



Understanding the Shenzhen Miracle: A Field Study of Urban and Economic Development in Shenzhen SEZ

Carl Hooks¹ and Sebastian Reil²

¹HR&A Advisors

²FDA Center

Abstract

This paper explores why and how Shenzhen has become, by far, China's most successful Special Economic Zone (SEZ). Our qualitative research methods included an extensive literature review and 15 in-depth interviews conducted during a six-day field study in Shenzhen in 2018. We identified underlying drivers of the Shenzhen SEZ's rapid urban agglomeration and economic growth by testing three different hypotheses for Shenzhen's success vis-à-vis China's other first generation SEZs. Our research confirmed the importance of Shenzhen's geographical proximity to Hong Kong and the city's superior institutional environment as key factors for the relative success of its SEZ.

Keywords: Shenzhen; China; Special Economic Zones; urban development

Resumen

Este artículo explora por qué y cómo Shenzhen se ha convertido, de lejos, en la Zona Económica Especial (ZEE) más exitosa de China. Nuestros métodos de investigación cualitativa incluyeron una revisión extensa de la literatura y 15 entrevistas realizadas durante un estudio de campo de seis días en Shenzhen en 2018. Aquí identificamos algunas de las razones principales que explican la rápida aglomeración urbana y el crecimiento económico de la ZEE de Shenzhen y exploramos tres hipótesis diferentes detrás de su éxito de Shenzhen, en comparación con otras ZEE de primera generación en China. Nuestra investigación confirmó la importancia de la

proximidad geográfica de Shenzhen a Hong Kong y el entorno institucional superior de la ciudad como factores clave para el relativo éxito de su Zona Económica Especial.

Palabras clave: Shenzhen; China; Zona económica Especial, desarrollo urbano.

1. INTRODUCTION

In 1979, on the eve of China's³ Reform and Opening Up (Gǎigé kāifàng) Policy, the area that would become modern Shenzhen was an inconspicuous Chinese fishing town of 30,000 residents nestled in the southeastern coast of Guangdong Province. After China's central government established a Special Economic Zone (SEZ) in Shenzhen Municipality in May 1980, the city grew at an astonishing rate (Yeung, Lee, and Kee, 2009). In the decades since, Shenzhen has blossomed into a mega-city of about 12.5 million residents. The city's increasingly service-based economy is a powerhouse in insurance, real estate, and IT; it hosts brand name Chinese companies such as Huawei, ZTE, Tencent, Vanke, and Ping'an insurance (Herlevi, 2017). In 2018, its municipal GDP surpassed USD 338 billion (RMB 2.2 trillion) – larger than the economies of Hong Kong or Singapore (He, 2018). Shenzhen's rise shattered both Chinese and international records for economic and urban growth (Yeung, Lee, and Kee, 2009). Almost as impressive is the fact that Shenzhen has not experienced crippling housing shortages, failures to provide basic infrastructure, or

“any other typical symptom of mega-city urban blight” despite the massive scale and “space-time compression” of its urban development (O'Donnell, Wong, and Bach 2017, pp. 65-66). The undeniable success of Shenzhen in many aspects has made the city a pivotal case study for both domestic and international audiences, (Herlevi, 2017) begging the question: *Why and how did Shenzhen become China's most successful SEZ?*

This paper uncovers and analyzes the causes of rapid urban agglomeration and economic development in the Shenzhen SEZ, which encompasses the entire city as of 2010 (previously, the SEZ only included four of the city's ten districts). Through localized policy experimentation and economic liberalization, SEZs have played an important role in China's development following the start of Reform and Opening Up in 1979 (Zeng, 2011). China's first four SEZs in the cities of Shenzhen, Zhuhai, Shantou, and Xiamen (i.e. “first generation SEZs”) rose from similar, humble economic origins. Yet the economic success story of the Shenzhen SEZ has been so exceptional that it merits special attention. Shenzhen's population, GDP, and economic output now place it alongside Beijing, Shanghai, and

³ Throughout, “China” is used synonymously with the People's Republic of China (PRC).

Guangzhou in the “first tier” of Chinese cities (Yeung, Lee, and Kee, 2009). Multiple explanations exist for why Shenzhen became China’s most successful SEZ. While much attention has been paid to economic incentives and market forces in SEZs, including foreign direct investment (FDI), this paper focuses on the important role played by Shenzhen’s municipal government. Did Shenzhen simply implement more effective or creative policies than other Chinese cities with SEZs?

This paper begins by providing a concise review of the most relevant SEZ literature. This is followed by the research design and methodology, and the description and analysis of key findings. The paper then presents lessons for non-territorial governance, and concludes with why and how the Shenzhen SEZ succeeded where others failed or experienced mixed results.

2. LITERATURE REVIEW

There is no clear or consensus definition of SEZs. The term is often used to describe a whole range of economic-geographical phenomena on a spectrum ranging from simple industrial parks to fenced-in zones

with different legal systems from the rest of their countries – for instance, the Dubai International Financial Center (DIFC) is a highly autonomous zone with different laws than the rest of the United Arab Emirates. The basal definition of a SEZ refers to a geographically defined area within which a different set of rules applies. On the aforementioned spectrum, the Shenzhen SEZ falls closer towards the DIFC, as it is a city-sized SEZ encompassing all of Shenzhen’s municipal districts (see e.g. O’Donnell 2013) that enjoys an unusually high degree of autonomy from China’s central government.

Today there are more than 4,000 SEZs worldwide (Bell, 2016). More countries have some type of SEZ framework than those that do not (The Economist 2015). The SEZ types within a single country can also vary greatly. China alone had either five, 222, 1,355, or 1,577 economic development zones by 2006, depending on the level of analysis, and maintains nine distinct SEZ programs (Herlevi, 2017). One might expect that SEZ proliferation would indicate strong performance and replicability across different national, political, and economic contexts. In reality, most SEZs are considered failures. Only a few have become

famous for their allegedly miraculous development (The Economist 2015). Shenzhen is often the prime example of a “successful” SEZ and has provided an influential inspiration for academic discussions on issues of economic development and urbanization (see e.g. Lutter, Moser, Bell, and Prichett 2018)

Even though SEZs have become a common phenomenon, they have received little attention in the mainstream development economics literature. Little is understood about the great variance in outcomes of different SEZs and SEZs programs, especially why most SEZs perform below expectations. There are a number of studies that try to identify the success factors of SEZs. The most important of these are the major studies conducted by the World Bank (FIAS 2008; Farole and Akinci 2011; World Bank 2017). Commonly found reasons for failure include institutional issues, poor administration, and inadequate infrastructure in SEZs. Generally, bigger zones and zones that host industries in line with countries’ comparative advantages fare better. The choice of location also matters. Political considerations are the main reason for

misplaced zone policies and hence zone failure (see e.g. Moberg 2015).

The literature on the Shenzhen SEZ is somewhat more limited. Wang (2013) remains the most comprehensive empirical study of Chinese SEZs with a significant section on Shenzhen. He finds SEZs increase Foreign Direct Investment (FDI) and do not crowd out domestic investment. Zones established earlier were also more successful than zones that were established later. Meanwhile, Tao et al. (2016) review the success factors of Shenzhen in order to provide recommendations to African countries. They also provide data that shows the success story of Shenzhen compared to the other early SEZs in China. UN-Habitat (2019) provides an updated account of Shenzhen’s development from an urbanism perspective.

Zai (1999) looks at the nexus of FDI and migration in Shenzhen, but his paper is now outdated. Moberg (2015, 2017) lays out a model of the political economy of SEZs. In the field of law and economics there is Bell (2016, 2018) which focuses on the legal institutions governing SEZs. Romer (2010) proposed the idea of “charter cities.” This idea is based on the experience of Hong

Kong; As a colonial trading port, Hong Kong was equipped with “good institutions” that facilitated the city’s rapid development. Romer also argues such success stories can be replicated by transplanting “good institutions” that have been proven to work in developed countries to city-sized areas in developing countries. In order for such an experiment to be voluntary and feasible, a target area should be (nearly) unpopulated. Romer has failed to convince country leaders to establish such charter cities. But the Dubai International Financial Center (DIFC) is an example that actually fulfills many of these criteria. For the establishment of the DIFC, Dubai declared a piece of land to be governed by English law instead of UAE law and imported foreign judges for the DFIC court. By importing a trusted legal system, DFIC was able to become the region’s leading financial center within a short period of time (Strong and Himer 2009).

Finally, institutional economics can provide general insights into SEZs. However, the application of frameworks from this literature to SEZs remains understudied. Institutional economics is usually presumed to have started with North (1991) and the most important recent culmination of

institutional/political economy is Acemoglu and Robinson (2013). Simply put, they argue that “good institutions” are the root cause of prosperity.

This paper contributes to the literature in the following ways: First, it tests different hypotheses for Shenzhen’s rapid urban agglomeration and economic growth using an empirical field study. Second, it provides valuable lessons for policymakers trying to replicate the success of the Shenzhen SEZ. Third, it integrates analysis of the Shenzhen SEZ more deeply into the emerging field of non-territorial governance.

3. RESEARCH DESIGN AND METHODOLOGY

To reiterate our guiding research question: *Why and how did Shenzhen become China’s most successful SEZ?* Based on theoretical considerations in the literature and common arguments from development economics, institutional economics, and economic geography, we derived the following three hypotheses for Shenzhen’s miraculous development:

1. *Proximity to Hong Kong is the primary reason why Shenzhen*

became more successful than SEZs with a less advantageous location.

This hypothesis is essentially a “geography matters” story for the Shenzhen SEZ’s development. It is important to note Shenzhen could have benefitted from Hong Kong’s geographic proximity in several interconnected but nevertheless distinct ways:

- a) Logistics and trade opportunities.
- b) Access to capital (FDI, portfolio investment, and trade financing). Herlevi (2017) even speculates that it is not clear whether Shenzhen would have had the operating capital to begin construction and initial phases of development without Hong Kong, a global financial center, right next door.
- c) Access to qualified labor.
- d) Access to advanced business services, especially those required for export of manufactured goods. In the early years of the Shenzhen

SEZ, “advanced business services” could have included “common Hong Kong business practices such as joint ventures, shareholding ownership, stock exchanging, public bidding for engineering projects, piece-work incentives, paid use of land, and open job recruitment” that were brought to the city and practiced openly for the first time in the People’s Republic of China (O’Donnell, Wong, and Bach, 75).

At the time of our field study (explained on the next page), we did not distinguish between or separate benefits a) through d). Doing so may have made our methods more precise and our findings more granular. Ultimately, we tried to connect all four benefits in our understanding of why geography mattered to the Shenzhen SEZ. Namely, we expected that Hong Kong’s nearby port offered an easy export location for Shenzhen-based factories. Entrepreneurs in Hong

Kong could also have easily relocated production to Shenzhen, facilitating labor, capital, and investment spillovers.

2. *The Shenzhen SEZ has more attractive policies and incentives for businesses.* This hypothesis is an “institutions matters” story, i.e. uniquely better policies implemented by Shenzhen’s municipal government helped the SEZ attract domestic and foreign investment, as well as labor and other factors of production.
3. *Shenzhen’s early success in attracting firms, labor, and investment led to path dependency, due to cluster effects and increasing returns.* This could explain why other SEZs have not been able to match Shenzhen in terms of urban agglomeration or economic growth over the years, despite implementing smart policies of their own.

Our research design consisted of a semi-structured interview methodology and visits to relevant institutions in Shenzhen, including research centers and public museums, during a six-day field study trip to the city (March 31 to April 5, 2018). Our

questionnaire included three questions to collect basic information about each interviewee⁴ and five questions to collect information related to our three hypotheses⁵. Collectively, the questions aimed to understand the motivations of workers and entrepreneurs, as well as businesses, for locating in Shenzhen. Both urbanization and spatially defined economic development can be seen in terms of the coordination of worker’s location choices and firm’s location choices; these choices are subject to institutional and policy factors that shape the whole urbanization process (see also New Economic Geography à la Krugman 1979, 1980, 1991a, 1991b). When necessary, we deviated from the questionnaire and asked follow-up questions in order to keep conversations flowing and dig for answers. We promised to anonymize interviewees’ names, professional titles, and other personal information – only identifying them by their place of work, which we deemed to be necessary to record in order to allow them to speak their minds freely and to protect their identities in case sensitive or confidential information was divulged.

⁴ e.g. their place of work; see questions 1-3 in Appendix

⁵ e.g. “Did the presence of firms, labor, or investment opportunities draw you or your company to Shenzhen?” relates directly to Hypothesis 3; see questions 4-8 in Appendix

The main limitations of our field study included restricted time, funding, labor force (e.g. not enough people to administer surveys widely), local connections, and access to interviewees in the public sector, especially government officials with direct knowledge of policymaking in the SEZ. These limitations resulted in:

- a) A small interview sample size (n = 15) that lacked Chinese municipal policymakers – although Chinese officials are notoriously difficult to access for foreign researchers such as ourselves – and lacked foreign investors as well.
- b) Some may say, lack of quantitative methods.
- c) No comparative analysis, as we were unable to visit and conduct similar research in Zhuhai, Shantou, or Xiamen, i.e. China's other first generation SEZs.

The next section explains our findings. While we do not believe the findings lack validity or significance due to the limitations

above, a small interview sample size is an important qualifier. As we express in the conclusion, future research on the Shenzhen SEZ should make use of larger interview sample sizes, systematic surveys, comparative case studies, and other methods to reinforce, challenge, or expand upon our research efforts and findings.

We interviewed 15 people in Shenzhen: eight working professionals, four researchers, two service workers, and one government official. Interviewees were employed in private, public, and third sector organizations, including the China Center for SEZ Research (CCSEZR), Tencent, Xinfeng Investment Management, and the Shenzhen Government Tax Bureau. We re-evaluated our hypotheses by analyzing interview responses.

4. FINDINGS

A. Hypothesis findings

Hypothesis 1

Across the board, interviews and site visits supported Hypothesis 1: given the importance of Hong Kong as a source of FDI, financial resources, and technology spillovers during the 1980s and 1990s,

geographic proximity was a major advantage for Shenzhen over other SEZs. Shenzhen's factories could easily and cheaply export goods via Hong Kong. One interviewee, a business developer at Tencent, stated during a dinner:⁶

“Proximity to Hong Kong is a privilege for Shenzhen... We can enjoy convenient services from Hong Kong, such as buying goods more conveniently and cheaply. Also, proximity brings Hong Kong more opportunities nowadays, instead of Shenzhen. Cooperation in investment banking is an example.”

Several other interviewees added how Hong Kong's influence on Shenzhen's urban development and economy has diminished since the 1990s. Nowadays, Shenzhen is a destination for investment from Hong Kong, other Chinese cities, and foreign countries. Labor and capital spillovers flow from Shenzhen to Hong Kong, not just the other way around.

While Hypothesis 1 correctly predicted the importance of proximity to

Hong Kong, we did not expect to hear about a second geographic advantage that blessed Shenzhen: the large size of the SEZ interacted with Chinese migrant labor to jumpstart local industry and commerce. Interviews with researchers at the CCSEZR emphasized that the Shenzhen SEZ originally contained the four “inner districts” out of ten administrative districts in the municipality. In July 2010, the SEZ expanded to include the six “outer districts,” growing to almost five times its former size and matching the city's total land area in the process (CGTN 2018). Ample unsettled land made the SEZ large enough to accommodate millions of new migrants from across Guangdong as well as other Chinese provinces. The flows of migrant labor to Shenzhen since 1980 have formed a younger, more diverse Chinese urban society without established elites or tight kinship ties – or the corruption that can accompany either of them.

Hypothesis 2

Our field research also supported Hypothesis 2. All of our interviewees who operate businesses in Shenzhen shared the subjective view that Shenzhen has a superior business environment as well as an

⁶ All interview quotes were captured and transcribed verbatim using audio recordings (with interviewees' consent) or the authors' handwritten notes.

impartial, effective municipal government. These are major reasons why firms locate in Shenzhen instead of other parts of China. For example, we asked one interviewee – an entrepreneur running a tea company in Shenzhen – what motivated him to set up his business there and not in his hometown of Shantou, a city that was granted SEZ status in 1981, one year after Shenzhen. The major reason he gave us was the integrity and pro-business mindset of the local government, which makes it easy for newcomers to do business in the city. He stated, *“Not only the economy, but also the political management of the [SEZ] area is important. The policy atmosphere is relatively open, fair, and transparent. It gives my company the same opportunities as the big players.”* Essentially, impartial and efficient local government provides a level playing field and entrepreneurial advantage not found in many other parts of the country.

Unlike other Chinese cities, Shenzhen’s policies also make it easier for young, talented Chinese citizens to apply for urban residence permits (hùkǒu) and become fully integrated into the city’s workforce. This is an important example of the superior regulations and policies in the Shenzhen SEZ. The hùkǒu system can be

imagined as an internal passport system in order to control the movement of the mainland Chinese population. The current system was founded in 1958 and ties Chinese citizens to their places of birth. It effectively restricts the flow of rural-born citizens to urban areas where they can find more productive work. With a need for domestic migrant labor to fuel its growing economy, Shenzhen was able to exempt itself from the hùkǒu system’s rigidity and became the first SEZ to slowly erode it. At first, exemptions gave Shenzhen a unique advantage in attracting workers and entrepreneurs from other parts of China. But as more SEZs were established, Shenzhen had to compete with other cities for talent. To keep its competitive edge, Shenzhen’s government began offering financial incentives to work in the city, targeting both Chinese citizens as well as foreigners who fulfill certain education criteria (Du 2020).

Several interviewees mentioned hùkǒu-based incentives and their continued importance to Shenzhen’s success. According to our Tencent interviewee, new university graduates can apply for local Shenzhen hùkǒu as soon as they move to the city. Specifically, early career professionals – defined as those who graduated from college

at least two years prior to moving to Shenzhen – receive government permission to apply for a Shenzhen hùkǒu after paying for just one year of social insurance. This policy is more lenient than those of Beijing or Shanghai, where hùkǒu restrictions cap and control the municipal population. Interviews at the CCSEZR further explained how Shenzhen has been able to implement such a unique policy. The city’s SEZ has always possessed an unusually high degree of local autonomy from the central government. This allows for best uses of local knowledge and policy experimentation, followed by policy adjustment. One interviewee, a marketing manager at Gudsen Ltd., hinted at this when she said, “[Living in] Shenzhen encourages innovation and entrepreneurship. It has received policy support from the municipal government, which will give preferential policies to some startup companies.”

A favorable business environment and “good institutions” are the proximate factors that influence firms to locate in Shenzhen. The good business and institutional environments also seem to not solely depend on the city’s SEZ status, given that Zhuhai, Shantou, and Xiamen were also granted this status between 1980-81 but did

not develop and urbanize nearly as fast. Thus, the more interesting question to understand the relative success of the Shenzhen SEZ is *why* it was able to develop superior institutions. This is also the major question for other countries and local authorities governing SEZs who wish to learn from Shenzhen’s experience. If building good institutions was easy, then the issues of development would already be solved. In Shenzhen’s case, the SEZ may have benefitted from a “first mover effect.” Shenzhen becoming one of the first Chinese SEZs was advantageous because it had no other domestic models to follow. Lack of precedent could have granted Shenzhen’s leaders freedom to experiment, fail, and revise policies where necessary (Herlevi 2017). Having discussed proximate factors, we now discuss the root causes driving the Shenzhen SEZ’s development and consequent urbanization.

The Shenzhen SEZ is unusual compared to other SEZs in China, and around the world, in several respects. First, as mentioned before, the Shenzhen SEZ is geographically large. It measured 396 km² prior to its expansion in July 2010 and 1,953 km² post-expansion (Xinhua 2010). Second, the SEZ’s land was nearly unsettled pre-May

1980. The area was only home to a few farming and fishing villages; it had even begun to depopulate due to its proximity to Hong Kong, which made it easy for people to flee across Shenzhen Bay (Shekou Museum 2018). Upon the establishment of the Shenzhen SEZ in May 1980, the zone had fewer than 30,000 workers. But the zone's large size combined with its low population density laid the foundations for a rapidly populating modern city as well as a new form of Chinese society based on intra- and interprovincial migrants. In the SEZ, society became based on individuality rather than pre-existing kinship ties. This made it easier to set up modern institutions through transplantation or leapfrogging. Cowen (2016) has referred to such societies, which also tend to enjoy rapid economic growth, as "startup nations."

Other places with established populations, including China's other SEZs, lack the advantages of a startup nation. Their institutions have to evolve gradually and endogenously. Corruption and nepotism are also more likely to arise in kinship-based societies, where government officials unevenly favor certain individuals. In all, Shenzhen possessed the foundations to become an immigrant city, one that is more

open and accepting of multiculturalism and new ideas. For example, an interviewee from northern China stated she could only live in Shenzhen, and not any other city in southern China, since it has a welcoming and tolerant culture. Critically, this culture helps Shenzhen to attract the best and brightest from across the country. University educated and technically skilled migrant workers are especially important for the city's high-tech industry.

Third, the Shenzhen SEZ has always been blessed with a high degree of autonomy from both the central government and the Guangdong provincial government. Greater autonomy allows for decisions to be made based on local knowledge and for policy experimentation to take place on a rapid, iterative basis. The aforementioned hùkǒu-based incentives for workers are examples of smart policies that can arise from this local autonomy. In contrast, other SEZs around the world, and the latter waves of economic and trade zones established in China are often centrally administered. O'Donnell, Wong, and Bach (2017) stress this in their recent book, *Learning from Shenzhen*. Their conclusion stresses Shenzhen's autonomy from central planning and policy, local policy experimentation, and

aforementioned “startup nation” social dynamics as key reasons for its exceptionalism:

By being the locus for... experiments, Shenzhen became essential to post-Mao structural change and all that followed, including new understandings of society and the goals of political life. In other words, in contrast to early free trade zones elsewhere, the Shenzhen Special Economic Zone became the prime example of how zones can afford the possibility for far-reaching social transformations by being as much a spatial solution to a political problem as it is an economic innovation (O'Donnell et. al, p. 251, 2017).

At the same time, the Shenzhen SEZ has received rather limited funding from China's central government. Deng Xiaoping is supposed to have said the following about the establishment of the Shenzhen SEZ: *“We can designate an area, call it a Special Zone.[...] The central government has no money; we can give policies, but you will have to do the work”* (Shekou Museum 2018). In other words, Shenzhen was set apart from the beginning by non-reliance on

central government funds and the need to generate its own. This contrasts with one major reason why SEZ programs face resistance in many countries: the draining of public funds and the distortions arising from it. Financial self-reliance, while potentially difficult, remains a major lesson from the Shenzhen SEZ.

Bertaud (2018) illustrates the laissez-faire regulations of Shenzhen with the example of the “handshake villages.” As Shenzhen continued growing over the years, the city started to encompass previously rural villages. Village lots still belonged to farmers and fishermen who, in order to earn additional income, built up their houses to rent out rooms and apartments to migrant workers. In order to maximize the ratio of floor space to land area, these houses were built very close to each other (hence the term “handshake villages”). In other cities in China and in most cities around the world, local housing regulations would prohibit these densely packed houses. But in Shenzhen, a liberal attitude towards housing regulations made the development of handshake villages possible. In turn, this allowed local farmers to participate in Shenzhen's economic upswing through their real estate businesses. It also enabled

migrant workers to find affordable housing in close proximity to areas with employment opportunities. According to Du (2020), more than half of Shenzhen's population between the years 2009-2016 lived in urban villages.

Hypothesis 3

Interviews and site visits neither supported nor disproved Hypothesis 3. Our data is too inconclusive to provide additional insights into clustering and path dependency in the Shenzhen SEZ. We recommend clustering and path dependency as promising topics for future research. Regardless, it is evident that Shenzhen rapidly progressed through known stages of urban and economic development. Several interviews revealed how Shenzhen's policies have actively evolved as the city has shifted from primarily export manufacturing towards technology and R&D (research and development). The government official we interviewed stated, for instance, that Shenzhen no longer offers tax cuts for manufacturing. High-tech firms in internet and telecommunications, biotech, and other fields now receive incentives and drive the city's economy (He 2018).

B. Other economic pros and cons

Aside from findings tied closely to our three hypotheses, interviews also stressed the market's contributions to Shenzhen's historical and ongoing development. One interviewee from an architecture and interior design firm stated that the SEZ's biggest economic advantages today are ample job opportunities, high average salaries, and status as the top technology city in China. The only "warning signs" interviews mentioned were a) Shenzhen's large business network imposing costs on the relocation of manufacturing or services, as employers can lose local connections, and b) surging local real estate prices. Even as salaries rise, an increasingly unaffordable housing market could begin to price out qualified workers and impair economic development in the SEZ.

C. The Shenzhen SEZ – not so special anymore?

Our findings highlight the important role of good institutions – efficient local government, market-driven policies that benefit entrepreneurs as well as large corporations, and policy adaptation over time – for the development of SEZs. However, Shenzhen and other Chinese SEZs

have become less politically exceptional since 1980. Whereas exclusive policies and other privileges were extended to SEZs in the early years, by 1992 many of these benefits had spread outside the zones to other parts of China (Yeung, Lee, and Kee 2009). In 2001, SEZs' exceptionalism had been further diluted by China's admission to the World Trade Organization (WTO), which bound all parts of the country to the same set of rules for liberalizing trade and openness to foreign investment. One could thus argue that any "special" attributes associated with SEZs today are either a legacy of past policy or reflect internal strengths (Ibid). Still, Shenzhen may remain special even as other SEZs lose some of their luster. The city's government continues to innovate. Local policies, labor and population demographics, and private sector conditions have yet to be replicated elsewhere in China.

Our understanding of the drivers behind Shenzhen's success can be summarized using a framework of root and proximate causation that explains observed outcomes, as visualized in Figure 1.

Figure 1 encapsulates how the root cause of proximity to Hong Kong led to

cheaper transport costs, which then led to

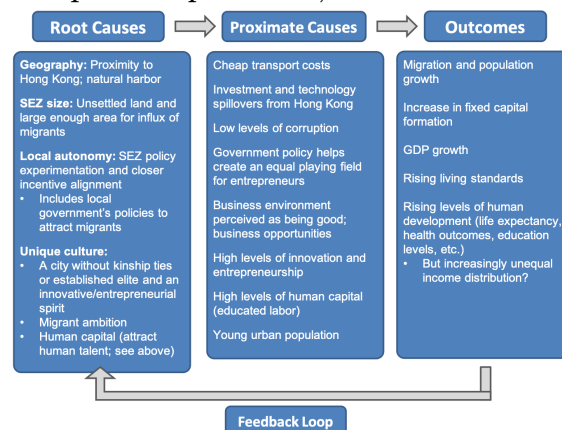


Figure 1: Key success factors in a root-proximate causation framework. Source: Authors' own visualization

more export-oriented investments and economic growth. Similarly, the unusually large geographic size of the SEZ and the fact that it was sparsely populated allowed for the creation of a new city of domestic migrants. The Shenzhen SEZ was also granted an unusually high degree of governing and policy autonomy by China's central government. These root causes allowed for the creation of superior institutions which are well understood in the literature to be direct causes of economic growth. Importantly, there is a feedback loop from the outcomes back to the root causes because, over time, urban agglomeration and economic development (outcomes) and future drivers of growth

(causes) influence each other in an evolutionary way.

5. LESSONS FOR NON-TERRITORIAL GOVERNANCE

The Shenzhen SEZ also provides lessons for non-territorial governance. “Non-territorial governance” is defined for the purpose of this paper as governance institutions not bound to a defined geographical area, and thus standing in contrast to the institutions of the Westphalian territorial nation-state.

There are multiple pre-Westphalian predecessors for non-territorial governance, such as private merchant dispute resolution mechanisms (see e.g. Greif 2006) and civil and penal law being autonomously administered along religious lines (see among others Hoppe, 2001 and MacDonald, 2015a). In modern times, the main drivers of non-territorial governance are technology (e-residency and blockchain), globalization, and the proliferation of SEZs such as Shenzhen. The Order of Malta is another example that has persisted since pre-Westphalian times. After losing its territory in the late eighteenth and early nineteenth centuries, The Order of Malta

still functions as a sovereign subject of international law and is recognized as a small sovereign state by most countries in the world. In other words, it is the closest thing to a country (in legal terms) without a territory.

The academic debate on non-territoriality (also referred to as de-territoriality) started in the mid-1980s. The discourse arose from Eastern European dissidents criticizing political systems who simultaneously wanted to avoid direct political confrontation. Increasing cosmopolitanism has also driven interest in the topic. As more people acquire multiple citizenships and travel across borders, more corporations become internationally active, and globalization as a whole accelerates, there is an emerging understanding that territorially defined governance has its limitations (Pugh et al. 2007).

SEZs represent an area of tension in relation to non-territorial governance. On the one hand, they are by definition territorial tools of governance. As geographically defined areas with different

regulations than the rest of a country, SEZs' regulations and institutions are only available to people and companies located within their territory. On the other hand, SEZs fragment the territory of the nation-state in terms of governance. As tools for political experimentation, they are often seen as pilot areas and forerunners to deeper institutional reforms and developments such as non-territorial governance. In the case of Shenzhen, O'Donnell, Wong, and Bach assert that the SEZ "as innovated in Shenzhen represents an evolving strategy of territorial exceptionalism now seen around the world where not only trade laws but the form of the city itself are up for grabs" (2017, p. 251).

MacDonald (2015a) points out that the SEZ sorting mechanism comes with trade-offs. Whoever wants to benefit from the policies in Shenzhen regarding foreign direct investment, housing, labor law, or immigration will need to accept the whole bundle; there is no option of selecting only one's preferred local policies. Non-territorial governance has the potential to overcome this trade-off because it unbundles the package of policies offered in a given location (e.g. a SEZ or other types of zones). For instance, one could theoretically benefit

from Shenzhen's housing policy but follow the family law of another jurisdiction based on their individual or organizational preferences.

MacDonald (2015b) makes the case that the low-hanging fruit in institutional reforms for SEZs have been exhausted and that experimenting with non-territorial governance is the next step. He sees SEZs such as Shenzhen to be particularly well suited for experiments in non-territorial governance. SEZ populations are more heterogeneous than comparable cities due to their high proportion of domestic and international migrants. Thus, elements of non-territorial governance can overcome issues associated with "one size fits all" institutions. MacDonald also sees democratization as the most pressing concern for Shenzhen. He sees an opportunity in transitioning to a polycentric democracy, as this can avoid direct confrontation with vested interests of China's one-party state structure. He explains this as "not transitioning from a one-party state to a multi-party state, but instead transforming into a multi-state party" (MacDonald 2015b).

With this context in mind, what are lessons from Shenzhen's experience in experimental governance for future projects in non-territorial governance?

First, experimentation and continuous refining of policies and institutions is key. The reforms in the Shenzhen SEZ constituted a discovery process. This will be the case even more for new non-territorial governance institutions, as there are only few and very limited precedents. A tolerance for experimentation and responsive feedback mechanisms will therefore aid the process of establishing successful non-territorial governance institutions.

Second, autonomous decision-making at low levels of governance is beneficial. This decentralization brings two main benefits: a) it enables policy experimentation with relatively lower risks and initial resource requirements, and b) it helps to solve the knowledge problem of a robust political economy (see e.g. Moberg 2015; Pennington 2010). The closer decision-makers are to the people and topics involved the more information they will have

to design, implement, analyze, and refine successful policy.

Third, institutions and policies need to constantly evolve over time to adapt to changing conditions. This was a key feature for Shenzhen's success, as the SEZ passed through different stages of economic and urban development at an accelerated rate that demanded a highly responsive local government. Similarly, non-territorial governance institutions elsewhere will need to continuously adapt to survive and thrive.

Fourth, non-territorial governance will increase the competition between institutions. In China, SEZs compete for talent and investment. The Shenzhen SEZ's superior economic performance helped the city attract many entrepreneurs from Shantou, a less successful SEZ. This inter-institution competition is a crucial part of the learning and discovery process and should not be hindered. As entrepreneurs can move from Shantou to Shenzhen, so should individuals also be able to "vote with their feet" and move from one non-territorial governance institution to another.

Fifth, the relations of non-territorial governance institutions to national or

territorial sovereigns are important. Shenzhen needed a credible commitment from Beijing that the national government would tolerate the city's experiments and limit interference. Non-territorial governance institutions will also overlap with territorial states to some degree. At the very least, the residents or members of a non-territorial institution will be physically located on the territory of existing states (possible exceptions being seasteading or space-based communities). A working relationship with these states will be necessary for co-existence. In Shenzhen's case, the SEZ provided benefits for China as a country by acting as testing grounds for nation-wide reforms and by contributing to the national economy. If non-territorial governance institutions provide such benefits to their "host" states, the likelihood of those states' support or limited interference will increase.

6. CONCLUSION

This paper explored why and how Shenzhen has become, by far, China's most successful Special Economic Zone. Through 15 in-depth semi-structured interviews during a six-day field study in Shenzhen, we identified underlying drivers of the SEZ's rapid urban

agglomeration and economic growth. Our research confirmed the importance of the Shenzhen SEZ's geographical proximity to Hong Kong and its superior institutional environment as key factors for its relative success. We were not able to shed new light on the dynamics of clustering and path dependency in the development process.

Even if some of the economic incentives such as lower taxes, tariffs, and FDI privileges that once distinguished Shenzhen as a SEZ in the 1980s and 1990s are now standardized or mirrored in cities across China, Shenzhen still provides a case study of how local policymaking – supplementing and interacting with market forces – can dramatically benefit SEZs and urban economies more broadly. The importance of this case study and the broader findings of this paper, we assert, still hold true despite the limitations of our study. As mentioned in section (III), these were limited time, funding, labor force, local connections, and access to government officials resulted in a small sample size of 15 interviews. To compensate for this, we aimed to make each interview as in-depth and informative as possible and adopted an open-ended set of questions (see Appendix) that facilitated longer conversations.

Future research can build upon this paper's research question by adopting a comparative approach and going further into the details of the policies and governance institutions behind Shenzhen's development – for instance, reviewing key policy differences across time between Shenzhen and other first generation SEZs, and/or between Shenzhen and non-SEZ top-tier Chinese cities, such as Beijing, Shanghai, and Guangzhou. More geographically broad, comprehensive, and historical policy analysis of Chinese SEZs will further deepen scholars' understanding of their performance. Researchers can also collect and analyze large amounts of data on the role Hong Kong played in Shenzhen's development – the annual quantity of exports from Shenzhen to Hong Kong (and vice versa), the number of companies founded by Hong Kong residents in Shenzhen since 1980, the number of

employees and productivity of those companies, data on investments by Hong Kong residents in Shenzhen-based companies, etc. Using our research design and qualitative methods as a template, future efforts to conduct interviews and surveys with a large, representative sample of Shenzhen residents across sectors, income levels, age groups, education levels, etc. can provide an important complement to quantitative data analysis. Illuminating and important insights about SEZs – especially China's groundbreaking SEZs – for global scholars of development economics, institutional economics, economic geography, and non-territorial governance will likely arise from a blend of quantitative and qualitative research. Hopefully, this paper serves as a first stepping stone towards this larger research project.

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8. APPENDIX

Questionnaire: This questionnaire served as the guideline for our interviews in Shenzhen. In every interview, we attempted to ask all eight questions within the time permitted as well as follow-up questions. Questions 5-8 were intentionally open-ended to provoke longer conversations and in-depth discussion. We assured interviewees that their names, professional titles, and other personal information (except for place of work) would be anonymized in order to encourage candid responses and remove sensitivity barriers.

1. How long have you lived, worked, or studied in Shenzhen?
2. Which company, school, or organization do you work or study at?⁷
3. How did you come to work, study, or live in Shenzhen?
4. In what ways did proximity to Hong Kong influence your decision to work, study, or live in Shenzhen?
5. The city of Shenzhen is a Special Economic Zone.⁸ In what ways do you think

- the SEZ policies in Shenzhen make working, studying, or living here especially attractive?
6. In what ways do you think local SEZ policies have helped Shenzhen develop more than China's other first-generation SEZs?
 7. In what ways did the presence of firms, labor, or investment opportunities draw you or your company to Shenzhen?
 8. In your opinion, what are the top economic reasons to live in Shenzhen?⁹

⁷ We asked for company, school, or organization depending on the interviewee and their current occupation.

⁸ We prefaced the question with this reminder and provided explanations and facts about the Shenzhen SEZ to interviewees as necessary.

⁹ If interviewees were unclear on what "economic opportunities" entailed, we gave cost of living, job opportunities, and investment opportunities as examples.