case of Vietnam, neither report outlines the start dates of these various zones. Thus, in order to build a time-series, cross-sectional dataset of the number of zones, it is necessary to determine the individual start dates of each zone in order to accurately collate the number of zones in each country-year. This coding

69 Singa-Boyenge (2007); World Bank (2008).
70 US Department of State (2014*c*).

would also be subject to a variety of coding decisions based on the program type and level of analysis[71] but could provide a more complete answer to the following research questions.

For instance, does the exchange rate regime and financial controls correlate with the number of zones in the country or does the interactive effect of financial opening and desire to peg the currency only matter for initial enactment? Similarly, do democracies enact more zones than non-democracies? Are the total number of zones per country comparable across regime type or are they different? Count and hurdle models could help us discern the reasons for initial enactment and separately assess the reasons for further program expansion. In terms of size, there are several other questions that emerge. At its simplest, how large is the zone in question and how much land area, in total, is within the confines of an SEZ in any one country? What are the geographic confines of the zone? How have leaders decided on the size or location for any particular zone? Is zone placement based on patronage, some sort of underlying economic efficiency logic, or entirely arbitrary? If based on efficiency or patronage, how is the scale and scope of the SEZ determined? Size is typically measured in hectares, square meters, or acres but size could also be measured as a percentage of the overall area of the country or as a percentage of the area of the particular jurisdiction which houses the zone. For example, in China, even though national-level zones represent less than one percent of China's land area, in 2005, SEZs accounted for nearly 4 percent of China's total GDP and over 16 percent of total FDI inflows.[72] By the mid-2000s, Fu and Gao (2007) estimate that China's zones account for over "one third of China's FDI stock."[73]

In terms of management and administrative authorities, there are public, private, and hy-

71 Depending on how you count and categorize zones, in 2006, China had either five, 222, 1355, or 1577 special economic zones! I collated the number of zones for each of the country cases but it was not feasible to do so for the cross-national dataset.

72 Fu and Gao (2007, 22).

73 Fu and Gao (2007, 22).

brid zones. In the next chapter, I discuss examples of both public and private zones. In the United Arab Emirates, early zones were all public ventures but the latest trend is towards public-private partnerships (PPP), with a focus on integrating private investors at the initial phase of development. There are also countries where the overlapping bureaucratic structure may cause serious management challenges. For instance, Jordan previously had three separate bureaucratic agencies with some responsibility for management of zones in the country. In May 2014, a new organization - the Jordan Investment Commission (JIC) - was created in an "effort to streamline and unify the nation's major government investment institutions."[74] As of October 2015, a "one-stop" shop had been created by the JIC to foster investor relations, but the other organizations meant to be consolidated under the JIC still exist and play a role in SEZ management.[75] India has 15 separate agencies that have some role in management of zones under the purview of the country's various SEZ laws.[76] Zone management can also be characterized by whether or not zones have overlapping management structures. How many bureaucratic agencies have responsibility for zone management? Is there one authority for land acquisition? What is the average time for approval of foreign investment projects? The number of agencies, the public or private sector status of zones, or conflicting legal regimes may all have an influence on not only whether the zone is effective but how long it takes for the enacting legislation to be approved.

This conclusion asks more questions than it answers but shows the importance of pursuing a research agenda that better understands the use and effectiveness of SEZs. This article has taken a first step in understanding why countries enact special economic zones and is thus a key starting

74 Jordan Investment Commission, http://www.jic.gov.jo/Contents/About_JIC.aspx. The Jordan case will be discussed further in both the national-level regimes and zone-level chapters.

75 Interviews in Amman, Jordan, October 2015.

76 Farole and Moberg (2014, 10).

Figure 3.7: Jordan: One-Stop Shop for Investment

point to begin answering all of these remaining questions. If development experts and governments are to continue funding and enacting SEZs, we need to understand all aspects of their origins and implementation in order to fully evaluate their effectiveness.

Chapter 4

SEZ Creation: How International Constraints and External Actors Shape National-Level Policy

4.1 Introduction

In this chapter, I address one main question: how does regime type and the involvement of external actors influence the creation of SEZs? I examine four developing countries, all of which have enacted SEZs, to examine differences across these two dimensions. In this chapter, I use four country cases to outline the creation of the initial zones in each country, and subsequent zone programs if relevant. The cases will illustrate how the factors identified in Chapter 3, most importantly financial openness and the exchange rate, operate in each of the cases. In these cases, the financial openness and exchange rate policy choices are consistent with the theory that countries attempting to liberalize their financial system are more likely to enact SEZs if they are also trying to maintain a fixed exchange rate.

However, these cases also go further than simply illuminating the logic of enactment tested in the previous chapter. The cross-national tests show that regime type is a significant predictor of SEZ enactment, but tests of various mechanisms were not supported by currently available cross-national measures. Therefore, in this chapter, I examine both democracies and non-democracies to build a theory of why democracies are more likely to enact SEZs than non-democracies. I argue that efforts to open financially are often tied to efforts to reform politically. While political and economic liberalization do not always coincide, the waves of democratization over the past thirty years have correlated with a larger trend toward FDI liberalization.[1] Even in countries that are non-democratic, major political changes to the system may coincide with significant economic policy decisions. This logic of economic and political imperatives is illustrated most clearly with the Mauritius and Sri Lankan cases.

In addition to regime type, the role of external actors is extremely important to SEZ enactment. There was no simple quantitative way to test a theory of external actors in the cross-national dataset. However, during the process of coding the enactment data, it was clear that foreign actors were involved in a large share of cases. Actors are broadly defined as foreign countries, foreign multinational corporations (MNCs), or international organizations (IOs). I use this variation in the type of actor to describe how external involvement can shape the nature of the zone program that is enacted. Clearly articulating the origins of SEZs and illustrating the dynamics of enactment with a set of paired comparisons provides a nuanced and context-specific foundation for understanding why and how developing countries enact SEZs. This foundation is necessary to devise measures that differentiate between the type of external actors involved in zone creation. Examining enactment also illuminates the cases in a way cross-national analysis does not and this provides a better understanding of how enactment is constrained by external constraints and mediated through a

[1] Jensen (2003); Jensen (2006); Jensen et al. (2012); Pinto (2013); Pandya (2014*a*).

country's political system.

To examine regime type, I select two democracies and two non-democracies. For democracies, I compare zone enactment in the Dominican Republic and Mauritius. Both countries are small island nations that had recently democratized before enacting their export-processing zones. For the non-democratic cases, I examine Jordan and Sri Lanka. Both countries faced significant security challenges but chose to enact SEZ programs as a way to foster growth. In each regime-type paired comparison, one country had significant involvement from an external actor in zone enactment and the other did not.

The contribution of this chapter is a structured analysis of set of cases based on regime type and the role of external actors. The next section will discuss the theoretic argument focusing on international economic constraints, regime type, and how external actors may influence zone enactment. Section 4.3 describes the case selection and the remainder of the chapter examines SEZ creation in the Dominican Republic, Mauritius, Jordan, and Sri Lanka. The final section concludes with recommendations for further theory building.

4.2 International Constraints and Domestic Political Choices

4.2.1 Financial Liberalization and Exchange Rate Choice

In modern political economy, both domestic and international factors play a role in determining what policies will be enacted. I begin with a discussion of those international constraints before focusing more narrowly on domestic determinants. Tests in the previous chapter focus on the domestic manifestation of international constraints because "international pressures are the most powerful stimulus to policy reform."[2] Moreover, "the international system can constrain state choice in two ways: through market pressures, and through political pressures."[3] In terms of international market pressures, two of the most critical are the ability to attract foreign capital, which requires open capital markets, and the currency regime. Over time, both financial openness and exchange rate choice have altered with capital markets becoming more open as FDI increases and less countries selecting a fixed exchange rate.

In the 1950s and 1960s, SEZs were associated with import-substitution industrialization (ISI), especially in Latin America.[4] Then, in the 1970s, as the Asian tigers (South Korea, Taiwan, Singapore) began to take-off, more countries began to pursue export-led growth (ELG) strategies. Many countries, including several discussed in this chapter, explicitly sought to replicate the ELG strategies of the Asian tigers by using SEZs to jump start manufacturing and ELG.[5] To enact these policies, many countries sought to open their financial systems in an effort to attract foreign capital. For some countries, this also meant obtaining loans, guidance, and recommendations from international financial institutions, such as the World Bank, which promoted market-led development.[6]

Given their capital scarcity, developing countries face volatility and price constraints. Thus, "no examination of the problems of developing countries would get very far without taking into account the implications of fixed exchange rate."[7] In the mid-1970s, based on a measure of *de facto* exchange rates, approximately 77 percent of countries had some sort of pegged exchange rate

2 Haggard (1990, 29).
3 Haggard (1990, 29).
4 Hirschman (1968) remains the canonical work on this subject. Haggard (1990) examines Brazil and Mexico; for his discussion of FDI and ISI, see pages 212-220.
5 An argument can be made that EPZs were only a small component of the success of South Korea, Taiwan, and Singapore. Regardless, countries often referenced the ELG policies of these countries and often equated EPZs with a key facet of the strategy.
6 Sharma (2017).
7 Krugman and Obstfeld (2006, 448).

(see Figure 4.1). As countries open economically, which has increasingly been the case since the 1970s, those economies face a "trilemma" of whether to maintain monetary policy independence, exchange rate flexibility, or the free movement of capital.[8] As Cohen notes, this trilemma or:

> "unholy trinity imposes an increasingly stark trade-off on policymakers. Autonomy of national policy can be preserved only by giving up some degree of currency stability; an independent exchange-rate target can be maintained only at the cost of reduced control over domestic macroeconomic performance."[9]

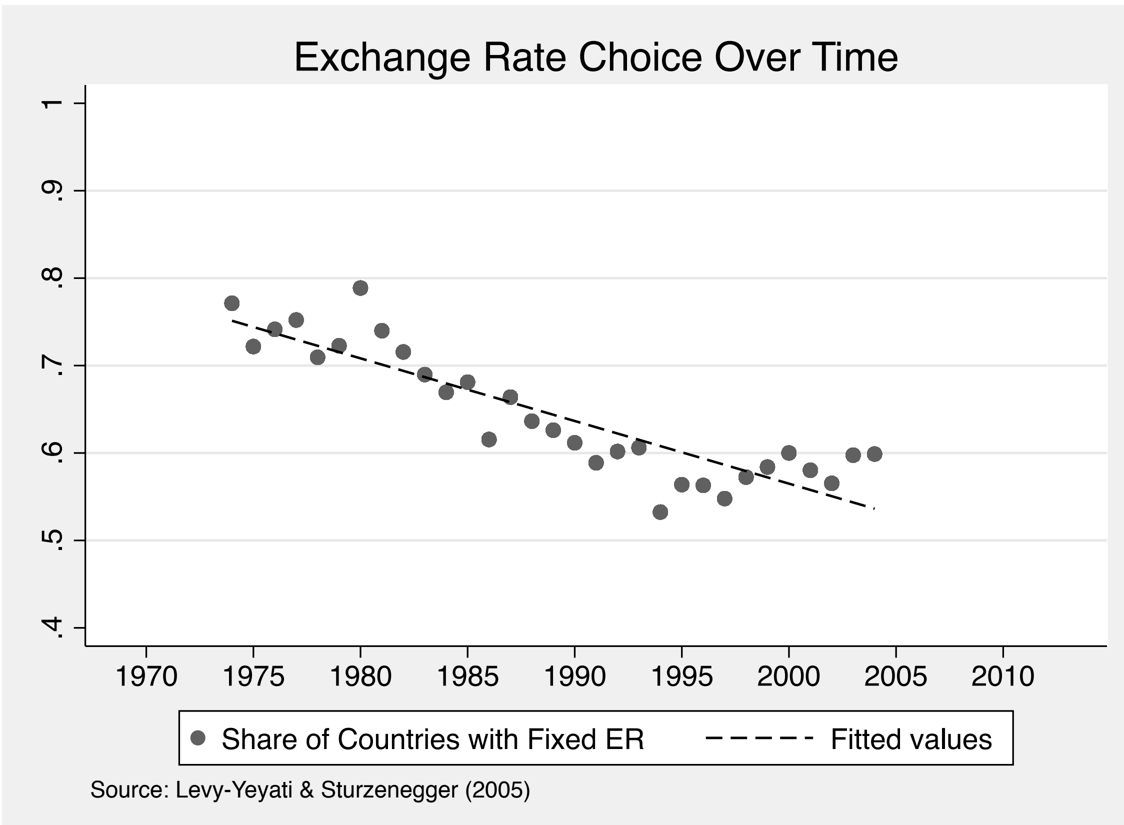


Figure 4.1: The Gradual Decline of Fixed Exchange Rates

Since the 1970s, the share of countries attempting to maintain a fixed exchange rate has declined. However, in 2004, the last year in which comprehensive data is available from the Levy-Yeyati and Sturzenegger (2005), approximately 59 percent of countries globally still had

8 Krugman and Obstfeld (2006).
9 Cohen (1996, 281) .

an intermediate peg or fully fixed exchange rate.[10] Deeply intertwined with issues of exchange rate choice is the increase in FDI as a component of GDP and the need for countries to open financially in order to access global capital flows. Figure 4.2 below shows the increasing reliance on FDI as a source of funds for economic development.[11] Across all countries in 1970, the average share of FDI inflows as a percentage of GDP was about 2 percent. Over time, the share of FDI has increased. By 2010, the average share of FDI as a percent of GDP was nearly 8 percent across all countries reporting FDI inflow data.

Simultaneously, capital account restrictions have decreased over time. Figure 4.3 depicts financial liberalization over time based on the Chinn-Ito Financial Openness Index. In this version of the data, Chinn-Ito scores have been scale to range from 0 to 1, with zero representing a closed financial system and one representing an open capital market. In 1970, the average financial openness score was 0.32 globally. By 2010, that average was approximately 0.54. This indicates that the share of countries are closer to the midpoint of the scale, even if they are not all entirely open. Broadly speaking, as countries have come to rely on FDI as source of funds for development,[12] countries have reduced their restrictions on FDI and thus, on average, have become more open financially.

As shown in Chapter 3, it is this interactive effect of loosening capital controls along with this desire to fix the exchange rate that is most closely correlated with zone enactment. I argue that instead of selecting a floating exchange rate, countries in the process of financial opening will want to select a fixed exchange rate. Fixing the exchange rate provides currency stability

10 The percent of countries with a fixed exchange rate has declined even as the total number of countries globally (and in the dataset) has increased.
11 FDI data was obtained from the World Bank World Development Indicators.
12 Colen, Maertens and Swinnen (2009); Pandya (2016, 464).

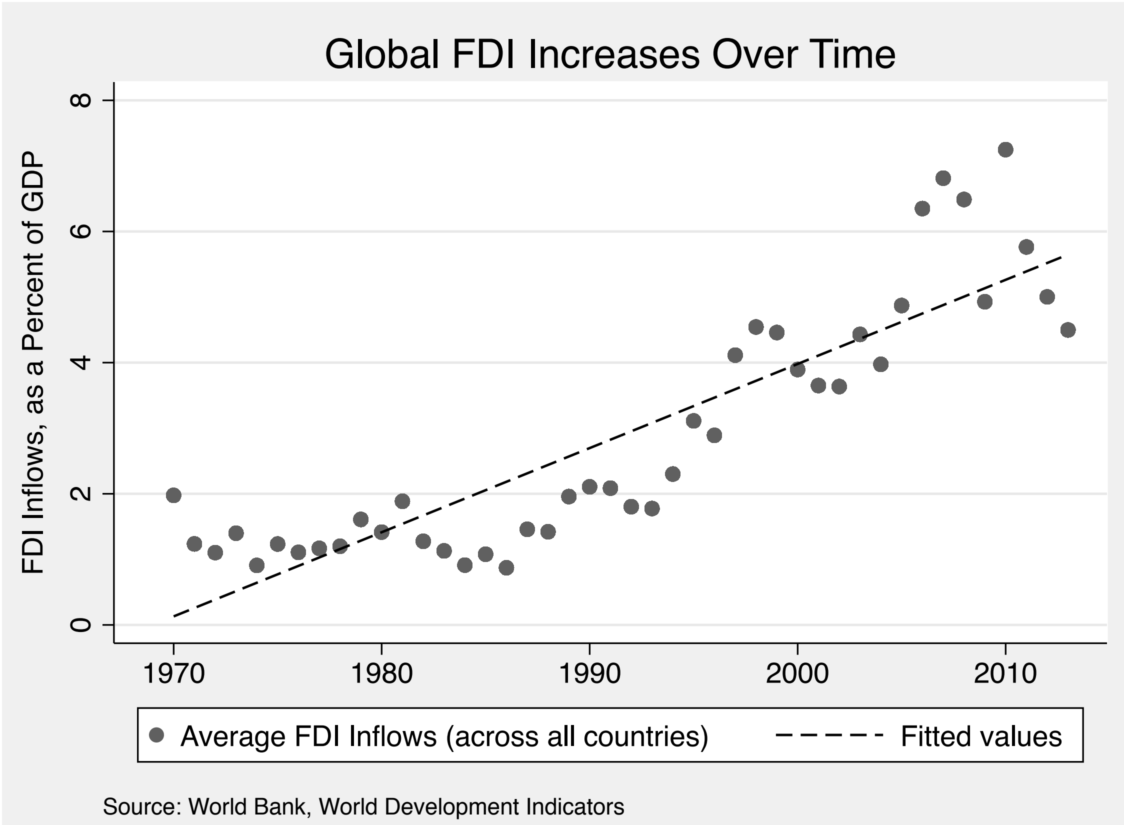


Figure 4.2: Reliance on FDI as a Source for Development

for export-oriented firms. Fixing the currency makes exports more competitive, and is a common strategy among developing countries. The combination of financial opening and a fixed exchange rate provides a proxy for this type of export-led development strategy. Moreover, later periods of financial opening may also be associated with expansions of an existing SEZ program.

Economic growth is not necessarily easy to maintain over long time periods. Rodrik (2007) notes, "Natural resource discoveries, garment exports from maquilas [EPZs], or a free-trade agreement may spur growth for a limited [amount] of time" but if momentum is not maintained then "growth will simply peter out."[13] SEZ policies often see an initial bump in exports and may contribute to growth but after this initial phase, there is often a need to revitalize the zones or reform

[13] Rodrik (2007, 94).

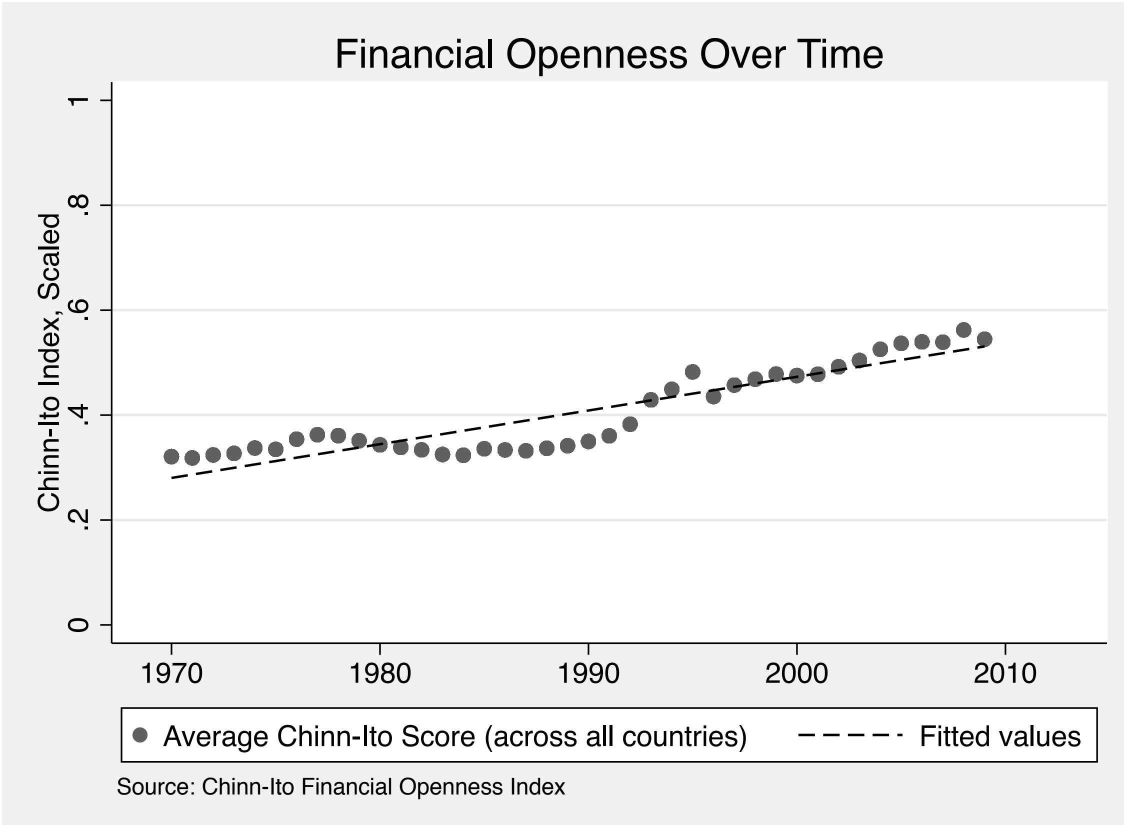


Figure 4.3: Increasing Financial Openness

a set of policies. This proposition is not tested in the cross-national analysis but can be seen in numerous country cases. As such, several of the case studies examine more than one time period in an individual country. For all cases, the initial period of enactment is explained. If there is a later time period in which an entirely new zone program is created or a substantial change is made to the SEZ programs in the country, this period of revitalization or reform is also examined. This type of over-time analysis is critical for scholars attempting to understand SEZ effectiveness but will also contribute to developing measures that capture policy evolution better than a simple binary measure of enactment.

4.2.2 Political Determinants: Regime Type

In democracies, citizens are connected to their leaders via elections. Elected leaders want to be able to take credit for successful economic policies, especially policies that can claim job creation. Jensen et al. (2014) term this tendency "electoral pandering" and describe it as the situation "whereby politicians endorse popular policies that provide short-term political gain at the cost of lower economic performance over the long term."[14] If politicians are able to create jobs and can reasonably take credit for that policy then they more likely to be elected. It is likely that this is one reason SEZs have become such a prominent policy instrument in democratic countries. Because SEZs are always associated with a geographic area, it is easy for politicians to point to a physical manifestation of their efforts to attract investment and promote economic development. However, one problem with the logic of electoral pandering is that both democratic and non-democratic regimes are inclined to claim credit for economic development projects. The graphics below provide an illustration of how advertising investment opportunities has become a key component of SEZ development.

Figure 4.4: Advertising Investment: (L) Jordan Investment Commission; (R) Mauritius Freeport

[14] Jensen et al. (2014, 434).

In Figure 4.4, the picture on the left is from the new Jordan Investment Commission (JIC) building in Amman.[15] The JIC is the "one-stop shop" and the investment promotion agency for all SEZs in the country. Prior to 2014, there was a separate Free Zones Development Commission but in May 2014 the Investment Commission subsumed the functions of the Free Zones Commission and several export promotion departments located within other government agencies.[16] The graphic on the right is the Mauritius Freeport and this image is used on a website to promote trade in Mauritius.[17] Visible symbols of investment promotion activities are important both for external investors and to show domestic constituencies that leaders are actively undertaking policies that could bring in foreign investment and create local jobs.

As it relates to FDI and democracy, Pandya (2014*a*) finds that the trend towards increasing democratization is partly responsible for the increasing demand for FDI. FDI not only creates jobs in countries but also creates better paying jobs and thus is a boon to labor. In a democracy, labor interests can push for FDI-friendly policies with this goal in mind.[18] For many years, the conventional wisdom was that multi-national corporations (MNCs) would seek out investment locations where labor conditions were poor and worker rights were absent or very low. These arguments could broadly be categorized as part of the "race to the bottom" in which investors seek out countries with low labor standards, poor environmental regulations, and low taxation. While the race to the bottom arguments seem to hold popular appeal, evidence for this position is scant. Rodrik (1999) finds that democracies pay higher wages in the manufacturing sector than

15 Photo by author.
16 Personal Interview with the Head of Research and Policy at the JIC, October 2015.
17 Image was obtained from "Mauritius Trade Easy," which is a website sponsored by the Ministry of Foreign Affairs located at `http://www.mauritiustrade.mu/en/trading-with-mauritius/mauritius-freeport`, last accessed 7 November 2017.
18 Pinto (2013).

non-democracies arguing that “political competition and participation seem to be the driving force behind the result.”[19] In terms of FDI, instead of MNCs seeking out repressive regimes or countries with low labor standards, Kucera (2002) finds that “FDI tends to be greater in countries with stronger worker rights.”[20]

Democracies use elections to connect constituents to political leaders but, ”What is the equivalent of the electoral connection in . . . authoritarian systems?”[21] Without elections, what are the mechanisms by which the public is connected to the political leadership, it at all? This question is slightly more problematic for non-democracies since this category is really only a residual category that combines a variety of different political systems.[22] As it relates to SEZ enactment, for non-democracies the choice is not whether to enact a zone or do nothing but rather between partial and total reform. In the economic jargon, autocratic leaders are selecting a possibly sub-optimal economic policy[23] in favor a politically optimal policy. If enacting an SEZ allows more open capital in a select geographic area, but also allows the regime to maintain a fixed exchange rate, then leaders can accomplish multiple objectives simultaneously. Moreover, by concentrating the benefits in a particular geographic area, the positive effects are readily visible and allow leaders to provide particularistic benefits to those select supporters.

If a regime is pro-FDI and understands that attracting that FDI is a long-term commitment, then enacting a zone policy should be seen as a long-term endeavor. Most zones accomplish very little in their first 3-5 years of operation so a leader should not assume quick economic gains from

19 Rodrik (1999, 707).
20 Kucera (2002, 33).
21 Shirk (1993, 70). The omitted portion of the quote is where Shirk references communist systems but I think this question strikes at the heart of all non-democratic systems.
22 Geddes (2003); Magaloni and Kricheli (2010); Wallace (2014).
23 Much of the economics and public choice literature still asserts that complete economic liberalization would meet the “free trade ideal” and thus is the “first best” choice.”

a zone policy. But if the non-democratic leader has a long-term time horizon then we should expect leader tenure, in autocracies, to be positively correlated with SEZ enactment. For example, leaders such as Deng Xiaoping in China and Sheikh Zayed in the United Arab Emirates may not be pandering to an electorate, as democratic leaders must, but they may have a longer time horizon and a need to continue to build political patronage among key constituencies.

Pandering is thus not necessarily unique to purely democratic regimes and autocratic leaders also have reason to employ visible policy instruments, current regime type theories are inadequate to explain the correlation between democracy and SEZ enactment. However, since the conventional wisdom that authoritarian regimes are more likely to employ SEZs is wrong, we need to further explore how and why different regime types create SEZs. As such, the case studies below examine both democracies and non-democracies.

4.2.3 Fly in the Ointment: External Actors

In many instances of zone creation, there is the presence and influence of external actors, whether those actors be countries, organizations, international institutions, or multi-national corporations. However, at present, there is no readily available cross-national data that could tell us when, where, or how external actors are involved in specific SEZ policy enactment.[24] Thus, I am using this chapter to hold constant some of the factors identified in the cross-national analysis. Most explicitly, all country cases below fit the macroeconomic logic tested in Chapter 3 and thus I am able to hold those factors constant. I then examine countries with the same regime type. I do so for two reasons. First, we need to explore how external actors play a role in enactment to see how that

[24] I explored creating a dataset of external involvement but, as discussed in the Research Design chapter, feasibility and time constraints did not allow me to pursue this avenue of inquiry.

factor interacts with the macroeconomic determinants. As such, I pair two democratic cases and two authoritarian cases with one another where the primary difference in each is an external actor. In one case, the external actor is so prominent that it is likely the zone program would not have been created had the external actor not been present. In the comparison case, their is no discernible external actor and, as such, the impetus for zone creation was primarily domestic.

Second, there are different types of external actors. For the purposes of this initial theory building, I lump all external actors into one larger category but another purpose of the case studies is to examine how different types of actors shape the policy enactment. For example, in the Dominican Republic, the primary external actor was a foreign multi-national corporation. In the case of Jordan, the reinvigoration of the Aqaba Port was due, in large part, to the United States and funds for various development projects were processed through the US Agency for International Development (USAID). US aid was not exclusively from the US in Jordan as the World Bank and OECD also provided development loans to Jordan during this time period. However, based on the secondary literature, the USAID loans were the most consequential. In the case of Bangladesh, the idea for the initial EPZ at Chittagong is attributed to World Bank President Robert McNamara,[25] While the Bangladesh case is not addressed in this chapter, the World Bank is a key actor in many instances of zone enactment. As such, I use this initial analysis to examine cases that have different types of external actors.

External actors are considered as a separate category of analysis from international constraints. Instead of limiting the ability of political leaders to pursue particular policies, external actors often allow political leaders to enact preferred policies that would not be possible without

[25] Dowla (1997, 562).

those actors. However, the ability of those same external actors to shape economic policy choices is mediated by the political system in place in that country. A country's political leaders have very little ability to influence global financial markets, but they can have a much larger impact when negotiating directly with one organization. In the case of Jordan, King Abdullah was able to maintain his political coalition, pursue desired reforms, and re-invigorate the Aqaba SEZ because of US foreign aid. In Bangladesh, Robert McNamara visited Bangladesh in 1976 and encouraged the idea for SEZs with one economist noting that "the idea of EPZ in Bangladesh was not inborn but rather proposed to the government by the World Bank."[26] External actors may take multiple forms, but to fully understand SEZ enactment in many countries, we must examine this aspect of zone creation to understand the full story.

4.3 Research Design: Theory-Building Case Studies

Current scholarship on SEZs incorrectly assumes non-democracies are more likely to enact SEZs and does not sufficiently examine the role of external actors. The case studies were first selected based on consistency with the findings of Chapter 3. Each of the four country cases broadly fits the macroeconomic logic that countries opening financially but trying to maintain a fixed exchange are more likely to enact an SEZ. Then, I selected cases based on regime type. The conventional wisdom has been that authoritarian regimes are more likely to enact SEZs as a method by which to repress labor. It was not until the completion of the cross-national dataset and associated empirical tests that I determined the conventional wisdom is flawed. Democracies are more likely to enact zones than non-democracies. I argue that democracies are generally more open and transparent; thus, financial liberalization is a more achievable policy goal in these regimes. Yet, some author-

[26] Dowla (1997, 562).

itarian regimes may also pursue financial liberalization so I thought it was important to examine both democracies and non-democracies.

Regime type mediates how a country plans to enact and utilize an SEZ but based on the qualitative coding of enactment, it is clear that international actors adds an additional dimension to the way in which that process evolves. Just as the macroeconomic logic has an interactive dimension, so do the political determinants of SEZ enactment. While I could not test this proposition in the cross-national study, it is clear that the external actors interact with the political system of the host country and this process differs depending on regime type. In democracies, this interaction is more likely to occur through the legislative process and the desire for politicians to create jobs and claim credit for positive economic outcomes. In contrast, in an authoritarian regime, it is more likely that the executive leadership will drive policy and thus guide interaction with the external actor. In some cases, such as Jordan, it is likely that zones would never have been created without the help and guidance of a foreign actor. For example, without US pressure, zones in Jordan would not have taken the shape they did. In short, the way in which the zone programs are enacted is mediated by domestic political institutions and, in some cases, the role of external actors.

Table 4.1: Theory Development Cases

	Regime Type	Democracy	Non-democracy
External Support			
No		Mauritius	Sri Lanka
Yes		Dominican Republic	Jordan

Table 1 depicts the four cases based on the two political dimensions of variation. Since all four cases are consistent on the macroeconomic logic, I will discuss those aspects of enactment in each case study but the key differences in the cases are regime type and the presence of an external actor. Thus, the research design is a set of paired comparison by regime type so the comparison is essentially a most similar research design. In each pair, the cases are similar on financial liberalization policy, exchange rate choice, and regime type. The key difference in each of the paired comparisons is whether or not an external actor was significantly involved in the enactment of the zone. For the paired democratic cases, I examine the Dominican Republic and Mauritius. For the paired non-democratic cases, I investigate Jordan and Sri Lanka. I will briefly discuss a few additional commonalities across all cases before honing in on the similarities and differences in the paired comparisons.

All cases have been selected because the global financial system and external characteristics were broadly similar because each country enacted zone programs in roughly the same period. The time period is essentially the 1970s, with the earliest enactor (Dominican Republic) enacting its zone in 1969 and the latest (Sri Lanka) creating its program in 1978. While this may limit some generalizability to other time periods, this choice was made in order to minimize the possibility that external circumstances changed. For example, it could be argued that economic policies in developing country were different during the Cold War than in the post-Cold War era. Also, as discussed in the previous chapters, the 1970s are key time period in which financial liberalization policies increased and signifies the end of the Bretton Woods exchange rate system. Moreover, these early adopters provided the impetus for later adoption by other countries. Each of these countries faced distinct constraints from the global economy but by looking at the same time period, we are able to hold the basic structure of the global economy constant. Moreover, it would be inappropriate in this first stage to compare zones of the 1970s to the zones of today given the enormous changes in terms of trade, destination and sources of FDI, global supply chains, and other changes in manufacturing and production.

For the democratic cases, I compare the Dominican Republic and Mauritius. Both countries are relatively small island nations that were heavily-reliant on one primary sector, namely the sugar industry. The Dominican Republic transitioned to democracy in 1966[27] and enacted its first export-processing zone soon thereafter, in 1969. Similarly, Mauritius became an independent democracy in 1968.[28] Mauritius enacted its first EPZ in 1971. In both cases, the countries had recently democratized and the EPZ program was officially enacted within five years of the transition (or decolonization) which lead to democracy. In terms of differences, in Mauritius, the idea for an EPZ may have come from an outside source, but the program itself was driven primarily by internal domestic politics. In the case of the Dominican Republic, the first zone was granted to a foreign company and this prompted the Dominican Republic to pursue SEZs more broadly.

For the non-democratic cases, Jordan and Sri Lanka were selected. Both countries faced serious security challenges. In the case of Jordan, various conflicts between Israel and other Middle Eastern countries made the overarching security environment in the region problematic. Unlike its neighbors in the Gulf, Jordan had not found any oil reserves within its territory so it was not able to use those funds to develop in the way that Saudi Arabia or other countries in the region did. In Sri Lanka, the civil war was a significant challenge to the country's economic development but despite the tenuous security environment, the government moved forward with enacting its

27 Both Cheibub, Gandhi and Vreeland (2010) and Boix, Miller and Rosato (2012) code the transition from non-democracy to democracy as 1966. The Polity score for the Dominican Republic is less clear cut; using the revised 20 point scale, the country moved from quite democratic in 1962 to less so from 1963 to 1977 and did not more fully consolidate democracy until 1978. However, using the minimalist threshold of CGV and BMR, the country is categorized as a democracy for our purposes.

28 Again, Cheibub, Gandhi and Vreeland (2010) and Boix, Miller and Rosato (2012) concur on this as the year in which Mauritius became democratic. Polity codes the country as a 9 on its 10 point democracy scale, remaining at that score until 1982, when the country was judged to be a 10 on this scale.

zone program in 1978. In the case of Jordan, the United States has had substantial involvement in various iterations of zone programs, which was due to security and geopolitical calculations vice profit motives from firms. For the US in Jordan, many of the policies enacted were about geostrategic calculus, which may actually make the enactment process in Jordan far more similar to the zones in Taiwan in the 1960s when the US managed economic aid to Taiwan in the interests of supporting a Cold War ally. In contrast, the Sri Lankan civil war made many external actors hesitant to invest in the country or work with the government in charge. However, the enactment of zones was intimately tied to larger changes to the political system driven primarily by domestic imperatives.

4.4 Democratic Development

The first set of cases are the democratic ones: Mauritius and the Dominican Republic. Mauritius is relatively prominent in the development economics literature,[29] and is often touted because of the maintenance of its democratic system and relatively successful economic growth after decolonization. Mauritius helps us examine how international constraints (financial and exchange rate policy) combine with regime type in order to increase the likelihood of using special economic zones. It is also an effective case because external actors were not prominent, allowing us to focus on the key variables identified in the empirical study - financial liberalization, fixed exchange rate, and regime type. In contrast, the Dominican Republic, which remains one of the earliest zone programs, had similar basics to Mauritius but external actors were critical in EPZ development. Both nations are island economies previously dependent on the sugar industry, both moved from a relatively closed financial system to a more open one, each utilized a fixed exchange rate regime, and both were

29 See Kearney (1990); Rodrik (2007); and Sandbrook (2005).

democratizing during the same time period in which they enacted their first zone programs. While Mauritius enacted SEZ policy without extensive external involvement, development ideas did emanate from abroad. However, in the case of the Dominican Republic, there was direct involvement from the United States in the form of both public and private entities.

Thus the comparison here is between countries with similar macroeconomic conditions, policies, and regime type but a difference in the involvement of external actors, which is not easily examined with quantitative data. Thus, I begin with Mauritius.

4.4.1 Democratic Demand for Employment: Mauritius

The case of Mauritius explains how international constraints and regime type shaped economic policies in the country and how the initial export processing zone (EPZ) policy was created as a means to generate employment for important electoral constituencies. Mauritius fits the classic model of unlimited labor supplies as originally described by Lewis (1954)[30] and is often characterized as a democratic darling of development. For example, Rodrik (2007) describes how the "case of Mauritius illustrates nicely how participatory democracy helps build better institutions that lay the foundation for sustainable economic growth."[31] Moreover, SEZs have been a key component of the country's development strategy since soon after independence. I will first discuss the international conditions at the time of independence and prior to enactment. I will then describe how elements of the political system resulted in a "two-track strategy" of development.[32] I conclude the Mauritius case with a discussion of how important ideas were in the country's ability to forge its own unique path for SEZs.

30 Like Lewis' home country of Saint Lucia, as a colony, Mauritius was dominated by the sugar industry.
31 Rodrik (2007, 166).
32 Rodrik (2007, 167).

Mauritius received its independence from the United Kingdom on 12 March 1968.[33] Because of this colonial history, Mauritius had access to the European market and experienced a sugar boom in the mid-1970s.[34] However, the sugar industry was not sufficient for keeping up with the growing labor force and need to create jobs. In order to develop a manufacturing industry, in 1970, the parliament passed the Export Processing Zone Act of 1970 in order "to provide additional incentives that would stimulate entrepreneurial activity and attract foreign capital investment . . . with preferential access to European markets."[35]

In terms of the exchange rate, prior to the country's independence in 1968, the official currency was the Mauritian rupee, which was pegged to the British pound through a currency board.[36] During decolonization, the country maintained a dual market, in which a link was maintained to the pound.[37] Basically, from 1967 until 1976, a peg to the pound was maintained, which corresponds to a fixed exchange rate during the initial period of SEZ enactment.

In terms of financial openness, Mauritius perfectly fits the logic of a country that would like to open to foreign investment but is afraid to do so in a wholesale fashion. However, this level of nuance is not necessarily captured in the primary quantitative financial indicator, the Chinn-Ito scale, which is one reason these case studies complement the cross-national empirical analysis. As Figure 1 shows, according to the Chinn-Ito Financial Openness Index, throughout the 1970s the Mauritian financial system remained closed. During the previous decade the government of Mau-

33 The country remained a part of the British Commonwealth but formally joined international organizations such as the United Nations on that date (EISA 2009).

34 EISA (2009).

35 EISA (2009).

36 Unless otherwise noted, all information in this paragraph is drawn from Ilzetzki, Reinhart and Rogoff (2017). The Levy-Yeyati and Sturzenegger (2005) data for Mauritius only begins in the mid-1970s but based Ilzetzki, Reinhart and Rogoff (2017), the exchange rate was fixed at the time Mauritius enacted its zone programs. A summary of Mauritian exchange rate policy from 1878 until 2016 is listed on Ilzetzki, Reinhart and Rogoff (2017, 82), by time period.

37 Ilzetzki, Reinhart and Rogoff (2017).

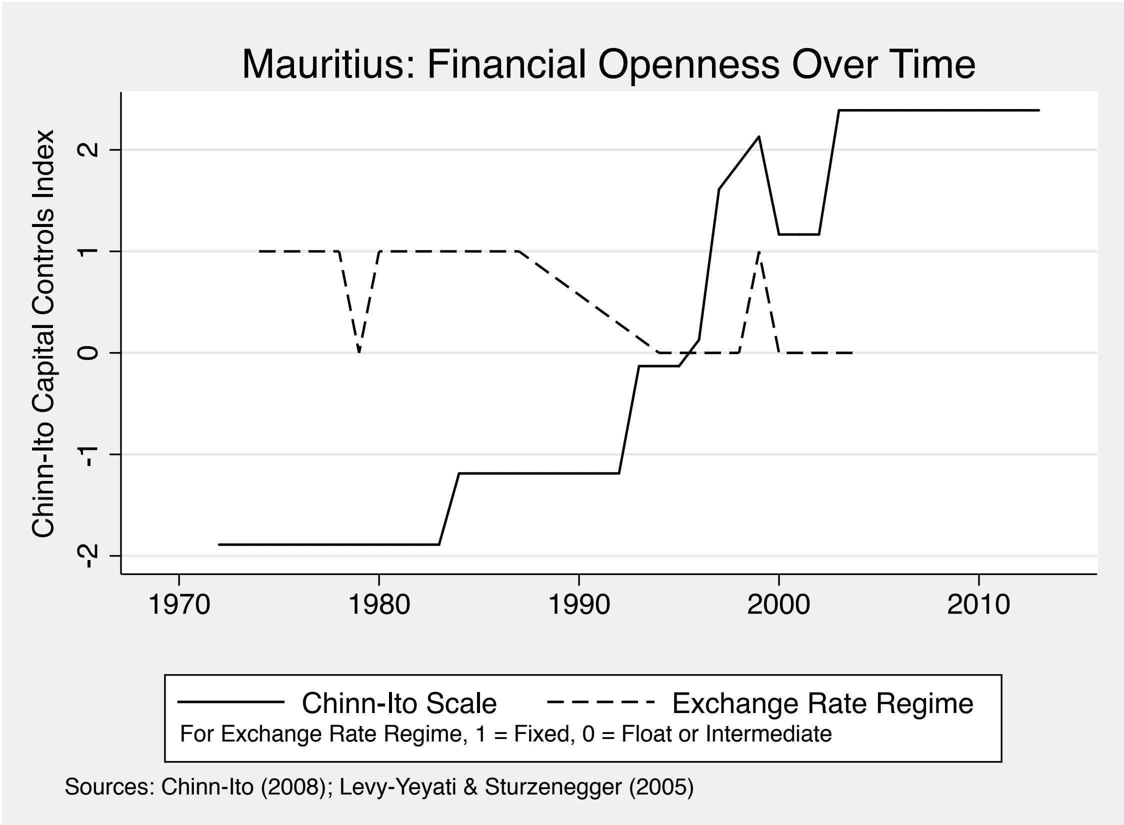


Figure 4.5: Mauritius: International Constraints

ritius was pursuing "an import-substitution development strategy meant to decrease the economy's heavy reliance on sugar exports."[38] Under the colonial regime, "import-substituting industrialists . . . [were] propped up by the restrictive commercial policies . . . [and] these industrialists were naturally opposed to relaxing the trade regime."[39] In terms of financial liberalization, Rodrik asserts, "A Washington economist would have advocated across-the-board liberalization, without regard to what that might do to the precarious political and social balance on the island."[40] However, in the interests of balancing export and import interests, and maintaining exchange rate stability, "the Mauritian authorities chose the two-track strategy."[41]

38 Baissac (2011, 228). In the late 1960s and early 1970s, sugar accounted for approximately 75 percent of the country's exports.
39 Rodrik (2007, 167).
40 Ibid.
41 Ibid.

In essence, the two-track strategy was to liberalize the trade regime with "an export-processing zone (EPZ) operating under free-trade principles"[42] while also appeasing sugar-related industrialists by keeping large portions of the domestic sector protected. The use of an EPZ achieved two goals. First, the EPZ "enabled an export boom in garments to European markets and an accompanying boom at home."[43] Second, the EPZ created jobs, partially through the segmentation of the labor market. In the late 1960s, unemployment in Mauritius was "more than 20 percent and the labor force [was] growing at 3 percent per year."[44] Import substituting industries, which primarily employed males, remained protected while the the new EPZ employed primarily female workers.[45]

The Role of Democratic Institutions and Ideas from Abroad

Because the EPZ was combined with protectionist policies in the rest of country, Rodrik argues that "there were no identifiable losers."[46] The notion that in a newly emerging democracy there were no "losers" entirely ignores the question of who the winners were. Prior to independence the Mauritian economy was heavily dependent on the sugar sector receiving revenue from this source but unemployment in 1968 reached nearly 20 percent.[47] The first set of elections in Mauritius took place before formal independence on 7 August 1967 with the Independence Party (IP) winning 55.1 percent of the vote against the separatist-leaning *Parti Mauricien Social Democrate* (PMSD).[48] The

42 Rodrik (2007, 167).
43 Ibid.
44 Baissac (2011, 228).
45 Rodrik (2007); Sandbrook (2005).
46 Ibid.
47 Sandbrook (2005, 554).
48 Electoral Institute for Sustainable Democracy in Africa, "1967 Legislative Assembly Election Results Overview," http://www.content.eisa.org.za/old-page/mauritius-1967-legislative-assembly-election-results-overview, updated May 2010.

IP was an alliance of the Mauritian Labor Party (MLP), the Independent Forward Block, and the Muslim Action Committee (CAM). The MLP built its reputation on a conciliatory and communal platform vice an ethnically-based one.[49] Given the ethnic cleavages and competitive elections the IP alliance needed to secure the support of more than a narrow elite.

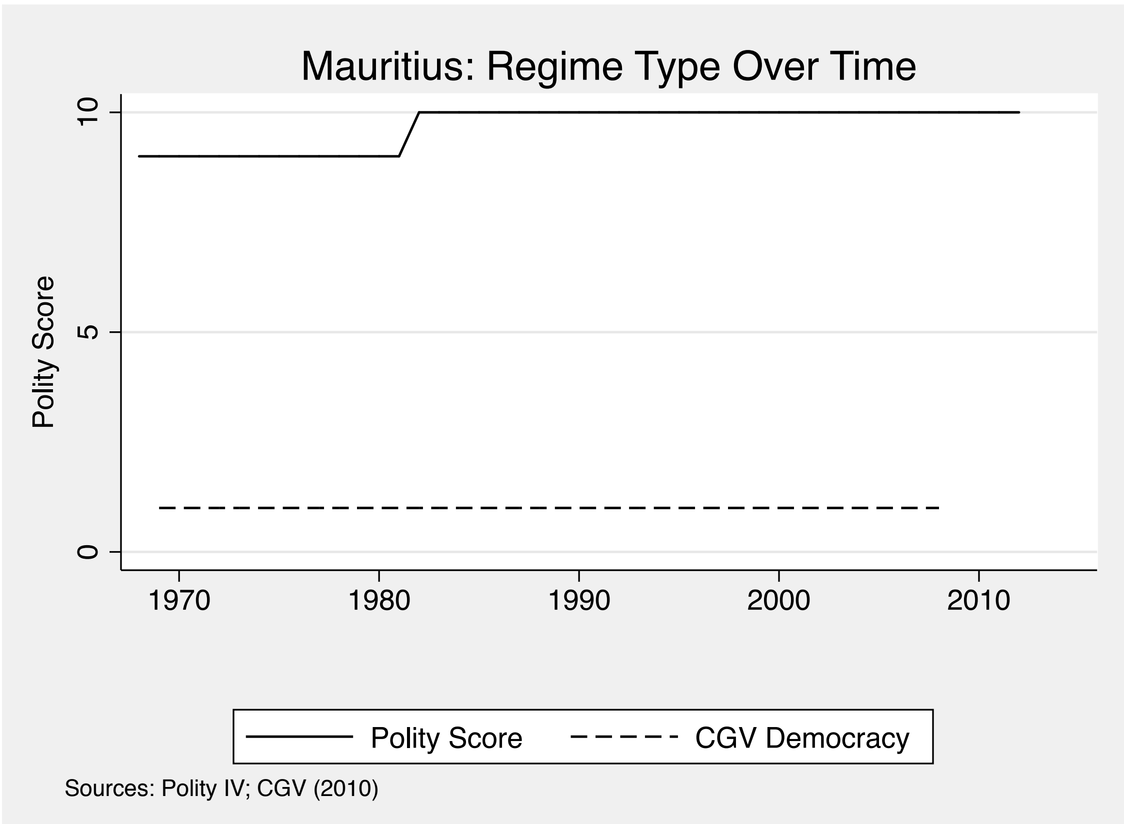


Figure 4.6: Decolonization into Democracy: Mauritius

While it is not exactly clear who first promulgated the idea for the zone, there was considerable debate about who should be recognized. Some give credit to a Swiss-Mauritian entrepreneur, Jose Poncini, and others claim it was University of Mauritius Professor Lim Fat after a 1969 trip to Taiwan. Regardless, the ruling coalition quickly embraced the idea.[50] The next elections were scheduled for 1972 and the major political factions wanted to secure support among a broader por-

49 Sandbrook (2005, 561).
50 Baissac (2011, 228).

tion of the electorate.[51] To remain consistent with the creation and enactment timeline describing in the theory chapter, the key period of interest is between the election of 1967 and November 1970, when the Export Processing Zones Act was passed. During this time, a new party formed from "frustrated, semi-educated young Mauritians" and political leaders in both the MLP and the PMSD feared that the *Mouvement Militant Mauricien* (MMM) would be able to command a large share of the vote in the next elections.[52] MMM successfully organized trade unions and the PMSD, now in a coalition with the MLP, demanded support for the EPZ law to support labor-intensive production and thus reduce unemployment.[53] In contrast with this broader coalition, the sugar sector was more ideologically homogeneous and less likely to be swayed by tactical redistribution alone.[54] The broader electorate was ideologically (and ethnically) heterogeneous and the ruling parties feared that promises made by the newly formed MMM would siphon votes away from them. Moreover, the poorer segment of society - especially the large portion of unemployed workers - were amenable to promises of tactical redistribution. Thus, the EPZ was one component of an "economic policy realignment" meant to broaden the MLP and PMSD's electoral support.[55]

In this way, the new demands of electoral democracy directly influenced SEZ policy. In order to meet growing demand for jobs, politicians needed to pursue a policy that appeared to be creating jobs - even if this jobs were primarily low skill and disproportionately went to female workers - in order to gain electoral support. Had a democratic system not been put in place post-

51 The 1972 were postponed after the IP alliance split and the Labor Party formed a coalition government with the PMSD (EISA 2009).
52 Houbert (1981, 99).
53 Baissac (2011, 228).
54 Some sources claim taxes on the sugar sector funded investment in the EPZ but upon further research those taxes were implemented in 1975 which is after the period of interest for this analysis. However, the logic is consistent with a policy intended to tax a core constituency in order to transfer those funds to swing voters employed in the SEZ who would likely be receptive to material benefits. Given the tax law's passage in 1975, prior to the 1976 elections, this may have been more top-down pork.
55 EISA (2009).

independence, the narrow political elite may have simply continued to cater to sugar interests on the island. Instead, enacting an SEZ policy allowed political leaders to bifurcate the economy and cater to the interests of both the broader electorate as well as a more narrow elite.

4.4.2 The Dominican Republic: Private Interests Drive Development

The Dominican Republic (DR) is an example of the intersection of financial liberalization, exchange rate policy, and regime type in determining the propensity to utilize SEZs as part of its development policy. Contrary to the conventional wisdom that authoritarian regimes are more likely to use SEZs, the DR was a democracy at the time of inception and continues to be so today. Like the macroeconomic theory predicts, during early enactment, the Dominican Republic's financial system was relatively closed but trending towards liberalization. This trend towards financial liberalization accelerated after 1990, which coincides with the second phase of SEZ development. Moreover, according to analysts at the World Bank, "the Dominican Republic is probably the Western Hemisphere's most widely recognized success story in the literature of free zones . . . few other countries worldwide have used the free zones program as effectively as an engine of diversification and growth."[56]

Figure 4.7 depicts changes in the Dominican Republic's exchange rate and capital account openness over time. Unfortunately, the Chinn-Ito financial openness index only begins in 1970 but the economy was relatively closed prior to this time period. Moreover, the exchange rate remained key to 1960s-era policy focused on ISI and a shift away from the US-dominated trade regime. In the early 1990s, after a period of economic stagnation, the DR once again shifted to a focus on trade liberalization. The DR adopted an export-oriented growth strategy and chose to move more

56 Burgaud and Farole (2011, 159).

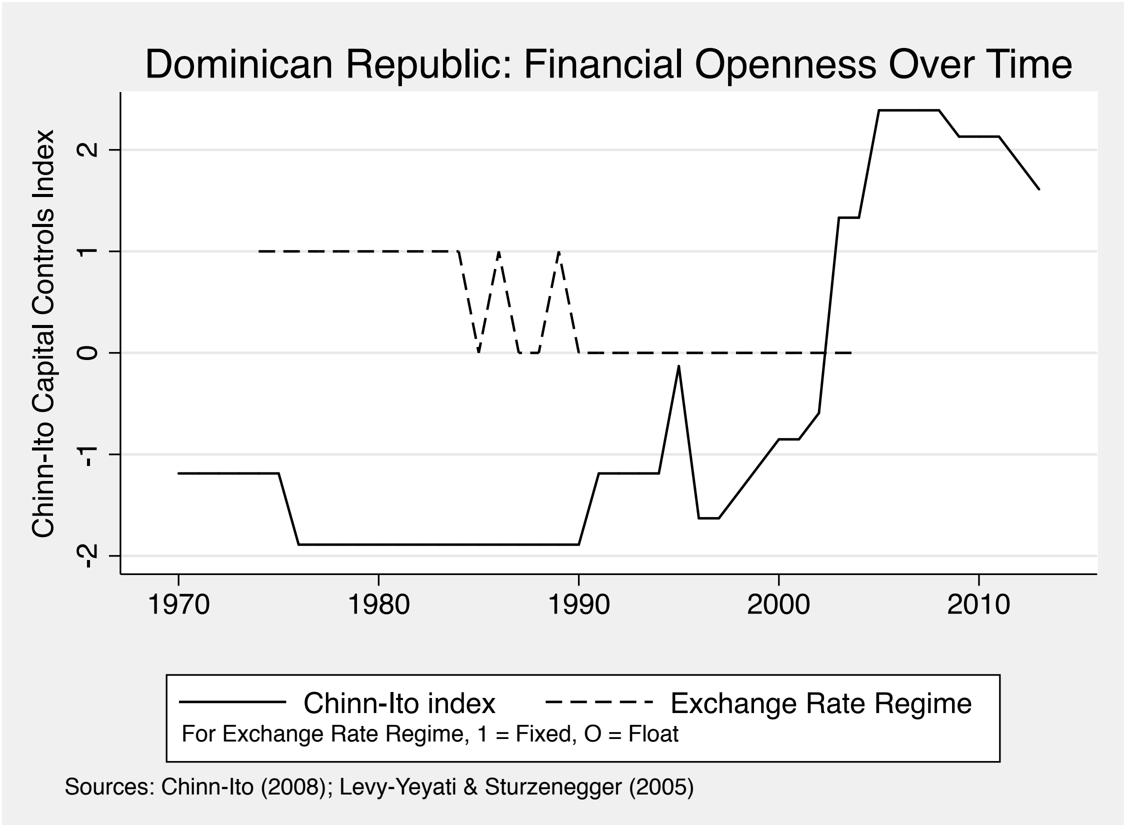


Figure 4.7: The Dominican Republic: Financial Policy in the Era of SEZs

closely to US policy, culminating in the signing of the US-Central American Free Trade Agreement (CAFTA).[57] After 1990, financial liberalization accelerated and by the mid-2000s, the DR was one of the most open economies globally with a Chinn-Ito score of over 2 until after the 2007 global financial crisis.

International Conditions: Late 1960s

The initial legal framework for establishing zones in the Dominican Republic is Law No. 299 on Industrial Protection and Tax Incentives, which passed in 1968. This law was further amended in 1983 as the Law No. 145 on Foreign Investment Tax Incentives.[58] Unlike countries that explicitly

57 The USTR refers to this extension of the trade agreement as CAFTA-DR.
58 UNCTAD (2003); Burgaud and Farole (2011).

passed a special economic zone law during this time frame, such as Bangladesh,[59] the original law in the DR was much more vague and did not explicitly create the framework for EPZs per se. Burgaud and Farole (2011) note that Law 299 "was really an import-substitution vehicle - it did not specifically define an FZ regime, rather it established the zero tax incentive package for companies who exported at least 80 percent of their production."[60] What transformed this law into one which established the legal foundation for an EPZ was the role of an external investor, in particular a private American company looking to expand its operations.

Classifying regimes type is problematic and does, at times, complicate case selection. However, since the foundation of this project is the cross-national empirical study, I had to rely on standard measures of democracy. Figure 2 depicts the two most prominent measures of democracy in political science for the Dominican Republic. The dashed line represents the Cheibub, Gandhi and Vreeland (2010) binary measure, which codes the DR as a democracy for the entirety of the period under study in the cross-national study (1970 onwards). According to this measure, the Dominican Republic became a democracy in 1966 so the 1968 law, which paved the way for free zones, was a key legislative endeavor of the new democracy.[61] The Polity measure, in contrast, depicts the regime in the DR as non-democratic since the rating in the late 1960s and early 1970s is less than zero. According to Polity, the DR does not fully achieve democracy until 1991, when the country completed a series of reforms.[62] Part of the problem with classifying the DR, is the role of former president Joaquin Balaguer. Balaguer served under the dictator General Trujillo but, in

59 Since the 1990s, most democracies specifically pass an SEZ law and non-democracies promulgate some sort of official decree, which establishes the legal authority for the zone program.

60 Burgaud and Farole (2011, 180, footnote 2).

61 Cheibub, Gandhi and Vreeland (2010).

62 Marshall, Jaggers and Gurr (2011). See http://www.systemicpeace.org/polity/dom2.htm, last accessed 16 October 2017, for a graphic depiction of the shift in regime type for the DR over time (from 1946-2013).

1966, Balaguer "was elected in one of the Dominican Republic's first freely contested elections."[63] Opposition parties boycotted these elections but for our purposes here, Balaguer began to usher in a more democratic period in the DR, even if he did at times rule "with an iron first, particularly during his first 12 years in office."[64]

Balaguer is a key actor in this story because, as the first president elected after the Trujillo era, he was struggling to reconcile the demands for pro- and anti-Trujillo forces in the country. During the 1950s and 1960s, like many other Latin American countries, the DR focused on import-substituting industrialization (ISI).[65] In particular, Rafael Trujillo, the country's dictator until 1961, "exploited his position to become the country's main investor, controlling over 80 percent of Dominican industrial production at the end of his reign."[66] When Balaguer came to power in democratic elections, he wanted to appeal to anti-Trujillo factions but was also "wary of losing customs revenue and the support of infant industry, and therefore hoped to maintain, or perhaps intensify, ISI."[67] According to Schrank (2003), in the US "the Johnson administration had originally hoped to encourage 'production sharing' between Puerto Rico, the Dominican Republic, and the United States, and had therefore counseled economic liberalization and free trade."[68] Despite the hopes for economic integration for US protectorates in the Caribbean, the US Agency for International Development (USAID) argued that it was better to allow incentives for select industries to receive benefits, even if they were not the most useful, and "therefore decided to permit the 1968 implementation of Industrial Incentive and Protection Law 299."[69] Balaguer's policies were rela-

63 Kershaw (2002).
64 Kershaw (2002).
65 Hirschman (1968).
66 Moberg (2014, Chapter 2, 14).
67 Schrank (2003, 95).
68 Schrank (2003, 95).
69 Schrank (2003, 95).

tively protectionist but Law 299 created the legislative framework that would be used by private companies to create and inculcate SEZs in the Dominican Republic.

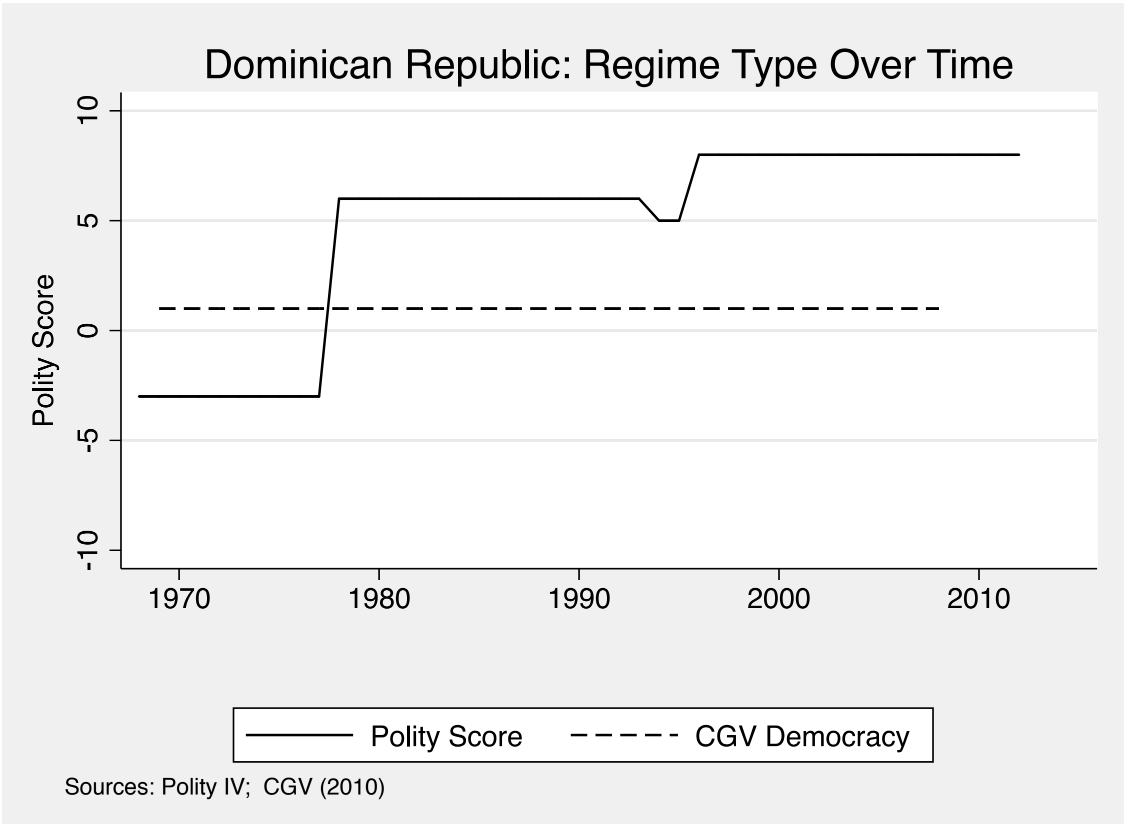


Figure 4.8: The Dominican Republic: Regime Type Over Time

Unlike the other case study of external involvement (Jordan), the external actor most heavily involved in early SEZ policy in the DR is a private entity. Instead of development institutions such as USAID or the World Bank encouraging the creation of SEZs, the first EPZ in the Dominican Republic was a private, not a public affair. After the purchase of a large sugar mill, "Gulf & Western of the Americas established the Dominican Republic's first export processing zone in the southeastern sugar town of La Romana in 1968."[70] Gulf & Western was created out of a series of other companies but was officially incorporated as Gulf & Western, Inc. on April 18. 1967. Trad-

[70] Schrank (2008, 1388).

ing in goods as diverse as coffee, auto parts and mining, the company continued to expand and acquire other firms throughout the 1960s. Acquisitions in the 1960s ranged from the Paramount movie studios to cigar manufacturers but included a small sugar mill in the Dominican Republic. According to a history of Gulf & Western, in 1967, the CEO Charles Bluhdorn's "fondness for commodities again surfaced when Gulf & Western paid $54 million for South Puerto Rico Sugar Sugar Company." This history goes on further to describe how:

> Most of the company's operations were in the Dominican Republic, where it owned the extensive Romana sugar mill and 300,000 acres of land. Nearly half of the land was used to produce sugar cane and, at the peak of the cane-cutting season, the company employed 19,000 people, making it the country's largest private employer as well as the largest taxpayer and landowner.[71]

While the operations were initially focus on sugar production, Gulf & Western soon began establishing manufacturing facilities as well. The establishment of an American MNC on the island prompted "a host of North American investors" to invest in the new EPZ and "the city of La Romana experienced an unprecedented economic recovery."[72] Soon other cities, such as San Pedro and Santiago, began pushing for their own EPZs.[73] By the 1980s, EPZs were approved by the government and in operation in La Romana, San Pedro, and Santiago. However, despite similar goals, the management of each zone was distinctly different. La Romana remained private and operated by Gulf & Western. San Pedro, another city known primarily for the sugar industry, was publicly-owned. According to Schrank (2008), "the San Pedro zone was owned and operated by the government's Industrial Development Corporation and appealed to investors whom Gulf & Western had been unable to accommodate in La Romana."[74] Alternately, the Santiago EPZ was run by a not-for-profit corporation, which is one of the more uncommon choices for EPZ

71 *Gulf & Western Inc.* (1988).
72 Schrank (2008, 1388).
73 Schrank (2008, 1388).
74 Schrank (2008, 1389).

management.[75] Despite the relative success of the EPZ in La Romana, Gulf & Western's operations were not without controversy. In 1975, the US "Securities and Exchange Commission charged the company with illegally withholding more than $38 million in profits owed to the government of the Dominican Republic."[76]

International Conditions: Renewing the Zones in the 1990s

Despite controversy with Gulf & Western profits and other challenges, SEZs grew to become an important part of the DR economy. In the 2000s, approximately 80 percent of the country's total exports emanated from zones. By 2005, over 46 percent of the companies operating with the DR's free zones were American with an estimated $978 million in invested capital.[77] American companies were responsible for nearly half of the invested capital in free zones (49 percent) while domestic Dominican firms were responsible for nearly 24 percent of invested capital in the free zones.[78] Other prominent investors included South Korea, Puerto Rico, and Spain, highlighting the importance of garment manufacturing enterprises in the case of the former (South Korea) and cultural and language similarities in the case of the latter two. By the mid-2000s, 55 zones were active in the country [79] in a variety of sectors including textiles, tobacco, medical equipment pharmaceuticals, and electronics.[80]

The spark to re-ignite SEZs as a key component of the Dominican Republic's development strategy came after the country's sugar resources were exhausted in the 1980s.[81] Given the promi-

75 Most zones in non-democratic countries are publicly-run. Democracies often use public and privately-owned SEZs. Both regime types are increasingly utilizing public private partnerships (PPPs) but non-profit owners remains relatively uncommon.

76 *Gulf & Western Inc.* (1988, 452).

77 UNCTAD (2009, 13, Table 1.4).

78 Ibid.

79 UNCTAD (2009, 12).

80 UNCTAD (2009, 13).

81 Rodrik (2007).

nence of sugar in the DR economy, the lack of exports had a huge impact on both the economy and government revenues. At first, the government sought to re-focus on the SEZs in order to deal with the lack of revenue from the sugar industry. In January 1990, the National Congress passed Law No. 8 of 1990, which sought to "promote a policy of increasing employment by stimulating the creation of new enterprises, whose production is aimed primarily toward the export market."[82] As with many other Latin American countries, the 1960s-era focus on ISI later shifted to acceptance of the export-led growth model. However, while the DR already had a series of both public and private SEZs, the 1990 law once again viewed SEZs as a way "to stimulate the establishment of *new* Free Zones and the growth of the existing ones . . . to achieve goals consistent with the national interest, through the concerted action of the public and private sectors."[83] As Rodrik (2007) argues, small-scale reforms such as the creation of SEZs, can be effective but typically only boosts growth for a short time period. DR leaders had seen success with SEZs and EPZs in the early 1970s so when growth slowed and the country needed new employment opportunities, democratic leaders once again turned to the same method that had generated growth previously.

However, the focus on free zones proved to be insufficient in the short run. A year after the *Promotion of Free Zones* law, a "balance-of-payments crisis erupted in 1991, and the country dealt with it swiftly and made modest structural reforms: a unification of its exchange rate regime and some trade liberalization."[84] SEZs were one step towards liberalization but since they proved insufficient, the DR sought to undertake more widespread reforms. Reforms included an "IMF intervention in 1991, [which] led to the adoption of the New Economic Program, a stabilization and

82 National Congress (1990).
83 National Congress (1990, Chapter 1, Article 1). This version of the free zone law was provided in English by the National Free Zones Council (CNZFE). See also http://drlawyer.com/francais/law-no-8-90-on-the-promotion-of-free-zones-official-gazette-9775-january-15-1990/, accessed 13 October 2017, for another translation.
84 Rodrik (2007, 81).

structural reform programme oriented to achieve macroeconomic stability and restore economic growth."[85] SEZs alone were not sufficient to achieve economic goals but did remain one tool to foster growth and increased in size and scope over the next 15 years. As Figure 1 shows, the level of financial openness increased dramatically in the Dominican Republic after 1991.[86] The trade liberalization measures undertaken after the balance-of-payment crisis included a series of measures to open the capital account and create further incentives for FDI. According to the 2009 UNCTAD Investment Policy Review, "In 1995, the Dominican Republic opened almost all economic sectors to FDI and granted it national treatment."[87] Prior to that time, nearly all "FDI was primarily directed at free zones (mostly textile and garment production) and tourism."[88] So, while free zones remain a prominent part of the Dominican economy, focusing investment only in the zones became insufficient and prompted the government to increase financial openness to other sectors of the economy.

During this time period, the role of external actors once again becomes important, although private sector entities are not the focus. In addition to financial liberalization policies and openness to FDI, the Dominican government also wanted to pursue of series of free trade deals. In 1998, the Dominican Republic signed an FTA with Central American, which entered into force in 2001,[89] and set the stage for what would become the Central American Free Trade Agreement (CAFTA) between 7 Central American countries and the United States.[90] Moreover, after the 1991 reforms, the Dominican Republic also invested much more heavily in labor laws and compliance

85 UNCTAD (2009, 3).
86 Author dataset using Chinn and Ito (2008) and Chinn and Ito (2005).
87 UNCTAD (2009, 1).
88 Ibid.
89 World Trade Organization (2010).
90 World Trade Organization (2010). The DR signed the agreement in 2004 and it entered into force in 2006. The other members of CAFTA are Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua.

with international labor standards. According to Schrank (2013), labor activists "put pressure on the DR during the first Bush administration by asking the US Trade Representative to investigate allegations of abuse by the sugar growers and exploitation in the EPZs."[91] DR leaders wanted to continue liberalization and believed CAFTA-DR was one way to do so. As such the DR government increased resources for the Ministry of Labor to reduce criticism that free trade and EPZs were not in compliance with international labor standards. In 1991, the DR only had 70 total inspectors for enforcing labor laws and those inspectors had few credentials and little job security.[92] After the substantial trade and financial sector reforms of the mid-1990s, the status of inspectors changed considerably. By 2007, the DR had over 200 inspectors, recruited via a competitive examination system. Inspectors were also required to hold a law degree and were given civil service protections to help prevent corruption.[93] Thus, as Schrank notes, "the Dominicans have responded to US pressure by turning their traditionally predatory labor ministry into a 'pocket of efficiency' (Evans 1995, 61)."[94]

In the case of the DR, without private external actors, SEZs may not have become a prominent policy instrument. As the macroeconomic theory predicts, there is a correlation between the interactive effect of financial liberalization and the exchange rate and SEZ enactment. However, these conditions were not sufficient to guarantee that zones would be created nor become such an important component of the Dominican political economy. Thus, regime type and the role of external actors were necessary for the policy to actually come to fruition. The democratic government passed DR 299, which laid the groundwork for foreign investment, but had Gulf & Western - a

91 Schrank (2013, 302).
92 Schrank (2013, 303). Data on inspectors is contained in Table 1.
93 Schrank (2013, 303). Data on inspectors is contained in Table 1.
94 Schrank (2013, 303).

private entity - not decided to create the initial zone in La Romana, zones may not have become such a prominent element of the Dominican economy. Thus, while international constraints and macroeconomic factors may predict a higher propensity to enact, the democratic government still had to take a certain number of actions in order to create an investment environment that would attract foreign MNCs.

4.5 Authoritarian Reliance: Jordan and Sri Lanka

The two final two cases - Jordan and Sri Lanka - represent non-democratic cases. Jordan is the third case study and shows the vital importance of external actors in shaping economic policy in a non-democracy. The final case, Sri Lanka, examines a non-democracy where external actors were not heavily involved but where international and domestic constraints still played a key role.

4.5.1 Jordan: Rentier State Origins and Expansion

For the Jordan case, I examine two different programs over several distinct time periods. I do so because change over time provides a more complete analysis than simply examining the initial period of enactment. Officially, Jordan's SEZ began in 1972, with the passage of the "Encouragement of Investment Law No. 53."[95] Thus, in the cross-national dataset the enactment year is coded as 1972 and Jordan remains coded as a one for the remainder of the time period in the dataset. While this coding is accurate and makes coding across countries consistent, it is also incomplete. First, the Aqaba SEZ is only one of many. As of 2014, Jordan had a total of 32 separate zones and two major program types. Second, SEZs in Jordan have evolved over time in a way that a binary variable simply does not capture. After initial construction in the 1970s, the Aqaba Port had

[95] Ministry of National Economy (1974).

a resurgence and key to this economic plan was the creation of the SEZ adjacent to Jordan's only seaport. Later, after the peace accord with Israel, Jordan created the Qualifying Industrial Zones (QIZ) program. Then, after King Abdullah II assumed power in 1999, the Aqaba SEZ once again became the focus of effort, with the help of the US and under the purview of several World Bank and IMF reform programs.[96]

International Constraints: Free Zone Failure

Jordan is a case in which the logic of maintaining a fixed exchange while opening financially holds in one key time period, the late 1990s. However, this was not the case at the initial outset of the zone in the 1970s. As Figure 4.9 shows, the exchange rate was fixed from 1974 (first year in which data from the Levy-Yeyati and Sturzenegger (2005) is available) and remained fixed until 1987, which covers the period of time in which the first two zone programs in Jordan were created. Then, in 1988 the government allowed the exchange rate to float for a short time. In 1989, a *de facto* crawling band was instituted.[97] SInce the crawling band is considered an intermediate category within the Levy-Yeyati and Sturzenegger (2005) exchange rate measure, Jordan's exchange rate regime is categorized as a zero in the binary version of this measure. Then, in September 1995, a *de facto* peg was re-instituted and has remained in place since that time.

Jordan's first free zone began operations in Aqaba in 1973.[98] The legal framework for this zone was put in place a year earlier with the Encouragement of Investment Law No. 53 of 1972.[99] However, unlike the other cases in this chapter, Jordan was not yet in the process of

96 Since this chapter is focused on national-level policy, I do not examine the full history of the Aqaba SEZ. See Chapter 7 for a more detailed explanation of the creation and evolution of Aqaba over time.

97 See Ilzetzki, Reinhart and Rogoff (2017, 65) for a summary of Jordan's exchange rate policies from 1927 to 2016.

98 Kardoosh (2004, 9); Fröbel, Heinrichs and Kreye (1980).

99 Ministry of National Economy (1974).

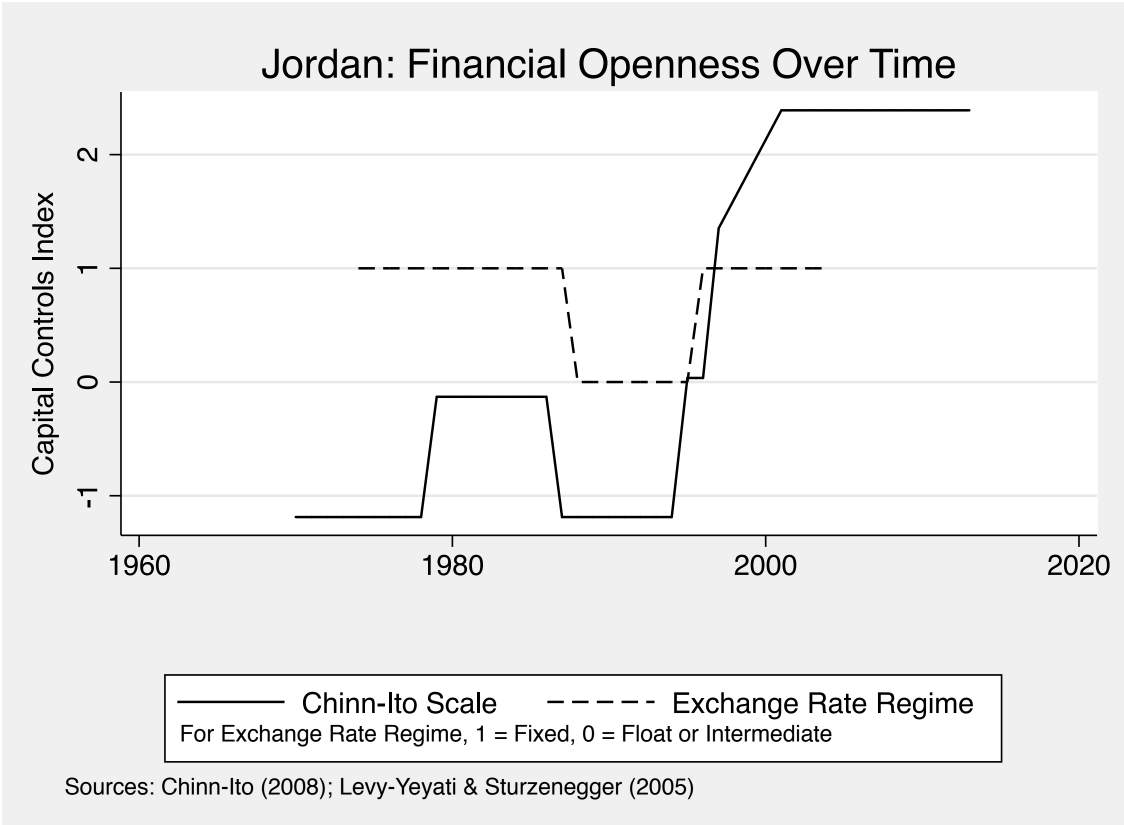


Figure 4.9: Jordan: Financial Policy in the Era of SEZs

opening financially during this initial enactment period. From 1970 until 1978, the Chinn-Ito score remained the same at -1.18, which coincides with a relatively closed financial system.[100] For a short period from 1978 until the mid-1980s, some gradual opening occurred but these policies were reversed after 1987. Coinciding with the 1995 exchange rate policy changes (back to a fixed rate), another round of financial opening policies were initiated and these policies accelerated after 1999, once King Abdullah II officially assumed power. By the 2000s, Jordan had become one of the most open financial systems in the world[101] and these more open policies coincided with the reinvigoration of the Aqaba SEZ and other policies directly sponsored by USAID and the US government.

100 During this same time period, the minimum Chinn-Ito score was -1.89 and the mean was -0.46.
101 According to Chinn-Ito, by the 2000's, Jordan had the maximum score on their scale (2.39).

The Encourage of Investment Law of 1972 established the legal framework for the early free zone but the policies leading up to this decision, as well as increasing involvement from external actors, including regional neighbors and the US, began even earlier. The state that is now modern Jordan was created by the British during its colonial occupation of the Middle East. By the 1960s, though, the British were attempting to withdraw from the region. During this transition, the US became increasingly involved in Jordan, which began "the onset of American dominance in Jordan's economic affairs."[102] In 1962, Prime Minister Wasfi Al Tell came to power and undertook a series of reforms, introducing the government's first five-year plan aided by the World Bank and American economists from the Ford Foundation.[103] By the late 1960s, Al Tell was placing "special emphasis on developing rural areas through roads, schools, health facilities, and moderate land reform."[104] Al Tell called on American officials, include the USAID director in the country to help assist Jordan with this projects, but when US aid did not materialize "Al Tell exploded at the USAID Director . . . accusing the Americans of behaving like the British in the 1950s."[105]

This frustration with external donors provided a reason for re-emphasis on self-reliance and protectionism. Instead of continuing to rely on the British or the Americans, economic policy shifted back to ISI. "Jordan, in the early 1970s, intensified her import substitution industrialization strategy (ISI) that started in the mid-1950s."[106] The Jordanian government, in the early 1970s, created the Three Year Economic Development Plan (for 1973-1975) and laid out further goals for the Aqaba free zone that had been legally established as part of the 1972 investment law.[107]

102 Peters (2009, 169).
103 Peters (2009, 171-2).
104 Peters (2009, 171-2).
105 Peters (2009, 171-2).
106 Harrigan, El-Said and Wang (2006, 265).
107 Ministry of National Economy (1974).

This time period coincides with the era known as Jordan's "rentier era" (roughly 1973 to 1980) because during this period "foreign aid was equivalent to about 30 percent of Jordan's gross domestic product (GDP) on average and as much as 86 percent of government revenue."[108] Specific data on zone financing is unavailable for the initial period in the early to mid-1970s, but official government documents from the 1980s indicate that one-third to one-half of financing for the various infrastructure projects within the Aqaba area were funded by "foreign loans."[109] In the early 1980s, improvements to the port itself and other aspects of the free zone in the vicinity of the road to the airport were made. The Aqaba airport road projects were funded by Iraq through a series of loans disbursed between 1981 and 1984.[110] Construction associated with the industrial area, including the movement of the phosphate terminal was financed by Saudi Arabia.[111]

While Jordan has remained a monarchy throughout the time period under study, there have been changes in the regime that indicate some efforts toward democratization. While still classified as a non-democracy by the canonical binary regime type measures,[112] the Polity Score for Jordan shows that there have been substantial moves toward political liberalization, even if the country has not yet transitioned to democracy. Figure 4.10 illustrates this change over time; despite no change according to one prominent democracy measure (Cheibub, Gandhi and Vreeland 2010), Jordan has moved from a -10 Polity score from 1974 to 1983, which indicates a highly authoritarian regime, to a -3 from 2007 to 2012. A negative score still indicates that the regime is non-democratic but there have been openings for political participation. Ellen Lust-Okar notes that while political parties

[108] Peters and Moore (2009, 270).
[109] National Planning Council (1981, 170, 202).
[110] National Planning Council (1981, 170) The loans for the port upgrades were estimated at 1.25 million Jordanian dinars (JD) and the projects associated with the airport were approximately 1.5 million JD.
[111] National Planning Council (1981, 202). At this time, fertilizers and potash were two of Jordan's largest exports and they needed to increase capacity at the port for these products.
[112] Boix, Miller and Rosato (2012) and Cheibub, Gandhi and Vreeland (2010).

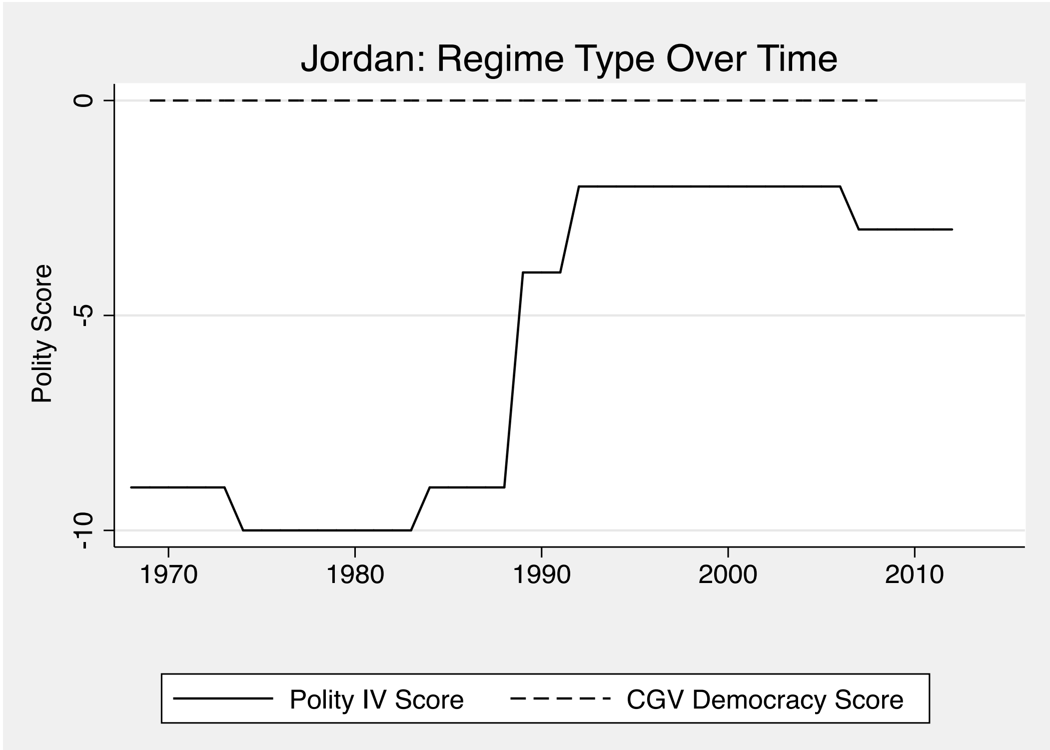


Figure 4.10: Jordan: Democratization without Democracy

in Jordan remain weak, they have not declined since the 1950s. While the party system in Jordan remains similar to that of earlier periods, "political liberalization in Jordan was a defensive move, intended to shore up the monarchy."[113]

Peters and Moore (2009) argue that "the use of Jordan extends the set of rentiers beyond oil and gas exporters to include lower-middle income developing countries that have relied upon a variety of external rents over time, such as development assistance, protocol trade, and security support."[114] Peters and Moore argue that while British aid in the period of state formation were insufficient to establish a true rentier state, in the 1980s, the United States instituted a series of "parallel institutions." Ostensibly, these parallel institutions were meant to aid development in various realms but, through side payments, the various donor aid - whether it is from Iraq, Saudi

113 Lust-Okar (2001, 546).
114 Peters and Moore (2009, 5).

Arabia or the US - had helped to maintain the ruling coalition.

Fostering Peace: QIZs

Despite the high hopes of the Aqaba SEZ, geopolitical events prevented Jordan from fully achieving many of its development goals. However, the next set of zones arose directly because of geopolitical factors. In 1985, the United States and Israel signed a free trade agreement (FTA). The US also continued to try to broker Mideast peace, and found success when Israel and Jordan signed a peace treaty nearly a decade later. On October 26, 1994, the leaders of Jordan and Israel officially signed a peace treaty and in it stated that "the Parties will enter into negotiations with a view to concluding agreements on economic co-operation, including trade and the establishment of a free trade area . . . for the purpose of promoting beneficial economic relations."[115] After the peace treaty was signed, the US decided to further encourage Israel-Jordan economic relations. In 1996, the original Israel FTA was amended with the intention of providing preferential treatment for goods produced in Jordan.[116] HR 3074 defined a qualifying industrial zone as "any area . . . [within] the territory of Israel and Jordan . . . [that has been designated by local authorities as an enclave where merchandise may enter without payment of duty or excise taxes."[117] Thus, Jordan could designate particular areas as QIZs and, if those zones met a series of criteria, they could be sent to the US President for approval for special access to the US market. Essentially, "the idea behind the establishment of QIZs was to foster a sense of prosperity and stability in the Middle East through economic cooperation and employment."[118]

115 Treaty of Peace Between the State of Israel and the Hashemite Kingdom of Jordan, October 26, 1994, Article 7, http://www.mfa.gov.il/mfa/foreignpolicy/peace/guide/pages/israel-jordan%20peace%20treaty.aspx, accessed 26 November 2017.
116 HR 3074, passed by the Senate on September 27, 1996.
117 HR 3074, Section E.
118 Cavanagh (2013, 50).

According to the Jordan Enterprise Development Corporation (JEDCO), the decision for the first QIZ was made entirely by the US. According to JEDCO, the "Establishment of the Qualifying Industrial Zone provision and designation of Al-Hassan Industrial Estate as the first Qualifying Industrial Zone were unilateral actions by the U.S."[119]Unsurprisingly, much like the Arab-Israeli peace agreement itself, QIZs were extremely controversial domestically and rarely attracted local workers. Despite being envisioned as way to encourage Israelis and Jordanians to work together on production in the zones, that is not how the QIZs evolved. In contrast, as one economist notes, "The most important outcome of the [QIZ] agreement which drove the dramatic growth in Jordanian exports [to the US] has been the influx of Asian trans-national producers especially from Hong Kong, Taiwan, and India . . . accompanied by 100-150 thousand workers from China, Sri Lanka, Bangladesh, India, Nepal and other Asian countries."[120]

Several of the zone programs in Jordan, most clearly the QIZs, can be be characterized as "parallel institutions" (Peters 2009), common in a rentier state of this type. Parallel institutions are a form of aid in which an external actor finances and delivers "public goods and services necessary for late development, economic reform, and maintaining basic standards of living."[121] In the case of Jordan, "Parallel institutions allowed the Jordanian government to avoid the painful institutional changes normally undertaken by countries entering late development."[122] QIZs were created and financed by the US, just as early incarnations of the Aqaba free port were financed by loans from Iraq, Saudi Arabia, and the US. As one U.S. Embassy official noted, Jordan is an "oasis in a very bad neighborhood" and thus it sells its strategic position and relative stability to foreign

[119] This statement was listed on the JEDCO website in 2014, but the website is no longer active and thus the link no longer works. JEDCO has now been consolidated under the Jordan Investment Commission (JIC), a new government body created in 2014 to consolidate all government functions related to foreign investment.

[120] Azmeh (2014, 62).

[121] Peters (2009, 3).

[122] Peters and Moore (2009, 271).

actors willing to invest in projects.[123] Those projects are often based on external perceptions of what kind of development needs to take place, but these programs also allow the Hashemite government to maintain its ruling coalition without having to spend their own resources. As Peters and Moore note, "To this day, Jordan's capital expenditures are [still] nearly identical to foreign aid receipts."[124]

True Financial Opening, with the Help of Friends

In the late 1990s, Jordan pursued a variety of measures to open its economy. Following a long period under an IMF economic reform program, "in 1995, the government established the Jordan Investment Board (JIB) to promote domestic and foreign investments and included generous investment incentives."[125] Jordan also decided to join the WTO, in 1999,[126] and then proceeded to sign 35 separate bilateral investment and doubte-taxation treaties.[127] Key to this wave of liberalization was the use of SEZs and, in particular, the reinvigoration of the Aqaba SEZ.

Renewal of the Aqaba SEZ hinged on a variety of domestic changes, as well as significant aid and support from the United States. The first set of domestic changes included a change in the status of the governing bodies for Aqaba. The Aqaba Special Economic Zone Law (Law No. 32 of 2000) put the all "facilities and properties located within the perimeters of the Zone" under the purview of the newly created Aqaba Special Economic Zone Authority (ASEZA).[128] The original organization with control over the area, the Aqaba Regional Authority (ARA), was

123 Personal Interview with U.S. Embassy official; Amman, Jordan; 19 October 2015.
124 Peters and Moore (2009, 271).
125 Abugattas-Majluf (2012, 234).
126 WTO Jordan Accession, https://www.wto.org/english/thewto_e/acc_e/a1_jordan_e.htm.
127 Abugattas-Majluf (2012, 234).
128 *Aqaba Special Economic Zone Law for the Year 2000* (2000).

viewed as lacking in power.[129] The new law granted ASEZA a higher status within the Jordanian bureaucracy after the area's upgrade to its own separate governorate in 1990[130] and increased the physical size of the area under the purview of ASEZA.[131]

As with the original Aqaba Free Zone the goals of the SEZ were essentially the same: attract investment and create jobs. However, the support behind this phase of development was much stronger among government officials in Amman and coincided with two other trends during this time period. First, unlike in the earlier era, Jordan did begin making substantial reforms to its capital controls. In 1994, after the Israeli peace treaty was signed, the opposition was "inflamed" and "Islamists and leftists had formed an Anti-Normalization Committee."[132] To keep capital coming in to support the ruling coalition, King Hussein began to liberalize financially. Second, in hopes of fostering the peace agreement and ensuring the stability of the regime, The United States had contributed to development projects early on in Aqaba, but the scope and scale of the projects increased dramatically under ASEZA. For example, "USAID financed Aqaba's first water and sewerage system from 1979 to 1987 and returned to upgrade and expand the system in 1999."[133] Soon thereafter, the US provided approximately $2.25 billion USD in loan guarantees and "since 2001, USAID has invested over $170 million USD in the development of the Aqaba Special Economic Zone."[134]

129 Personal interview with the former head of the Aqaba Regional Authority. Amman, Jordan; 19 October 2015.

130 Prior to 1990, the town of Aqaba was within the Ma'an governorate (Kardoosh 2004). The Ma'an area is known as one of the "restive" parts of Jordan, and includes several tribes that oppose the Hashemite ruling coalition in Amman. Some argue that Aqaba was separated from the Ma'an governorate because leaders in Amman did not want to have to work with local tribal leaders in that area.

131 At its outset, the Aqaba Free Zone was less than one square kilometer of land adjacent to the port. Over twenty years later, the area officially within the purview of the SEZ had grown to approximately 375 square kilometers in total. Early figures are from Ministry of National Economy (1974), and recent size data is from U.S. Agency for International Development (2012).

132 Peters and Moore (2009, 279).

133 Peters (2009, 254).

134 USAID, https://www.usaid.gov/jordan/economic-growth-and-trade, accessed 5 October 2015.

In the 1970s and 1980s, SEZ enactment in Jordan did not coincide with financial opening. In the earlier time period, the country maintained a fixed exchange rate but did not make significant changes to its capital account policies. As such, the macroeconomic theory does not account for the initial enactment in Jordan. However, the resurrection of the Aqaba SEZ in the late 1990s coincides with a period of dramatic financial opening. Jordan is now lauded "as one of the best reformers in the Middle East based on the Washington Consensus."[135] The IMF has argued "that structural reforms have transformed Jordan from an inward-oriented, mostly state-controlled, highly indebted economy to an export-oriented one where the private sector is the primary engine of growth."[136] The first attempts at using SEZs to reform the economy did not work, but more recently, with substantial help from the United States, Jordan's economy has opened financially and done so while maintaining a fixed exchange rate.

4.5.2 Financial Control and Non-Democratic Demand: Sri Lanka

Sri Lanka is a problematic case for the simply categorizations outlined in the theory section. However, for this reason, it is also an important case to show that no one factor causally determines the choice to enact an SEZ policy. Instead, a myriad of factors coalesce resulting in the utilization of this policy tool. In the case of Sri Lanka, neither regime type nor external involvement were determinative but financial liberalization and exchange rate policy were intertwined with efforts to reform the economy and changes made to the fundamental nature of the political system.

One reason Sri Lanka is a problematic case is because on the two dimensions of theoretic interest in this chapter, namely regime type and external support, Sri Lanka does not neatly fit in

135 Abugattas-Majluf (2012, 232).
136 Abugattas-Majluf (2012, 232).

either category. In terms of regime type, binary scales of democracy have Sri Lanka alternating back and forth between democracy and non-democracy. The Polity scale depicts a gradual decline in the quality of democracy since the late 1970s, but the Polity score always remains above four, which indicates that there are at least elections even if they are not always free and fair. In terms of external support, loans from the World Bank and IMF were present and used to aid in the development of EPZs. However, IMF and World Bank do not appear nearly as important as a more general desire to model the economy after more authoritarian countries such as Singapore. Moreover, Sri Lanka's civil war with the Tamil Tigers in the north presented problems for external relations as many countries chose not to do business with Sri Lanka. Thus, while there was certainly some influence from external actors, it was not the defining feature of SEZ enactment nor nearly as important as in the cases of Jordan and the Dominican Republic.

In the next section I will describe initial zone enactment before moving onto a discussion of the international opportunities Sri Lanka took advantage of, as well as the constraints they faced in terms of financial and monetary policy.

Zone Enactment: A Multitude of Factors

Sri Lanka began using EPZs as a core component of its economic development strategy in 1978. Law No. 4 of 1978, which manages the special economic zone programs, was officially passed on March 9 of that year. In the original law, the organization responsible for managing zones was known as the Greater Colombo Economic Commission (GCEC), and this organization was created shortly after the United National Party (UNP) came to power in 1978. In 1992, the SEZ and investment laws were updated and the GCEC's name was changed to the Board of Investment, although the functions of the organization remained the same. The BOI runs all of the country's

SEZs and EPZs while the Ministry of Industries, Science, and Technology manages a series of industrial estates.

As of 2014, Sri Lanka has 16 SEZs, ranging in size from 21 acres to over 2,717 acres.[137] The average size of zones in Sri Lanka is 1.8 square kilometers, but the largest zone in Hambantota is approximately 11 square kilometers.[138] Most of Sri Lanka's zones are publicly-owned and managed by the BOI, but there are also two privately-managed zones created in the 2000s. In terms of the role of SEZs in development, Sri Lanka is considered a successful case of job creation from SEZs. According to Aggarwal (2007), "total employment in SEZs stands at 104,237 which accounts for around 10 percent of the manufacturing employment [and] . . . it is uncertain whether these economies would have been able to create so many jobs . . . in the absence of SEZs."[139]

At the time of zone inception, according to the Cheibub, Gandhi and Vreeland (2010) measure, Sri Lanka was considered a non-democracy. The country was considered democratic from 1948, when it was granted independence, until 1976. In the mid-1970s, a series of events led to political instability and are partially responsible for the unrest in the north by the Tamil Tigers.

Then, in 1978, the same year in which the SEZ law passed, a new constitution was enacted. This new "Gaullist constitution" changed the political system from a parliamentary system to one with a more powerful executive.[140] In fact, these changes to the political structure were intimately tied to Sri Lanka's development objectives. Venugopal (2015) argues that "Sri Lanka's executive presidency was born out of an elite impulse to create a more stable, centralised and authoritarian political structure that would overcome and reverse the negative economic effects of a populist

137 Author dataset and Dias (2011). The map graphic shown in Figure 4.11 was obtained from Dias (2011) and can be accessed at http://www.sundaytimes.lk/110424/BusinessTimes/bt01.html.

138 Author Dataset.

139 In this section, Aggarwal (2007, 7) is also discussing zones in Bangladesh and China.

140 Venugopal (2015, 672).

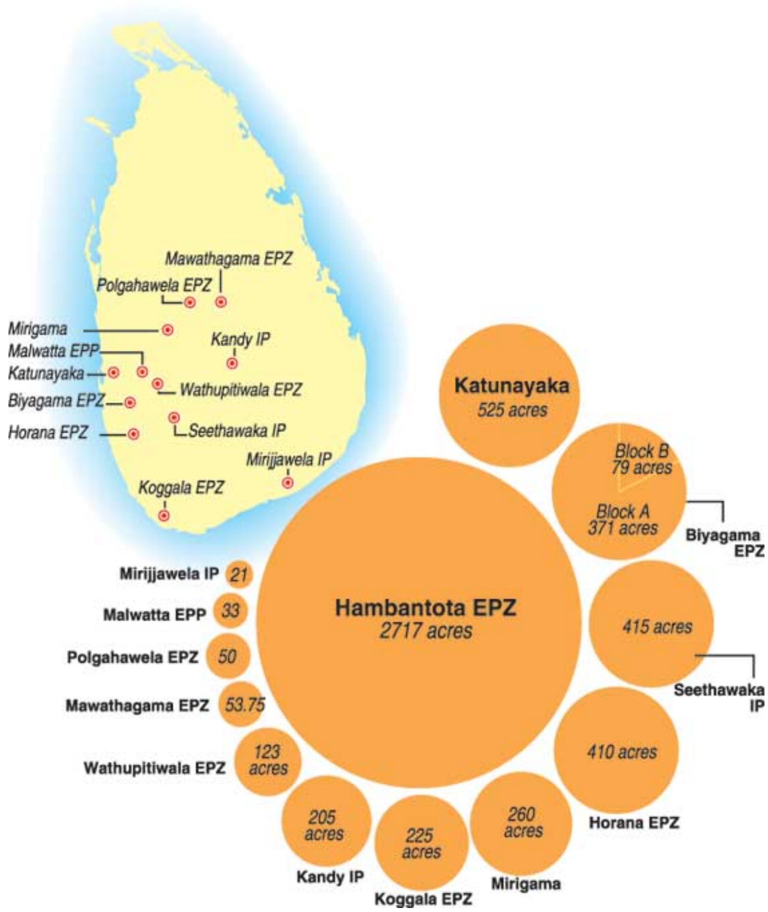


Figure 4.11: Sri Lanka's Zones
Graphic is from Dias (2011).

electoral democracy."[141] Moreover, this goal coincided with the governments opening of financial markets in the 1970s.[142] Not only did some political leaders fear the effect of populist democracy on economic goals but many "elite hoped [the executive presidency would] help revive economic growth under a market-driven development regime."[143]

Amidst major political debates in the 1970s, Sri Lanka's government decided to undertake a series of financial liberalization policies and the political and financial changes made during this

141 Venugopal (2015, 673).

142 Chinn-Ito (2008); see Figure 8 for the graphic depiction. Despite this opening, some capital controls were re-introduced in 1980.

143 Venugopal (2015, 673).

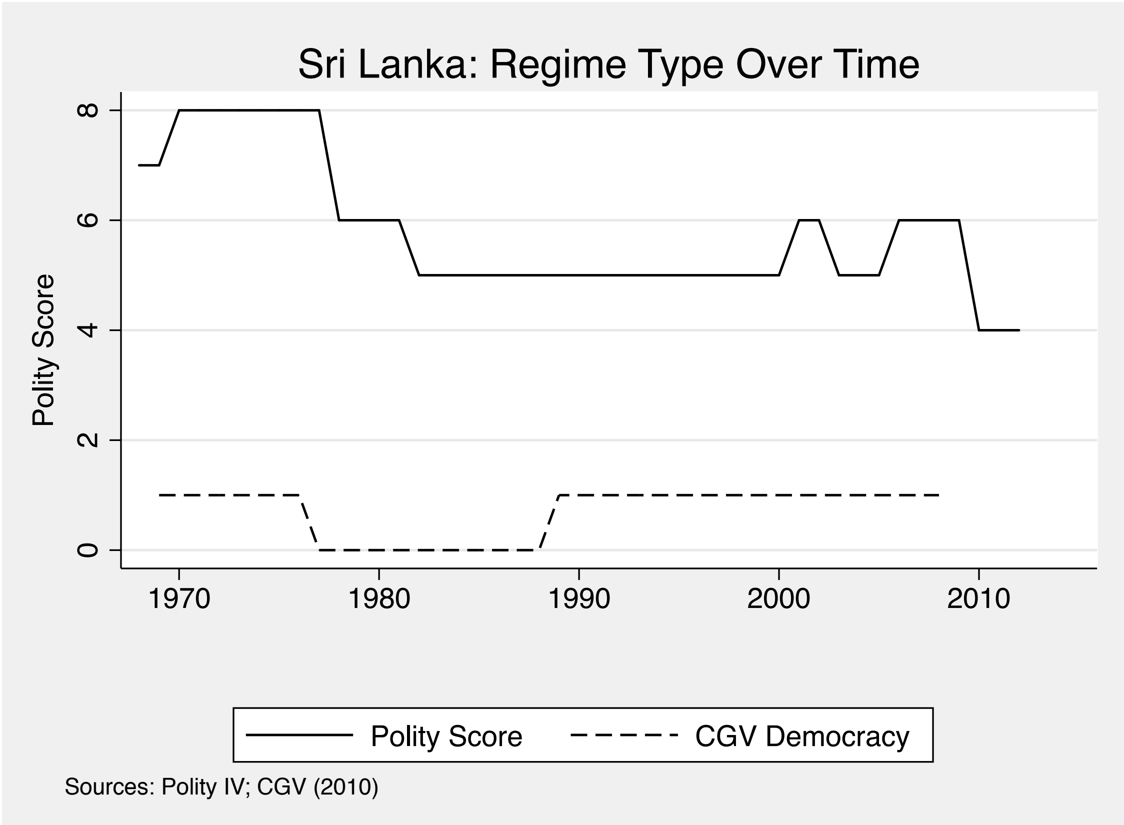


Figure 4.12: Sri Lanka: Regime Type

time are difficult to disentangle. Figure 4.13 shows the Chinn-Ito scale of financial openness for the country from 1970 onwards. From 1970 to 1976, the score for Sri Lank's financial openness was -1.89, which means the economy was essentially closed to foreign capital.[144] In 1976, amidst a variety of political changes that will be discussed below, the country's leaders decided to pursue financial liberalization and a market-oriented reform strategy. However, most of these reforms originated domestically, unlike what occurred in Jordan. According to one scholar,

> . . . simultaneous adoption of a radically different political system and a new economic development regime was an original experiment in its own right and not the prevailing international fashion. Market reforms were also not forced on Jayewardene [head of the ruling UNP and president] by the IMF at the knife-edge of a balance of payments or debt crisis bailout (Venugopal 2015, 677).

[144] Technically the scale is from -2 to 2, but -1.89 represents the minimum value for a country in the dataset in this time period and thus indicates that the economy had significant restrictions on capital flows.

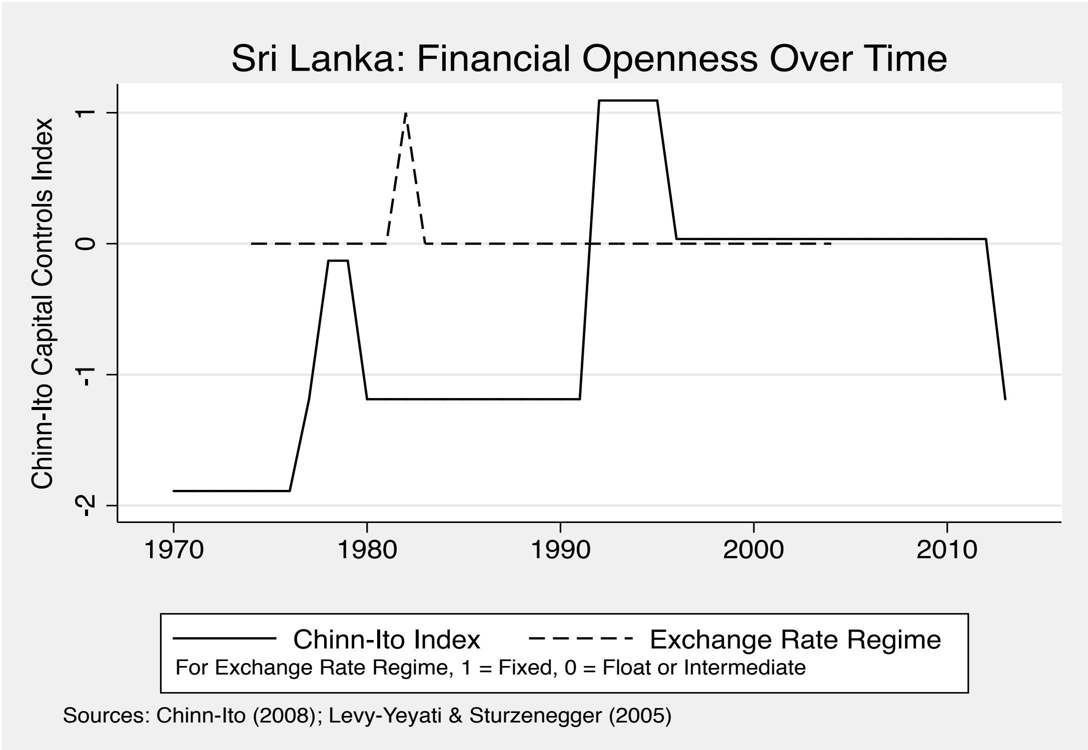


Figure 4.13: Sri Lanka: Financial Control

Despite the lack of direct intervention from abroad, there was certainly a "measure of international inspiration involved."[145] The president that benefit most directly from changes made in Sri Lanka's 1978 constitution, Jayewardene, argued that the United National Party (UNP) was both "a conservative" and "capitalist party."[146] As the Polity scores in Figure 4.12 show, the level of democracy suffered in this period as market-driven financial liberalization increased. However, some of these efforts to liberalize economically preceded the official enactment of the new constitution. Later in the 1980s, both democracy and financial liberalization stagnated.

In terms of currency policy, according to a former Deputy Governor of Sri Lanka's Central Bank, since independence in 1948, Sri Lanka (then Ceylon) had a monetary system in which, "Our currency was tied to the Indian Rupee and the purchasing power of the rupee (which was

145 Venugopal (2015, 677).
146 Venugopal (2015, 678).

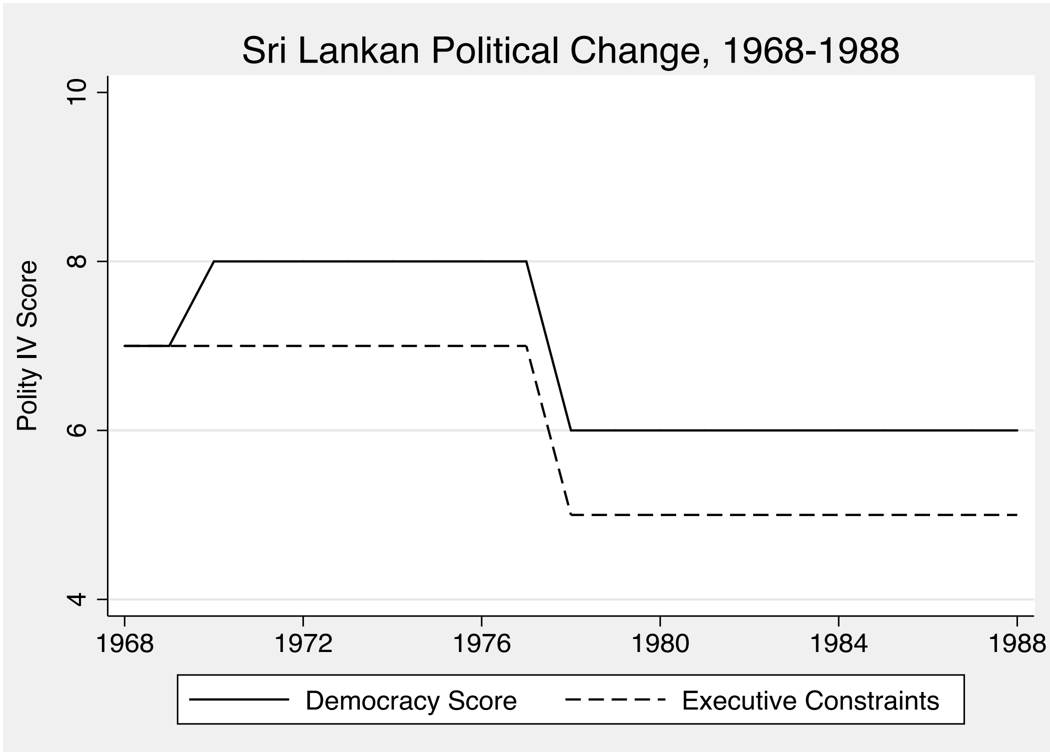


Figure 4.14: Political Change in Sri Lanka

the unit of currency that was adopted by the Currency Board) depended on the value of the Indian Rupee in the world markets."[147] Throughout the 1970s, several changes were made to the way in which Sri Lanka managed its monetary policy. According to Ilzetzki, Reinhart and Rogoff (2017), Sri Lanka maintained the peg to the Indian rupee until the late 1950s, and then changed its target currency to the UK pound. In the early 1970s, the country had multiple exchange rates and a *de facto* crawling band.[148] In 1976, the Central Bank sought to maintain its *de facto* peg but changed the linked currency to the US dollar. Thus, in the period leading up to zone enactment, an intermediate method of fixing the exchange rate was used, even thought the Levy-Yeyati and Sturzenegger (2005) index only considers Sri Lanka's exchange rate to have been *de jure* fixed in 1981. Moreover, the Levy-Yeyati and Sturzenegger (2005) measure masks both the volatility in Sri

[147] Eramudugolla (2004, 1).
[148] Ilzetzki, Reinhart and Rogoff (2017, 112).

Lanka's exchange rate at this time and efforts by the Central Bank to manage its peg. Figure 4.15 below depicts Sri Lanka's exchange rate stability from the period 1968 to 1988. The index was compiled by Aizenman, Chinn and Ito (2010) and higher scores (closer to one) indicate exchange rate stability, whereas lower scores indicate volatility.[149]

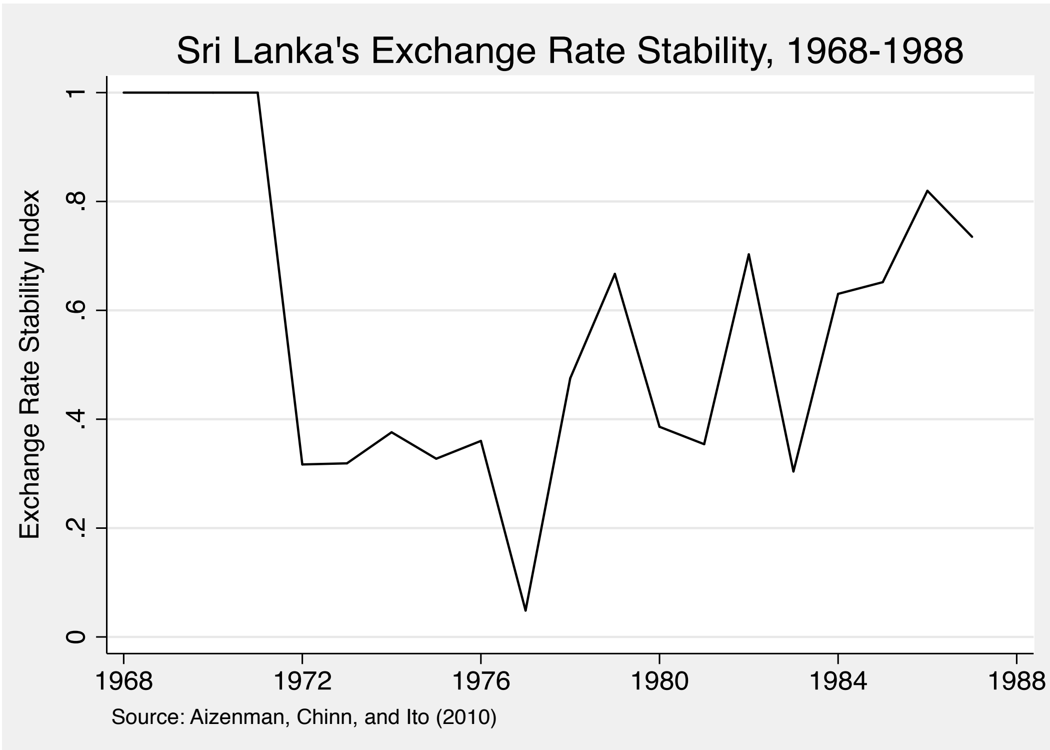


Figure 4.15: Sri Lanka: Exchange Rate Fluctuations

More important than the direct involvement of external actors, in Sri Lanka in the late 1970s, political leaders believed that the political system itself hampered their ability to pursue economic development. As such, a newly elected political party changed the system itself in order to give the executive more power. Doing so allowed the UNP to pass legislation that opened the financial system and enacted SEZs as a way to foster economic growth. Fast forward to the present and political controversies still surround Sri Lanka's SEZs. However, the debate is no longer

149 Information about the coding of this variable was obtained from Aizenman, Chinn, and Ito's NBER Working Paper No. 14533. Data was located from the Graham and Tucker (2016) International Political Economy (IPE) database.

about whether or not the political system needs to be changed to allow for economic development. Instead, the debate is now about an external actor. In early 2017, Sri Lanka sold shares in the Hambantota Port to China Merchants Port, Ltd. in exchange for debt forgiveness. Part of this deal included control over the SEZ and industrial area adjacent to the port. Sri Lanka's political leaders touted the deal as a "once in a lifetime opportunity" but protestors and opponents of the deal argue that the Sri Lankan government has essentially ceded autonomy for a foreign power.[150] Once again, financial constraints (in the form of foreign loans and debt) have prompted a country to pursue SEZs development. The difference now in Sri Lanka is that an external actor has entered the fray, which was not the case in the early phase of zone development.

4.6 Country Case Study Conclusions

This chapter set out to accomplish several inter-related tasks. First, provide a set of case studies drawn directly from the cross-national empirical study to illuminate how enactment occurs. Doing so allows us to examine how international constraints shape domestic policy and decisions on whether to liberalize financially and how to manage the exchange rate. Second, because regime type was found to be a significant predictor of the propensity to enact, but cross-national tests of why came up inconclusive, I examined enactment in both democracies and non-democracies. Third, during the course of examine international constraints and domestic political realities in each case, it became clear that external actors can play an important role in a country's propensity to enact an SEZ program. While this final proposition is much more difficult to test in a cross-national, quantitative dataset, it is a key factor in why and how country's create SEZs. As

[150] The quote is from Prime Minister Ranil Wickremesinghe; in January 2017, the protests against the port deal turned violent. See Shepard (2017) for additional context.

such, further analysis of the role of external actors in SEZ enactment should be explored. Further directions for research are discussed in the overall conclusion to this dissertation.

As shown in the Dominican Republic and Jordan cases, the role of external actors is extremely important to SEZ enactment. Even in Mauritius and Sri Lanka, where external involvement was not direct, external examples were a powerful image to leaders in each country. Mauritius looked to Taiwan as an example and Sri Lanka hoped to replicate Singapore's economic success. Looking outward to an external model is not the same as direct involvement of either a foreign country (the US in the case of Jordan) or a foreign corporation (Gulf and Western in the DR), but does show that diffusion may be a powerful factor in the global proliferation of SEZs. For this project, there was no simple quantitative way to test a theory of external actors or diffusion. However, given the large number of countries with some level of foreign actor involvement identified during the coding process, future research should examine this phenomenon. Direct involvement of an external actor could be coded with a binary variable or a categorical variable could be used to differentiate between IOs, nation-states, and multi-national corporation involvement. Theories of diffusion could be tested using spatial methods or other techniques, as used in Simmons, Dobbin and Garrett (2008).

For differences in regime type, this chapter provides nuance to the role of democratic institutions in SEZ enactment but does not answer one key outstanding question: why are democracies more likely to enact zones than non-democracies? This question is especially crucial because the conventional wisdom for some time now has been that non-democracies are much more likely to use SEZs to repress labor or control other aspects of economic development. The China model seems to reinforce this conventional wisdom. In the debate between the economic outcomes and regime type, Rodrik (2007) notes, “Nothing prevents authoritarian regimes from using local knowledge; the trouble is that nothing compels them to do so.”[151] The key difference with SEZ enactment may be the strong belief that SEZs create jobs, despite evidence to the contrary. If credit claiming[152] is the mechanism at work, then taking credit for the idea is far more consequential than actual employment outcomes. This credit claiming idea may be one reason the debate about who initially came up with the idea for EPZs in Mauritius was so hotly contested. The notion of ideas as the key factor in economic development policies is much more difficult to test empirically but is also one avenue worth exploring further.

[151] Rodrik (2007, 166).
[152] Jensen et al. (2014).

Chapter 5

Shenzhen: Model or Anomaly? China's National SEZ Programs in Comparative Context

5.1 Introduction

Institutional change emerges from exogenous shocks and transformation over time. China in the reform era has experienced both; the decision by Deng Xiaoping to "reform and open" could be considered a shock to the system in terms of the range, scope, and scale of change. Yet, at the same time, many institutions of the communist era remained in place and were tasked with transforming China from a planned to a market economy. Much of the institutionalist analysis in comparative politics focuses on long-standing regimes and how institutions within that context evolve over time or change because of shocks to the system. But what happens when new institutions are simultaneously created alongside a series of deeply-entrenched institutions and both are concurrently tasked with new, and often contradictory, responsibilities?

In this chapter, I use institutional analysis to highlight how the role and purpose of SEZs in

China has changed over time. China has over nine distinct SEZ programs and exhibits tremendous variation in the size, scope, and variety of SEZs. This paper relies primarily on qualitative and historical analysis to uncover the variation in zone programs. Recounting this history is necessary to establish an initial baseline and begin to address the following research questions. What are the origins of the Shenzhen SEZ and how did this particularly influential model come to fruition? Why does China have so many separate zone programs? Are China's distinct zone programs truly comparable? If Shenzhen was the original model, do the follow-on zones and zone programs resemble this model or not? What are the origins and differences between the various national-level SEZs in China? How are these programs managed? How did the bureaucratic structure shape the origins and period of enactment?

Studying the origins and effects of SEZs in China faces two fundamental problems. The first challenge is the level of analysis. National zones need to be examined separately because national-level reform policies have grown out a different political logic. Local zones are about control of land whereas the early SEZs were about access to foreign exchange, capital, and technical expertise. Second, Landry (2003) notes that the proper level of analysis for adjudicating decentralization debates in China may be cities rather than provinces.[1] Municipal zones approved at the provincial-level offer different level of incentives than national zones and thus should be analyzed separately. The third challenge to comprehensive understanding of China's SEZ is the complex bureaucracy that has grown to manage this policy area. The legal regimes governing China's zone programs are understudied in the interdisciplinary literature. Investment incentives are often lumped together but, in reality, zone programs have subtle differences in scope, focus, and goals.

[1] Landry (2003, 32).

To examine bureaucratic actors more directly, I break zone establishment patterns into three distinct periods. The reason for taking a institutional and bureaucratic politics approach is two-fold. First, the overlapping physical, legal, and programmatic realm of SEZ policy in China demands further explanation. Why are there so many distinct programs in addition to the myriad of individual zones that now exist nationwide? I argue that the explanation is to found in a theory of fragmented bureaucratic politics, as originally outlined in (Lieberthal and Oksenberg 1988). Since so many distinct government agencies have responsibility for and an interest in economic development zones in China, it has generated a complex legal and regulatory environment. To my knowledge, no one has attempted to disentangle this bureaucratic web in the context of special economic zones, at least not comprehensively. Second, analyzing one specific policy instrument allows us to examine change over time. The political context at the start of the Shenzhen SEZ is vastly different from the context that led to the creation of the Shanghai Pilot Free Trade Zone in 2013.[2]

This article contributes to our knowledge of SEZs and political economy in several ways. First, I provide an overall political history of zones in China. Second, this paper contributes to our understanding of bureaucratic politics in China. Most of China's SEZ programs are managed and overseen by different government agencies. Although there is some overlap in program control, different bureaucracies have distinct missions, areas of responsibility, and organizational cultures. Moreover, the bureaucracies managing each program have changed over time. As the property rights regime for land has evolved so too management of SEZs. In particular, central government attempts to curb rural land conversion has collided with political and financial incentives for local leaders. Third, I argue that the political context in each period influenced why and how each sub-

[2] The Shanghai case will be discussed further in the next chapter.

sequent zone program was enacted. Thus, we must begin with Shenzhen, even if this comparison is not perfect.

The next section will discuss the bureaucratic politics literature and use Shenzhen as an explicit model for three reasons. First, Shenzhen in nearly always the *implicit* model in the imaginations of development economists and policy makers seeking to replicate the "China model." Despite ubiquitous references to Shenzhen, what exactly the Shenzhen model represents is rarely addressed. Second, as the first zone in China, it also holds a special place in the understanding of China's political economy in the reform era. Thus, instead of relying on implicit assumptions, I make the comparison to Shenzhen explicit. Third, I argue that the history of Shenzhen is actually distinct from most of the subsequently-enacted SEZ programs in China. A brief recounting of Shenzhen is thus necessary to make the comparisons outlined in the empirical section of the paper. The empirical section analyzes the origins of subsequent SEZ programs in China.

5.2 Shenzhen and Bureaucratic Politics as the Base

Shenzhen was originally a rural backwater. The city has now become known as the most innovative city in China, according to Western media outlets.[3] While export-oriented manufacturing made Shenzhen rich and famous, the city has begun to shift from a traditional export manufacturing hub to an economy focused on services such as insurance, real estate, and information technology (IT) and is now home to Chinese brand names such as Huawei, ZTE, Tencent, Vanke, and Ping'an insurance.[4] A recent World Bank report on SEZs notes, "No other SEZ program has had as much

3 The original ranking was conducted by Forbes Magazine and was recounted in Zhang (N.d.).

4 Huang (2008) characterizes Guangdong as extremely "entrepreneurial," partly because of the presence of firms such as these.

impact, nationally and internationally, as the Chinese program"[5] and when foreign observers conceptualize a model for SEZ development, it is often Shenzhen that serves as the ideal case.

In a recent volume dedicated entirely to Shenzhen, O'Donnell, Wong and Bach (2017) correctly note that Shenzhen is "a pivotal case study" for both domestic and international audiences. The authors also acknowledge that the actual reform process and the narrative now being told of reform are in conflict. The authors state, "While the official perspective lauds the [Shenzhen] model as the logical result of coherent policies and plans, we argue that nothing of the sort took place. In fact, the model emerged out of a period of illicit (and often outright politically unapproved) experimentation."[6] The Shenzhen Museum, which contains the modern history of the city, is consistent with the effort by city leaders to portray logical consistency in the process of reform. Rithmire (2013) notes that now, "Nearly every Chinese city has a museum devoted to urban planning"[7] and these reconstructed histories show how local officials are attempting to tell a story that puts both current and past leaders in the best possible light. The other reason to not assume that SEZ policies in China are logically coherent is because the overlapping legal and bureaucratic structure nearly guarantee turf wars. Finally, if we are to make an argument that these policies are in fact logical, we must specify who judges the policy to be "logical." Is the policy outcome justifiable from a local or central government perspective? Which bureaucratic agencies benefit from the various programs and which are opposed? Have central government objectives been implemented or have local leaders strayed from the intent of the law in order to serve their own parochial interests?

Following historical institutionalist perspectives, I conceptualize institutions "as distributional instruments laden with power implications" noting that "any given set of rules or expecta-

5 Farole (2011, 36).
6 O'Donnell, Wong and Bach (2017, Introduction).
7 Rithmire (2013, 873).

tions . . . will have unequal implications for resource allocation."[8] Because of the complexity of the Chinese political system, China and other comparative politics (CP) scholars have challenges building upon one another's theories. However, explicit comparisons of China to other economic systems has begun.[9] In this article, I attempt to bring in both general CP theoretic perspectives as well as Lieberthal and Oksenberg (1988) theory of "fragmented bureaucratic politics." Fragmented bureaucratic politics continues to explain many of the distributional elements of China's system but theories of gradual institutional change also apply. In terms of China's bureaucratic politics, center-local relations remain a key focal point for resource allocation and consensus decision-making is still a key facet of the Communist Party's way of doing business. In their examination of the energy sector in China, Lieberthal and Oksenberg (1988) provide a detailed history of the leaders, government ministries, provincial organizations, and state-owned enterprises with responsibility for devising, implementing and/or managing the energy sector. The authors note that most scholarship up to that point had focused exclusively on either a "rationality" model of politics or a "power" politics model resulting in the "neglect of bureaucratic structure [which] frequently leads to dubious assumptions about the policy process."[10] I examine one specific policy area in China allows us to examine bureaucratic actors alongside gradual institutional change. Thus, we can utilize general CP concepts to see how they operate in the Chinese context.

Specifically, Mahoney and Thelen (2010) delineate four types of gradual institutional change, namely displacement, layering, drift, and conversion.[11] *Displacement* is when new rules replace existing ones. In the case of China, at the start of reforms in 1978, entirely new rules had

[8] Mahoney and Thelen (2010, 8).
[9] See Kennedy (2011).
[10] Lieberthal and Oksenberg (1988, 17).
[11] This discussion is derived from Mahoney and Thelen (2010, Chapter 1) but the theory is also based on Streeck and Thelen (2005).

to be created but later new rules had to be enacted to address the changing nature of the economy. *Layering* is when old rules remain but new rules are layered onto them such that the web of rules and regulations grows increasingly complex. Mahoney and Thelen describe *drift* as the situation when rules remain the same but external conditions are altered in a way that changes how the rules operate in practice. Conversion is when formal rules remain but are interpreted in new and distinct ways. At different times during the reform era, each of these types of change can be seen in the implementation of SEZs in China.

To my knowledge, no one has directly addressed the bureaucratic politics of SEZs nor compared and contrasted different types of zones to clarify the legal and financial policies therein. Thus, I outline the bureaucratic actors while also conceptualizing the kind of institutional change that occurred. In terms of assumptions, I do not assume that SEZ policies have an "underlying logical consistency."[12] As already noted, I think this was the case for the initial period of enactment for Shenzhen but do not assume logical consistency (or not) for the other zone programs. The second assumption is about economic efficiency. Most economic debates on SEZs center around the efficiency of outcomes but I set aside those questions to focus on program origins.

The main zone programs currently in existence in China are outlined in the table below, along with their year of enactment. At the outset of reform, the SEZs in Guangdong and Fujian Province were approved by Beijing but the central government did not have revenue for massive investment so the management of the zones was left to the local and provincial government. The second wave of zones is more commonly known as the "coastal open cities." The official program associated with these 14 cities is the Economic and Technological Development Zone (ETDZ).

12 Lieberthal and Oksenberg (1988, 17).

Coastal cities had considerable leeway to design their respective zones but all individual zones had to be approved by the State Council and the Customs Administration. In the late 1980s, Deng Xiaoping and others recognized the importance of acquiring new technology in order to foster economic growth. To direct resources to this effort, in 1988, the High-tech Industrial Development Zone (HIDZ) program was created under the purview of the Ministry of Science and Technology.[13] In the 1990s, bonded zones and the Border Economic Cooperation Zones (BECZs) were created, albeit with much different programmatic goals as will be discussed further in section three. Other than the Export-Processing Program (EPZ) program, between 1992 and the mid-2000s, there was little impetus for new program types but the number of individual zones increased rapidly. By the early 2000s, approximately 6,866 zones had been created across China.[14] In 2006, a three-year audit of all zones was completed reducing the number of approved zones to 1568.[15] However, despite the crackdown on zones, the State Council approved two additional program types in the aftermath of the audit. Then, it was not until 2013 that the latest zone program was officially promulgated.

5.2.1 Shenzhen as the Explicit Model

The use of models is common in China. As O'Donnell, Wong and Bach (2017) note, "The production of policy through the production of 'models' - model people, model factories, model villages - is a classic feature of socialist governance."[16] Shenzhen is no different; it is now a model of the new China but this outcome was not pre-ordained. In 1985, Deng Xiaoping still characterized Shenzhen as only an experiment stating that "we hope to make it a success, but if it fails, we can learn from

13 Fu and Gao (2007).
14 Zhang (2011, 146).
15 State Council (2006).
16 O'Donnell, Wong and Bach (2017, Introduction).

Program Name	**Acronym**	**Year of Enactment**
Special Economic Zone	SEZ	1979
Economic & Technological Development Zone	ETDZ	1984
High-Tech Industrial Development Zone	HIDZ	1988
Bonded Zones	BZ	1990
Border Economic Cooperation Zone	BECZ	1992
Export Processing Zone	EPZ	2000
Comprehensive Reform Testing District	CRTD	2005
Free Trade Zone	FTZ	2006
Pilot Free Trade Zone	PFTZ	2013

Table 5.1: China's Zone Programs and Enactment Dates

the experience."[17] In the early period, Shenzhen was often characterized as the wild west for its hectic pace of life and lack of rules. In the absence of formal rules or regulations, business people often skirted the edge of what was legal because the ambiguity about what actually constituted legality made it difficult to know whether people were in compliance or not. This perception of lawless is now a far cry from how local leaders describe Shenzhen's development.

The Shenzhen Museum puts forward a simple and straightforward, albeit incomplete, narrative of the early period of enactment. Beijing approves various regulations, Guangdong leaders begin implementing those regulations, construction begins, and then development ensues. The narrative seems logical and coherent but does little to help us understand what the Shenzhen model truly is. Shenzhen also serves as an example of how neither origins nor implementation are a one-shot game. Over time, the nature of local-national bargaining, business relations, and rules and regulations have all changed dramatically. The jurisdiction has been growing, upgrading, and evolving. As such, the city's stature within the Chinese political system has also changed over time. Shenzhen has grown in both physical size despite beginning as the largest SEZ in the world

[17] Deng (1985).

at its founding. Moreover, Shenzhen has seen an incredibly fast pace of urban development nearly unheard of in world history. For all of these reasons, Shenzhen is not only a city and an SEZ but an extremely powerful image of development within and outside China but one which is not easily replicated.

Initial Planning

Gradual institutional change helps explain the most recent period of SEZ policy, especially as it relates to land-use, but the initial period in Shenzhen was more like the big bang. Despite later success, zones were incredibly controversial at the outset. So controversial that Guangdong leaders were not even sure what to call these new enclaves. Initial terms included "foreign trade base," "export special area," and "pilot export commodity base."[18] Each of these names appeared too risky to local leaders until the term "special economic zone" (*jingji tequ*) was agreed upon. Looking back on those early years, Deng recounts the controversy noting that, while Guangdong leaders were responsible for the idea, Deng "said they should be called special zones economic zones, not special political zones, because we didn't like anything of that sort."[19] Unlike some scholars, which have viewed SEZs as extra-territorial enclaves completely separate from the overarching political system,[20] Shenzhen was fundamentally embedded into the political system. Carolyn Cartier and Hu De note that "the idea of zones as places in synchronization with global markets belies the reality of zones administrative divisions. . . . Understanding that *qu* is an area or district of the system of administrative divisions offers a corrective to notions about economic zones as if

18 Shenzhen Museum, July 2016.
19 Deng (1987).
20 Sklair (1986) argues that early EPZs were extra-territorial because they were more in sync with the interests of foreign multi-national corporations (MNCs) than local interests.

somehow separate from the political system."[21] SEZs are embedded within the political system even if zone regulations differ slightly.

The official regulations for establishing special economic zones in Guangdong were approved on August 26, 1980.[22] While planning for the country's first zone in Shenzhen could not have preceded the major national-level changes that accompanied Deng's official return to power at the Third Plenum of the 11th Party Congress in December of 1978, Guangdong leaders wasted no time planning once the political winds had changed. In 1978, provincial leaders in Guangdong had already prepared a report on the "Planning of Foreign Trade Bases in Bao'an and Zhuhai Counties."[23] Thus, once the December Plenum was complete, the Guangdong Provincial Committee prepared reports on the "early trial period for an export special area" in April and May 1979. Many leaders were skeptical of the new "special areas," especially Mao loyalists such as Deng Liqun. Deng Liqun served as head of the Political Research Office (PRO) and the Propaganda Department.[24] Along with Chen Yun, the highly influential Chinese Communist Party (CCP) Vice Chairman who managed much of economic policy under Mao, feared that SEZs would simply re-enact the century of humiliation. The exploitation of China at the hands of foreigners was exactly what the Chinese Communist Party (CCP) had spent decades fighting before it finally rose to power in 1949. In fact, in the late 1970s and early 1980s, Deng Liqun lead a research office which "collected material that attempted to prove that the SEZs would degenerate into 'foreign concession zones.'"[25] Thus, even debates over naming were controversial. Given the range and scope of regulations that needed to be enacted this ensured that progress would remain slow and politically

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21 Cartier and De (2015, 157).
22 *Regulations on Special Economic Zones in Guangdong Province* (1980).
23 Shenzhen Museum; Shenzhen, China; July 2016.
24 Ignatius and MacFarquhar (2009).
25 Ignatius and MacFarquhar (2009, 102).

difficult.

Even after Shenzhen began operations and firms from Hong Kong began establishing operations therein, political conservatives were not convinced of Shenzhen's success nor whether zones should be expanded. In fact, senior members of the Politburo were specifically concerned about expanding SEZs to coastal locations, most notably Shanghai and Zhejiang Province.[26] Chen Yun was supposedly concerned about the region's "concentration of opportunists who would, with their consummate skills, emerge from their cages if given the slightest chance."[27] Essentially, business leaders in Shanghai and Zhejiang cities such as Ningbo and Wenzhou had historic reputations as traders and merchants and thus were exactly the kind of capitalists that Communist Party stalwarts had against during the civil war.

Regulatory Environment

From today's vantage point, it is difficult to fathom that when Shenzhen began, not only did the rules and regulations for the SEZ have to be created but China "literally had no legal system and no law in a Western sense as of 1977."[28] However, the central government could not start from scratch with all institution-building so many of the new rules were layered onto existing modes of operation. CCP ministries and central planners had to "start developing a legal infrastructure in order to attract the foreign investments it desired."[29] As Lieberthal's volume on governance inThe rules and regulations designed and enacted in Shenzhen, thus, had a unique impact on investment, joint ventures, and SEZs more generally would be managed. However, developing these early regulations did not happen either immediately and rarely dealt effectively with key issues. For

26 Ignatius and MacFarquhar (2009, 102).
27 Ignatius and MacFarquhar (2009, 102).
28 Lieberthal (1995, 150).
29 Lieberthal (1995, 151).

example, in early legal analysis of Shenzhen, Fenwick (1984) notes that the 1980 Regulations on Special Economic Zones in Guangdong Province "compare poorly with terms offered by other countries export-processing zones" and lacked a long list of preferential policies common in other SEZs at the time.[30]

The 1980 enacting regulations were relatively general as it pertains to business law but signaled massive change for China. Initial regulations focused on the registration of foreign enterprises and made clear that while foreign investors were certainly needed and wanted, all "land in the special zone is owned by the People's Republic China."[31] Despite the effort of reformers, nearly all leaders in China remained concerned about foreign incursion into China and a repeat of the treaty ports era. Given the location of Shenzhen, across from Hong Kong, many immediately viewed the new zone as yet another example of giving foreigners free reign to exploit China. As such, the initial regulations set out to make clear that therein remained Chinese and all foreign businesses would be monitored and registered in order to ensure that the Chinese government and zone managers remained the final arbiter of all decisions within the special enclave.

Despite the need to clearly establish Chinese sovereignty in the Shenzhen, local leaders soon recognized deficiencies in the early regulations and altered policies in order to offer incentives, which would attract external firms. Corporate income tax rates were reduced to 15 percent, down from the 30 to 50 percent rates that applied to firms outside zones.[32] Initial regulations also claimed that "special preferential treatment" would be given to firms establishing within two years but the exact nature of these privileges, at least in the initial regulations, was essentially

30 Fenwick (1984, 384).

31 *Regulations on Special Economic Zones in Guangdong Province* (1980, Article 12).

32 Fenwick (1984, 383) notes that joint ventures were typically taxed at approximately 33 percent but non-joint ventures could face up a 50 percent rate if you combined local and national-level taxes.

non-existent. However, early legal analysis of the zone notes that, “unlike the Joint Venture Law governing Sino-foreign joint ventures elsewhere in China or the earlier Shekou Investment Guidelines, both of which mandated twenty-five percent minimum foreign equity, the [1980 Guangdong] Regulations contained no minimum foreign-equity requirements.”[33]

Shenzhen also created the first labor market in China, although initially there were concerns about the shift from the communist-era *danwei* system to a free-market labor system. Thus, at the outset a labor service company was used to find workers that would be employed within the zone. In terms of management of the zone itself, the committee responsible for managing Shenzhen fell directly under the Guangdong Provincial Committee[34] and thus did not have to be mediated by a municipal government as would be the case with many subsequent zone programs. Local leaders soon realized that “no single committee could make a decision on every site” so a “consortia of outside developers were each assigned to develop huge industrial zones.”[35] Shekou was one such site. China Merchants Steamship Navigation Company plan, ran, organized, and developed that particular zone but this area showed the initial potential for further reform in other parts of Shenzhen. In fact, Vogel (2011) argues that Shekou “became the model for and the envy of the other industrial zones established in the Shenzhen special economic zone.”[36] Essentially, the early period of Shenzhen was much more tentative than some observers now realize. Political controversies were high, planning was tentative, rules and regulations were often absent or often contradictory. So what happened next?

33 Fenwick (1984, 382).
34 *Regulations on Special Economic Zones in Guangdong Province* (1980, Article 24).
35 Vogel (2011, 138).
36 Vogel (2011, 135).

5.3 SEZ Program Origins Over the Reform Era

In this section, I will examine three distinct time periods: 1) the early reform era from 1979 until 1989; 2) the time period from 1990 to 2003; and 3) 2003 to the present. I use these time periods for analytic and policy reasons. The initial reform period was one of major experimentation and considerable policy autonomy for the areas selected as SEZs. The first 4 SEZs did not have complete autonomy but there was an understanding that reform experiments could go wrong in the anointed zones. If reforms did not work in those remote jurisdictions, reforms could be halted, altered, or not extended further. However, if perceived as successful, than other jurisdictions could adopt those policies. I selected 1989 as the cut-point for this first period of study because the Tiananmen incident had a far reaching on all aspects of domestic policy. Moreover, despite the 1980s laying the groundwork for entire reform period, Huang (2008) notes, "The decade of the 1980s deserves far more analytical attention than it has received."[37] Not only is more analytic attention needed to studying the 1980s but we must not let later success color the way the events unfolded at that time.

While I use 1989 as the first endpoint, the period from 1989 to 1992 in many ways was one of transition. Conservative elements of the Party leadership re-asserted themselves but Deng Xiaoping's Southern Tour in 1992, reinvigorated the reform effort. However, other fiscal realities created new demands on local governments. Thus, the period from 1990-2003 was qualitatively different from the 1990s. 2003 was selected as the start point for the third phase of SEZ development for three reasons. First, in 2003, the State Council called for a comprehensive audit of all of the country's zones in response to concerns about rural-urban land conversion. In December of

[37] Huang (2008, 51).

that year, the National Development and Reform Commission (NDRC), the Ministry of Land and Resources (MLR), Ministry of Housing and Urban-Rural Development (HUD), and the Ministry of Commerce (MOFCOM) jointly issues a series of policy circulars calling for the inspection and rectification (*qingli zhengdun*) of all zones in the country in order to set limits on zone expansion and promote coordinated development.[38] Second, 2003 represents the beginning of the Hu Jintao and Wen Jiabao era, which ostensibly began an era when rural poverty became a main concern of these political leaders. Under the Hu-Wen administration, Liew and Wu (2007) make the case that "the National Development and Reform Commission (the former State Planning Commission), the Ministry of Finance, and the Ministry of Commerce were added to the core policy network" for economic and financial affairs.[39] It is these organizations, along with the Ministry of Land and Resources, that became essential in culling down the rampant "development zone fever" of the 1990s. The elevation of these organizations in policymaking during this time period allowed them to shift policy focus. Third, in 2005, China shifted "from a pegged exchange rate to a quasi-floating regime" thereby shifting the country's exchange rate policy.[40] Along with the rapid accumulation for foreign currency reserves after 2001 and these domestic policy changes, the use of SEZs in China since 2003 has been substantively distinct from the two earlier periods.

5.3.1 Early Zones: The Original SEZs and Coastal Opening

The first four SEZs in China created in Shenzhen, Zhuhai, and Shantou (Guangzhou Province) and Xiamen in Fujian Province are the ones most often referenced in the collective imagination of economists. The legal regulations governing the original SEZ grew out of a series of decisions

38 National Development Reform Commission (2003).
39 Cited in Chin (2013, 524).
40 Chin (2013, 521).

focused primarily on the zones in Guangdong and were officially promulgated in August 1980. The "Regulations on Special Economic Zones in Guangdong Province" were approved during the Fifth National People's Congress and addressed labor management, administrative organization, and autonomy of the newly created zones.[41] The zones were expressly intended to "encourage foreign citizens, overseas Chinese, compatriots from Hongkong and Macao . . . to open factories and set up enterprises."[42] Key provisions in the early zones were the ability for foreign investors to establish operations, more flexible labor market rules, and lower corporate taxes.[43]

The average size of the original SEZs (at their outset) was approximately 85 square kilometers.[44] This is enormous when compared to the average size of EPZs in the developing world at that time, which was approximately 2 square kilometers, as illustrated with Figure 1. However, the SEZ figure for China is heavily skewed because of Shenzhen. In 1980, Shenzhen was 327.5 square kilometers. The other three zones ranged from between 1.6 square kilometers (Shantou) and 6.8 square kilometers (Zhuhai), which is more consistent with the size of EPZs in the rest of the developing world, although larger than Taiwan's early zones.[45] Prior to the creation of Shenzhen, the largest EPZ in the developing world was the Phividec Industrial Estate created in Mindanao in the Philippines in 1974, which was approximately 30 square kilometers.[46] Five years later, Shenzhen remained the same size but each of the other original zones had grown so that the average size was now approximately 132 square kilometers. By 1990, that number had grown to 158 square

41 Vogel (1989); Fenwick (1984); Ge (1999).

42 English translation of original regulations obtained from the Asian Legal Information Institute, http://www.asianlii.org.

43 For the latter, the corporate tax rates were 15 percent within SEZs whereas joint ventures elsewhere were taxed at 33 percent (Fenwick 1984, 383).

44 Author's calculation based on data from Vogel (1989) and Naughton (2007).

45 The Taichung EPZ was only 0.23 square kilometers (Fröbel, Heinrichs and Kreye 1980) and "Taiwan's three export-processing zones . . . together constituted less than 3.0 square kilometers" (Vogel 1989, 127).

46 Author's "Early Adopters SEZ/EPZ Dataset." See also Phividec Industrial Estate for further information, http://www.piamo.gov.ph/pia/, accessed 6 December 2015.

kilometers not including Hainan Island.[47]

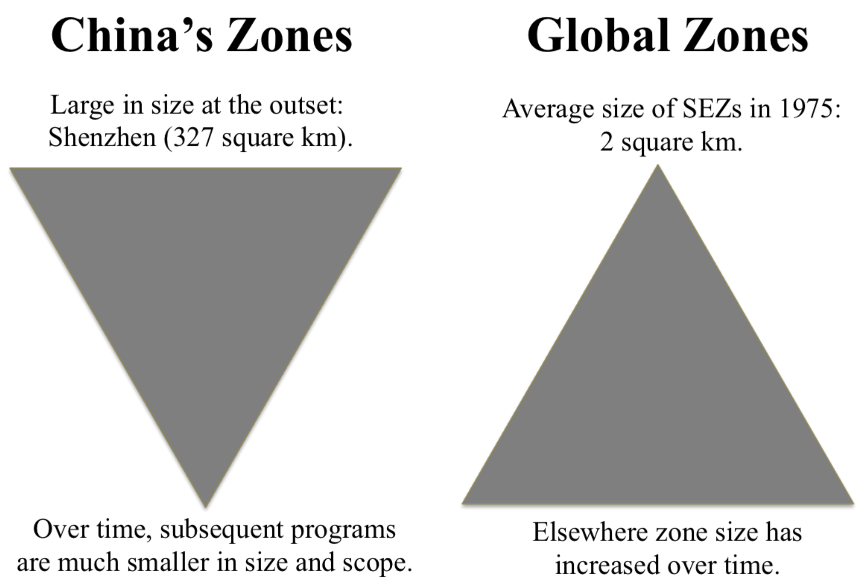

Figure 5.1: Shenzhen versus Early EPZs

In the period from 1980 to 1984, there were also several bureaucratic changes in the central government that related to how policies inside SEZs would evolve. Most importantly, in March 1982, the Ministry of Foreign Economic Relations and Trade (MOFERT) was created in order to put "major components of China's dealings with the international economy under one bureaucratic roof."[48] This new ministry consolidated a variety of previously distinct entities, such as the State Import and Export Control Commission and the Foreign Investment Commission, together under one organizational structure. As such, MOFERT had a broad mandate with responsibility for all foreign trade, FDI, trade promotion, and foreign aid.[49] In 1984, the People's Bank of China (PBOC) was restructured to better deal with "national financial planning; interest rate policy" and dealing with the variety of financial institutions that began to arise in the reform era.[50] However,

47 The total area of Hainan is 33,900 square kilometers so this figure is not included in the size averages for the original zones. If Hainan was included, the average size would be approximately 6900 square kilometers.
48 Lieberthal and Oksenberg (1988, 113).
49 Lieberthal and Oksenberg (1988, 113).
50 Chin (2013, 526).

while "the bank as a financial institution is under the jurisdiction of the next higher level bank, the bank's Communist Party committee is directly under the authority . . . of the locality in which the bank is located."[51]

The next major set of officially-designated development zones in China are the coastal open cities. In 1984 the first round of 14 cities were designated, although some did not become fully operational until the late 1980s.[52] The policy guidance for the ETDZs was released in April 1988 by the Customs Administration.[53] While initially restricted to coastal open cities, eligibility for access to the ETDZ program was later expanded nationwide.[54] Concurrently, moves to establish a separate SEZ program also begin. Deng was heavily committed to science and technology so he and other influential leaders believed that China had to devise a way to foster both science and its commercial and industrial applications. Lieberthal (1995) notes Zhao Ziyang convinced "Deng that the key to China's development lay in rapid expansion of the country's scientific base."[55] Thus, in the mid-1980s, a key imperative in promoting the market transformation was scientific research fostered in High-Tech Industrial Development Zones (HIDZs). This program developed under the purview of the Ministry of Science and Technology and the first such zone was established in Beijing.[56] Key leaders such as Zhao Ziyang were engrossed how to utilize scientific and technology in development and "persuaded Deng that the key to China's development lay in rapid expansion

51 Lieberthal (1995, 270).
52 The original cities are referred to as "port," "open," or "coastal economic" cities and include Dalian, Tianjin, Qinhuangdao, Yantai, Qingdao, Lianyungang, Fuzhou, Guangzhou, Shanghai, Zhanjiang, Nantong, Ningbo, Wenzhou, and Beihai.
53 General Customs Administration, "Provisions of the General Administration of Customs of the People's Republic of China on the Administration of Inbound and Outbound Goods at the Economic and Technological Development Zones," 26 April 1988.
54 Rithmire (2015, Table 3.1).
55 Lieberthal (1995, 139).
56 Zeng (2011).

of the country's scientific base."[57]

In 1984, Zhao "increased his control over urban economic policy and over science policy" and this paved the way for further reforms at the 1984 plenum,[58] including the creation of the coastal open cities-focused economic and technological development zones. Thus, once Zhao Ziyang "increased his control over urban economic policy and over science policy" it paved the way for adoption "of principles on urban economic reform that pointed the way toward Deng Xiaoping's preference for radical reorganization of the urban economy along market lines."[59] However, the success was not complete and by 1988 Chen Yun and other anti-reformist elements pushed for a halt to the most aggressive reforms. Then, in 1989, when Zhao Ziyang was removed from power due to the Tiananmen incident, one of the lead architects of the coastal reform opening was no longer at the helm to push Deng and his reform agenda.

As of 2011, there were 54 HIDZs with zones in both coastal and inland provinces but the distinction between these zones and the ETDZs described above seems to have blurred over the years.[60] Despite only representing 0.01 percent of China's land area,[61] HIDZs make an outsized contribution to the economy; "nearly 5 percent of China's total industrial labor market" is within an HIDZ, the value of their exports increased over 12 percent in the period from 1995-2005, and HIDZs account for nearly 11 percent of China's FDI stock (as of 2006).[62] In terms of incentives, tax policies are somewhat similar to other zones but the comparative advantage for HIDZs appears to be research and development (R&D) expenditures. Corporate tax rates for foreign-invested

57 Lieberthal (1995, 139).
58 Lieberthal (1995, 139).
59 Lieberthal (1995, 139).
60 Zeng (2011).
61 Fu and Gao (2007, 20).
62 Fu and Gao (2007, 21).

enterprises range from 7.5 to 15 percent, depending on a variety of characteristics associated with the company.[63] R&D expenditures in 2002 were over 31 billion RMB, nearly 25 percent of total R&D expenditures in China.[64] Skilled workers are also an important attraction for foreign-invested firms to operate in these zones. Scientists and technicians represent 6.4 percent of China's labor force but they are over 22 percent of the workforce in HIDZs.[65]

5.3.2 From Transition to Development Zone Fever: 1990 to 2003

During Deng Xiaoping's Southern Tour, the coastal south received the bulk of attention but the overarching message was broader reform and opening.[66] For ETDZs, following the initial round of approvals, there were two additional waves of expansion, in period from 1992 to 1994 and from 2000 to 2002.[67] The second wave includes additional coastal locations but also more inland locations while the third wave consists primarily of inland and western areas. The expansion in the early 1990s brought the total number of national-level ETDZs to 49.[68] According to a 2012 report by Renmin University, the total number of ETDZs is now 128.[69] Concurrently, 15 border economic cooperation zones (BECZs) were also established. BECZs were managed directly by the State Council until 2007 but are now under the purview of the Ministry of Commerce. Given the preferential coastal policies of the 1980s, Chung (1998) argues that inland provinces developed two strategies for their own economic development. The first strategy was to create their own set of incentive policies to attract investment while the second focused on "collective efforts to

63 "State Preferential Tax Policies for High-Tech Zones," Xian Outsourcing Service, 20 June 2012.
64 Fu and Gao (2007, 28).
65 Fu and Gao (2007, 28).
66 Zhao (1993).
67 Ministry of Commerce (2015).
68 State Council (2006).
69 Zeng et al. (2012, 4).

compete against their coastal counterparts by forming regionally-based organizations."[70] Chung notes that in 1994, party officials in Shaanxi, Gansu, Qinghai, Ningxia, and Xinjiang "held a 'summit meeting' where they agreed to join in efforts to obtain more preferential policies from Beijing."[71] These efforts continue today; in 2012, a joint meeting was held in Kunming to discuss measures to promote these areas.[72]

Changes to the land law and the tax system in the 1990s radically shifted the way land was utilized in China. The changes to the tax sharing system (TSS) meant that local governments saw revenues decline. However, since local leaders could now generate revenue from the land, through land-use fees and leasing to developers, the incentives to develop land increased dramatically. Double-digit growth rates, rural-to-urban migration, and the development of scarce land along China's eastern coastal region boomed. One strategy used by local officials to guide development, and generate revenue, was the creation of economic development zones (*kaifaqu*).[73] By the end of the decade, over 6800 zones were active.[74] "Development zone fever" (Zhang 2011) had gotten out of control. Complaints of land confiscation increased as did allegations of corruption. In his study of golf courses, Sun (2015) finds that enforcement of the land law is only selective. The outright "ban" on new golf course construction has been only marginally successful and local jurisdictions still have many methods for skirting national legal requirements. After the 1994 tax reforms, not only did provincial and municipal leaders have more incentives to make money from land, many local officials were also able to find "numerous loopholes in the credit control mechanism

70 Chung (1998, 434).
71 Ibid.
72 Dezan Shira and Associates, *China Briefing*, "China to Support Development of Border Economic Cooperation Zones," 10 December 2012, http://www.china-briefing.com/news/2012/12/10/china-to-support-development-of-border-economic-cooperation-zones.html, last accessed 1 October 2014.
73 For translations of the Chinese SEZ terminology, see Figure 1 in the Appendix.
74 Zhang (2011).

to finance local growth."[75] Other analysis of the early People's Bank, mostly notably by Lardy (1998) and Yang (2004), argue that in its early phase the PBOC was a relatively weak organization noting that "until the early 1990s, the provincial branches of the central bank responded primarily to provincial-level political leaders rather than central bank headquarters in Beijing."[76] The ability of local officials to pressure banks to provide funds for their preferred development projects is one facet that allowed development zone fever to rapidly gain momentum throughout the decade.

5.3.3 Dawn of a New Era: 2003 to the Present

In 2003, the State Council called for a comprehensive audit of all development zones nationwide in an effort to "rectify" zones and set limits on the size and scale of future zones. The audit took approximately three years and, in 2006, the State Council's NDRC published the finalized list of all zones officially approved post-audit.[77] This directory left 222 national-level zones and 1346 provincial-level zones in place across China, for a total of 1568 approved zones. Table 2 below provides the number of zones by program type for the period immediately following the audit. The audit occurred amidst other concerns about the falsification of government statistics in the early 2000s. At the spring 2000 meeting of the Standing Committee of the National People's Congress one official, Zheng Jianling then an NPC deputy and "deputy director of the Shanghai Audit Bureau of the National Bureau of Statistics . . . proposed that criminal penalties be imposed on officials who falsify statistics."[78] In the 2003 guidelines for rectifying zone programs, there is one section devoted to how to deal "falsifying data by either over or under-reporting."[79]

75 Shih (2008), cited in Chin (2013, 527).
76 Chin (2013, 527).
77 State Council (2006).
78 Lardy (2002, 12).
79 National Development Reform Commission (2003).

Zone Type	Number (as of 2006)	Average Size	Total Land Area
National-Level Zones			
ETDZ	49	11.7	575
SEZ	5	158.1	632
HIDZ	53	18.2	964
BECZs	14	5.6	78
Bonded Zones	13	5.4	147
EPZ	58	2.9	170
Bonded Port Areas	13	2.6	40
Pilot FTZs*	0	29	29
Provincial Zones			
Zhejiang Province	103	6.8	702

Table 5.2: Program Size, area in square kilometers

In March 2004, the Ministry of Land and Resources (MLR) and the Ministry of Supervision jointly announced new regulations to curb land development associated with SEZs. According to Hsing (2010), if leasing fees were not fully paid and if local authorities did not receive the requisite approvals from the central government by August 31, 2004, then the land parcels in question would be reclaimed by the state.[80] During 2004, the MLR and six other central government agencies sent joint work teams to conduct audits and evaluate zones.[81] Upon completion of the two-year audit, thousands of zones were cancelled and only those officially on the list could remain.[82] This was a dramatic re-assertion of central government power in the effort to limit conversion of rural, agricultural land. Yet, the success of some of these efforts remains to be seen. Technically, "rural land cannot be employed for non-agricultural purposes without the permission of the state"[83] Both national and provincial-level zones continue to be created and increased in size and, according to Sun (2015), large-scale violations of the the current land regulations continue. Those local

80 Hsing (2010, 101).
81 Hsing (2010, 102).
82 State Council (2006).
83 Cai (2003, 665).

leaders that are politically-connected seem perfectly capable of ignoring the land moratoriums and building as they please. Moreover, the central government continues to create new program types, such as the Comprehensive Reform Testing Districts and Pilot Free Trade Zones, unhindered by the increasingly complex and duplicative patchwork of overlapping zones.

At the same time that these land-use changes were being implemented, "the Chinese central government decided to abolish the agricultural tax . . . [t]his goal was achieved earlier than anticipated, in 2006, bringing an end to land-based taxation in rural China."[84] Using central government organizations remains key to China's fragmented bureaucratic politics but Cai (2014) argues that "'fragmented authoritarianism' has not captured the impact of new social changes on the decision-making process" in China.[85] The crux of this argument as it relates to the expansion, use, and restrictions on SEZs is the role of two main groups of actors: business interests and rural farmers. In the case of the former, business interests could consist of either state-owned enterprises (SOEs) or private firms. Both have been utilized in the development of zones and have certainly played a role in expansion. Conversely, rural farmers have pushed against the rampant land conversion but with varying degrees of success.[86]

In addition to land-use changes, as the new century began, China's economy faced two new situations. First, in 2001, China officially joined the World Trade Organization prompting a myriad of new changes to its import and export rules. Second, in the same year, the "State Council announced a national policy to set up Centers for Land Reserves" as part of the central government's effort to curb land conversion.[87] These new law appeared with the express purpose of displacing

84 Cai (2014, 108).
85 Ibid, 112.
86 Cai (2003).
87 Hsing (2010, 48).

earlier rules for SEZs. However, incentives for development, especially for local leaders, remained the same. Simultaneously, the external conditions were also altered leading to policy drift. This tension between new imperatives and old policy tools can be seen in the creation of the Export Processing Zone (EPZ) program. Despite efforts to limit the use of zones, trade officials also needed to meet trade regulations under the purview of the WTO. EPZs initially began as a "pilot" project and in the creation phase, instead of being placed primarily under the purview of a single bureaucratic actor, the conference to establish the rules that would guide the use of EPZs included representatives from the Customs Administration, Economic and Trade Commission, Ministry of Foreign Trade, and State Taxation Administration.[88] After the conference, which included at least eight distinct ministries and commissions, EPZs were established "to regulate processing trade from the existing scattered operation to a closed, centralized management."[89] Better management of both imports and exports, consistent with WTO-related changes was a key facet of this new program. However, while streamlining administrative procedures for processing trade was one important goal of the EPZs, another imperative was to manage land-use. As such, EPZs were only allowed to be setup in "existing ETDZs that have been approved by the State Council, and must not be established elsewhere."[90] EPZs could only be created within the confines of an already existing zone. The enacting regulations explicitly state that the "construction of EPZs must not include new construction land" and each individual EPZ could not exceed 2-3 square kilometers in size.[91]

For these reasons, EPZs in China are much different than those used in other developing countries. Unlike EPZs meant to leverage cheap labor and promote export-oriented growth. EPZs

88 Hong Kong Trade Development Council (2000).
89 Hong Kong Trade Development Council (2000).
90 Hong Kong Trade Development Council (2000).
91 General Office of the State Council (2000).

are actually an indication of the state attempting to re-assert control rather than further promoting reform and opening. In various policy documents, the issue of smuggling and tax collection are raised as issues of concern and the desire to streamline administration and prevent smuggling may also be behind the origins of this particular program. The Hong Kong Trade and Development Council (HKTDC) notes that Customs supervision across localities had not been unified stating that "some use 'registration handbooks' as the official record, and some use 'tax collection and exemption certificates,' [and] there are yet others who simply put their comments on the approval document."[92] Despite the official program start date being legally recognized as 2000, there are a couple anomalies. For example, the Shanghai Caohejing EPZ began operations in 1992 but this zone is considered both an ETDZ and an EPZ (State Council 2006) and thus is eligible for incentives under both programs. An expansion of the program occurred in 2005 such that, as of 2006, the State Council had approved 58 EPZs throughout the country.[93]

Despite new laws meant to curb illegal land confiscation and better manage land, the use of industrial zones continued unabated. Regardless of the economic efficiency of these periods of zone expansion, this episode provide a useful illustration of how the number of zones can quickly increase, as they did in the 1990s. In the second wave of development fever, in the early 2000s, local officials were once again rushing to create zones but this time, according to Hsing (2010), "the scale of the development zones was considerably larger, from 1 to 3 sq km [in average size] in the early 1990s to 10 to 20 sq km."[94] Hsing estimates that, "by 2003, the total area designated for development zones nationwide was . . . 36,000 sq km, compared with 15,000 sq km in

92 HKTDC, "China Establishes 15 Pilot Processing Zones," 2000.
93 State Council (2006).
94 Hsing (2010, 99).

1993."[95] Thus, the total land area in zones had more than doubled in the time between the first and second wave of development zone fever. In 1994, Premier Zhu Rongji initiated a series of austerity measures to cool the economy[96] but the second wave of development zone fever prompted a more formal investigation and an eventual crackdown on the number and scope of approved zones.

5.3.4 Expanding Outward: The Top-down Push for Financial Reform

On September 29, 2013, the Shanghai PFTZ was officially launched. In concert with a range of other reforms proposed during the 12th Five-Year Plan, the Shanghai pilot zone was underway less than a year later. However, the idea began much earlier when the previous administration approved a request[97] by the Shanghai government to create "an international financial and shipping center by 2020."[98] The proposal was hotly contested[99] but before the trial period was even complete other jurisdictions began their own versions of this program. PFTZs have been approved for Guangdong, Tianjin, and Fujian[100] and media reports indicate that Shanxi, Gansu, and Hubei provinces have all provided PFTZ proposals to the central government for approval.[101]

This latest edition to the family of zone programs is yet another example of institutional layering. Instead of replacing earlier zone programs, the PFTZs are one large overarching structure

95 Ibid.

96 The majority of these reforms were focused on local financial institutions (Tsai 2006) but the lack of loans and other sources of financing also slowed the ability of local governments to develop their development zones.

97 State Council, "State Council meeting arrives at plan to move forward construction of Shanghai international financial center," March 25, 2009, `http://www.gov.cn/ldhd/2009-03/25/content_1268570.htm`.

98 Quote is from Li (2009, 3); see also Zhang and Rogowsky (2015).

99 George Chen, "Exclusive: Li Keqiang fought strong opposition for Shanghai free-trade zone plan," *South China Morning Post*, July 15, 2013, `http://www.scmp.com/news/china/article/1282793/li-fought-strong-opposition-shanghai-free-trade-zone-plan`.

100 Angela Meng, "State Council approves free-trade zones for Tianjin, Fujian, and Guangdong," *South China Morning Post*, December 13, 2014, `http://www.scmp.com/business/economy/article/1661619/state-council-approves-free-trade-zones-tianjin-fujian-and`.

101 *Shanghai Daily*, "New FTZs to follow Shanghai's lead," March 25, 2015, `http://coverage.shanghaidaily.com/shdailyftz/news/`.

placed over the top of a series of other zones. In the process, the other zones remain in tact but yet another layer of administration is added to an already complex bureaucratic structure. At the outset, “senior policymakers indicate[d] that there [would] be no other FTZs of the same type”[102] but recently more have been announced. In 2015, eight additional PFTZs were approved, often encompassing areas previously established as other types of national-level zones. Three other provinces have also submit applications for approval to the central government.[103] This policy reversal has made some observers question whether the latest zone program is “hope or hype”[104] but is likely a facet of continuing debates about the pace and nature of reform.[105]

5.4 Comparisons

In this chapter, I have argued that if we are to understand the myriad of zones and national-level zone programs, we need to begin by examining Shenzhen and then examine the bureaucratic actors now responsible for managing zones. In doing so, we are able to see where subsequent zone programs follow the same patterns and the areas in which the policy environment at the outset of reform and opening was unique. That unique time period of transition and change, meant that Shenzhen had no other domestic models to follow but in many ways that also freed up Shenzhen’s leaders to experiment, fail, and revise policies where necessary. Moreover, without Hong Kong right next door, it is not clear whether Shekou and Shenzhen would have had the operating capital to begin construction and lay the groundwork for that initial phase of development. Having a global financial center right next door is note something other zones, either in China or elsewhere in the

102 Huang (2013, 1).
103 *Shanghai Daily*, “New FTZs to follow Shanghai’s lead,” 25 March 2015, http://coverage.shanghaidaily.com/shdailyftz/news/, last accessed 31 March 2015.
104 Pandit (2015).
105 Or, as Naughton (2016) and others argue a stagnation of reform (see Kennedy (2016) for a recent debate).

world, have at that disposal. Thus, it is clear that the Shenzhen model is rather unique and does not necessarily serve as the best model for comparison.

As noted in the Shenzhen versus early EPZs size comparison figure, China's SEZs began as an incredibly large enclaves unlike most global zones during this same time period. Over time, the number of zones increased dramatically. After 2003, the size of individual zones decreased in an effort to control rural land conversion. This is distinct from global trends where traditional EPZs often started very small and then grew in size over time.

As China entered the next phase of economic development, in this case the period after 1989, the calculus changed. China still had much room to develop its economy but some of the problems particularly acute in the late 1970s and early 1980s, such as severe lack of foreign exchange and no laws guiding how to deal with foreign joint ventures, had been partially solved. Several zone programs were now in place with various incentives to promote not only investment but also the research and development for building high-tech industry. None of these were anywhere near completion at the start of the 1990s but what changed for many provincial and municipal leaders was the incentive structure. Local leaders needed to generate revenue and land was the way to do it. Thus, the "development zone fever" occurred partially because of the need for local leaders to generate revenue. In some ways, the later success or failure of zones in terms of industrial production was secondary to the need for local governments to commodify land. What had previously been a "free" resource, owned by all, became a vital tool for local governments to manage their own development and thus fostered one of the largest urban transformations in world history.

But as with any good idea, the use of zones to generate had its limits. Once leaders in Beijing realized that the conversation of rural land was occurring at an unprecedented rate and leading to a level of dissatisfaction that could have implications for regime stability, it was necessary to step-in. In the post-2003 phase of SEZ development, some of the incentives facing local governments did not necessarily change, but the policy environment for managing land did. Land could no longer continue to be converted endlessly for the benefit of localities and a stricter system of land management was put in place to see that, even if not stopped or fully controlled, the central government made it clear that approvals would be required for most major changes to land-use or administrative restructuring within cities. This stricter policy environment has paved the way for the latest zone programs, the PFTZ. In the latest phase, it is no longer about converting land but creating a new overarching administrative structure with the purpose of consolidating and centralizing development. Whether this latest program will be successful at achieving its administrative or financial goals remains to be seen but it is indicative of yet another shift in how SEZs are used to manage development in China.

Thus, the variation in use and objectives within China is a lesson to other countries wishing to emulate this model. While this paper has focused only on China and national-level zone programs, the lessons learned from China's use of zones is of special importance for global development. As such, the larger purpose of this analysis is to inform the international and comparative political economy literature.[106] Finally, not only have SEZs become ubiquitous globally but China is using overseas zones as one method to achieve its latest foreign policy objectives. Xi Jinping's One Belt, One Road (OBOR) strategy explicitly notes the role of SEZs along the Silk Road corridor.[107] Moreover, many view the financial policies proposed in the PFTZs as one method for

106 Kennedy (2011).
107 National Development Reform Commission (2015).

enhancing China's outward FDI. Thus, SEZs provide a valuable window into Chinese bureaucratic politics and are increasingly a key component of China's foreign economic policy. Further analysis of each aspect of zone policies will improve our understanding of both.

5.5 Appendix A: China's Development Zone Terminology

Chinese	English	Acronym Used
经济特区	Special Economic Zone	SEZ
经济技术开发区	Economic and Technological Development Zone	ETDZ
高薪技术产业开发区	High-Tech Industrial Development Zone	HIDZ
高科技园区	High-Tech Park	n/a
边境经济合作区	Border Economic Cooperation Zone	BECZ
出口加工区	Export Processing Zone	EPZ
自由贸易区	Free Trade Zone	FTZ
保税区	Bonded Zone	BZ
自由贸易试验区	Pilot Free Trade Zone	PFTZ
省级经济开发区	Provincial-Level Economic Development Zone	n/a
省级高新技术产业园区	Provincial-Level High-Tech Industrial Park	n/a
省级特色工业园区	Provincial-Level Special Industrial Park	n/a
计划单列城市	Central Economic Cities	CEC
中关村	Zhongguancun	n/a

Figure 5.2: China's Development Zone Terminology

Chapter 6

Zone-Level Origins in Three Cities

6.1 Zone-Level Introduction

I now shift the level of analysis down by focusing on the enactment process at the level of the zone itself. Rather than focusing on enactment at the cross-national or national level, I examine a set of individual zones. In Chapter 3, I explored global patterns of SEZ enactment, and Chapters 4 and 5 focus on national-level enactment. This chapter is a companion to Chapter 4, but at a lower level of analysis. Chapter 4 focuses on national-level patterns to hone in on regime type and the role of external actors in zone origins. In contrast, this chapter moves down to the local level of to see how creation, official enactment, and implementation are shaped by land policies and other domestic imperatives. I examine bargaining *between* national and local actors rather than *among* national actors. In many cases, local officials have a great deal of influence on the nature and direction of an SEZ and thus are essential to fully understanding the enactment process.

In this chapter, I focus on three cities - each with prominent and important zones - to highlight how national-level characteristics structure the incentives for local leaders. The three cities are Aqaba, Jordan; Dubai in the United Arab Emirates; and Shanghai, China. Since other portions of this dissertation have examined Jordan and China, I continue to use these country case studies. However, by shifting the level of analysis to that of a city, we are able to examine the decisions of local leaders, and the constraints they face in making those decisions. The third case, Dubai, is relevant not only because the Jebel Ali Free Trade Zone is an iconoclastic SEZ, but offers useful comparisons to both Aqaba and Shanghai. For comparability, all three zone cases are cities within authoritarian regimes, which means the regime type variable is held constant, allowing us to focus on macroeconomic constraints and the incentives for local leaders.

To examine these cities and the zones therein, I focus on three analytic categories: international constraints, discrete policies (within the zone itself), and the management of land. As already discussed, macroeconomic policy is a key facet of the decision of governments to enact SEZ policies. Macroeconomic constraints include the market and political pressures that constrain policy choices of government officials.[1] As discussed in Chapter 4, these incentives are shaped by the international system and include factors such as exchange rates, foreign exchange markets, prices for commodities, as well as national policies based on these constraints such as capital account openness (or restrictions) and monetary policy. National policymakers can influence these decisions, but local officials often have little to no control over these policies. Local officials may have particular preferences as it relates to these choices but their ability to influence national policy choices or the international market is extremely limited. However, local officials may have considerable influence over the second analytic focus: discrete policies regarding the zone itself.

Discrete policies include how the land is managed, tax incentives, FDI incentives, and

[1] Haggard (1990, 29); Haggard, Lee and Maxfield (1993); Simmons, Dobbin and Garrett (2008); Frieden (2015).

other regulatory policies. Regulations may be promulgated by national officials but local governments have the authority and ability to manage land, guide urban development, pass local-level regulations, negotiate incentives, and guide the implementation process. Property rights (or lack thereof) are important part of SEZ enactment at the local-level. Property rights are often cited as a factor for successful economic development. Ostensibly, the legal rules for property rights are legislated at the national level but local officials have significant authority and ability to influence the property rights regime in any given locality. Even though national governments enact land-use policies, it is local officials that implement those regulations. Chapter 4 compares democracies and non-democracies to one another but, in this chapter, I narrow the scope of analysis by examining property rights in non-democracies only.

Examining the initial enactment period for SEZs at the local level is necessary for two reasons. First, local leaders have the capacity to shape the creation and implementation of a zone, especially early in the process, and this is likely to generate path dependencies. In the early phase of zone enactment, success (or failure) is not a foregone conclusion. In hindsight, many zones are lauded as a great success, but little attention is paid to how long it took to achieve that success. SEZs are a common component of industrial policy. In the 1970s and 1980s, industrial policy was increasingly important but understanding of how best to employ it was still lacking. Put bluntly, "Advocates of industrial policy made a leap of faith from the *existence* of a policy having a certain goal to the *achievement* of the intended effects . . . [scholars and policymakers at the time] neither demonstrated nor theoretically grounded the causal connections."[2] Even if SEZs were not proven to be effective, they were often an explicit component of a country's industrial policy. If, at some point in a zone's existence, some goals were achieved, then that SEZ was viewed as though success was

2 Haggard (1990, 14), italics in original.

inevitable. Those goals could include broad economic reforms in the zone, attracting investment, or creating jobs but those goals were rarely explicit at the outset. Moreover, this view dramatically underestimates the controversies associated with the creation of SEZs during the initial phase.

The second reason for focusing on enactment is that decisions made at the local level are intimately tied to the land on which the SEZ is built. Thus, spatial considerations and urban planning intersect with national-level imperatives and policy constraints. The desire for economic growth and desire for control of the land could complement one another, or it may create conflicts between local and national officials or among local leaders. Since the initial enactment period and decisions about how land is managed creates a particular path for development, initial decisions have an outsized influence on later policy choices, often making later reforms more difficult.

In the next section, I briefly address macroeconomic constraints and discrete policies before discussing how and why property rights matter. I will then address case selection and scope conditions. Section 3 delves into the three city cases beginning with Aqaba, Jordan, moving on to Dubai in the United Arab Emirates, and concluding with Shanghai, China. In Section 4, I will address some of the similarities and differences between the three cases. In the conclusion, I offer some tentative suggestions for further research.

6.2 Analytic Framework for Theory Building

Modern SEZs are meant to attract FDI and thus they are an excellent proxy for investment promotion but they are also inseparable from trade and other development policies. Pandya (2016) argues that “scholars should recast the separate study of trade and FDI into the study of global production in which trade and FDI are inextricably linked."[3] Why the study of trade and FDI became separated is understandable because of the necessity of precise theories and better availability of trade data but, from a policy perspective, the two have always been inextricably linked. In export-oriented growth strategies, "the new emphasis on exports went hand in hand with an opening to foreign direct investment" because the policy changes could reduce balance-of-payments difficulties.[4]

Zones are typically their own separate enclaves and may have their own leadership or management structure, but in the cases discussed in this chapter, zone leaders are all beholden to the city in which they are located. As such, the focus of analysis essentially coincides with a particular city. In both China and the UAE, these cities also have the status as their own province (China) or emirate (UAE). In Jordan, the status of the city of Aqaba has changed considerably over time. Initially, Aqaba was simply part of the Ma'an Governorate, but when leaders in Amman did not feel they had sufficient control over the development in Aqaba, they separated the Aqaba SEZ from Ma'an and now the Aqaba SEZ *is* the local government for the entire Aqaba area.

In this chapter, I use the term policy characteristics when referring to the three basic analytic categories under review. The conceptual structure is similar to Haggard's "three distinct levels of national policy" that are likely to influence investment.[5] The first characteristic that influences investment is basic property rights. Who owns the land and how is it managed? The second factor consists of the "structure of incentives that result from trade, exchange-rate, and pricing policies."[6] For my research, this category of analysis coincides with the data examined in the cross-national empirical analysis and the country-level case studies. Exchange-rate policies correlate with SEZ

[3] Pandya (2016, 455).
[4] Haggard (1990, 197).
[5] Haggard (1990, 192).
[6] Haggard (1990, 192).

enactment, primarily during the process of financial opening, but the overall trade balance is less clearly linked to these policy choices. The third set of characteristics is discrete policies, by which Haggard means specific incentives such as tax reductions and subsidies that are used to promote investment. I was unable to test these components in the cross-national study due to the lack of reliable data, but these factors are discussed in the individual case studies.

6.2.1 Macroeconomic Constraints: Financial Policies & Capital Formation

As noted in the cross-national empirical chapter, the nature of a country's financial system is related to the use of SEZs. Moreover, recent studies on the efficacy of zones find that GDP growth from SEZs, at least in China, is achieved primarily through "the positive effect on physical capital accumulation."[7] However, the way in which capital accumulates matters. Countries with a trade surplus may be able "to finance government investment and current expenditure out of revenue" as Taiwan did under the colonial administration of Japan.[8] In other cases, firms may finance capital investment from profits as is more often the case in advanced industrial economies. Alternately, "capital formation [may be] financed not only out of profits but also out of an expansion of credit."[9]

In the case studies, I review the national-level macroeconomic policies for each country, and discuss other international constraints where appropriate, in order to provide context for the actions of local officials. I then discuss some of the incentive policies intended to attract foreign (and often domestic) firms to the area. One of the biggest incentives offered in each of these case studies is infrastructure. Infrastructure investment is a key characteristic of SEZs since it is an assumed output of SEZS, but is also is necessary prerequisite for attracting firms and FDI. For

7 Alder, Shao and Zilibotti (2016).
8 Haggard (1990, 195).
9 Lewis (1954, 16).

our purposes, infrastructure has two definitional components. The first is the traditional, more narrow definition of infrastructure which includes buildings, electricity, gas, water management, and environmental considerations.[10] Broader definitions of infrastructure, according to a recent IMF working paper by Walsh and Yu (2010), could include "investment in agriculture (including irrigation systems), information transmission, computer and software, resident services, education, healthcare, culture, sports and entertainment, public administration and social organization."[11] In this broader definition, I also include the laws passed to enact the zone and the legal infrastructure that is created to manage the way in which the zone operates.

6.2.2 Land and Property Rights: State-Owned Complexity

The concept of property rights covers a wide range of phenomenon, including the right to own or hold goods, land, intellectual property and a firm or corporation. All of these types of property rights may be important to economic growth, but in this chapter we focused on property rights over land because SEZs expressly deal with a physical location and control over the geographic territory therein. I also only examine property rights over land in non-democracies. State control of land has different implications for property rights because in many non-democracies the land is state-owned. Property rights under authoritarian regimes are fundamentally distinct from those that evolved in democratic or capitalist countries. Rithmire (2015) examines property rights regimes in China and argues that the way in property rights have evolved in China during the reform era are fundamentally different than the evolution of property rights in Europe and other Western countries. I argue that this is not just true for China, but many non-democratic regimes. As such,

[10] Walsh and Yu (2010) examine the linkage between physical infrastructure of this sort and the ability to attract FDI.

[11] Walsh and Yu (2010, 19).

the nature and characteristics of property rights in non-democracies is vastly different than the evolution that occurred in England or other prominent cases in the comparative politics literature.[12]

For our purposes, I use Deininger's definition that "land rights are social conventions that regulate the distribution of the benefits that acccrue from specific uses of a certain piece of land."[13] I use this definition because rather than being plagued by debates about individual versus collective ownership or public versus private property rights, conceptualizing land rights as social conventions allows me to situate land-use policies into the context that makes sense in that particular context, society, or country. This conceptual step is necessary because SEZs adhere to a wide variety of ownership patterns: public, private, single-company owned, collectively owned, or state-owned. For example, most of my non-democractic country cases use a public, state-owned model for management of land associated with an SEZ, with the exception of the privately-held zones in the Dominican Republic. In more recent history, the notion of a public-private partnerships (PPP) has gained traction with examples of PPP zones in countries, such as the United Arab Emirates.

For understanding how authoritarian governments control land, Rithmire (2015) uses four dimensions of variation based on two key characteristics: legitimate claimants to the land and the regulatory authority overseeing the land. Legitimate claimants are those actors which have a legal right to the land. In the case of China, "the state is the only legitimate claimant to land rights."[14] In Jordan and the UAE, the "state" also owns the land, but management of that land is heavily influenced by local officials and jurisdictions (governorates in Jordan and emirates in the UAE) have considerable leverage in negotiations with national leaders over how that land is

12 North and Weingast (1989) and North (1990) being the two most prominent examples of how property rights evolved in England.
13 Deininger (2003, xxii).
14 Rithmire (2015, 12).

controlled. Legitimate claimants' access to land may be restrictive or expansive. In China, all land is controlled by the state, but can be owned by the government or a rural collective. These delineations between levels of government means that even if certain actors all claim to represent the "government," significant disagreement may arise over land-use. In China, some cities, such as Dalian, restricted the actors that could legitimately make claim to the landThus, the government, SOEs, and individuals were are to make claim to the land resulting in an expansive definition of who had land rights. In contrast, when the local government is the only actor with claim on the land then the legitimate claimants are restrictive.

Moreover, in an authoritarian regime where "the state" has the legal right to the land and its use, defining *who* represents the state is complex. Continuing to use Rithmire's framework, regulatory authority refers to the part of the government that has control over land policy. Regulatory authority refers to the power of the government managing the land because it is that authority "who can extend or grant legitimacy to property rights claims."[15] Rithmire notes that "in the postsocialist context" the regulatory authority is "almost always 'the state,' but . . . what part of the state" is often less clear.[16] I argue that this is the case in other authoritarian regimes, even those that have no communist or socialist tradition. The authorities with regulatory authority may be concentrated or dispersed.

In both Jordan and the UAE, the state is the regulatory authority but to understand who actually controls the land we must examine the relationship between various government actors. Despite the fact that all land is state-owned, who actually regulates that land varies by jurisdiction. In Rithmire's vernacular, the regulatory authority can be either concentrated or dispersed. If the

15 Rithmire (2015, 12).
16 Rithmire (2015, 12).

regulatory authority is concentrated, one can expect to see "a clearly designated state agency," which has control over land policy.[17] In contrast, a dispersed regulatory authority is one in which "multiple agencies and arms of the state [are] competing for authority" and control.[18] To examine a dispersed regulatory authority, a bureaucratic politics approach is necessary and this type of regulatory authority is consistent with the discussion of national-level SEZ programs in China, as discussed in Chapter 5. Instead of one bureaucratic actor that is responsible for all SEZ incentive policies, there are a myriad of bureaucratic actors each with their own areas of responsibilities and policy objectives.

	Legitimate Claimants	*Restrictive*	*Expansive*
Regulatory Authority	*Concentrated*	Statist	Pluralistic
	Dispersed	Oligarchic	Fragmented

Table 6.1: Property Rights Regime Framework

I do not think the patterns described necessarily apply to democratic political systems but I believe that the nature of land rights may be generalizable to other non-democratic countries. Debates over control of property, whether it be land or capital, are inherently political. Rithmire (2015) notes that "property rights decisions are often made in the aftermath of other more seismic political fights."[19] In Rithmire's study both Dalian and Changchun, the only regulatory authority was the local government. However, property rights were restricted in Dalian but more expansive in Changchun. Legitimate claimants were also expansive in Harbin but the local government had conflicting agencies and agencies, which led the power of the local state to be dispersed. The

17 Rithmire (2015, 12).
18 Rithmire (2015, 12).
19 Rithmire (2015, Chapter 1).

dispersed regulatory authority and expansive urban land claimants led land-use and urban policy to be highly fragmented in Harbin.

6.2.3 Case Selection and Scope Conditions

National-level policy is vital and allows us to test national-level explanations, such as exchange rate policies and capital controls, but land management and implementation are typically handled, or at least heavily influenced, by local officials. For the case studies in this chapter, the level of analysis is the zone but in the three selected cases, zone-level analysis essentially equates to examination of cities. The three cities under scrutiny are Aqaba, Jordan; Dubai in the United Arab Emirates; and Shanghai, China. These three cities have within their confines some of the most iconoclastic special economic zones in the world. In the case of Dubai and Shanghai, the enclaves therein - including the Jebel Ali Free Zone in Dubai and Pudong in Shanghai - are associated with incredible success. Jebel Ali has become one of the largest trans-shipment hubs in the global trading system and has helped secure the prominent place of Dubai Ports in the world shipping industry. In Shanghai, the Pudong New Area was once only farmland but now is a symbol of Shanghai itself. In contrast, Aqaba has been far less successful. Aqaba is Jordan's only port but has never achieved the kind of success the founders of the SEZ had hoped for.

The difference in the success of these zones provides an important contrast but is not the primary reason for selecting these three zone cases. To begin, I selected a set of countries with roughly the same values for national-level characteristics tested in Chapter 3. Specifically, for case selection at the country-level, I focused on exchange rate policy and regime type. Exchange rate policy is inherently national-level policy and shapes the "structure of incentives" for FDI.[20]

20 Haggard (1990).

However, local officials have relatively little influence or control over the exchange rate. Based on my cross-national analysis, having a fixed exchange rate (amidst financial opening) is associated with a higher propensity to enact zones. Therefore, I selected three countries that maintained fixed exchange rates and are all non-democracies, but whom exhibited significant changes in terms of their financial policy in the period in which they enacted the SEZs under study in this chapter.

China and the UAE have both maintained a fixed or pegged exchange rate throughout the period of inquiry.[21] Jordan experimented with a floating exchange rate for a brief period in the late 1980s and early 1980s but otherwise both Jordan and the UAE maintained a fixed exchange rate.

Country	China	UAE	Jordan
Exchange Rate Regime	Fixed	Fixed	Fixed
Financial Openness	Closed	Open	Closed to Open

Table 6.2: Case Selection, Summary of National-Level Characteristics

The remaining national-level characteristic of importance is financial openness. It is on this dimension that the three cases, at least at the country-level, differ. Since we do not have city-level measures of financial openness, I use the national-level financial openness as one indication of the structure of incentives in each country. A national-level measure, such as the Chinn-Ito scale is not ideal for a set of city cases, but at least provides a good indicator for the structure of financial incentives in the country as a whole. With this more general picture in mind, we can then delve down into the discrete policies offered in the zones themselves to analyze the origins of zones and how the incentives within zones differ from national-level policies.

21 The UAE experimented with some changes to its exchange rate policy in 1980 but quickly reverted back to a policy of pegging to the dollar.

In two of the cases, the zones are not the entirety of the city but instead encompass large districts of that city. Yet, city officials had the most influence in how the zone was managed and how regulations were promulgated to manage the zones. In these two cases, Shanghai and Dubai, the regulations in the zone influenced the choices of firms because ownership structures and incentives offered inside the SEZ were typically not available in the larger economy. Now, each of these zones has grown so large and important within the city itself that it is difficult to distinguish the zone from the larger urban environment. However, at the outset of each, the zone was very much a separate enclave with separate rules, regulations, and management.

6.3 Zone Origins in Select Cities

In this section, I begin with a discussion of Aqaba, Jordan. The Jordan case study in Chapter 4 primarily focused on national-level policies and how support from external actors, such as the United States, shaped zone enactment. In contrast, this section hones in on Aqaba only and explains how the zone there evolved over time. I then discuss the Jebel Ali Free Zone in Dubai to highlight how the use of land was fundamentally tied to the formation of the United Arab Emirates. The final case is Shanghai, China. After a brief summary of how local leaders pushed for the first zones in Shanghai, in the early 1990s, I describe how more recent efforts to create one, overarching zone over the entirety of Pudong is creating new governments between local and national authorities.

6.3.1 Aqaba, Jordan

In 2010, the *Financial Times* recognized the Aqaba Special Economic Zone (ASEZ) as the fourth best free zone in the world.[22] In October 2015, the industrial estate within the ASEZ was listed

[22] Hegarty (2010).

as "best in class" for its facility upgrades, infrastructure improvements, and China strategy by the same publication series.[23] These accomplishments prompted the managers of the Aqaba International Industrial Estate to publish a half-page ad in *The Jordan Times* highlighting the success of what is the largest SEZ in Jordan. Despite the self-selecting nature of this award - nominations are made by the zones themselves - the newspaper ad paid homage to the Aqaba SEZ Authority (ASEZA) Chief Commissioner Dr. Hani Mulki and noted that recognitions such as this "enables us to advance the Aqaba Special Economic Zone in fulfillment of the vision of His Majesty King Abdullah II."[24] Achieving international recognition was important but ensuring that one's patrons are properly recognized is likely even more crucial. Essentially, without the support of key leaders in Amman, those managing the various projects within Aqaba would not be able to do so.

In the national-level legal regimes analysis, the Jordan section discussed Aqaba but focused on the overall economic environment, international constraints, and the role of external actors. In this chapter, we delve deeper into the Aqaba Special Economic Zone. Arguably, the Aqaba SEZ is the most important SEZ in Jordan although it is not clear whether Aqaba or the QIZ program has a larger tangible effect economically.[25] I first provide a basic summary of Aqaba over time and then focus in on the period of origins of the Aqaba zone. After discussing the early evolution of the zone geospatially, I then describe the zone's resurrection in the 1990s.

The Aqaba area remains a relatively small access point to the Red Sea with only 27 kilometers of beach access from the border of Saudi Arabia on the southern side of the Gulf of Aqaba to the Israeli border in the north. In a set of promotional materials produced at the outset of the free zone in 1974, the Ministry of National Economy noted that Aqaba "is Jordan's only direct point of

23 Mullan (2015).
24 The Jordan Times (2015, 4).
25 Azmeh (2014).

access to the sea which makes possible the handling and shipment of all her foreign trade directly without the need of transiting through other countries."[26] The key to the last phrase, "other" countries, is an implicit reference to Israel. The strategic importance of Aqaba is tied to the broader Arab-Israeli question since the ports of Haifa and Jaffa are much closer to Amman, the political and population center of Jordan, but during times of instability in the Middle East, Jordanian access to Israeli ports on the Mediterranean has at times been limited.

Until the mid-1960s the Jordanian government encourages the use of Aqaba by levying taxes on imports arriving through other ports but, at that time, could not expand the volume of trade in Aqaba given the limited space available at the small port near the city center.[27] One problem with expansion was the limited amount of land south of the town of Aqaba. However, this problem was solved in the mid-1960s. The official land border between Jordan and Saudi Arabia was extended in 1965, with Saudi authorities giving Jordan an extra 16 kilometers of coastline. The expansion of the land area and coastline around Aqaba provided the impetus for re-thinking the development of the area.

The Aqaba port trade figure shows how fluctuations in trade coincide with major geopolitical events in the region. Data on exports and imports was obtained from the Central Bank of Jordan (CBJ) and is measured in tonnage. The Aqaba Ports Company also maintains vessel data but viewing trade in tonnage illuminates the volume of trade physically moving in and out of the port. While we do not have trade data for the actual year of enactment of the Aqaba free zone (1972), data from 1975 shows the volume of trade that was occurring through Aqaba in the 1970s and beyond. At the outset, trade volumes were quite low. Throughout the 1980s, the volume of

[26] Ministry of National Economy (1974, 26).

[27] Cavanagh (2013) argues that Aqaba "became a national priority in the early 1950s" but trade data from the 1950s to the 1970s remained very low through Aqaba.

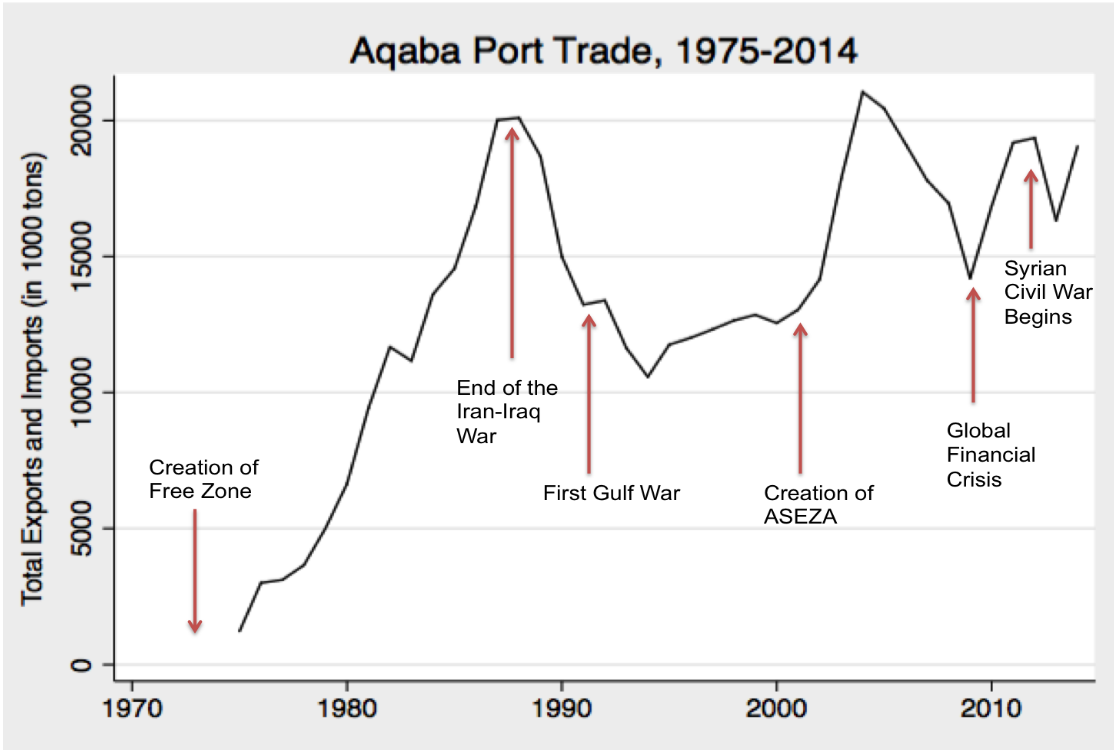

Figure 6.1: Aqaba Port: A Geopolitical Timeline

trade continued to increase. Much of this increase is due to trade diversion since many shipping companies did not want to operate in the Persian (Arabian) Gulf during this time period because of the Iran-Iraq War. In the 1980s, Jordan maintained "a close alliance with Iraq, driven above all by economic factors,"[28] and Aqaba became the primary port by which supplies for Iraq arrived to be transported over land. For this reason, trade volumes increased steadily throughout the 1980s and was a relative boom period for the port.

Development within the town itself was not significant, but the port was functioning as intended in the law creating the free zone in Aqaba. However, once the Iran-Iraq War ended, Iraq no longer needed the alternate Red Sea port and trade dropped precipitously. Then, in the early 1990s, the first Gulf War also reduced trade to the region resulting in a further decline of shipping

[28] George (2005, 67).

into (and out of) Aqaba. In an effort to re-develop the area, the central government created the Aqaba Special Economic Zone Authority (ASEZA) and channeled a wide range of new resources from USAID and other external actors to the area.

The Encourage of Investment Law of 1972 established the legal framework for the early free zone.[29] Government planning documents outlining the Three Year Economic Development for 1973-1975 state that the Aqaba free zone was to be modeled on the "Copenhagen and Hamburg type."[30] However, other materials from the time never specify what they mean by this "model," but the key goal outlined by the Ministry of Economy was to enhance shipping (with deep-water berths) thus contributing substantially to the development of trade. The free zone become operational the following year, in 1973.[31]

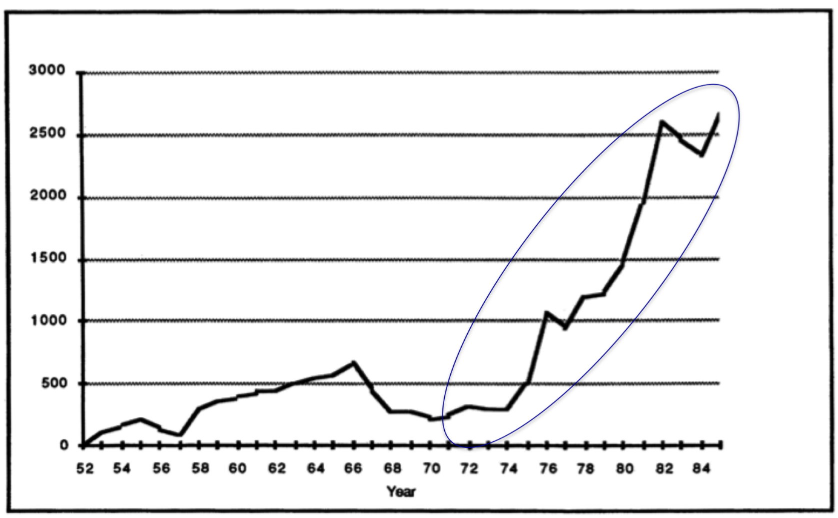

FIG. 2—Number of vessels calling at Aqaba. *Sources:* Compiled from data in Aqaba Port: Thirty Years, text footnote 10; Aqaba Port, 1983 (Amman: Aqaba Ports Corporation, Ministry of Transport, 1984).

Figure 6.2: Aqaba Port: Vessel Port Calls

29 Ministry of National Economy (1974).

30 Later rhetoric, discussing the reinvigoration of the port area as the ASEZA also called forth external zone models but this time channeling East Asia. The Ministry of Planning explicitly stated that the re-focus on Aqaba as an SEZ would be "modeled after similar successful projects in East Asia."Ministry of Planning (1997).

31 Kardoosh (2004, 9); Fröbel, Heinrichs and Kreye (1980).

Since data on shipping in Aqaba was not available from the Central Bank of Jordan, I relied on other data sources to map out the characteristics of Aqaba before and after the creation of the zone. The Aqaba Port vessels figure shows the number of port calls into Aqaba between 1952 and 1984.[32] Vessels were using the port prior to the creation of a free zone, but took a dive after the 1967 closure of the Suez Canal, which greatly increased shipping times between Jordan and Europe. The Jordanian government was thus forced to think about how to effectively promote trade through Aqaba despite higher costs and longer transit times to key markets. To do so, the Jordanian government contracted Doxiadis Associates, an international development consulting firm, to develop a plan for Aqaba. However, according to Kardoosh (2004), the plan was disregarded in 1968 because "it did not take into consideration the effect of the Israeli occupation of the West Bank."[33]

Another key challenge for developing Aqaba was the physical location of infrastructure in the early 1970s. Essentially, the port was quite small and very close to the town center, as shown in Figure 6.3, in the proposed development map from 1974.[34] The original port area is shown shaded in dark yellow; a modern-day view of this port area is shown in Figure 6.4.

In 1974 planning documents, the intent was to build a container port south of the town (light pink shaded area) and then put the industrial area further south (dark pink area furthest to the south, near the border with Saudi Arabia). In addition to the need for land in which to build the additional port facilities and industrial area, their was also concerns about the local population. One of the main exports from Jordan is phosphates and potash, both of which air pollution that can

32 The graphic is drawn from Drysdale (1987) and used with permission from the author since the original data used to create the port call timeline is no longer available. Original graphic is based on data compiled by Drysdale from the Aqaba Ports Corporation and the Ministry of Transport.

33 Kardoosh (2004, 9).

34 Ministry of National Economy (1974).

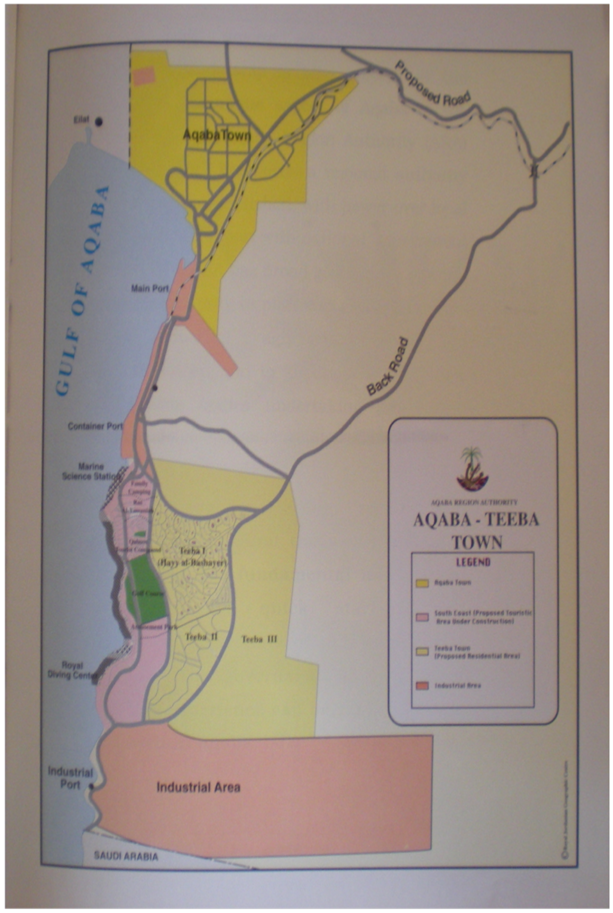

Figure 6.3: Early Aqaba Spatial Divisions: Town, Port, and SEZ

cause lung diseases. According to the former director of the Aqaba Regional Authority (ARA), the governing body for the free zone, Queen Noor was concerned about the health effects of the phosphates terminal and she pushed the ARA to move the specialized phosphates cargo terminal to the industrial area south of the town.[35]

Key to achieving increases in Aqaba trade was using the free zone. However, to make the free zone more attractive, the port and associated infrastructure needed to be improved. Jordan did not have the resources to do this on its own and thus relied heavily on foreign aid, primarily through grants. I was unable to locate Aqaba-specific data on revenue and expenditures for the initial

35 Personal interview, Former Head of the Aqaba Regional Authority, 19 October 2015, Amman, Jordan.

Figure 6.4: Aqaba Port Movements, Town Center

enactment period, but national-level figures provide a sense of the scale of this source of funds for infrastructure development projects. Between 1967 and 1973, foreign grants roughly equaled 57 percent of total revenues for the government.[36] Another 10 percent of the country's revenues were from development loans, although these data tables do not specify which countries provided these grants and loans.[37] While the exact sources of the funds remain unclear, according to an official government publication, "capital expenditure on the projects of the Port Corporation amounted to JD [Jordanian dinar] 35 million during the period 1976-1980."[38] From these expenditures, "Port capacity increased from 700,000 tons of imports in 1975 to 2.7 million tons in 1980."[39] Later infrastructure investments were also made and those did identify the external foreign investor. For example, from 1981-1984, the free zone in Aqaba received 1.25 million Jordanian dinars from the Iraqi Fund for External Development.[40] While this was well below the original expenditures in the late 1970s, the additional investment allowed for port upgrades, which were key to Iraq's ability to import goods via Jordan during Iran-Iraq war.

36 Ministry of National Economy (1974, Part A).
37 Ministry of National Economy (1974).
38 National Planning Council (1981, 180).
39 National Planning Council (1981, 179).
40 National Planning Council (1981, 170).

Opening Financially: Resurrecting the Aqaba SEZ

The structure of the global economic system changed dramatically after the end of the Cold War. The United States was no longer solely focused on maintaining its client, anti-communist states, such as South Korea and Taiwan, but some policies transcend these global economic changes. In many ways, the use of foreign aid to support an ally remained strong, but the impetus for doing so was no longer anti-communism. The Middle East remained host to a range of security problems for the US, but Jordan was one of few bastions of stability among a very difficult neighborhood. Thus, keeping Jordan functioning as a state and one that is ostensibly close to the US is imperative for US policy objectives. As previously discussed in Chapter 4, Jordan was viewed positively by the US for signing a peace agreement with Israel. The US thus supported a variety of programs that not only attempted to promote mideast peace, but that also provided funds to maintain regime stability in Jordan.

In this way, funding and support for the Aqaba SEZ, and other economic policies in Jordan, shows striking similarities to Cold War-era policies. In his analysis of South Korea and Taiwan during the 1950s and 1960s, Haggard notes that investment preceded industrial development in both countries and that "aid was the crucial form of external capital."[41] Jordan had been trying to promote the Aqaba Port since the early 1970s, but it was not until the 1990s that Jordan fully achieved all of the objectives first envisioned in the original free zone plans, with a major influx of aid and loans from the US, World Bank, and OECD.

The re-emergence of Aqaba and the origins of its latest incarnation, ASEZA, began in the mid-to-late 1990s. According the 2014 Investment Climate Statement:

[41] Haggard (1990, 197).

> The Aqaba Special Economic Zone (ASEZ) is an independent economic zone not governed by the DFZC [Development and Free Zones Corporation]. It offers special tax exemptions, a flat five percent income tax, and facilitates customs handling at Aqaba Port. In recent years ASEZ has attracted projects mainly in hotel and property development valued at over $8 billion. The government continues to implement development projects aimed at attracting commerce and tourism through the Port of Aqaba. The Aqaba New Port project, initiated in 2010 with completion expected by 2015, includes relocating the current port 20 km south, adding four new terminals, and expanding ship berthing, marine services, and capacity, including for energy resources such as natural gas, phosphates, and propane.

The policy changes of this era coincide with larger changes in the Jordanian political system, most importantly monarchical succession following King Hussain's battle with cancer and eventual death in February 1999. His eldest son, King Abdullah, was not the heir apparent and thus in the immediate aftermath of King Hussain's death the new leader had to not only solidify his own power but determine a roadmap for the country's economic future. King Abdullah is considered more security-focused than his predecessor, primarily because of his background with the Jordanian Special Forces.[42] George (2005) argues that King Hussain indulged a passion for foreign policy at the expense of more mundane domestic affairs, claiming that the monarch's macro-economic illiteracy may be responsible for the country's economic woes during the 1980s. In contrast, King Abdullah combined foreign policy with domestic economic goals by courting the US and obtaining substantial foreign aid to support his domestic patronage network.[43]

A variety of financial opening policies began after the signing of the Israeli-Jordan peace accord in 1994, as shown in the financial openness graphic. These financial opening policies accelerated further after King Abdullah took power in 1999. According to the Chinn-Ito index, since the early 2000s, Jordan has been one of the most financially open countries in the world.

[42] George (2005).
[43] Peters (2009).

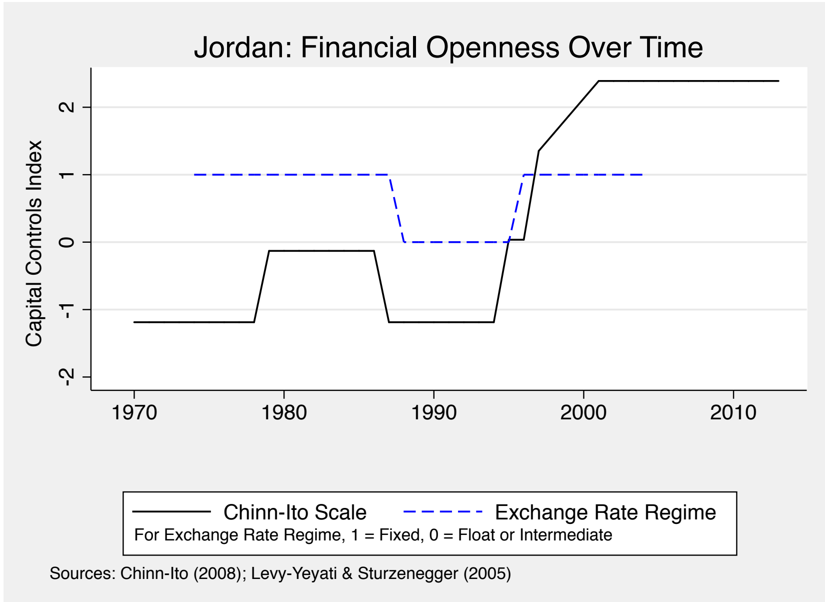

Figure 6.5: Financial Openness and Exchange Rate Policy in Jordan, 1970 to 2014

While a larger port infrastructure for Aqaba was envisioned from the start in the 1970s, and increases in the volume of trade were seen throughout the 1980s, a modern container terminal and cargo port were not fully realized until the 2000s. The photo below shows the modern Aqaba Container Terminal (ACT), which is owned by the privately-held Aqaba Development Corporation under the close supervision of the Aqaba Special Economic Zone Authority (ASEZA). For Aqaba, some of the goals originally envisioned in 1972 were eventually achieved, but it took several decades and a complete re-thinking of land-use and financial policies. The port infrastructure needed to be moved to satisfy shipping needs, but also to appease the local population. Much like the 1970s, the Jordanian government needed external funds to build the infrastructure necessary to make each new iteration of the SEZ successful. In the case of the post-2001 incarnation of the Aqaba SEZ that included a significant revision to the country's overall financial policy.

Figure 6.6: Aqaba Port Movements, Container Terminal

6.3.2 Dubai, United Arab Emirates

In terms of the structure of incentives, the UAE has maintained a fixed exchange rate for the past four decades. The only exception is a very short experiment with a floating exchange rate in 1980, as indicated in Figure 6.7. Even now, despite increasing trade with China and India and some speculation that the UAE may alter its exchange rate, the UAE has committed to pegging its currency to the US dollar. The *dirham*, the country's local currency, has been pegged to the US dollar since November 1997.[44] The UAE cites two main reasons for adhering to a fixed exchange rate regime. First, "since oil prices are denominated in US dollars, this allows for greater convenience in oil transactions."[45] The UAE economy is heavily dependent on the oil and gas sector. In 2013, over 58 percent of the GDP of the Emirate of Abu Dhabi was generated from the hydrocarbon industry.[46] The second reason for pegging to the US dollar is so that the UAE can "benefit from the US's

44 Elite Media (2013, 58).
45 Elite Media (2013, 55).
46 Elite Media (2013, 78).

financial stability, keeping the dirham stable."[47]

Overall, the financial policies of the UAE are extremely open and have been open since the country's official independence from Britain and the country's founding in 1971. The UAE has the highest score on the Chinn-Ito Capital Controls Index (2.39), which indicates that the country has very few controls on capital in the country. The primary reason for maintaining such open financial policies is the UAE's desire to serve as a commercial, trading, and financial hub for the Middle East and South Asia. The UAE now ranks 22 out of 189 countries in terms of the ease of doing business.[48] While the capital account has remained open throughout the country's existence, what the Chinn-Ito scale does not capture is restrictions on less liquid assets, such as land. Land is owned by the local emirate[49] and the "UAE restricts foreign ownership of land, with rules varying from emirate to emirate."[50]

In terms of serving as a trade and trans-shipment hub, the Jebel Ali Port and Free Trade Zone has become a critical node in global shipping. Despite the tiny size of the country, both in terms of population and land area, the UAE is twentieth largest exporter (as of 2011) and "accounts for 1.6 percent of total world exports."[51] Out of the country's overall exports, Dubai accounts for nearly 80 percent of that trade and the bulk of these exports transit the Jebel Ali port. Moreover, Dubai is now home to one of the largest shipping companies in the world, Dubai Ports (DP) World. The success of DP World is inextricably linked to Jebel Ali. In fact, the original name of the company was the Dubai Ports, Customs, and Free Zone Corporation. The role of this corporation at

47 Ibid.
48 World Bank (2015, 6).
49 The UAE is divided into 7 emirates, which are similar in size and structure to states or provinces.
50 U.S. Department of State (2014*e*, 4).
51 Elite Media (2013, 62).

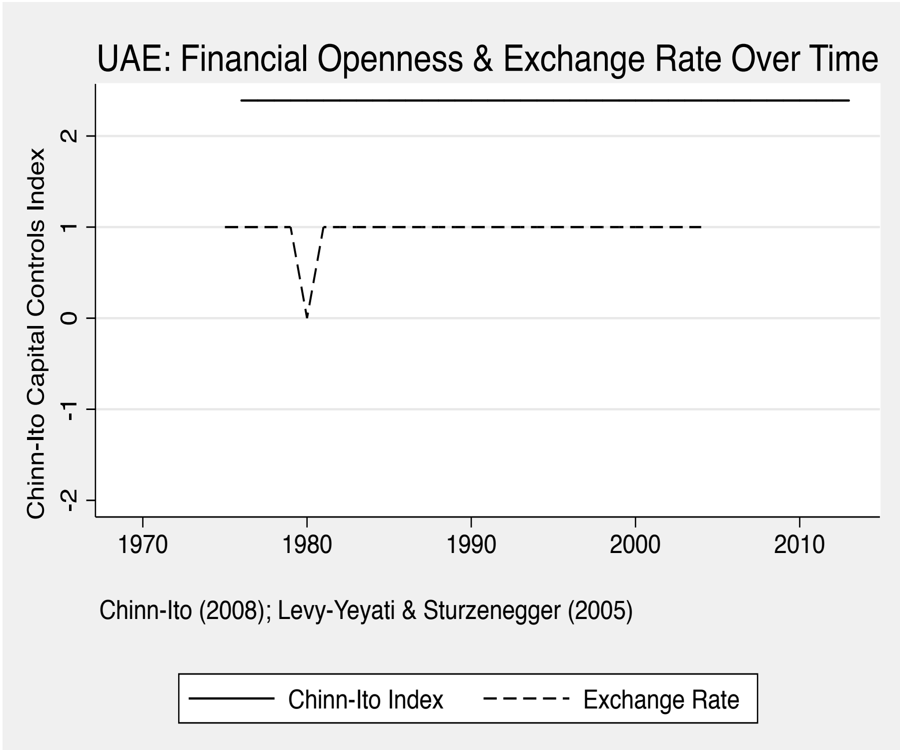

Figure 6.7: Financial Openness in the United Arab Emirates

its founding was to build, manage, and operate the Jebel Ali Port and Free Zone.[52] The corporation is now responsible for the management of over 50 ports worldwide.[53]

The location of the Dubai zone has some advantages, but the success of Jebel Ali was not assured at the outset. In the initial phases of development, the UAE was not yet even a sovereign nation, the population of the country was incredibly small, and the country's colonial heritage could have detracted from the areas development. Observers may simply attribute Jebel's success to the country's large oil reserves, but the bulk of oil revenues were discovered in the Emirate of Abu Dhabi and were not a fundamental component of the ports development. Instead of providing a source of funds for Dubai, internal boundaries served as barriers to cooperation between distinct emirates ruled by separate ruling families. In fact, Jebel Ali became a point of leverage for leaders

52 DP World was also responsible for Port Rashid, which is also in Dubai (Hvidt 2009, 405).
53 DP World, http://web.dpworld.com/our-business/marine-terminals/.

Figure 6.8: Map of the UAE, Jebel Ali Highlighted

in Dubai because it offered a source of revenue for local leaders. Later, during the period of state formation and British colonial departure, the port and free zone provided diversification of the country's economy so that national leaders were not solely reliant on oil resources.

As late as the 1960s, the country that was to become the United Arab Emirates remained desperately poor.[54] The Trucial States, as the area was called under the British,[55] was made up of a variety of local tribes and ruling families. The traditional British colonial model, or at least the model utilized in places such as India, was much different on the Trucial Coast.[56] Initially, the British did not particularly care about the Trucial States on their own terms, as the area simply served as midpoint for vessels on their way to India. The primary concern of the British was safe passage for British vessels transiting the Persian/Arabian Gulf on their way to British outposts in Iran, Iraq, or India.[57] However, once oil was discovered in the Gulf, securing access to these

54 For an excellent summary of the conditions at the time, from the perspective of a resident of Abu Dhabi, see "A Daily Struggle" in Fahim (1995; 2013, 55-59).
55 The United Kingdom relinquised control of this colony in 1971.
56 Alhammadi (2013).
57 This body of water that separates the Arabian Peninsula from Iran is often referred to as the Persian Gulf, but

resources became a major prerogative.

Haggard (1990) argues that most developing nations begin with primary product economic (PPE) and that was certainly the case in Abu Dhabi. However, despite several decades of exploration, accessible oil reserves were not found within the Emirate of Dubai. Thus, oil revenues did not fund SEZ construction. Instead, the SEZ was built partially because Dubai did *not* have access to the kind of revenues that Abu Dhabi was generating from its oil wealth. As early as the 1930s, British oil representatives began conducting surveys in the vicinity of Dubai after the discovery of oil in Kirkuk (modern-day Iraq) and Bahrain. It was not until 1963 that oil was discovered off the coast of Dubai in the mid-1960s with three major oil fields entering production between 1966 and 1972.[58] However, the amount of oil found in Dubai was nowhere near the levels found in the neighboring emirate of Abu Dhabi. By the mid 1970s, production in Abu Dhabi was three times greater than the production seen in Dubai. In 1973, Abu Dhabi was exporting 1.3 million barrels per day whereas Dubai averaged approximately 300,000 barrels per day.[59]

Despite Abu Dhabi's oil wealth, throughout the 1960s Dubai remained "the commercial capital of the Trucial States."[60] Key to Dubai's status as the commercial capital was the role of the merchant class, many of them immigrants from India and Persia who moved to Dubai under British colonial rule. In terms of political interests, there was a symbiotic relationship with these economic elites and the ruling al-Maktoum family. Sheikh Rashid bin Said Al-Maktoum, Dubai's leader from 1958 to 1990,[61] was "himself a merchant, [and] institutionalized his relationship with the

this a major point of contention for the residents of the countries in the Gulf or in Arabia. For example, maps produced in the UAE will always label this body of water as the Arabian Sea. Given these political sensitivities, I will refer to this area as the Persian/Arabian Gulf or simply, the Gulf.

58 Wilson (2006, 240).
59 Wilson (2006, 366).
60 Wilson (2006, 97).
61 Davidson (2015, 30).

merchants through his Majlis [council] . . . and concentrated his efforts on trade."[62] The merchant class was less concerned about controlling land or political issues, but wanted low customs duties and a better port that would facilitate trade. Sheikh Rashid supposedly once said to his local council that, "What is good for the merchants, is good for Dubai."[63]

Figure 6.9: Moving the Port: From the Creek to Jebel

Part of appeasing the merchant class included developing a new more modern part. Up until the 1970s, the main port was located on Dubai creek. The port and wharves near the creek were able to continue operation because Iranian merchants pursued "successful dredging of its creek and the expansion of its mooring facilities."[64] Continued dredging was necessary because of the silt build-up in the creek bed, which for the most part is quite shallow, meaning that only relatively flat-bottomed vessels, as shown in Figure 6.9, are able to transit up and down the creek. Because of the constant need for dredging in the vicinity of the creek, Jebel Ali was initially envisioned as

62 Al-Sayegh (2006, 98).
63 Wilson (2006, 127).
64 After the Shah raised tariffs in the 1970s, many Persian merchants left Iran and moved their operations across the Gulf to Dubai (Davidson 2007, 34).

simply a second port for Dubai.[65] Jebel Ali was a small area to the west of the Dubai creek and at that time was sparsely populated and since their was no creek or other water outlet, the need for constant dredging would be less. While initially envisioned as simply a port, the Dubai Department of Industry decided to make the land surrounding the port an area "with the objective of supplying foreign clients with all the necessary administration, engineering, and utility services."[66]

According to British sources, the first mention of a "free trade zone" in Dubai was reported by a consular officer in 1974.[67] The port itself was proposed by Neville Allen, a close advisor of Sheikh Rashid bin Maktoum, in 1972.[68] Planning for the Jebel Ali port took four years and the initial phase (66 berths) were completed in 1983.[69] At the time, Jebel Port was "the largest man-made port in the world . . . initially encompass[ing] some 70,000 square metres of warehousing and 850,000 square metres of uncovered areas."[70]

By 1980, both the port and free zone were essentially in operation even though all the regulations for the free zone had not yet been promulgated. Dubai Ports was in operation and, in the early 1980s, served as an important dry dock for ships damaged in the Gulf during the Iran-Iraq war. The decree to officially establish the Free Zone at the Jebel Ali Port was signed by Sheikh Rashid in 1980. Then, in 1984, the regulations were approved that allowed for duty free privileges in the free zone and foreign ownership of firms, which is not allowed in the rest of the economy.[71] In February 1985, the Jebel Ali Free Zone Authority (JAFZA) was officially established with the regulatory authority to manage the affairs within the SEZ.[72] There are now 23 zones throughout

65 Davidson (2007, 39).
66 Davidson (2007, 40).
67 Keshavarzian (2010, 37).
68 Neville Allen was an engineer with Sir William Halcrow and Partners (Wilson 2006, 129).
69 Wilson (2006, 370).
70 Wilson (2006, 432).
71 Fahim (2010).
72 Iriani, Elbadawi and Fadhel (2012, 7).

the Emirate of Dubai, all of which are managed by the Dubai government.[73]

Figure 6.10: Regulatory Authority: Dubai Government Planning Department

In Dubai, the local government owned the land but those same local leaders had to appease a variety of constituencies. Thus, the regulatory authority in Dubai was concentrated, but the legitimate claimants were expansive. The government had to attempt to satisfy a wide variety of stakeholders, including the local merchant class, supporters of the ruling family, and foreign businesses. Moreover, there was an implicit competition between the city of Dubai and the government in Abu Dhabi. While the government technically owned the land, in order to build the port, the government had to appease important segments of the community in order to make the free zone and port come to fruition. This led to a more pluralistic arrangement where local interests had significant say in how Jebel Ali arose. Moreover, since the restrictions on firm ownership did not exist within the confines of the free zone, foreign firms could establish a foothold in the city and have been a vital part of the city (and the zones therein).

73 Author dataset.

The pluralistic management of the zone in Dubai is in contrast to more statist management of land and zones in Abu Dhabi. Prior to the discovery of oil in Abu Dhabi, the population was quite poor.[74] However, once oil was discovered and the ruling al-Nahyan family re-negotiated oil contrast with British officials, the ruling family was the only segment of the population with control over both the land and the oil resources. Thus, in Abu Dhabi, the regulatory authority was concentrated and legitimate claimants to the land and its resources was restrictive, resulting in a more statist property right management regime, which is similar to the next and final case study.

6.3.3 Shanghai, China

In the Chinese political economy, Shanghai is both a city and a province. Technically, Shanghai is considered a direct-control municipality and what this means in practice is that the city has the status of a province within the internal hierarchy. However, given its size and stature, Shanghai is more important than many provinces. While Beijing is the political and cultural center of China, Shanghai remains a key financial and commercial hub. Some local and national officials would prefer for Shanghai, rather than Hong Kong, to be the financial center of East Asia. However, since Shanghai is not autonomously governed in the same way that Hong Kong is, the challenges the city faces are distinct. In particular, Shanghai is much more beholden to leaders in Beijing than Hong Kong. At the same time, Shanghai has a level of political clout higher than less developed or centrally located provinces. This importance within the Chinese political economy is one key reason for selecting Shanghai as a zone-level city case study.

In this case, one reason for delving down to the city level is that cross-national data hides the dramatic changes that have occurred within and across the country. For example, not only

[74] Fahim (1995; 2013).

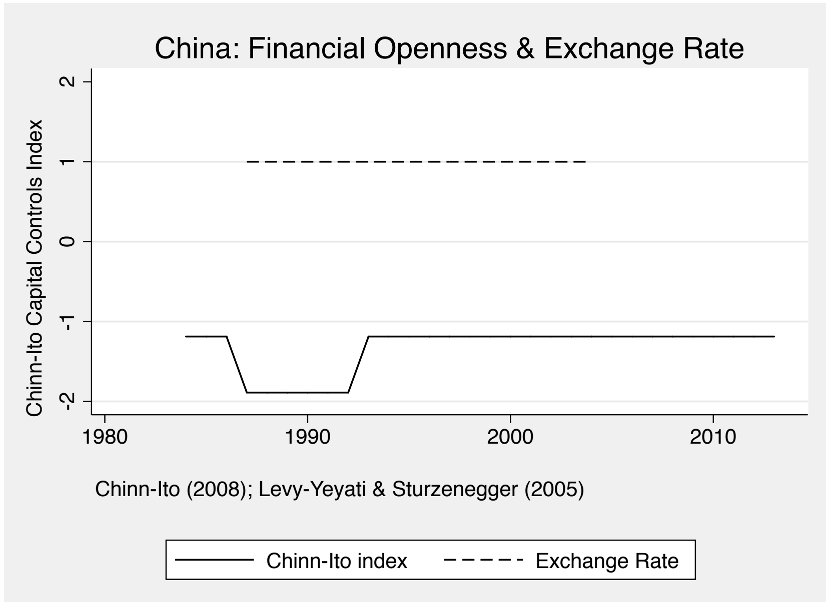

Figure 6.11: Financial Openness in China, 1984 to 2014

has China maintained a fixed exchange rate throughout the past forty years, changes in financial openness at the national-level have been minimal. The only change is from the late 1980s to the early 1990s, went capital controls were increased. Otherwise, the Chinese financial system has remained relatively closed.

The second reason for selecting Shanghai as a case is that we are able to compare the property rights and other policies over two distinct time periods. I examine Shanghai in both the early 1990s and in the period from 2013 to 2017. During the late 1980s and early 1990s, local leaders created the Pudong New Area and developed wide swaths of agricultural land that was to become a key urban center within the larger Shanghai municipality.[75] The creation of Pudong is a key starting point because many leaders in Shanghai were jealous of the preferential treatment given to Guangdong Province and, specifically, the Shenzhen Special Economic Zone. Leaders in Shanghai viewed Pudong as their opportunity to replicate Shenzhen's success. Today, the Orient

[75] Huang (2008).

Pearl Tower, which adorns the east bank of the Huangpu River, has become a striking symbol of modern China but without the development of Pudong this symbol of modern China may not exist.

The second time period of study focuses on the creation of China's newest zone program, the Pilot Free Trade Zone (PFTZ) and its first incarnation, which occurred in Shanghai in 2013. Unlike earlier zone programs, the focus of the Shanghai Pilot Free Trade Zone (SPFTZ) was not on land; no new land was developed. However, the new organization created a separate level of administrative control over many of the pre-existing zones in Pudong. In essence, this new structure has attempted to consolidate regulatory control while simultaneously limiting the rights of legitimate claimants. What was already a statist property rights regime, attempted to further consolidate investment and development in Pudong. Although the jury is still out on whether or not this effort has been successful.

A Short Economic History of Pudong

In 1990, the Pudong New Area[76] was officially approved for preferential policies associated with special economic zones.[77] Despite Shanghai's history as an economic and commercial center in China, the early SEZs were created in less important provinces. In the 1980s, Guangdong and Fujian Provinces were rural backwaters and thus better locations for the grand reform experiment begun in 1979. However, like the early SEZs, Shanghai's policies for reform and opening were equally controversial. In some respects, given the importance of Shanghai as both a political and economic center in China, the reform efforts were often even more difficult. During the Mao era, Shanghai served as a "political stronghold and springboard to launch many political campaigns."[78]

[76] Figure 6.12 highlights the area in which the initial zones approved in the early 1990s were concentrated. However, most people also refer to the entire peninsula east of the Huangpu River as the "Pudong area."
[77] Prime Minister Li Peng made the formal announcement on April 15, 1990 (Lin 1998, 85, footnote 65).
[78] Lin (1998, 52).

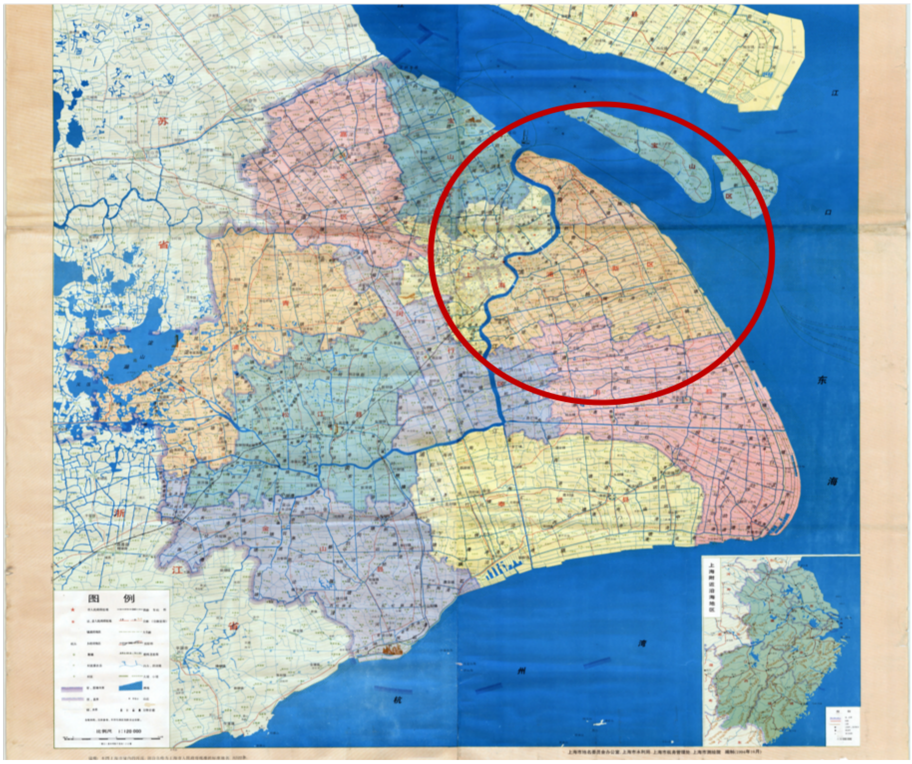

Figure 6.12: Pudong New Area, Shanghai, China

During the Cultural Revolution, “three of the so-called ’Gang of Four,’ the leftist faction [that arose after Mao’s death] came from Shanghai.”[79] Given this background (and often forgotten from today’s vantage point), Shanghai faced substantial economic challenges in the 1980s.

Deng Xiaoping once lamented that Shanghai was not included as one of the original SEZs. In 1991, Deng stated that, “It would have been better to develop the Pudong District a few years ago, like the Shenzhen Special Economic Zone.”[80] Local leaders in Shanghai trace the beginning of the Pudong District to the development strategy conceived in 1984.[81] Essentially, this development plan outlined three general, overarching goals for the city and these goals would guide the efforts in Pudong. First, Shanghai should be a multi-functional city. Second, the city should focus on the

79 Lin (1998, 52).
80 Deng (1991).
81 Shanghai Editorial Committee (2010); Lin (1998, 58).

high-tech and service sectors. Third, Shanghai should "serve as a key link between China and the world economy."[82]

According to the Shanghai Encyclopedia, an official history produced by the municipal government, after a feasibility study in the late 1980s, then-party secretary of the Communist Party's Shanghai Municipal Committee Zhu Rongji proposed the Pudong plan to Deng.[83] The national-level government bureaucracy, the State Council, approved the *Plan for Developing Pudong* on April 18, 1990.[84] As part of the overall Pudong development plan, three separate zones were planned, and those are listed below in Table 3. The fourth zone, the Jinqiao EPZ was not founded until national-leaders initiated the EPZ program in 2001.

Zone Name	**Year Established**
Lujiazui Finance and Trade Zone	1990
Waigaoqiao Free Trade Zone	1990
Zhangjiang HI-Tech Zone	1992
Jinqiao Export Processing Zone	2001

Table 6.3: Zones within the Pudong New Area

The designation of Pudong as a new area provided Shanghai with the same preferential policies afforded other SEZs. However, unlike Shenzhen, Shanghai Pudong had one additional incentive: seed money. At the outset of reform in Guangdong, Shenzhen was given substantial leeway to devise new rules and regulations but it essentially had to fund itself. Firms from Hong Kong could setup in an city with cheaper land and a ready supply of low-cost labor but Beijing did not initially provide funds for Shenzhen to develop. In contrast, Shanghai Pudong "received 6.5 billion yuan from the central government for the next five years [from 1990 onward] as *qidong zijin* (seed money) and the authority to raise more funds on its own including issuing local bonds

82 Lin (1998, 59).
83 Later, Zhu Rongji would become the Chinese Premier.
84 Shanghai Editorial Committee (2010, 74).

for the purpose of financing major construction projects" in Pudong.[85]

In terms of the discrete policies enacted within the Pudong New Area, many of them now appear quite standard. The initial regulations focused on reducing corporate income tax rates, how to deal with reinvested earnings, remittances, and other basic elements of financial policy. The corporate tax rate was set at 15 percent, much lower than the 30 percent rate in the rest of the economy, for most firms and set at 10 percent for those that focused primarily on import-export.[86] In the first year of operation, firms were not required to pay any corporate income taxes.[87] For any public infrastructure that was built, including ports, rail, roads, and electricity-related infrastructure, construction companies were completely exempt from corporate taxes in the first five years.[88]

6.3.4 The Shanghai Pilot Free Trade Zone

Discrete policies within Shanghai have changed over time. In the early period as Pudong was being created, the local government wanted to offer the kind of tax policies that would attract foreign investors to the area. Despite restrictive policies in most of China, by having more lenient financial rules in Pudong and other SEZs, the idea was that those favorable policies would be sufficient to overcome both uncertainty among foreign investors and concerns about the restrictive financial environment. While many of China's financial policies have remained (or even become more restrictive),[89] the focus of the most recent phase in SEZ evolution, the Shanghai Pilot Free Trade Zone (SPFTZ) was not simply financial. The original plan for Pudong was concerned with

85 Lin (1998, 62).
86 State Council (1992).
87 *Special Economic Zone and Coastal Economic and Technological Zones Yearbook* (1992, 619).
88 State Council (1992, Section 4).
89 See Dollar (2013) for analysis of China's recent financial policies, many of which have been promulgated to reduce financial openness and restrict outward capital flight.

controlling land, but local leaders also needed to create the right financial incentives in order to attract investors. However, while some observers touted the SPFTZ's "negative list" for foreign investment, financial openness was never really the purpose of this latest zone.

On September 29, 2013, the Shanghai PFTZ was officially launched. In concert with a range of other reforms proposed during the 12th Five-Year Plan, the Shanghai pilot zone was underway less than a year later. However, the idea began much earlier when the previous administration approved a request[90] by the Shanghai government to create "an international financial and shipping center by 2020."[91] The proposal was hotly contested[92] but before the trial period was even complete other jurisdictions began their own versions of this program. PFTZs have been approved for Guangdong, Tianjin, and Fujian[93] and media reports indicate that Shanxi, Gansu, and Hubei provinces have all provided PFTZ proposals to the central government for approval.[94]

According to both official policy documents and interviews with Shanghai-based business leaders, the focus of the zone was on streamlining the administrative burden for firms operating in the various zones that would become part of the PFTZ. The Framework Plan for the Shanghai zone stated that the "the transformation of government functions," accelerating capital account convertibility, and other financial and regulatory changes would be key aspects of the new zone.[95]

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90 State Council, "State Council meeting arrives at plan to move forward construction of Shanghai international financial center," March 25, 2009, http://www.gov.cn/ldhd/2009-03/25/content_1268570.htm.

91 Quote is from Li (2009, 3); see also Zhang and Rogowsky (2015).

92 George Chen, "Exclusive: Li Keqiang fought strong opposition for Shanghai free-trade zone plan," *South China Morning Post*, July 15, 2013, http://www.scmp.com/news/china/article/1282793/li-fought-strong-opposition-shanghai-free-trade-zone-plan.

93 Angela Meng, "State Council approves free-trade zones for Tianjin, Fujian, and Guangdong," *South China Morning Post*, December 13, 2014, http://www.scmp.com/business/economy/article/1661619/state-council-approves-free-trade-zones-tianjin-fujian-and.

94 *Shanghai Daily*, "New FTZs to follow Shanghai's lead," March 25, 2015, http://coverage.shanghaidaily.com/shdailyftz/news/.

95 Shanghai Municipal Government, "Framework Plan for the China (Shanghai) Pilot Free Trade Zone," http://en.shftz.gov.cn/Government-affairs/Laws/General/212.shtml.

In terms of sectors, the original planning documents focus most heavily on financial services and shipping. Arguably, the biggest innovation in the zone has been the use of a "Negative List" but this component of the plan has not been without controversy.[96] Some argue that the impetus for the shift to the Negative List approach stems from China's negotiations with the United States on a bilateral investment treaty (BIT) between 2010 and 2013,[97] along other regional free trade agreements.[98] However, the BIT never came to fruition.

Many of the policies devised for the PFTZ are also complementary to the foreign policy guidance that was emerging during the same time frame. The One Belt, One Road (OBOR) initiative formally took shape in 2013, and one of the key aspects of the OBOR guidance was to increase outward FDI.[99] The OBOR *Vision and Action* explicitly cites "using key economic industrial parks as cooperation platforms" and recommends "speed[ing] up the development of the China (Shanghai) Pilot Free Trade Zone."[100] However, guidance remained incredibly vague as to how these two economic policy initiatives could or should work together. As the SPFTZ has evolved, the dramatic financial reform goals have not come to fruition.[101] Instead, the new zone seems to be functioning as a means to consolidate control over the existing SEZs within Shanghai. While other zones in the city are not under the purview of the SPFTZ, all of the Pudong-located zones have been re-branded as part of the larger SPFTZ. The newly re-designed entrance, to what was originally the Waigaoqiao FTZ, is shown below in Figure 6.13.

However, Shanghai's latest attempt at consolidation has several striking similarities to ear-

96 China-Britain Business Council, "China (Shanghai) Pilot Free Trade Zone," November 2014.

97 Personal Interview, US Foreign Commercial Officer, US Consulate, Shanghai, April 13, 2016.

98 Markus (2016).

99 Ministry of Foreign Affairs (2013); Xinhua News (2015).

100 NDRC, *Vision and Actions*, 2015.

101 Personal Interviews: Business Consultant, Shanghai, April 14, 2016; Business Association Leader, Shanghai, 16 August 2016; Compliance Officer, Waigaoqiao FTZ, August 19, 2016.

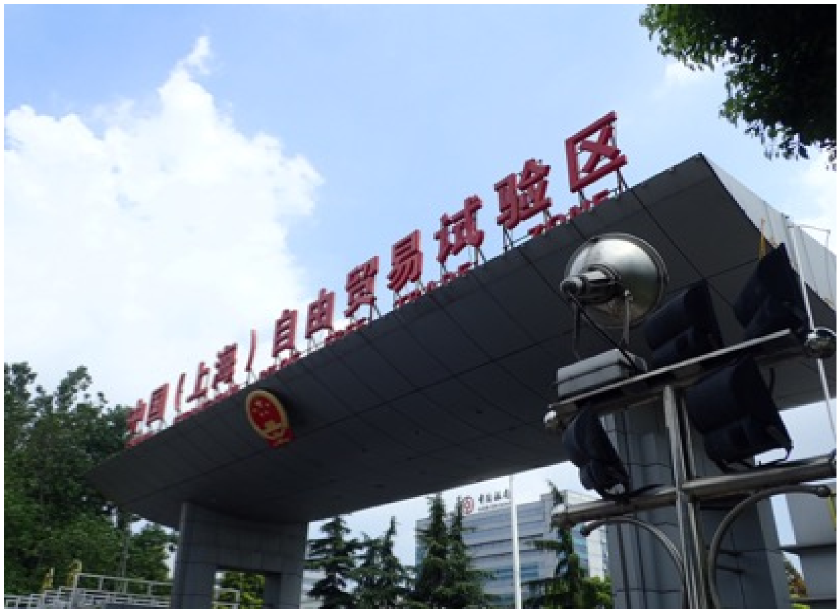

Figure 6.13: Re-branding the Shanghai Pilot Free Trade Zone

lier development efforts in Pudong. At the time of Pudong's creation, the area was primarily rural. The political upheaval of 1989 (Tiananmen) had slowed economic momentum and a crackdown on private sector business was taking shape. By 1992, these debates with conservatives who sought to halt reforms,[102] and reformers on the side of Deng Xiaoping. Official media sources, in March and April 1992, published articles criticizing continued financial opening and reform stating that "the romantic ideas of some economists" were not appropriate for the Chinese system.[103] Despite these challenges (primarily at the national-level, but concerns across a range of cities), Shanghai leaders were clamoring to develop Pudong hoping to make Shanghai once again the financial center of China. Eventually, and primarily due to support from Deng during his "Southern Tour" to promote the reform agenda,[104] Shanghai leaders received approval from Beijing to create the Pudong zones

[102] According to Zhao (1993), key amongst the conservatives was Chen Yun. By 1992, Chen Yun was no longer a Vice Chairman for the Communist Party of China (CPC), but still served as a member of the CPC Central Advisory Commission, and thus remained influential in national-level party politics.
[103] Zhao (1993, 754).
[104] Zhao (1993).

and convert agricultural land into SEZs.[105]

In the modern era, Shanghai leaders want to maintain their regulatory control over the vast majority of economic activities but land was no longer the focus of their effort. Essentially, the bulk of land to the east of the Huangpu River in Shanghai had been developed so this was not longer available as an access of control. Simultaneously, leaders in Beijing were pressing Shanghai officials to pursue particular aspects of the broader reform agenda. At this time, according to media sources, the reforms were primarily being pushed by Premier Li Keqiang. However, the current moves within the SPFTZ to continue consolidating power have now been put under the purview of President Xi Jinping's main economic focus, namely "supply-side structural reforms."[106] As such, the focus of regulatory control became the overarching structure of city management, exemplified by the Shanghai PFTZ. This zone does not actually create any dramatically new incentives for manufacturing, production or other economic activity but does solidly lock-in the statist management prevalent in Shanghai.[107]

6.4 Comparative Conclusions

Both Shanghai, China and Abu Dhabi in the United Arab Emirates exhibit patterns associated with a statist property rights regime. The key difference at the national-level for these two countries is in terms of financial openness. While financial restrictions have remained in place in China, the UAE has become incredibly open. China's Chinn-Ito index score has remained less than zero, ranging between -1 and -2 throughout. In contrast, the UAE has maintained a Chinn-Ito score of 2.38, which is the maximum score for this capital controls index. While the UAE has remained open,

105 Vogel (2011, Chapter 23).
106 Naughton (2016); Xinhua News (2014); Xinhua News (2017).
107 See Huang (2008) for further analysis of how Shanghai's statist model of development has occurred.

the way in which legitimate claimants can place demands on the local government differs across jurisdiction. In Abu Dhabi, there were no other strong constituencies, so once oil was discovered, the government could control all land, economic development, and regulatory matters. In this sense, Abu Dhabi fits the classic rentier state model. In contrast, the merchant class in Dubai was large and quite influential prior to the formation of the UAE. Thus, when leaders in Abu Dhabi and Dubai were negotiating what the future UAE would look like, leaders in Dubai knew they would have to appease these constituencies. Thus, development of the Jebel Ali free zone was used to not only appease the local merchant class, but also as a bargaining chip with Abu Dhabi since Dubai could not rely solely on oil revenues in the way that Abu Dhabi did.

		Legitimate	**Claimants**
		Restrictive	*Expansive*
Regulatory Authority	*Concentrated*	Shanghai (Statist)	Dubai (Pluralistic)
	Dispersed	Aqaba (Oligarchic)	(Fragmented)

Table 6.4: Comparative Property Rights and the Management of SEZs

In contrast to both statist and pluralistic property rights regimes, Jordan followed a more oligarchic model. The only legitimate claimants to the land were the government itself, but the regulatory authority has never been consolidated in the same way that was seen in other cases. Even though the Aqaba SEZ has evolved considerably over its life span, there have always been a wide variety of regulatory bodies with authority over different aspects of development within the port and zone. Even when leaders in the capital Amman attempted to consolidate all foreign investment policy under the Jordan Investment Commission (JIC), the regulatory authority of ASEZA remained.[108]

Another key difference between Aqaba and Shanghai is the centrality of the city within the country's political economy. In this respect, Shanghai is much more akin to Dubai in terms of importance. Aqaba remains on the fringe of the Jordanian economy, while both Shanghai and Dubai are key cities within each country's economic system. The original zones in Shanghai have now become inextricably linked into the greater Shanghai urban area. Yet, the latest phase of zone development in Shanghai has not only changed considerably but generated fierce political battles between local officials and the central government over the nature and pace of reform.

In conclusion, while national-level financial and exchange rate policies matter for local economic development, these factors do not provide a complete explanation for how or why countries and localities enact special economic zones. Local leaders use SEZs to control land as well as the scale, pace, and direction of urban development. To fully understand zone enactment and evolution over time, we must examine local leaders and decisions in conjunction with national-level policy imperatives. Crossing levels of analysis and examining change over time provides a more accurate and complete picture of zone origins. I now turn to a summary of areas for future research, in the next and final chapter.

108 Personal Interview, Head of the Research Department, Jordan Investment Commission, multiple interviews in October 2015, Amman, Jordan. Personal interview, Head of Business Environment Development, Ministry of Industry and Trade, October 29, 2015, Amman, Jordan.

Chapter 7

Conclusion: The Next Era of SEZ Analysis

Prior to this research, we had conventional wisdom about SEZs, debates about efficiency, and conjecture about how facets of economic policy could contribute to the origins of SEZs. What was lacking in the literature, however, was an explanation of why national and subnational governments enact special economic zones. This dissertation has shown that macroeconomic factors, such as capital controls and the choice of exchange rate regime, are correlated with SEZ enactment. On average, countries that are opening financial (loosening capital controls) while attempting to maintain a fixed exchange rate are more likely to enact SEZs. Yet, as was shown with the national and local case studies, focusing *only* on macroeconomic factors provides an incomplete description of zone origins.

As the national-level case studies show, even when the macroeconomic logic is present, it may co-exist with other related factors. For example, in Jordan, the role of the United States was inextricably linked with Qualifying Industrial Zones and the financial opening that occurred in the 1990s. In the Dominican Republic, the Gulf and Western Corporation used the country's investment law to create the La Romana EPZ, which benefit their unique business interests. In the process, private multi-national corporation created a policy instrument that would be replicated throughout the country by other firms. In Sri Lanka, we see how the conventional wisdom that zones are enacted by non-democratic regimes appeared natural at the time, even if we now know the reality is much more complex. Despite public elections, which made Sri Lanka democratic according to most measures, the economic and political reforms that occurred in the late 1970s not only created SEZs, but also created an executive presidency that moved the country in a non-democratic direction. Political and economic reforms were about parochial interests and maintaining control, not only about macroeconomic policy.

In other cases, the changes over time may be as important as specific instances of zone creation. The Shenzhen SEZ has played an outsized role in China's internal political economy and follows the macroeconomic logic of other zone enactors during that time period. Shenzhen, however, had a variety of unique circumstances that allowed for its success. Despite that fact, the World Bank and others have touted Shenzhen as a model other countries should follow. What is lost in this analysis is an understanding of the unique circumstances that led to Shenzhen's success. Moreover, blanket recommendations for following the "China model" ignore later trends within China itself. First, local and provincial zones were driven by a much different logic; land was the most effective form of "capital" for the zones created in the 1990s and 2000s. Thus, the goal of local zones was not financial opening and macroeconomic stability. Instead, various waves of "zone fever" were about the control of land and using that land as capital to generate growth. Moreover, as Chapter 6's section on Shanghai argues, the creation of the latest zone program in China is more about ensuring regulatory authorities maintain control over zones, and is driven by a logic of internal competition rather than external macroeconomic realities.

7.1 Summary: What have we learned?

In this final, concluding chapter I will first summarize the contributions from each distinct section. After discussing contributions, I will shift to the implications of this research, addressing both theoretic contributions and policy implications. I then address the limitations of this research; for this study, only one quantitative measure of SEZ enactment was used, but there are numerous other ways to conceptualize and test the creation and role of SEZs in today's political economy. The final section will outline future areas of research based on the contributions and limitations of the current study.

7.1.1 Data Contributions

SEZs are both a macroeconomic and political tool to achieve a variety of policy goals. This research is the first to systematically analyze *why* countries create SEZs, showing the connection between macroeconomic policy and the decision to enact. On average, countries that are opening financially, in particular those countries with national leaders attempting to maintain a fixed exchange rate, are the most likely to enact this policy. However, this explanation is incomplete. First, the cross-national empirical analysis has shown us that there is an interactive effect between a fixed exchange rate regime and financial openness. However, given the nature of the data, I cannot prove that this theoretic explanation hold for countries that enacted prior to 1970. Nor does it tell us whether these trends continue today, since most of the necessary independent and control variables were only available through about 2010.

I began this dissertation by noting that despite interest in and research on SEZs, the lack of cross-national empirical data has limited our ability to make generalizable statements about the propensity to enact zone programs. Using an original dataset of SEZs, we now have an initial understanding of both the widespread nature of these programs and the characteristics associated with them. We know now that nearly 45 percent of country-year observations are countries with a zone program. That is nearly half of the observations in a relatively complete list of countries for over 40 years. Zones are far more widespread than previously anticipated at the outset of this project. The descriptive reality for the modern day is even more staggering. In 2014, 73 percent of the observations, or 138 countries had some type of zone program in place. This is a dramatic increase since 1970 when only 14.5 percent of the observations, or 22 countries, reflected the presence of a zone.

The descriptive understanding of who enacts SEZs is even more interesting broken down by regime type. Unlike the conventional wisdom that autocracies are more likely to enact zones, we find that democracies are more likely to enact SEZs. I argue that democracies do so in order to accomplish financial opening and to liberalize their capital account, but while maintaining control over the exchange rate. If you examine zone enactment since 1990, over 60 percent of democracies had some sort of zone program in place.[1] Examining a similar time period for non-democratic regimes, only 45 percent of the country-year observations had zones in place, which is a smaller percentage than for democracies. While I tested a range of other possible characteristics that might help explain the propensity of democracies to enact, none of them were statistically significant. At this time, it is not clear whether the lack of results is indication that the connection does not exist

[1] Approximately 1130 observations out of 1845 observations from 1990-2009, which is the end point of the CGV democracy dataset.

or whether it is simply a facet of the data not properly capturing the concept under study (such as demand for labor) or the limitations in these measures themselves. Regardless, more testing needs to be conducted in order to identify the factors driving democratic enactment.

7.1.2 Case Study Theory Building

In the theory-building case studies, we learned that both democracies and non-democracies utilize these programs. In both types of regimes, external actors may be involved in the enactment process. In fact, the presence of external actors, which are often providing economic development advice, may help explain the correlation between democracies and zone enactment, especially considering the role of the IMF and World Bank in promoting financial opening. As such, the role of external actors is a separate and distinct component of the SEZ enactment and another avenue that needs further exploration. Even when the macroeconomic logic of the cross-national statistic model is present, it may co-exist with other related explanations such as the role of external actors. For example, in Jordan the role of the United States was inextricably linked with both Qualifying Industrial Zones and the resurrection of the Aqaba SEZ, along with the financial opening that occurred nationally in the 1990s. In the Dominican Republic, the Gulf and Western corporation used the Investment Law to create the La Romana EPZ.

In other instances, the changes over time were more consequential. The reasons for enactment in China are fundamentally different depending on the time period under study. Early zones are consistent with the macroeconomic logic tested cross-nationally, but later iterations of zone enactment, including the development zone fever of the 1990s, were driven by domestic imperatives and the commodification of land. SEZs are fundamentally a tool that is tied to a spatial location.

Thus, the land issue must be examined in terms of the incentives associated with creating local and provincial-level zones in China. Chapter 6 builds on the importance of distinguishing between the levels of analysis but focusing on 3 city city (local) level cases. In each case there were national-level similarities such as an authoritarian regime and a fixed exchange rate. However, each of these cases varied in how closely tied zone enactment was with financial opening. China has kept many of its capital controls, despite successive waves of reform, whereas the United Arab Emirates has had a relatively open capital account since it became an independent country. Jordan went from a closed financial system to one that is quite open, but that financial opening has not fostered the kind of growth in the Aqaba SEZ that Jordan's leaders would like, despite public proclamations to the contrary.

7.2 Implications

Global capital challenges domestic political leaders' ability to manage the economy and protect constituents from the vagaries of the global economy. During the most recent global financial crisis (GFC) even wealthy, advanced countries struggled to find the right tools to deal with the crisis and insulate their citizens from its most damaging effects. For developing countries these challenges are often even more acute. The Asian financial crises presented major problems for stability in Southeast Asia with some observers arguing that the crisis was partially responsible for the downfall of political leaders, such as President Soeharto in Indonesia.[2] For decades, the Washington Consensus has promoted broad liberalization - trade, capital account, and FDI opening - as the best economic strategy. For many economists the question is simple, why not liberalize? However, for national leaders the answer for not undertaking quick or full liberalization is quite

2 Pepinsky (2009).

simple as well: the global economy is harsh! One need only remember the post-GFC riots in Greece or food riots in the wake of rice shortages and skyrocketing prices in South Asia[3] to see that swings in the global economy often do not easily coincide with the interests of domestic political constituents and their leaders.

For much of the 1980s, SEZs were decried as a second best policy option but by the 2000s these zones were being touted as the key to development by many international organizations (IOs). China's dramatic success using zones as a tool of development may be one reason for the about face but this begs the larger question of how ideas in development economics arise, take hold, or become overtaken by other ideas. Thus, this project speaks to both policy debates about economic development strategies but also raises questions about the efficacy, influence, and role of IOs and external actors in the national development process. For example, in the case of China there was little to no intervention from IOs or other external actors (with the exception of business interests in Hong Kong) to promote EPZs nor any aid associated with using this policy instrument. In contrast, Bangladesh's Chittagong EPZ appears to be the direct result of Korean business interests, most prominently the Daewoo corporation, need for manufacturing hubs to circumvent provisions of the Multi-Fiber Agreement. Without the intervention of Korean business interests, in conjunction with domestic political and economic actors in Bangladesh, the Chittagong EPZ may have never gotten off the ground.

7.2.1 Contributions to Theory

This project contributes to our understanding of international and comparative political economy in several ways. First, research on SEZs contributes to our understanding of the demand-side of

[3] Peter Beaumont, *The Guardian*, 5 April 2008.

FDI and how FDI attraction policies are mediated through the domestic political economy. The new dataset provides a method of testing theories about the origins of zones. Moving forward, this data could also be used to test the effects of SEZs on FDI, GDP, employment, and other economic outcomes on an expansive set of countries (nearly the entire universe of countries since 1970). Second, this analysis contributes to development strategies more broadly. In some instances, SEZs have even become a microcosm of state-building; successful ones emerge from countries with an effective state-building capacity whereas failures tend to emerge from the ones with similar problems. However, prior to creation of this dataset, once major problem with testing theories of SEZs was the lack of clear conceptualization and use of confusing terminology has made the study of EPZs and SEZs highly problematic.

Thus, a major theoretic contribution of this research is providing a standard definition and consistent coding of SEZs cross-nationally. By using a consistent coding scheme we were able to test enactment and show that the financial policies of the 1970s, financial opening and exchange rate controls, are correlated with the use of zones. Moreover, conventional theories of SEZ enactment which argue that authoritarian regimes are more likely to create zones, in order to repress labor, are wrong. We now know that financial opening is related to zone enactment in both autocracies and democracies. However, we still lack a full theory of why this is the case. In the section on future research, I will address the kind of research on democracies that could and should be done. Suffice it to say though, theories focused solely on labor repression in non-democratic countries do not tell the full story of the history nor use of SEZs worldwide.

In terms of the country cases, each study contributes something slightly different to the broader literature. In the case of Jordan, instead of the SEZs being an example of foreign MNCs

”exploiting” the country and its workers as the neo-Marxist literature would argue, the Aqaba SEZ provides another example of how Jordan has skillfully manipulated the neoliberal economic system to support its government coffers. Instead of FDI being the tool of development, Jordan devised a way to use foreign aid to build the infrastructure it perceives as necessary. In the case of the UAE, the creation of SEZs is fundamentally wrapped up with the period of state formation. Instead of being a strategy to attract FDI, Dubai’s Jebel Ali free trade zone was a method to increase the leverage of a local government. That leverage gain the locality increased bargaining leverage, much in the way the reform period in China has allowed provincial and municipal governments far more power than they had under the Mao-era system. What all three have in common is the importance of land - state-owned land - to this development, which means all three show a somewhat different conception of property rights than the traditional Western perspective.

As shown in the Dominican Republic and Jordan cases, the role of external actors is extremely important to SEZ enactment. Even in Mauritius and Sri Lanka, where external involvement was not direct, external examples were a powerful image to leaders in each country. Mauritius looked to Taiwan as an example and Sri Lanka hoped to replicate Singapore’s economic success. Looking outward to an external model is not the same as direct involvement of either a foreign country (the US in the case of Jordan) or a foreign corporation (Gulf and Western in the DR), but does show that diffusion may be a powerful factor in the global proliferation of SEZs. For this project, there was no simple quantitative way to test a theory of external actors or diffusion. However, given the large number of countries with some level of foreign actor involvement identified during the coding process, future research should examine this phenomenon.

In China, early zones were highly contentious and reform-minded elements were pitted against conservatives who feared that SEZs would replicate the "treaty ports" of the "century of humiliation." Shenzhen is generally regarded as successful but later replications of the early SEZs are not nearly as clear to assess. Huang (2008) argues that the Pudong New Area in Shanghai has not been nearly as successful as Shenzhen and may actually have given rise to a very problematic model of rural land confiscation that has now extended throughout the country. The Pudong model is still being re-invented but it is unclear whether the Shanghai model of development is as sustainable as the original Shenzhen model. Rather than pro-reform versus conservatives, in the United Arab Emirates, the axis of political competition was between the two largest jurisdictions in the country, each run by their own ruling family. While the early SEZs in China and the Dubai zones eventually became regarded as successful, political disputes can also lead to stagnation. In the case of Aqaba, very little development occurred in the first twenty years. It was not until a major political transition that the Aqaba SEZ was reinvigorated.

7.3 Limitations

This research has only scratched the surface of our understanding of SEZs. Creating a binary variable of the presence/absence of zones is a necessary first step to better understanding global enactment patterns. However, there are a multitude of other dimensions of variation that could be examined such as the number of zones, size of zones, the number of firms operating in zones, the administrative authority or autonomy of zones, geographic characteristics, infrastructure characteristics, sectoral composition, or the involvement of external actors. This section will summarize a selection of these variables to describe how they might contribute to our knowledge of SEZs.

The first limitation is that a binary variable only captures the presence (or absence) of a zone in-country, but says nothing about how many SEZs may exist in that country over time. Many countries, including all of the case studies examined in this dissertation, have more than one type of zone program in place. For example, China has seven distinct zone programs and thousands of individual zones, while Jordan has at least three zone program types. In the case of Jordan, some of these programs may eventually disappear altogether. This creates a problem for the presence variable since it does not distinguish between different types of programs. Moving forward, it may be worthwhile to create a variable that captures the number of programs over time (and each program's enactment year), which may be especially important for large developing countries such as China and India.

Size is another incredibly important dimension of SEZs, but one that I could not test in this dissertation. In some of the case studies, however, size patterns did generate new questions. For example, in China, early zones were quite large but declined in size over time. In contrast, in Sri Lanka, early zones were quite small, but the Hambantota SEZ is larger than nearly all other zones in Sri Lanka combined. Over time changes are certainly a facet of the internal political economy, but in the case of Sri Lanka, the large size of Hambantota may be due to the role of an external actor (China Merchants Shipping). As noted in Chapter 6, control over land is a fundamental component of SEZ enactment, especially in non-democratic regimes, so a test of the size and scale of zones could help us identify spatial patterns. For example, how large are the zones in a country as percentage of the total land area in that jurisdiction or country? What are the geographic confines of the zone? How have leaders decided on the size of a particular zone? Is this arbitrary or is there some sort of underlying logic? If the latter, what is the logic behind the size? For individual country case studies, I was able to collate data on the size across zones and in some instances over time for particular cross-sections. Yet, doing so for a complete cross-national analysis was not feasible.

What about firm characteristics? Do firms precede the creation of zones and encourage their enactment, as Gulf and Western did in the case of the Dominican Republic, or do firms simply show up later? How many firms operate in the zones? What is the size of firms within the zone? What does the distribution of firm size look like within individual zones and across different zones? One avenue of future research that could be pursued is the perception of how zones operate, from the perspective of firms operating in the zones. In the case of firm opinions on the operating environment, this would not necessarily require new data collection. In the late 2000s, the World Bank conducted a series of surveys in 10 countries to examine how firms perceive the SEZs in that country. Farole (2010) discusses these surveys and some initial patterns, but much more could be done with this data.[4] These surveys would help answer questions, such as, what are the biggest obstacles to doing business in the zone? What is the ideal size for a zone? What kind of infrastructure was necessary for your business, and did the SEZ incentives in this area alter your locational decision?

In terms of the time frame for the analysis, the cross-national dataset begins in 1970 and most case studies focus on enactment after this time period.[5] For reasons of feasibility, I had to limit the dataset of the period from 1970 to 2014. However, some of the most iconic examples of using SEZs were initiated prior to this time period. These countries include Ireland, South Korea, and Taiwan. However, since these countries were already coded as a one in the cross-national dataset, these cases do not provide evidence for the empirical findings since there enactment period

[4] Thomas Farole provided the full dataset.
[5] The Dominican Republic is the exception since its zones were enacted in 1968.

preceded the start of the dataset.

Similarly, for countries that have never enacted (those that remain a zero throughout the entirety of the dataset), we do not have an explanation of why those countries have never been interested in SEZs, even when many of their neighbors or countries with similar characteristics have decided to enact. An interesting case to explore would be a country that considered enacting a program but then decided not to do so. For example, as of 2015 in Grenada, the House of Representatives was considering passage of the the Free Trade and Processing Zone Bill, but at the time of coding this legislation had not yet passed.[6] In addition to the countries who either did or did not have a zone program throughout the entirety of the dataset (1 or 0 for the entire period from 1970-2014), there are also a set of countries that had programs but then dismantled those programs. At least 15 countries have dismantled their SEZ program altogether or have declared "sunset" periods in the enactment legislation itself.[7] Including a sunset period implies that these zones were envisioned as only a temporary policy. Whether or not these zone programs actually sunset when scheduled to do so, is an empirical question. In other cases, such as Latvia and Lithuania, the sunset periods are not until relatively far off in the future, with sunset dates of 2035 and 2045, respectively.

We now have a better understanding of zone origins, but are not yet able to definitively assess whether SEZs are successful at achieving particular economic policy outcomes across a broad cross-section of countries. While economic outcomes were not the focus of this research, the newly created SEZ variable could be used to test a variety of outcomes, which will be discussed in the next section.

6 Free Trade and Processing Bill, http://thenewtoday.gd/local-news/2015/07/24/free-trade-and-processing-bill/#gsc.tab=0, dated July 24, 2015.

7 For a list of these countries, see the data coding appendix.

Country	Year Enacted
Laos	2010
Oman	2010
Armenia	2011
Bhutan	2011
Burma	2011
Gabon	2011
Kazakhstan	2011
Mauritania	2012
Maldives	2014
Nepal	2014

Table 7.1: Zone Enactors since 2010

For developing middle and low income countries, policy knowledge about the efficacy of zone programs is vital. First, if the empirical evidence on the efficacy of SEZs as a way to increase FDI or achieve other policy goals is insufficient, why do governments continue to pursue this policy? Instead of enacting an SEZ, national-level governments may want to invest more heavily in preferential trade agreements (PTAs), bilateral investment treaties (BITs), or other institutional changes. If, however, SEZs are a complement to these national-level policy instruments then we must think about whether the effect is additive or interactive. Does a BIT send a signal to international investors but also require a more compelling credible commitment such as concrete physical infrastructure and legal changes in a particular jurisdiction to be convincing? Moreover, middle income countries such as China are beginning to tout their own success with zones by proactively funding zones in Africa.[8] Even though most of these African countries have much different underlying characteristics from China they are attempting to use the same SEZ model that China used despite vastly different underlying circumstances. It is too early to assess whether these newly created zones will be successful, but SEZs are both a domestic policy instrument and a foreign policy tool.

[8] Bräutigam and Tang (2011*a*); Bräutigam and Tang (2011*b*).

All of the case studies focus on early periods of enactment and thus do not capture more recent trends in SEZ enactment. Since 2010, at least ten countries have created zone programs. Given the end point of some of the other data used in the empirical cases, many of these more recent cases were excluded from the empirical tests due to lack of data. While these latest enactors may have created zones for the same reasons found in this study, additional testing would need to occur to verify that is the case. However, there is some reason to believe that the findings of this research may change over time. China has taken on a much bigger role in funding, building, and operating overseas economic zones. Because of China's stated policy of non-interference, there may be less direct attempts to encourage countries to open up their financial system. Moreover, given China's own domestic currency policy, the PRC is unlikely to encourage countries to float their currencies. Thus, the connection between SEZ enactment and financial opening may weaken over time, but the link between a fixed exchange rate and SEZ enactment may increase or remain the same. Additional tests would need to be conducted in order to see how this influences the interactive effect of financial opening and exchange rate choice tested in Chapter 3.

If the logic behind China's funding of SEZs is different, then the cross-national results found in this study may be limited to the period from 1970 to the mid-2000s, and the impetus for enactment may be evolving as China plays a larger role in the global political economy. A prominent recent example is Sri Lanka's Hambantota Port and associated special economic zone. Sri Lanka has had a zone program since 1978, but the Hambantota SEZ project is far larger than all of Sri Lanka's previous zones. The port and associated industrial area are also highly controversial because of recent negotiations with a prominent Chinese firm. On July 25, 2017, a concession agreement between China Merchants Ports and Hambantota Port was reached. China Merchants will invest up to 1.2 billion US dollars into the port and lease approximately 60 square kilometers for a proposed industrial zone, in exchange for an 85 percent stake in Hambantota International Port Group.[9] The agreement was partially reached because the Sri Lankan government was facing budgetary challenges, and some segments of the local population were not happy about the agreement. Before the deal was signed, protestors fought the plan arguing that China was attempting to build a "colony" in Sri Lanka.[10] These types of dynamics should be examined further in future research.

Another limitation of this study is that the cross-national dataset does not currently differentiate between types of zones. In terms of management and administrative authorities, there are public, private, and hybrid zones. In the United Arab Emirates, early zones were all public ventures but the latest trend is towards public-private partnerships (PPP), with a focus on integrating private investors at the initial phase of development. There are also countries where the overlapping bureaucratic structure may cause serious management challenges. For instance, Jordan previously had three separate bureaucratic agencies with some responsibility for management of zones in the country. In May 2014, a new organization - the Jordan Investment Commission (JIC) - was created in an "effort to streamline and unify the nation's major government investment institutions."[11] As of October 2015, a "one-stop" shop had been created by the JIC to foster investor relations.[12] However, other organizations meant to be consolidated under the JIC still exist and continue to play a role in SEZ management.[13] India has 15 separate agencies that have some role in management of zones under the purview of the country's various SEZ laws.[14]

9 Lee (2017).
10 Shepard (2017).
11 Jordan Investment Commission, http://www.jic.gov.jo/Contents/About_JIC.aspx.
12 See Chapter 4.
13 Interviews in Amman, Jordan, October 2015.
14 Farole and Moberg (2014, 10).

Zone management can thus be characterized by whether or not zones have overlapping management structures. How many bureaucratic agencies have responsibility for zone management? Is there one authority for land acquisition? What is the average time for approval of foreign investment projects? The number of agencies, the public or private sector status of zones, or conflicting legal regimes may all have an influence on not only whether the zone is effective but how long it takes for the enacting legislation to be approved.

7.4 Future Research

This analysis has only scratched the surface of a variety of SEZ-related topics. In this section, I will focus on three main areas for future research: additional cross-national empirical tests, democratic enactment, and a subset of other issues that could be examined.

7.4.1 Additional Empirical Tests

For future research on SEZs, there are several lines of inquiry that could be pursued. First, as described in previous chapters, the statistical models tested in this dissertation do not test for zone enactment prior to 1970. The dataset only begins in 1970 so these empirical models cannot explain zone enactment in Brazil, Ireland, South Korea or Taiwan, all of which are canonical cases of the use of SEZs. Other less canonical cases, such as India and Panama, also enacted their programs prior to 1970. While some of these programs stagnated for periods of time, many have been resurrected more recently. As such, the results derived thus far could be used to make out-of-sample predictions for the patterns of SEZ enactment in the 1950s and 1960s. If this dataset was expanded to cover the time period from 1950 to 1969, the hypotheses described above could be tested on only that time period to see whether these trends are unique to the post-1970 period or whether they existed in the earlier time period. Moreover, a full dataset of zones from the 1950s onward would include the iconic cases (Ireland, Korea) that are so often referenced in analysis of other zones. Bringing these countries into the scope of the current quantitative analysis would allow us to test the durability of these macroeconomic and political explanations and determine whether these patterns are time contingent.

Related to the possibility of time-contingent results is the question of whether more recent trends in SEZ enactment will alter the findings of this research. As already mentioned above, China has become much more involved in funding and managing overseas zones. Will the involvement of a new external actor change the results found in this study? Empirical analysis will be necessary to determine whether financial opening and exchange rate patterns continue to hold. Analysis of China's role in zone development will be especially important in the time period from 2006 to the present, since the mid-2000s marked the start of China's "Going Out" policy.[15]

For future cross-national analysis, there are several other dimensions of variation that could be explored. For example, the size, number, and location of zones are all key dimensions of variation as well as policy variables such as the number of programs in the country and the administrative authority responsible for the program and/or zone. One of the first ways to build upon the binary classification of zone presence is by calculating the number of zones per country. If a cross-national measure of the number of zones was created, then we would not be limited to binary logit or duration models, but could assess the impetus for initial enactment *and* later program expansion. I attempted to pursue this line of inquiry initially but the data was more problematic

15 Bräutigam and Tang (2013).

than I expected. For example, according to the ILO, Taiwan has 5 SEZs but the World Bank states that it has 14.[16] In a more extreme example, the World Bank (2008) reports that Vietnam has 191 economic development zones but the 2014 Investment Climate Report for Vietnam states that over 270 SEZs are now active in the country.[17] In the case of Vietnam, neither report outlines the start dates of these various zones. Thus, in order to build a time-series, cross-sectional dataset of the number of zones, it is necessary to determine the individual start dates of each zone in order to accurately collate the number of zones in each country-year. This coding would also be subject to a variety of coding decisions based on the program type and level of analysis, but could provide a more complete answer to the following research questions.

For instance, does the exchange rate regime and financial controls correlate with the number of zones in the country or does the interactive effect of financial opening and desire to peg the currency only matter for initial enactment? Similarly, do democracies enact more zones than non-democracies? Are the total number of zones per country comparable across regime type or are they different? Count and hurdle models could help us discern the reasons for initial enactment and separately assess the reasons for further program expansion. In terms of size, there are several other questions that emerge. At its simplest, how large is the zone in question and how much land area, in total, is within the confines of an SEZ in any one country? What are the geographic confines of the zone? How have leaders decided on the size or location for any particular zone? Is zone placement based on patronage, some sort of underlying economic efficiency logic, or entirely arbitrary? If based on efficiency or patronage, how is the scale and scope of the SEZ determined? Size is typically measured in hectares, square meters, or acres but size could also be

16 Singa-Boyenge (2007); World Bank (2008).
17 US Department of State (2014*c*).

measured as a percentage of the overall area of the country or as a percentage of the area of the particular jurisdiction which houses the zone. For example, in China, even though national-level zones represent less than one percent of China's land area, in 2005, SEZs accounted for nearly 4 percent of China's total GDP and over 16 percent of total FDI inflows.[18] By the mid-2000s, Fu and Gao (2007) estimate that China's zones account for over "one third of China's FDI stock."[19]

In addition to measuring the number of zones in a country over time, there are a number of zone-level characteristics that could be examined. For example, data could be collected on government spending on zones, proximity to ports or other transportation infrastructure, distance to key economic hubs, or by the type of management structure of the zone. To understand the implementation and infrastructure building phase of zones, we could examine the amount of electricity consumed using Nightlights data, water and sewer lines, or examine physical infrastructure changes over time using commercially-available satellite imagery. Individual case studies such as those described in Chapters 4 and 6, could be used to determine zone-level characteristics and then those factors could be combined into an overall measure for the country. In the case of Jordan, Sri Lanka, and the United Arab Emirates, I was able to collate complete descriptive data on all zones in the country, and this data could be the foundation for country-wide measures and other pilot studies. Similarly, I have estimates of zone size across China for 2006, and a complete inventory of zones in Zhejiang Province. Paired with other provincial-level data, these types of data could provide additional information on how subnational zones differ from national-level ones.

Another set of research questions could center around the outcomes associated with SEZs cross-nationally. As noted in the theory chapter, much work has been done to assess the success or

[18] Fu and Gao (2007, 22).
[19] Fu and Gao (2007, 22).

failure of zones but this literature has been dominated by formal economic models or small country samples. Now that a cross-national measure is available, the binary SEZ measure could be used as an independent variable to test the effects on GDP, GDP growth, job creation, FDI, and other economic outcomes.

A more comprehensive framework for evaluating the efficacy of zones, and one which would shed additional light on the policy environment domestically, would include analysis of PTAs, BITs, taxation treaties, and other legal arrangements that alter trade and financial rules between countries. For developed industrial economies that enact and use SEZs, how does the use of these sub-national enclaves with different legal and financial rules effect future negotiations within organizations such as the World Trade Organization (WTO)? The 1994 Agreement on Subsidies and Countervailing Measures (SCM) was an important step in thinking about subsidies and investment incentives but it is not clear whether SEZs are in compliance with the WTO or should they be phased out to meet the legal requirements of the treaty. Some agreements, such as the Southern Common Market (MERCOSUR) and the Caribbean Community (CARICOM), state that any products produced under a "special regime" such as an EPZ are not granted preferential trade treatment.[20] In contrast, the US-Jordan FTA stipulates that products from QIZs are given preferential treatment. These conflicting policies and the dramatic increase in incentives prompted the World Economic Forum to call for a multilateral investment agreement similar to the international trade regime.[21]

20 Granados (2005, 80). For a more in-depth analysis of what EPZs mean for multilateral trade negotiations see Granados (2003).

21 World Economic Forum (2013).

7.4.2 Democratic Demand for SEZs

For differences in regime type, Chapter 4 provides nuance to the role of democratic institutions in SEZ enactment but does not answer one key outstanding question: why are democracies more likely to enact zones than non-democracies? This question is especially crucial because the conventional wisdom for some time now has been that non-democracies are much more likely to use SEZs to repress labor or control other aspects of economic development. The China model seems to reinforce this conventional wisdom. In the debate between the economic outcomes and regime type, Rodrik (2007) notes, "Nothing prevents authoritarian regimes from using local knowledge; the trouble is that nothing compels them to do so."[22] The key difference with SEZ enactment may be the strong belief that SEZs create jobs, despite evidence to the contrary. If credit claiming[23] is the mechanism at work, then taking credit for the idea is far more consequential than actual employment outcomes. This credit claiming idea may be one reason the debate about who initially came up with the idea for EPZs in Mauritius was so hotly contested. The notion of ideas as the key factor in economic development policies is much more difficult to test empirically but is also one avenue worth exploring further.

Another avenue for exploration is to examine the dismantling of programs. Unlike some policies that may linger on long past their span of usefulness, there are some instances of countries abolishing SEZs. The universe of cases is small, but all but two of these countries are democracies, or had transitioned to democracy by the time the country abolished their SEZ program.[24] For

22 Rodrik (2007, 166).

23 Jensen et al. (2014).

24 Kuwait and Liberia are the only two non-democratic countries that have abolished their zone programs. Liberia abolished its zones in 2000 and Kuwait in 2006. However, Kuwait decided to re-establish its zones again in 2015 US Department of State (2014*b*).

example, Germany dismantled two zones in 2010 and the Hamburg zone lost its free zone status in 2013; however, according to the Investment Climate Statement, four zones remain open and legal under EU law.[25] While the focus of this research has been primarily on middle income or developing countries, examining zone abolishment would shed light on the use of this policy in advanced industrial democracies. Australia, Germany, Estonia, and Iceland have all had zone programs at some point, but have dismantled these programs. Understanding why these countries abolished these zones would help us more fully understand the SEZ life cycle, and could provide lessons learned for those countries that have outgrown their zones.

7.4.3 Local-Global Interaction

For this project, there was no simple quantitative way to test a theory of external actors or diffusion. However, given the large number of countries with some level of foreign actor involvement identified during the coding process, future research should examine this phenomenon. Direct involvement of an external actor could be coded with a binary variable or a categorical variable could be used to differentiate between IOs, nation-states, and multi-national corporation involvement. Theories of diffusion could be tested using spatial methods or other techniques, as used in Simmons, Dobbin and Garrett (2008) and Franzese (2014), both of which use methods for dealing with geographic proximity or spatial contiguity.

Moreover, additional research related to levels of analysis could be done. What does lowering the level of analysis tell us about the origins of SEZs? Changing the level of analysis is necessary to provide both a complete explanation of zone enactment but moving from the country-level to the zone-level (and back up) presents several problems. The first is ecological inference.

[25] The four zones are Bremerhaven, Cuxhaven, Deggendorf and Duisburg. U.S. Department of State (2015*b*).

The cross-national data aggregates a host of zones, policies, and actors that all combine to create the binary coding of zone enactment. However, the binary coding scheme masks variety in zone type and complete obscures both individual-level actors and the behavior of subnational governments. To delve into the local actors and their role in zone development, the first step is a qualitative tracing of the process itself. This is worthwhile because before any good causal theories can be generated, we must have a clear description of the event. Only then can we assess when it is appropriate to aggregate data up to either a subnational or national level.

Taking serious the levels of analysis supports a second objective for the overall study of SEZs, including the building of alternative measures of zone enactment. Instead of remaining content with a binary-only dependent variable, exploring zones over time allows us to generate a timeline of zone expansion, which is necessary for building a country-level count variable. Current models based only on a binary dependent variable at the national level may suffer from aggregation bias.[26] Also, a measure of legislative enactment at the national-level does not allow us to test theories of expansion emanating from subnational and local governments. Thus, a multi-level count model of the number of zones per country at the national and local level would allow us to test more precise theories of SEZ expansion.

7.4.4 Gender Issues in Early Zones

One other important issue that I was unable to address in this dissertation is gender and gendered production within export processing zones. The early literature on SEZs, especially analysis in the 1980s, discusses the issue of female employment within SEZs but data on this phenomenon is quite limited. For example, Sklair (1986) argues that the division of labor is not adequately addressed in

[26] Alt, King and Signorino (2001).

many studies, but then goes on to state, "As is well known, in the 'traditional' EPZs, women have substantially outnumbered men in the labour force."[27] Sklair does not provide any evidence about the gender balance in zones, instead only referring to data on the Masan EPZ in Korea noting that as the zone developed, male employment increased and then "women's average wages actually declined relative to those of men."[28] According to Dowla (1997), "Females, typically aged 17-25, account for 85 percent of the employees [in Bangladesh's zones, which is] a common pattern in export processing zones."[29] While using primarily female labor in early zones may have been a common pattern, we do not have sufficient cross-national data to verify whether these individual country patterns were more widespread. Moreover, we do not have sufficient data to assess the patterns of employment in zones today.

Patterns of employment in zones is important on its own, but may also be directly related to zone origins. If zones were meant to bifurcate the labor force, then this should be seen in patterns of male and female employment. For example, it is possible that zones focused on garment manufacturing were meant to take advantage of low-cost female labor while simultaneously protecting jobs for male workers in the rest of the economy. In countries with segregated patterns of employment, jobs in the regular economy may have been (informally) reserved for male workers, and SEZs were viewed as a way to take advantage of young, female workers in a way that was limited and tightly controlled. There is certainly anecdotal evidence that female employment was higher in Korea, Malaysia, and Bangladesh,[30] but is not clear whether this pattern holds across all countries at that time. Moreover, based on the ILO (2007) inventory, the average rate of female

27 Sklair (1986, 757).
28 Sklair (1986, 758).
29 Dowla (1997, 567).
30 Ong (1987); Dowla (1997); Seguino (2000).

employment in zones is only around 60 percent with wide variation in between. Further research is needed to determine whether gendered patterns of employment did exist, whether they still exist, and whether separating male and female labor was an explicit component of decisions to enact SEZs in those countries were gender disparities were (are) large.

Moreover, in addition to the necessity of collating accurate data by which to make claims about gendered employment patterns, we must also address other empirical and normative questions. Is female employment in SEZs much higher than male employment, and if so why? Is it because wages are lower in zones or because employment opportunities in the larger economy were unavailable for women? With this empirical data in hand, we must then ask the normative questions. Is employment in EPZs good or bad for women? The conventional wisdom had often been that labor standards were much less in EPZs but Kucera (2002) finds that this conventional wisdom is wrong. Investment, as measured by inward FDI, tends to go to countries and areas with higher labor standards. In my own research, I have found that the conventional wisdom regarding which countries use SEZs is wrong so conventional wisdom on female employment in early zones may be similarly flawed. Thus, if our empirical understanding of labor issues in zones is wrong, then our normative judgments may be wrong as well. Working in an SEZ may be far better for women than working in other sectors of the economy because of the presence of foreign firms and expatriate workers that might be willing to report abuses to authorities. If so, SEZs may have been one important means by which women could not only lift themselves from poverty but earn sufficient wages to give them a modicum of independence in their own lives.

To close, we now know a lot more about SEZs and how they relate to macroeconomic and political factors, as well as domestic policy choices. However, there is still so much more to learn.

Data and References

Data Coding Appendix

This data appendix provides a summary of the three main variables created for the cross-national empirical analysis described in Chapter 3. Following the variable descriptions is a summary of the coding for each country in the dataset. In some country cases, I had to triangulate between several different sources to decide on the year of enactment. In those cases, I list relevant sources necessary to make the coding decision. In cases where no specific sources are listed, I used a combination of the three primary coding sources Singa-Boyenge (2007); individual country *Investment Climate Statements (ICS)* from the US Department of State; and World Bank (2008), as outlined in the Research Design (Chapter 2). In cases where I had to use ICS reports from different years, I annotate with the correct year.

The cut-off date for information used to code this data is January 25, 2016. Later in 2016, I obtained additional information on the abolishment of the zone program in Japan, which was not reflected in the ICS so I updated the data accordingly. In October 2017, I made several changes to some of the case study countries to reflect information acquired during field research. These changes to the data are discussed in the individual country descriptions. All models in Chapter 3 were re-run based on these changes with no substantive changes to any results. Based on these two minor updates, the official dataset is labeled *SEZ Master Data v1.2*, and this will be the version used for any replications.

Variable Descriptions

Presence or Absence of a Zone Program

Presence or absence of an SEZ is the primary dependent variable (labeled, *zone*). This binary variable captures the presence (or absence) of a zone within the country. A one indicates the country has an active zone program in that year, while a zero indicates there are no active zones. An active zone indicates that legislation has been passed enacting the zone.

Year of Zone Enactment

This variable capture the year in which the program in that country was officially enacted (labeled, *zone_enact*). If the year of program enactment was not included in either ILO (2007) or World Bank (2008), I then referred to the Department of State's Investment Climate Statements (ICS) for that country for 2014. The ICS documents the existence of EPZs/SEZs in a section entitled, "Foreign Trade Zones/Free Ports/Trade Facilitation." In this section, the ICS stated whether or not a zone program was active in the country or not and in most cases included the year the law was passed governing the program. In cases where the ICS stated that a program was active but did not list the enactment year or legal regime, I referred to the zone authority or investment promotion authority for that country. In some cases, the secondary literature discussed the enacting legislation; in those case, I have included the relevant citations.

Country	Year of Enactment
Bahamas	1955
Bahrain	1968
Brazil	1957
Chile	1958
Denmark	1891*
Dominican Republic	1969
Finland	1970
Germany	1888*
Greece	1914
Iceland	1970
India	1965
Ireland	1958
Israel	1969
Italy	1719*
Lebanon	1960
Netherlands	no date
Panama	1948
Singapore	1960
South Korea	1970
Switzerland	1925
Taiwan	1965
United States	1934

Table 7.2: Countries with Zone Programs in 1970

Zone Program Abolished

A handful of countries experimented with SEZs but then later abolished the programs; this variable is included in the dataset as a separate variable (*zone_abolish*). If a specific year for abolishment was given, then that year is listed as the final year in which *zone* equals one; thereafter, the *zone* country-year is coded as zero. This variable captures the year in which those countries abolished their zone programs. If the country never had a zone or if the country has an active program that has not ended, this variable is coded as a zero. Some countries have explicitly set a sunset date for their zones so some countries have a future year is listed in the *zone_abolish* variable.

For both enactment and abolishment dates, if it did not apply, I coded as zero instead of missing [.] in Stata and ”NA” in R. This was to ensure that data was not incorrectly coded as missing when I had in fact verified the information. For example, if a country’s zone program remained active, *zone_abolish* was zero. However, if I could not verify whether the program was active or not (a possibility in the case of a country like Somalia) then I left it coded as missing.

Country	Year Abolished
Australia	2003
Estonia	2011
Germany	2010*
Hungary	2003
Iceland	1994
Kuwait	2006*
Latvia	2035
Liberia	2000
Lithuania	2045
Saint Kitts and Nevis	2011
Sao Tome-Principe	2011
Slovak Republic	2006
Slovenia	2013
Sweden	1995
Ukraine	2005

Table 7.3: Zone Programs Abolished

Data Coding By Region

In this section, I organize the countries by region of the world. Within each region, countries are alphabetized. The by-country dependent variable data is available separately as a spreadsheet and includes zone enactment year and year of abolishment, if applicable. The full dataset, which includes all independent and control variables, is available upon request as a Stata (version 13.1) dataset; however, some variables are copyrighted and cannot be shared publicly.[31]

Africa

The Arab Chamber of Commerce and Industry (N.d.) provided a list of North African countries with SEZs, so this list was consulted for countries in North Africa and the Middle East, in addition to the three worldwide source documents used to verify zone presence.

Algeria

Algeria has a zone program and the enactment year is 1997, according to World Bank (2008).[32]

Angola

Angola has a zone program and the enactment year is 2009.[33]

[31] For example, the license agreement for the Cross-National Time-Series (CNTS) data from Wilson (2016) states that the data may not be shared.

[32] The Algeria ICS for 2014 states that the country does not have an SEZ program, but both the World Bank and the Arab Chamber of Commerce verify that Algeria has zones in place.

[33] US Department of State (2014*d*).

Botswana

Botswana has a zone program and the enactment year is 2009.

Burundi

Burundi does not have a zone program in place.

Cameroon

Cameroon has a zone program and the enactment year is 1990. The Singa-Boyenge (2007) report listed an active EPZ in place but did not list the enactment date or any specific zone names. However, the State Department ICS stated that the FTZ law passed in 1990. According to ILO (2007), there was one EPZ with 4690 employees and 29 firms, accounting for 33 percent of the country's total exports.

Cabo Verde

Cabo Verde (in English typically seen as Cape Verde) has a zone program and the enactment year is 1998. According to *Cape Verde Mineral and Mining Sector Investment and Business Guide* (2007), "In 1998, Cape Verde approved a law authorizing the establishment of commercial free zones, defined as a duty free import and export area (Law No. 83/V/98 of 21 December)."

Central African Republic

Central African Republic does not have a zone program in place.

Chad

Chad does not have a zone program in place.

Comoros

Comoros does not have a zone program in place.

Cote d'Ivoire

Cote d'Ivoire has had a zone program in place since 2008.

Democratic Republic of Congo

Democratic Republic of Congo does not have a zone program in place.

Benin

Benin has had a zone program in place since 2008.

Burkina Faso

Djibouti

Djibouti has had a zone program in place since 2004.

Equatorial Guinea

Equatorial Guinea does not have a zone program in place.

Eritrea

Eritrea has had a zone program in place since 2001.

Ethiopia

Ethiopia has had a zone program in place since 2009. The ICS did not list any free trade zones; however, the AidData project cites the creation of several SEZs funded by China, with a start date of 2009.[34]

Gabon

Gabon has had a zone program in place since 2011.

The Gambia

Gambia has had a zone program in place since 2005.

Guinea-Bissau

Guinea-Bissau does not have a zone program in place.

Guinea

Guinea does not have a zone program in place.

Kenya

Kenya has had a zone program in place since 1990. According to Kenya's 2014 ICS, "By the end of 2012, Kenya had 45 designated Export Processing Zones (EPZs) in which 81 companies operated, employing 32,917 workers and producing roughly 8.2 percent of exports."

Lesotho

Lesotho does not have a zone program in place.

Liberia

Liberia enacted its zone program in 1975. However, the zones were abolished in 2000.

[34] Dreher et al. (2017).

Libya

Libya enacted a zone program in 2006. According to the 2014 ICS, "Libyan Law Number 215 of 2006 established the Zuwara Free Trade Zone (ZFTZ) . . . [SEZs] are overseen by the Libya Free Trade Zone Board, created by Law Number 168 of 2006."

Madagascar

Madagascar has had a zone program in place since 2007.

Malawi

Malawi has had a zone program in place since 1995.

Mali

Mali does not have a zone program in place.

Mauritania

Mauritania enacted its zone program in 2012.

Mauritius

Mauritius enacted its first SEZ in 1971, following the passage of the Export Processing Zone Act of 1970.[35] The ICS lists 1992 as the year of enactment, but the 1992 law was an amendment to the original EPZ Act of 1970, which was verified in several secondary academic sources.

Morocco

Morocco has had a zone program in place since 1995. Morocco has 6 SEZs instituted under the Law 19-94, which was passed on January 26, 1995. Additional information on Morocco's zones is available from the country's investment authority.[36]

Mozambique

Mozambique has had a zone program in place since 1999.

Namibia

Namibia has had a zone program in place since 1990.

Niger

Niger does not have a zone program in place.

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35 EISA (2009); Rodrik (2007).

36 Moroccan Development and Investment Agency, http://www.invest.gov.ma.

Nigeria

Nigeria has had a zone program in place since 1992.

Republic of Congo

Republic of Congo (also listed as Congo-Brazzaville in some datasets) does not have a zone program in place.

Rwanda

Rwanda has had a zone program in place since 2006.

Sao Tome-Principe

Sao Tome-Principe has had a zone program in place since 2003.

Seychelles

The Seychelles has had a zone program in place since 1995.

Senegal

Senegal has had a zone program in place since 2006.

Sierra Leone

Sierra Leone has had a zone program in place since 2003.

Somalia

The Arab Chamber site lists Somalia as having free zones, but given the unstable status of Somalia I was not able to assign an enactment date with any confidence. Moreover, the Horn of Africa Free Zone website states that all operations ceased in 2005 so I coded Somalia as zero from 2005-2014 but coded the remainder of the Somalia observations as missing (1970-2004).

South Africa

South Africa has had a zone program in place since 1999.

Sudan

Sudan has had a zone program since 1994.[37]

Swaziland

Swaziland does not have a zone program in place.

[37] South Sudan was not included in the dataset.

Tanzania

Tanzania has had a zone program in place since 2002.

Togo

Togo has had a zone program in place since 1989. According to the 2014 ICS, "As of December 2013, 65 firms were operating in the EPZ in the services and manufacturing sectors, with more than 13,000 employees."

Tunisia

Tunisia has had a zone program in place since 1994.

Uganda

Uganda does not have a zone program in place.

Zambia

Zambia has had a zone program in place since 2007. According to the Zambian Ministry of Commerce, the zone program is managed by the Zambia Development Agency (ZDA) Act No. 11 of 2006 under section 18, and the regulations and guidelines governing the declaration and establishment of Multi-Facility Economic Zones (MFEZs) were put in place through Statutory Instrument No. 65 of 2007.[38]

Zimbabwe

Zimbabwe has had a zone program in place since 1996. According to the 2014 ICS, "The government promulgated legislation creating EPZs in 1996. Zimbabwe now has approximately 183 EPZ-designated companies."

Asia and Oceania

Asia

Afghanistan

Afghanistan does not have a zone program in place.

Australia

Australia enacted a single zone in Darwin in 1985, but then abolished the program in 2003.[39]

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[38] Zambian Ministry of Commerce, http://www.mcti.gov.zm/index.php/investing-in-zambia/multifacility-economic-zones/85-multi-facility-economic-zones.

[39] Wilson (N.d.).

Bangladesh

Bangladesh has had a zone program in place since 1980.[40]

Bhutan

Bhutan enacted a zone program in 2011, according to local media.[41]

Brunei

Brunei has had a zone program in place since 1994.[42]

Cambodia

Cambodia has had a zone program in place since 2001.

China

China enacted its first zone in Shenzhen in 1979.[43]

India

India has had a zone program in place since 1965.

Indonesia

Indonesia has had a zone program in place since 1986.

Japan

Japan had a zone program and the enactment year was 1992. However, the Japanese Ministry of Economy, Trade, and Industry (METI) ended the country's Foreign Access Zone program in 2006.[44]

Laos

Laos has had a zone program in place since 2010.

Malaysia

Malaysia has had a zone program in place since 1971.

Maldives

The Maldives enacted its zone program in 2014.

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40 *The Bangladesh Export Processing Zones Authority Act* (1980); Dowla (1997).

41 `http://www.dhiinfra.bt/?ban=special-economic-zones`.

42 Chen (2005, 218).

43 *Regulations on Special Economic Zones in Guangdong Province* (1980); Fenwick (1984); Chen (1993).

44 Personal correspondence with the US Embassy Tokyo, Trade and Economic Policy Unit, email dated 5 May 2016.

Mongolia

Mongolia enacted its zone program in 1999.

Myanmar

Myanmar enacted its zone program in 2011. According to the 2015 ICS, “Burma enacted a Special Economic Zone Law in January 2011 that was replaced by the Myanmar Economic Zones Law which President Thein Sein ratified in January 2014.”

Nepal

Nepal enacted its zone program in 2014. The 2014 ICS stated that draft legislation has not yet passed but, according to the Ministry of Industry, “[The] Government of Nepal has formed the Special Economic Zone Project (SEZP) . . . under Ministry of Industry, Commerce and Supply (MOICS) to formulate laws, rules and regulation.”[45] Thus, Nepal is coded as zero from 1970-2013, and as a one for 2014.

New Zealand

New Zealand does not have a zone program in place.

North Korea

North Korea had a short-lived zone program, beginning in 1992. However, as recently as 2015, China has proposed building free trade zones on the border with North Korea, despite economic sanctions on the country.[46]

Pakistan

Pakistan has had a zone program in place since 1989.

Philippines

The Philippines has had a zone program in place since 1972.[47]

Singapore

Singapore has had a zone program in place since 1960.

South Korea

South Korea has had a zone program in place since 1970. According to Haggard (1990), “The Law on the Establishment of the Free Export Zones . . . passed in 1970 [and] the first zone, in Masan, became operational in 1970.[48]

[45] Government of Nepal, Ministry of Industry, “About SEZ Project,” `http://www.seznepal.gov.np/sez/page.php?page_id=11`, last accessed 14 December 2015.

[46] Reuters (N.d.).

[47] Warr (1987).

[48] Haggard (1990, 64).

Sri Lanka

Sri Lanka has had a zone program in place since 1978.[49]

Taiwan

Taiwan enacted its zone program in 1965.

Thailand

Thailand enacted its zone program in 1979.

Timor-Leste

East Timor does not have a zone program in place.

Vietnam

Vietnam enacted its zone program in 1991.

Oceania

Fiji

Fiji enacted its zone program in 1991.

Federated States of Micronesia

Micronesia does not have a zone program in place.

Kiribati

Kiribati does not have a zone program in place.

Marshall Islands

The Marshall Islands do not have a zone program in place.

Nauru

Nauru does not have a zone program in place.

Palau

Palau enacted its zone program in 2003.

Papua New Guinea

Papua New Guinea does not have a zone program in place.

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49 Jayanthakumaran and Weiss (1997).

Solomon Islands

The Solomon Islands do not have a zone program in place.

Tonga

Tonga does not have a zone program in place.

Tuvalu

Tuvalu does not have a zone program in place.

Vanuatu

Vanuatu does not have a zone program in place.

Western Samoa

Western Samoa does not have a zone program in place.

Europe and Eurasia

In addition to the ILO, World Bank, and State Department sources, for Europe, I also consulted the European Union's (EU) Free Zone list, dated 29 August 2014.[50] According to this list, there are two categories of zones: control type I and control type II. Control Type I zones are associated with a distinct geographic area that is enclosed, with entry and exit controlled, whereas the Control Type II zones are more akin to a customs warehouse. I included both types of zones as meeting the definition for an SEZ. In instances where there is is a conflict between the information contained in the State Department's ICS and the EU Free Zone list, I deferred to the EU list. In those cases where the EU report listed an active zone, I supplemented the EU report with country-specific information to determine the enactment year.

50 European Commission (2014); see also http://ec.europa.eu/taxation_customs/customs/procedural_aspects/imports/free_zones/index_en.htm, for the most recent update to this list.

Europe

Austria

Austria does not have a zone program in place.

Belgium

Belgium does not have a zone program in place.

Bosnia Herzegovina

Bosnia Herzegovina has had a zone program in place since 2009.

Croatia

Croatia has had a zone program in place since 1996.

Czech Republic

The Czech Republic has had a zone program in place since 1998.

Denmark

Denmark has had free trade zones since the late 1800s, so the data was coded as a one throughout (from 1970 to 2014).

Estonia

Estonia enacted its zone program in 2004, but then abolished the program in 2011.

Finland

Finland has had a zone program in place since 1970.

France

France has a zone program in place and the enactment year is 1992.

Germany

Germany had zone-type programs in place since the late 1800s. However, Germany abolished its free trade zones in 2010, according to U.S. Department of State (2015*b*).

Greece

According to World Bank (2008), Greece enacted its first zones in 1914,[51] and the EU free zones report that Greece still has four active zones.[52]

[51] World Bank (2008, Table 2-4, 67).
[52] European Commission (2014).

Hungary

Hungary enacted its zone program in 1995, but then abolished the program in 2003.

Iceland

Iceland had a zone program in place since 1970. However, Iceland abolished its zone program in 1994, as part of the agreement to the European Economic Area (EEA). According to U.S. Department of State (2014*a*), free ports were not allowed under the EEA agreement so Iceland had to dismantle in order to accede to the treaty.

Ireland

Ireland has had a zone program in place since 1957.

Italy

Italy had zone-type programs in place since the 1800s, so the country is coded as a one throughout the time period of the dataset.

Kosovo

Kosovo enacted its zone program in 2009.

Latvia

Latvia enacted its zone program in 1997, but has set a sunset period for the zone programs in 2035.[53]

Lithuania

Lithuania enacted its zone program in 1996, but has set a sunset period for the zone programs in 2045.[54]

Luxembourg

Luxembourg created a free zone program in 2014, according to media reporting.[55]

Macedonia

Macedonia created its zone program in 2007.

Malta

Malta has had a zone program in place since 1988.

53 US Department of State (2015*c*).

54 *Investment Climate Statement - Lithuania* (2014).

55 Coline Milliard, https://news.artnet.com/market/le-freeport-opens-in-luxembourg-107878, dated September 19, 2014.

Montenegro

Montenegro created its zone program in 2004.

Netherlands

According to the ICS and the EU Free Zone list, the Netherlands has several free zones currently in place. However, I was unable to verify a year of enactment based on these sources so the *zone-enact* variable is coded as missing [.], but the *zone* variable is coded as one for the entirety of the time series (1970 to 2014).

Norway

Norway does not have a zone program in place.

Poland

Poland created its zone program in 2004.

Portugal

Portugal has had a zone program in place since 1980.

Romania

Romania has had a zone program in place since 1992.

San Marino

San Marino does not have a zone program in place.

Slovak Republic

Slovakia enacted its zone program in 1993 (2005 ICS), but abolished the zone programs in 2006, according to the 2015 update to the country's Investment Climate Survey.

Slovenia

Slovenia enacted its zone program in 1998, but abolished the zone programs in 2013.

Spain

Spain has had a zone program in place since 1998.

Sweden

Sweden has had free trade zones since 1785,[56] and these zones remained in place until 1995. According to the European Commission (2014) list, there are no longer any active zones in Sweden.

56 World Bank (2008, Table 2-4, 67).

Switzerland

Switzerland has a zone program and the enactment year is 1925.

United Kingdom

England has a zone program and the enactment year is 1988.

Eurasia

Albania

Albania has had a zone program in place since 2007. According to the ICS, the government "approved the 'Law on the Establishment and Functioning of Economic Zones,' on July 19, 2007, to replace the 2000 'Law on Free Zones'." Since no zones were setup under the authority of the 2000 law, the amended law of 2007 was used as the year of enactment.

Armenia

Armenia has had a zone program in place since 2011.

Azerbaijian

Azerbaijian has had a legal zone program in place since 2009, but according to the ICS no zones are officially active. However, for coding consistency, this program is included because of the passage of relevant legislation.

Belarus

Belarus has had a zone program in place since 1996.

Bulgaria

Bulgaria has had a zone program in place since 1987.

Cyprus

Cyprus has had a zone program in place since 1973.

Georgia

Georgia has had a zone program in place since 2007.

Kazakhstan

Kazakhstan has had a zone program in place since 2011.

Kyrgyz Republic

Kyrgyzstan has had a zone program in place since 1992. According to the *Kyrgyzstan Business Law Handbook: Strategic Information and Laws, International Business Publications*, the Law on

Free Economic Zones in the Kyrgyz Republic, No. 1076 was passed on 16 December 1992.

Moldova

Moldova became an independent country in 1991, and both World Bank (2008) and the country's ICS both note the presence of a zone program. To obtain the year of enactment, I had to consult additional sources. According to World Bank (N.d.), Moldova enacted its first free economic zone program in 1995.

Russia

Russia has had a zone program in place since 2005, and current has 26 zones in place.[57]

Serbia

Serbia has had a zone program in place since 2006.

Tajikistan

Tajikistan has had a zone program in place since 1996.

Turkey

Turkey has had a zone program in place since 1985.

Turkmenistan

Turkmenistan has had a zone program in place since 1993.

Ukraine

Ukraine enacted its zone program in 1996, but abolished the zone programs in 2005.

Uzbekistan

Uzbekistan has had a zone program in place since 1996.

Latin America and the Caribbean

South and Central America

Argentina

Argentina has had a zone program in place since 1995.

Belize

Belize has had a zone program in place since 1990.

[57] Ministry of Economic Development, http://www.economy.gov.ru/minec/activity/sections/sez/main/.

Bolivia

Bolivia has had a zone program in place since 1990.

Brazil

Brazil has had a zone program in place since 1957.[58]

Chile

Chile has had a zone program in place since 1958.

Colombia

Colombia has had a zone program in place since 2005, based on the passage of comprehensive SEZ modernization legislation passed in the Colombian Congress.

Costa Rica

Costa Rica has had a zone program in place since 1978.

Dominican Republic

The Dominican Republic has had a zone program in place since 1968.

Ecuador

Ecuador has had a zone program in place since 1991.

El Salvador

El Salvador has had a zone program in place since 1975.

Guatemala

Guatemala has had a zone program in place since 1973.

Guyana

Guyana does not have a zone program in place.

Haiti

Haiti has had a zone program in place since 2002.

Honduras

Honduras has had a zone program in place since 1977.

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58 Christiansen, Oman and Charlton (2003).

Nicaragua

Nicaragua has had a zone program in place since 1976.

Panama

Panama has had a zone program in place since 1948, when it established the Colon Free Zone, which according to the 2014 ICS, "is now the second largest free trade zone in the world."

Paraguay

Paraguay does not have a zone program in place.

Peru

Peru has had a zone program in place since 1991.

Suriname

Suriname does not have a zone program in place.

Uruguay

Uruguay has had a zone program in place since 1987.

Venezuela

Venezuela has had a zone program in place since 1991, according to the Free Trade Zone Law published in the country's official gazette as entry 34.772 for 1991.

The Caribbean

Antigua and Barbuda

Antigua and Barbuda has had a zone program in place since 1994, according to the country's zone authority.[59]

Bahamas

The Bahamas has had a zone program in place since 1955.

Barbados

Barbados does not have a zone program in place.

Bermuda

Bermuda does not have a zone program in place.

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59 Government of Antigua and Barbuda, http://www.zone.gov.ag/.

Cuba

Cuba has had a zone program in place since 1997.

Dominica

Dominica does not have a zone program in place.

Grenada

Grenada does not have a zone program in place.

Jamaica

Jamaica has had a zone program in place since 1976.

Saint Kitts and Nevis

Saint Kitts and Nevis has had a zone program in place since 1978.

Saint Lucia

Saint Lucia has had a zone program in place since 1979.

Saint Vincent and the Grenadines

Saint Vincent and the Grenadines does not have a zone program in place.

Trinidad and Tobago

Trinidad and Tobago has had a zone program in place since 1988.

Middle East

In addition to the three worldwide source documents, the The Arab Chamber of Commerce and Industry (N.d.) provided a list of North African countries with SEZs. The Arab Chamber of Commerce list was consulted to verify presence/absence of a zone for countries in North Africa and the Middle East.

Bahrain

Bahrain has had a zone program in place since 1968.

Egypt

Egypt has had a zone program in place since 1974.

Iran

Iran has had a zone program in place since 1988.

Iraq

Iraq has had a zone program in place since 1998.

Israel

Israel has had a zone program in place since 1969.

Jordan

Jordan has had a zone program in place since 1972.[60]

Kuwait

Kuwait created its zone program in 1995. Then, in 2006, it abolished its zone program. However, in 2015, the government of Kuwait announced that it was planning to re-instate the zone program once again.[61] Kuwait is one of the few examples of multiple enactment, with a period of dismantling in between.

Lebanon

Lebanon has had a zone program in place since 1960.

Oman

Oman has had a zone program in place since 2010.

Qatar

Qatar has had a zone program in place since 2005.

Saudi Arabia

Saudi Arabia has had a zone program in place since 1975.

Syria

Syria enacted its zone program in 1971.

United Arab Emirates

The UAE formally enacted the legal authority for zones in the country in 1985, and as of 2014, there were 36 active zones in the UAE.[62] The UAE is one example of a country that essentially built the framework for the SEZ, but then passed the legislation providing the official legal guidance after the zone was essentially in operation. See the case study in Chapter 6 for additional information about this case.

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60 Ministry of National Economy (1974).
61 US Department of State (2014*b*).
62 Author dataset.

West Bank and Gaza

The West Bank and Gaza does not have a zone program in place.

Yemen

Yemen enacted a set of zones based in Aden in 1993.

North America

Canada

Canada has a zone program and the enactment year is 1997.

Mexico

The maquiladoras of the 1960s could be considered zones, but since these were primarily single-factory zones, this was not considered to be the official enactment period. According to both ILO (2007) and World Bank (2008), formal legislation creating a new type of SEZ program was passed in 2002, so this is the date of enactment used for the cross-national dataset.

United States

The US has had various zone programs in place since 1934. Federal empowerment zones were created in 1993, according to Busso, Gregory and Kline (2013). For a full list of all current free trade zones in the US, see the International Trade Administration's list at http://ita-web.ita.doc.gov/FTZ/OFISLogin.nsf.

Since the US is potentially an important democratic case, I conducted several robustness checks in order to ensure that the US case was not determining any of the regime type (or other) results. In the primary model specification, the US is coded as a one throughout the entirety of the dataset. However, in the robustness checks I also coded several other variations, including coding the US as a zero throughout, and coding the US enactment year as 1990. None of these variations had any effect on the overall results discussed in Chapter 3.

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