

PIDE Research Report Series


Special Economic Zones in Pakistan: Promises and Perils

Iftikhar Ahmad and Zhou Taidong



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Pakistan Institute of Development Economics, Islamabad

An abstract background featuring a complex, overlapping pattern of light blue and white geometric shapes, including triangles, rectangles, and lines, creating a sense of depth and movement.

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**Special Economic Zones in Pakistan:
Promises and Perils**

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Executive Summary

Introduction

Special Economic Zones (SEZs) are considered one of the major elements stimulating rapid development in countries like China, Poland, South Africa and Malaysia. Global evidence correlates successful implementation of SEZs with substantial increases in GDP, employment, trade and technology transfer. The successful execution of any SEZ is dependent on, along with the socio-economic and political milieu, the prevailing governance structure, administrative setup and institutional framework.

Scope of the study

This study is designed to contribute to Pakistan's deliberations on its SEZ initiative. It begins by acknowledging the contribution of SEZs globally to respective GDP, trade and investment levels, identifying the scope of success. For a comprehensive understanding of both the positive impacts and challenges associated with SEZs, the study explores international experiences with SEZs with a particular focus on China. The study then reviews Pakistan's industrial context by evaluating on-ground realities, assessing the state of preparedness for SEZs under CPEC and finally, offering recommendations.

Promising impacts of SEZs

A key question often asked is "Why do we need SEZs?; Why can't we allow industrial clusters across country?". The answer is that internationally, SEZs have contributed to economies by bringing phenomenal changes in growth rates, boosting regional development, generating employment opportunities, and providing basic infrastructural foundations by concentrating related industry at a given focal space. SEZs generate value-added product chains by creating space for new entrants in manufacturing markets. They generate resources for socioeconomic uplift by improving livelihoods and creating a demand for intermediate goods and services. SEZs also enhance the productivity and managerial skills of the workforce through exposure to international best practices. There are also technology transfer spillovers to domestic firms in identifiable industrial clusters. Overall, evidence suggests, with SEZs the global competitiveness of a country enhances.

Some caveats

Despite phenomenal potential for positive impact, SEZs are not a panacea: there exist myriad challenges, which have resulted in SEZ failures, ending with a wastage of resources and negative externalities. The selection of a location for SEZs is a notable challenge. At times, the choice of land for SEZs is not based on economic and business feasibility, rather land is allocated in less developed regions to generate economic activity there. SEZs in such locations are bound to underperform because of the lack of accessibility and connectivity hindering smooth mobility of labor and capital. On the other hand, geographical concentration of SEZs can also create regional disparity through inefficient resource distribution.

Literature identifies some other key challenges, which include: the legal, regulatory and institutional framework; poor business environment; lack of strategic planning and demand-driven approach; inadequate infrastructure; issues with zone management and operational know-how; host government ownership and policy consistency; and resettlement issues.

Unless SEZs are integrated in a wider national or regional trade and economic reform agenda, they will at best have only a limited impact, rather than acting as the transformative catalysts that they are often intended to be.

Pakistan and SEZs

Before SEZs, Pakistan established IEs and EPZs nation-wide under Statutory Regulatory Orders (SROs) issued by the Ministry of Industries and Production (MOIP). However, a number of market failures, like uninterrupted provision of utilities, compromised security and Law & Order situation, unfavorable conditions to attract FDI and technology transfer and Tax complexities forced the policy makers to think out of box. Resultantly, in 2012, the SEZ Act was promulgated under which special incentives are promised to enterprises at notified SEZs in the country. Moreover, under the China Pakistan Economic Corridor (CPEC) launched in 2015, nine additional Priority SEZs (PSEZs) were announced jointly by the two governments, but these are still to be notified in total. Though recently, on March 04, 2020, 10 SEZs (including 3 PSEZs i.e. Allama Iqbal, Faisalabad (Punjab); Bostan (Balochistan) and Rashakai (KPK)) are approved by the Prime Minister (to be notified by BOA), following a lag of 4 years from the firstly notified 7 SEZs in 2016.

Promising potential for Pakistan: The study finds that SEZs and PSEZs in Pakistan potentially provide strong economic incentives for domestic businesses and furnish the requisite platform to enhance the country's commercial attractiveness for foreign investments. PSEZs have the potential to offer long-term benefits by enabling Pakistani investors to collaborate with their Chinese counterparts and develop export-oriented manufacturing activity. PSEZs are expected to generate decent employment and connect Pakistan to global supply and value chains. Policy makers in Pakistan have termed PSEZs instrumental for output growth, technology transfer and imports substitution.

SEZ management in Pakistan: Concerning the establishment and governance of SEZs, the Federal and provincial governments are allied in terms of zone development, stakeholder outreach, and private sector awareness. The SEZ Authorities (SEZAs) are responsible for the establishment and facilitation of the SEZs and for ensuring compliance with rules and regulations. SEZ developers in each province are tasked with infrastructure development. Currently, all the three modes of financing for SEZ development (public, public-private, and private) are open; the expression of interest from the private sectors is more recent, while the existing SEZs predominantly carry the public or public-private mode of financing. The role of the Federal government and CPEC authorities is to connect the enterprises and facilitate the establishment or relocation of industries in SEZs. Conventional awareness strategies like seminars and road shows are organized at Federal and provincial levels to disseminate information and promote the potential of these SEZs and PSEZs.

Challenges awaiting Pakistan. Amidst positive vibes, there exist concerns. Domestic political instability and extremism are major hindrances. On the socio-economic side, the increase in national debt, decline in firms' solvency, devaluation of the rupee and soaring trade deficit in recent years are the major concerns of Chinese investors. Pakistani manufacturers cited lack of clarity and the government's reluctance to share information as the main concerns. Hence, the sense of urgency on the implementer's part is needed to change business as usual. Further, lack of representation of the business community in the planning processes has resulted in a paucity of basic knowledge about the incentives being

offered at SEZs / PSEZs. In fact, potential Pakistani investors feel intimidated by their highly competitive Chinese counterparts.

Policy recommendations

Policy recommendations are proposed to cater to the challenges in light of the lessons learned from SEZ veterans like China. The study suggests a focus on the improvement of the business environment and governance within the country. Specifically, the Federal and provincial governments still need to achieve harmony regarding their role in the successful implementation of the agenda. Moreover, prioritizing specific sectors under PSEZs and SEZs for more targeted industrial development would result in better implementation. In order to gain investor confidence, it is recommended that the government finds mechanisms to adhere to its SEZ Act promises with regard to the infrastructural development of notified zones. While the authorities are generally aware of the need for trained labor, planning for optimal industrial cooperation is still needed. The study also proposes recommendations for skill dissemination and training to the local workforce prior to the establishment of the PSEZs. Last but not the least, the physical establishment of SEZ, as promised under SEZ Act, is what would boost investor's confidence and bring SEZs into reality; because SEZs is by far a promise still to be completed as envisioned.

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Abbreviations and Acronyms	
BOA	Board of Approvals
BOI	Board of Investment
BECZs	Border Economic Cooperation Zone
CPEC	China-Pakistan Economic Corridor
CPEC CoE	CPEC Centre of Excellence
CRBC	China Road and Bridge Company
EPZ	Export processing zone
ETDZs	Economic and technological development zone
FDI	Foreign direct investment
FIEDMC	Faisalabad Industrial Estate Development & Management Company
FPCCI	Federation of Pakistan Chambers of Commerce and Industry
FTZ	Free trade zone
GDP	Gross domestic product
HIDZ	High-tech industrial development zone
ICCI	Islamabad Chamber of Commerce and Industry
IE	Industrial estate
JCC	Joint Cooperation Committee
KP-BOIT	KPK Board of Investment and Trade
KPEZDMC	KPK Economic Zone Development and Management Committee
KPK	Khyber Pakhtunkhwa
LCCI	Lahore Chambers of Commerce and Industry
MOIP	Ministry of Industries and Production
MoPD&R	Ministry of Planning Development & Reform
NAVTTTC	National Vocational & Technical Training Commission
OIC	Organization of Islamic Cooperation
OETDZ	Overseas economic and trade development zone
PBIT	Punjab Board of Investment and Trade
PPP	Public-private partnership
PSEZ	Priority special economic zone
QIE	Quaid-e-Azam Industrial Estate
R&D	Research and development
SCCI	Sialkot Chamber of Commerce and Industry
SEZA	Special Economic Zone Authority
SEZ	Special economic zone
SIP	Suzhou Industrial Park
SMEDA	Small and Medium Enterprise Development Authority
SMEs	Small and Medium Enterprises
SRO	Statutory Regulatory Order
TEVTA	Technical Education and Vocational Training Authority
UAE	United Arab Emirates
UK	United Kingdom
USA	United States of America

As developing nations emulate successful economic models and strive to achieve rapid growth by broadening their industrial base, they test a variety of concepts. These include special economic zones (SEZs) – i.e., zones where special incentives, not available to the rest of the country, are provided to facilitate production activities in new industries.¹ Special Economic Zones are among the successful variants of industrial development models. Following the western economies' successful economic growth and development model, developing nations are striving to broaden their industrial base to achieve rapid growth. In this search, a variety of concepts are being followed including industrial development zones, industrial clusters, and export promotion zones along with Special Economic Zones (SEZs). These are the zones where special incentives are provided to new industries to facilitate production activities.

Widespread use of SEZs: SEZs, which may be referred to as export processing zones (EPZs), industrial estates (IEs), tax-free zones, or free trade zones (FTZs), were introduced in the late 1970s with China establishing the first one – the Shenzhen Special Economic Zone (Farole & Gokhan, 2011). The idea was then adopted in Latin America and South Asia and, more recently, in Africa with China's support. Evidence from around the world demonstrates the growth, employment, trade and technology transfer benefits associated with the successful implementation of SEZs.

SEZs in Pakistan: Before SEZs, Pakistan established IEs and EPZs nation-wide under Statutory Regulatory Orders (SROs)² issued by the Ministry of Industries and Production (MOIP).³ However, a number of market failures, like uninterrupted provision of utilities, compromised security and Law & Order situation, unfavorable conditions to attract FDI and technology transfer and Tax complexities forced the policy makers to think out of box. In 2012, a dedicated Act was promulgated; promising special incentives to enterprises at notified SEZs, and by 2016, seven SEZs were formally launched. Currently, several of these SEZs are ready to be operational, while a few are still in development.

SEZs under CPEC: In recent years, the China Pakistan Economic Corridor (CPEC) has brought numerous opportunities to Pakistan, including investments worth approximately USD64 billion. CPEC additionally promises important initiatives that can help tap Pakistan's growth potential. The establishment of Priority SEZs (PSEZs) is one such initiative. In connection with CPEC, the Federal and provincial governments of Pakistan identified 46 potential SEZs in 2015,⁴ out of which nine were initially selected for the development of new industries and the relocation of Chinese firms to these designated PSEZs. More recently, in December 2018, the two governments signed a Memorandum of Understanding (MoU) for industrial cooperation and development in selected sectors through joint ventures and relocation of Chinese industries to Pakistan.⁵

¹The World Bank defines a SEZ as a specific geographically identified area where particular incentives, exemptions from taxes and customs duties, security, and one-window facilitation are provided to the investors (Akini & James, 2008).

²SROs are executive orders issued by the Federal Board of Revenue to amend the taxation requirements for a certain sector or entity.

³The first IE, Sindh Industrial Trading Estate, was established in 1963, and the first EPZ, at Karachi, in 1989.

⁴Frequently Asked Questions from Board of Investment: <http://boi.gov.pk/boi/userfiles1/file/SEZ/SEZFAQ.pdf>

⁵'8th Joint Cooperation Committee of CPEC' <http://cpec.gov.pk/news/147>

Anticipated Impact of SEZs and PSEZs in Pakistan: SEZs and PSEZs provide a strong economic incentive for Pakistan's government to introduce reforms catered to improving the domestic business environment, productive capacity, and export base, and to enhance the country's commercial attractiveness for more foreign investments. With more productive industrial zones and modern export hubs for manufactured goods, Pakistan stands to be more favorably positioned in the international market. PSEZs also offer long-term prospects for Pakistani investors to work in collaboration with their Chinese counterparts for the development of export-oriented manufacturing industries with the support of public sector institutions. PSEZs are expected to generate decent jobs and improve industrial and business global supply and value chains. The International Labour Organization estimates that CPEC could create more than 0.4 million jobs by 2030, raising the country's GDP by 2-2.5 percent (Kuraishi and Mustafa, 2017).⁶ They will increase the employability of human resources by improving skills and education levels, and they will use domestic natural resources as input resources.

Early progress: By June 2017, CPEC had created more than 30,000 direct jobs in infrastructure, energy, and industrial projects.⁷ The majority of the workforce hired is from Pakistan with only technical expertise brought in from China. According to the Chinese Ambassador, CPEC is already contributing 2.5 percent of the country's GDP and has provided employment to 7000 Pakistanis in the initial 22 projects.⁸

Multiplier effects: The SEZs and PSEZs also allow the international market to relocate industries that are no longer viable in developed economies. Thus, SEZs are expected to stimulate economic activity in Pakistan by creating jobs for the underemployed educated workforce, promoting capacity building through vocational and technical training in quality skills, providing opportunities for Pakistani labor living abroad, integrating domestic firms with international firms, promoting trade-related domestic industries, generating knowledge spillover to domestic industries, encouraging labor pooling, and establishing strong linkages with the Chinese market (Mahmood, 2018). Such advantages promise to attract both domestic and international investors. CPEC will also allow Pakistan to learn from China's experience with SEZs, which have enhanced China's economic development through export-oriented industrialization.

Purpose and scope of study: This study is designed to contribute to Pakistan's deliberations on its SEZ initiative. It discusses the importance of SEZs and their contribution to GDP, trade, and investment, briefly describes some experiences with SEZs around the world with a particular focus on the Chinese experience, and reviews Pakistan's industrial development, on-ground realities, and state of preparedness for SEZs under CPEC. It concludes with a set of recommendations for the further development of SEZs in Pakistan.

The report analyzes different dimensions before reaching to conclusion. Industrial cooperation is the dimension that can change the direction of growth in Pakistan; given that

⁶ Estimates of future employment vary widely. The Applied Economics Research Centre estimates that CPEC will generate up to 0.7 million jobs by 2030, and the Planning Commission estimates around 0.8 million jobs (PCI, 2017). What is clear is that CPEC's effect on employment levels is expected to be great.

⁷ "CPEC projects create over 30,000 jobs," June 6, 2017: <https://www.app.com.pk/cpec-projects-create-over-30000-jobs-officials/>

⁸ "China to provide 'multiple forms of bailout packages' to Pakistan," December 2, 2018: <https://www.dawn.com/news/1448985>

opportunities are tapped optimally. SEZs are the most important element of CPEC, which can bring in the most needed foreign direct investment into Pakistan. However, while discussing SEZs, it is important to keep in mind the differences that exist between China and Pakistan. As obvious, the governance structure in the two countries (i.e. China and Pakistan) is quite different. Therefore, there is a need to explore the challenges in cooperation under CPEC while identifying Pakistan's potential to tap benefits attached to SEZs. In this regard, policy documents are reviewed to identify the potential SEZ cooperation under CPEC (e.g. it could be to enhance trade, investment, industrial cooperation i.e. joint ventures, supply chain management) or employment. Moreover, the planning, governance and promised support structure for SEZs is also analyzed using the document analysis.

To identify the limitations related to SEZs, it is important to analyze the existing situation of Pakistan in the perspective of industrial development. Even before the inception of CPEC, Pakistan had already tried to develop industrial estates and tax-free zones in different parts of the country to spur industrial development. Nevertheless, these zones could not bring the desired miracles. Therefore, it is also of great importance to know: a) the planning processes in Pakistan, b) the reasons for below-expectation results from already established economic zones by taking into account the responses from manufacturers undertaking production in selected economic zones, c) the response of business community regarding the SEZs. In brief, this report discusses all the aforementioned aspects to provide comprehensive ground for analyses.

The Economic Impact of SEZs: Global Experience

Of the three main sectors that contribute to the economic growth of a country: agriculture, industry, and services, industry stands out as the phenomenon that has most significantly overhauled the structure of economies, notably by generating employment, increasing productivity, advancing technological development (UNIDO, 2015), and boosting trade. Numerous authors (Schumpeter, 1942; Singer, 1950; Prebisch, 1950; Lewis, 1954; Hirschman, 1957; Kaldor, 1970, Hausmann et al., 2007; Hausmann & Bailey, 2007; Hidalgo et al., 2007; Hidalgo and Ricardo, 2008, 2009; and Ishtiaq and Ahmad, 2018) have discussed the importance of industry and trade to a country's sustained economic development⁹.

Emergence and popularity of SEZs: Specialized industrial hubs have helped develop and open domestic industries for many countries. From industrial hubs evolved SEZs. Often designed for specific purposes like technological services, logistics, or science (COMCEC, 2017) SEZs are emerging as a popular and promising source of industrial development and growth. According to the International Labor Organization, the use of SEZs has risen rapidly during the last 20 years, especially in developed countries. Worldwide, between 1997 and 2006 the number of SEZs increased from 176 to 3500. The World Bank categorizes SEZs into six types (see Table 1) (Akini & James, 2008).

Table 1. Types of SEZs

1. <i>Free trade zones (FTZs)</i> , also called commercial free zones, offer storage and distribution facilities and warehouses.
2. <i>Export processing zones (EPZs)</i> , are primarily industrial estates producing goods for the international market.
3. <i>Hybrid EPZs</i> are like industrial estates, but they have a separate area for export-oriented EPZ enterprises.
4. <i>Enterprise zones</i> are designed to decrease the rural-urban divide by offering tax exemptions and concessions to the enterprises of small regions.
5. <i>Free ports</i> cover large areas with activities on a broader level – for example, residential incentives, tourism-related services, and retail services.
6. <i>Single-factory EPZs</i> are confined to a single entity, irrespective of their location or designation in the particular zones.

2.1 SEZs and Economic Development

SEZs generate value-added product chains by creating space for new entrants in the basic and intermediate manufacturing markets. They also generate resources for socioeconomic upgrading by improving the livelihoods of local people (Mahmood, 2018), creating a demand for intermediate goods and services, and thus improving the sustainability of the

⁹ Industrialization has brought huge changes to, for example, the Asian economies of China, Singapore, Taiwan, Malaysia, and South Korea (Chang, 2006; Ishtiaq & Ahmad, 2018). In these countries, the industrial transformation was due to long-term policy plans with clear objectives, a shift toward a technologically advanced industrial structure, and the introduction of new production networks in different products (Ishtiaq & Ahmad, 2018).

manufacturing and service sectors at the local level. SEZs also enhance labor productivity and managerial skills. SEZs may also stimulate competition, which translated to efficiency in SEZs in *China* and *Korea* (Mukherjee, 2016). Studies have shown the positive impact of SEZs, especially in rural regions, in countries as diverse as South Africa (Nel and Christian, 2014), Russia, and Iran (Hakimian, 2009).

Empirical evidence: Success stories from various countries show that SEZs have contributed significantly to their economies, evidencing phenomenal change in the respective economic growth rates before and after the establishment of SEZs.

- **Russia.** SEZs are handled as the tax instrument for the region's development. Between 2005 and 2014, foreign direct investment (FDI) in Russia's Tatarstan region reached USD3,110.02 billion—about 2000 times the amount of government spending on those SEZs. During the same period, the region's per capita gross regional product – a significant indicator of economic efficiency – increased by 15.63 percent (Sinenko and Igor, 2017).
- **Poland.** The average annual FDI inflow to Poland, USD6.7 billion between 1970 and 1985, increased to USD158.6 billion in 2010 with the adoption of a program of SEZs.¹⁰ More than 15 SEZs were established in Poland during the 1990s. Exemption from income tax boosted the number of SEZ business permits from 679 to 1,709 by 2013. At the same time, the amount of investments increased fivefold, from 19.9 billion zlotys to 93.1 billion zlotys (KMPG, 2009). In 2013, Poland ranked 45th out of 189 countries in ease of doing business (Tynel et al., 2013).
- **UAE.** Following the establishment of SEZs, the share of non-oil investment in GDP rose from AED 846,684 billion in 2011 to AED 953.239 billion in 2013. UAE ranked 19th among 132 countries on the World Economic Forum's Enabling Trade index, ahead of the United States of America, France, and Ireland (Raqbani, 2014).
- **China.** During the 1980s, China established four SEZs granting special financial, investment, and trade related incentives in the cities of Shenzhen, Zhuhai, Shantou, and Xiamen. In a few years, the optimal combination of policies and factors of production in these SEZs proved to be a driver of China's exceptional growth rate (Yeung et al., 2009). The benefits reaped by China extended to economic growth¹¹ (Yeung et al., 2009), escalation of FDI¹² (Wong, 1987), and increase in exports¹³ (Yeung et al., 2009). The SEZs were contributing 22 percent to GDP and 60 percent to exports, and generating about 30 million jobs. In 1992, the State Council of China formed 35 Economic and Technological Development Zones (ETDZs), which increased to 191 by 2013. The average annual GDP growth rate of the ETDZs was 43 percent, compared to 11 percent for China as a whole. In 2006, the ETDZs accounted for more than 15 percent of China's GDP and more than 50 percent of its exports (Zeng, 2011, 2015), and attracted almost 22 percent of China's FDI until 2007 (Wong, 2013).

¹⁰ <https://msp.gov.pl/en/polish-economy/economic-news/4425,Special-Economic-Zones-in-Poland-a-boost-for-FDI.html>

¹¹ Shenzhen's economy expanded sixfold and GDP per capita in these SEZs increased from 2,100 RMB to 22,500 RMB during 1978-90

¹² In 1981, the four cities had 60 percent of the total FDI in China

¹³ In 1990, exports from these four SEZs had risen from USD0.5 billion to over USD10 billion

2.2 SEZs and Trade

SEZs enhance regional trade opportunities by opening up trade routes, providing avenues of investment, and attracting FDI through effective policies. Free trade agreements adopted around the globe have led to rapid growth in investments linked to FTZs and SEZs (Raheem, 2011). When SEZs are located strategically and ensure proper infrastructure while avoiding complicated processes, restrictive policies, and political hassles, they offer an empowering investment climate that attracts both offshoring and outsourcing activities (Mahmood, 2018).

The Dubai International Financial Centre and the TwoFour54 Zone in Abu Dhabi are the most prominent non-oil free trade zones. UAE has 47 free zones covering various socioeconomic sectors (Shayah and Yang, 2015).

Empirical evidence. FDI inflows have been growing rapidly in India, ever since SEZs were established in 2004 to accelerate foreign investment and increase exports (Mallikarjuna, 2014). During 2007-08, India received FDI of USD24.57 billion. Similarly, exports increased by 121 percent between 2001 and 2010, and in 2007, SEZs accounted for about 13 percent of total exports (Pahariya, 2007). Free trade zones account for a third of the UAE's non-oil economy and approximately 80% of non-oil exports (Shayah & Yang, 2015). In 2014, Thailand approved a SEZ program to promote regional economic growth and cross-border trade. The SEZs are expected to bring Thailand's cross-border trade (currently estimated to constitute 10 percent of the country's total trade) up to 50 percent of the country's total trade (Liuhto, 2009). In Bangladesh, eight EPZs accounted for 20 percent of the country's total exports. During 2009-15, the exports increased to USD31.7 billion, compared to USD11 billion during 2002-08 (Bangladesh Export Processing Zone Authority, 2016). In 2005, the FDI inflow to Russia's Kaliningrad region was just 15 million euros, but with the establishment of EZs in 2008, it reached 120 million euros. According to the Philippines Economic Zones Authority, with the establishment of SEZs, FDI in the Philippines increased by 23 percent during 2006-2010 and exports reached USD28.9 billion in 2009 compared to USD19.5 billion in 2001 (Manasan, 2013).

SEZs drive exports. According to a World Bank report, the share of EPZs in total global exports was 41 percent in 2004. In Costa Rica, for example, EPZs accounted for 10 percent of the total exports in 1990, a share that increased to 53 percent in 2005 (Akini and James, 2008). In Mauritius, according to a report by the United Nations Economic and Social Commission for Asia and the Pacific (2005), the share of exports from EPZs increased from 3 percent to 53 percent of GDP between 1971 and 1986.

The Katowice SEZ in Russia, the front-runner for the award of Europe's Global Free Zones of the Year 2015, had created 55,000 jobs and engrossed USD5.2 billion of investment with its 63% share in the locomotive industry (Sinenko and Igor, 2017).

2.3 SEZs and Employment

SEZs generate employment opportunities for skilled, semi-skilled, and unskilled labor. The demand for low-skill workforce arises through construction and infrastructure projects

(Raheem, 2011), while that for skilled labor is generated as the focus of SEZs shifts to higher-value-added products. Furthermore, SEZs are also a source of employment indirectly in three ways. First, they generate development funds through foreign exchange earnings. Second, they generate economic activity outside the zone as investment funds are changed into fixed assets, and inputs and services are purchased from the rest of the economy. Finally, with increased incomes comes a rise in demand for various goods and services such as housing, education, health, and transport, which, in turn, has multiplier effects on income and employment. In general, the share of women in SEZs' labor force is significantly higher than their share in the overall economy (Kusago and Zafiris, 1998).

Empirical evidence. In Russia, SEZs are credited for reducing unemployment by 0.74 percent and increasing per capita income by 19 percent (2014). In 2010, SEZs in India were providing employment to more than 644,000 people, of whom 76 percent were local and nearly 40 percent were women (Pahariya, 2007). Impressive employment statistics are recorded for SEZs in Poland (KMPG, 2009; Tynel et al., 2013), Africa (Xiaoyang, 2015), Cambodia (Warr and Jeyant, 2016; Zia et al., 2017), and the Philippines (Manasan, 2013). In 2015, eight of Bangladesh's EPZs provided employment for 450,000 workers, and 64 percent of the workforce was women (COMCEC, 2017). Jordanian SEZs are an example of zone development especially focused on women's access to employment opportunities. Authorities initiated the Satellite Factory Program to promote the participation of rural women in the SEZs (COMCEC, 2017). In six SEZs, 55 percent of the workforce was women and 70 percent of them had had no previous work experience. It has also been found that the presence of SEZs often generates more employment opportunities for women entrepreneurs outside the SEZs because of the increased demand for labor.

2.4 SEZs and Technology Transfer

SEZs can add to human capital both by improving workers' skills through on-the-job training and by prompting improvements in the education system to cater to the needs of the industrial units. In terms of technology transfer, the knowledge from foreign firms that are involved in SEZs spills over to domestic firms in SEZs and even to non-SEZ firms. New skills in production and marketing increase the potential for domestic firms to improve their global competitiveness.

2.5 Policy Interventions for the Development of SEZs

Countries that use SEZs have encouraged the development of businesses through various kinds of measures. In its FTZs, the USA, for example, introduced concessions such as duty exemption on exports, delay in federal excise taxes and customs duties on imports, easy and modernized customs procedures, and exemption from inventory taxes for foreign and domestic goods (Scheepers, 2013). In India SEZs received similar concessions and were additionally permitted to develop residential colonies with basic education and health-care facilities for the labor force (Raheem, 2011). Likewise, the United Kingdom's Enterprise Zones provided incentives for private investment through tax discounts, reduced political interference, simplification of planning rules for development, and public sector infrastructure renewal. Iran has offered similar incentives for the investors of FTZs: tax and duty exemption and the ensured provision of competitive infrastructure facilities and subsidiary services (Hakimian, 2009).

2.6 The Governance and Functioning of Zones: Global Experience

The successful execution of any SEZ is highly dependent on its governance structure, administrative setup, and institutional framework. Bangladesh, Philippines, and Thailand have independent governing authorities for SEZs, EPZs, and FTZs (the Prime Minister's office in Bangladesh, and the Ministry of Trade and Industry in the Philippines and Thailand). In India, the Department of Commerce under the Ministry of Commerce and Industry bears responsibility for SEZs. In each of these countries, a committee is formed to approve these zones with the involvement of all the relevant central ministries and departments. China, however, has followed a decentralized model (at the subnational level) to give SEZs political and economic liberty in their decisions (Zeng, 2011; Tantri, 2011). There is a separate management committee for each zone under the municipal or provincial government, and SEZs have their own legislative authority, with the right to formulate their own regulations aligned with national laws. These zones also have specified production targets.

In South Africa, each zone was focused on a particular sector to build on regional economic strengths and to give focus to proposed development – for example, Tubatse (platinum mining), Musina (petrochemicals, agro-processing, and logistics), and Nkomati (agro-processing) (Nel and Christian, 2014).

Land acquisition. Where the acquisition of land is necessary for the development of SEZs, such as in Bangladesh and the Philippines, specific authorities have the responsibility to provide land: the Bangladesh Economic Zones Authority and the Philippines Economic Zone Authority. In India, private investors themselves purchase land for zone development under rules and criteria defined by the Government. China, however, does not allow the zones to have complete ownership of land; instead, it offers huge incentives for developers to develop SEZs on state-owned land.

Preferential benefits. SEZs normally offer preferential benefits for domestic as well as international investors. Exemptions on income tax for developers and industrial units in SEZs are offered in phases in Bangladesh, China, India, the Philippines, and the Republic of Korea, as are duty-free imports of capital goods and raw materials. Other incentives offered include exemption from VAT and excise duties on imported machinery, for example in Thailand, and exemption from land and property tax in the Republic of Korea (Mukherjee, 2016).

2.7 Challenges and Failures of SEZs: International Perspective

International evidence correlates SEZs with positive impacts in growth, employment, trade and technology transfer, and suggests that SEZs have been an important component of developed world economic models. However, not all SEZ development models thrived. The reasons for the failures of SEZs vary across zones and countries. Zeng (2012a) identifies some of the key challenges, which include: legal regulatory and institutional framework; poor business environment; lack of strategic planning and demand-driven approach; inadequate infrastructure; issues in zone management and operational know-how; host government ownership and policy consistency; and resettlement issues (see also Cling and

Letilly, 2001; FIAS, 2008). In this section, we examine some of the cases of SEZ non-performance around the world, with a focus on understanding the challenges.

Unsuitable land selection: One of the major reasons for the failure of several SEZs, particularly in India and China, was the selection of location. The choice of land for the SEZs that underperformed was not based on economic and business feasibility factors, but rather was allocated in less developed regions with the intention of generating economic activity. Lack of accessibility and connectivity hindered smooth mobility of labor and capital, leading to underperformance of the SEZ (Aggarwal, 2005; Aggarwal et al., 2009). In Poland, location and financing modes posed difficulties for seven SEZs initiated in 1989. In India, SEZs were treated as real estate businesses rather than industrial production hubs (Levien, 2013).

Competition for local businesses: It was also noted that while SEZs promoted FDI and provided new trade markets for domestic investors, they also brought in significant competition for domestic businesses, leading to major challenges for domestic growth (Aggarwal et al., 2009; Cling et al., 2005; Rolfe, 2004).

Inefficient resource distribution and regional disparity: Some SEZs fail due to unbalanced development—that is, the difference between the growth of firms in the SEZ and that of firms outside it—a situation that adversely affects domestic investors outside the SEZs (Zeng, 2015; Litwack, 1998). According to Litwack and Qian (1998), while SEZs in China brought in development on a large scale, they also created regional disparity through inefficient resource distribution. Investment concentrated towards areas where SEZs were established - Fujian and Guangdong during 1980s and 1990s in China, for example. Such disparities among regions result in unstable economic growth and unjust distribution of both resources and incentives. In China, the mushroom growth of SEZs at the local level led to a waste of resources, poor planning and a race to the bottom in taxes, leading Chinese authorities to revisit their SEZ policies. Similar unbalanced economic growth between zone and non-zone regions was experienced in India (Palit, 2009) and in Bangladesh (Shakir & Farole, 2011), creating imbalanced competitiveness, wages and working environments.

Unexpected resource shortfalls: Often, the gap between expectations and realities made the planning and administration of certain SEZs questionable. Such was the case of Shenzhen SEZ (Chu, 1987, Wong, 1987) where the unexpected shortfall of skilled labor led to mediocre performance.

Central authority interference: A similar shortage of skilled labor was observed in a Honduras SEZ, but in this case, due to the over-influence of centralized authorities. While trying to maintain the performance of the existing SEZs, the government confined the transfer of technology to certain regions only, resulting in limited skills development trainings and therefore a shortfall of skilled labor (Engman, 2011).

Weak institutional framework and planning: In the case of Africa, the major reasons for the failure of SEZs were outdated planning and institutional frameworks, shoddy business environments (high cost of business, complicated registration and licensing process), inadequate provision of infrastructure and amenities to investors, insufficient expertise and managerial skills of SEZ developers, and lack of ownership by the host government (Zeng, 2012a, 2012b; Farole, 2011). In Bulgaria, EPZs failed to produce the desired outcomes because of an unfavorable institutional framework, lack of infrastructure, and restrictions preventing domestic investors from investing there (Ahrens and Astrid, 1994).

2.8 Summary

The evidence suggests that the establishment of incentivized and facilitated SEZs has significant benefits extending to increased GDP growth, increases in FDI, and employment in countries as diverse as China, Russia, Malaysia and the OIC countries. This analysis has focused on explaining the driving factors behind the development, role, and impact of these zones.

Concurrently, challenges and constraints also exist, which need to be well-understood and dealt with in policy and planning. The number of SEZs in the world is growing rapidly, but they are relatively new initiatives. There is broad consensus in the literature that the impact of these industrial initiatives has been varied. As Zeng (2015) asserts, “the mixed results of SEZ development in different continents/countries [shows] that it is not a panacea and has to be implemented properly and carefully tailored into a country’s specific situations.” Unless SEZs are integrated in a wider national or regional trade and economic reform agenda, they will at best have only a limited impact, rather than acting as the transformative catalysts that they are often intended to be (FIAS, 2008; Madani, 1999).

SEZs in China: Literature Review

It is now widely recognized that the establishment of SEZs made crucial contributions to China's economic success. Many developing countries, therefore, believe there is much to learn from China's experiences with SEZ development. This chapter reviews the literature on the experiences, impacts and lessons from China's efforts in building SEZs.

3.1 Origin and Evolution

The era of SEZs was heralded when, in 1980, the Chinese Government declared four southeastern coastal cities as SEZs: Shenzhen, Zhuhai, and Shantou in Guangdong province and Xiamen in Fujian province. China was in dire need of systematic change in the late 1970s after the decade-long Cultural Revolution, and China's leaders were eager to open the country to global contacts and influences. SEZs were conceptualized as a complex of related economic activities and services rather than uni-functional entities (Wong, 1987), differing from EPZs and similar special areas in Asia by being more functionally diverse and covering much larger land areas.

Evolution of SEZs in China: Three generations of SEZs rapidly evolved in China over 30 years.

- Almost all four of the original SEZs engaged in specific and well-targeted cooperation. Shenzhen and Zhuhai, for example, are in proximity to Hong Kong and Macau respectively. The large areas within which these SEZs operated allowed them to serve as testing grounds for open and innovative policies that, if proven pragmatic, would be implemented more widely across the country. The emphasis on forward linkages with the world, especially through the liberalization of foreign investment and trade relations with capitalist countries, and backward linkages with different parts of China, was a primary rationale for their establishment. They were also located far from the center of political power in Beijing to minimize both potential risks and political interference (Yeung et al., 2009).
- In the 1990s, when regional development was seen as crucial, a second generation of SEZs was designed to develop and cultivate key national strategic growth poles to produce a diffusion effect and form new spatial developmental structures. They were also expected to hatch knowledge-intensive and technology-intensive industries.
- The third-generation SEZs, established after 2000, are more diverse in both their geographic locations and goals. They aim to find solutions to specific issues such as resources and environment, rural areas, and agriculture. The Chengdu-Chongqing Pilot Zone, for example, focuses on coordinated urban-rural development; the Wuhan and the Changsha-Zhuzhou-Xiangtan pilot zones mainly involve coordinated resource and environmental development; and the Xinjiang Kashgar SEZ centers on coordinated economic, social, cultural, and political development.

Changes in focus and function. 35 years of SEZs in China have evolved from institutional experimentation to regional development to a focus on developmental issues. The desired function has changed from "overall" to "strategically regional" to "specifically local." 21st

century SEZs are no longer exclusively experimental fields for reform and opening up; there is now additional emphasis on regional economic development.

3.2 Types and Functions

SEZs in China have several specific characteristics: (a) a geographically limited area, usually physically secured; (b) a single management or administration; (c) benefits based on physical location within the zone; and (d) a separate customs area (duty-free benefits) and streamlined procedures (Zeng, 2015). Additional features include: (a) a special regulatory regime: SEZs tend to operate under relatively more liberal economic laws in matters such as labor, land use, and foreign investment; (b) public services: SEZs usually operate with efficient customs and fast-track registration and licensing, often through “one-stop shop” services; (c) infrastructure: SEZs are typically served by relatively superior infrastructure such as roads, power, and water; and (d) fiscal incentives: particularly anchor investors in SEZs often benefit from capital freedoms as well as certain levels of tax incentives and subsidies (Zeng, 2016). These characteristics and features still leave a great deal of scope for varying modalities within the overarching SEZ concept, typically “centered on the type of activity a zone engages in” (ADB, 2015:69).

Types of special economic zones. Academics and policymakers use a number of terms interchangeably to refer to special economic zones. This study uses *SEZ* to cover all geographically demarcated areas in China that function with different administrative, regulatory, and fiscal regimes from the rest of the country. At present, China has at least six distinct zone programs in operation in addition to over 1,000 provincial SEZs.

- **National Economic and Technological Development Zone (ETDZ).** The 219 ETDZs aim at attracting foreign investment and developing private economy in the manufacturing industry outside the state-owned system, and hence act as an experiment and model of export and rapid economic growth.
- **National High-Technology Industrial Development Zone (HIDZ).** The 146 HIDZs use the technological capacity and resources of research institutes, universities, and large and medium enterprises to develop new and high-tech products and expedite the commercialization of research and development.
- **National Border Economic Cooperation Zone (BECZ).** The 15 BECZs, largely distributed in border provinces, are important to the opening of the middle and western parts of China and play a significant role in developing economic and trade relationships between China and its neighboring countries.
- **National Export Processing Zone (EPZ).** China’s 63 EPZs are special industrial zones marked off in an already built developing zone, whose functions are limited to promoting processing trades for export. EPZs can be set up only in existing ETDZs that have been approved by the State Council and must not be established elsewhere.
- **Bonded Zone.** China has 66 bonded zones, including such variants as bonded port areas and bonded logistics zones, all run by the customs authorities. Bonded zones are quite small and are nearly always located within some other type of development zone.
- **Free Trade Zone (FTZ).** China’s 11 FTZs are in areas with geographical advantages for trade, such as major seaports and international airports and they are used to

explore policies for modernizing Chinese businesses. Unlike other types of SEZs, FTZs can experiment with financial models and attract investment, and they serve as a blueprint of further reform throughout China.

- ***Overseas economic and trade development zones:*** In addition to these various forms of SEZs, China has overseas economic and trade development zones (OETDZs)— industrial, agricultural, or service parks or zones that are constructed in a foreign country by Chinese enterprises and/or in collaboration with other countries, with the aim of attracting Chinese and foreign enterprises. They support a number of strategic objectives: to (a) support demand for Chinese-made machinery and equipment and make it simpler to deliver post-sales product support; (b) allow Chinese companies to circumvent trade frictions and barriers they would face if they were producing overseas and exporting to Europe or North America; (c) help China’s efforts to enhance its own domestic restructuring and move up the value chain; and (d) generate economies of scale for overseas investment, especially to help earlier-stage small and medium-sized enterprises (SMEs) expand operations overseas in groups. They are widely seen as a way for China to support other developing countries, by replicating a key component of its own success overseas (World Bank, 2010).

3.3 Governance and Management

Governance: Various governance instruments exist to attract foreign investment in China. At the federal level, these include the Ministry of Foreign Trade and Economic Cooperation, the Law on Joint Chinese and Foreign Investment Enterprises and a series of regulations to encourage overseas Chinese to invest in mainland China. Additionally, subnational governments are allowed the leeway to experiment with flexible SEZ guidelines, and have taken various approaches.

- The SEZs set up in Guangdong and Fujian were aimed at attracting industrial transfers from Hong Kong and Taiwan. The low cost of labor and land, along with the cultural and linguistic proximity of Guangdong with Hong Kong, did indeed attract many small enterprises. The kindling of business activity around the import of raw materials, manufacturing of products and assembly of imported parts triggered exports, boosted the country’s total trade volume and sped up industrialization in the region.
- The Suzhou Industrial Park in the capital city of Jiangsu province profits from the China-Singapore cooperation and was built and operated using Singapore’s planning, financing, and investment-hauling ideas. Singapore’s involvement helped this SEZ attract conglomerates from the US and Europe.
- SEZs set up in northeast China, the country’s traditional industrial base with mature enterprises and a technically skilled workforce, became an ideal destination for industrial transfers from Japan, South Korea, and Europe.

Management. The management of SEZs can be categorized into three models.

- ***Government-led management model.*** These models, often adopted at the early stages of zone construction, can be divided into “vertical coordination” and “centralized management” types. Vertically coordinated zones task the municipal government to

lead the construction and management of the zone and hand operational management to an industrial management department. A zone management committee is responsible for coordination among the different departments. Under centralized management, the zone management committee is responsible for the construction, development, and management of the zone.

- **Mixed management model.** This model is commonly used once the zone begins full operation. There are two types - “combination of government and enterprises” and “separation of government and enterprises.” In the former, the zone management committee is tasked with decision-making and service work, while a subordinate development company, usually with the same representatives and leadership, takes charge of infrastructure construction. In the latter, and more widespread type in China, the zone management committee does not interfere with the work of the development company, which, as an independent economic legal entity, administers and manages the zones.
- **Enterprise management model.** This model is mostly applicable to mature zones and relies on a development company set up by a local government to develop and manage the zone.

Financial management of SEZs. The financial management of Chinese SEZs falls under one of three models.

- **Public sector.** Nearly all of the early SEZs were developed by government agencies, which serve as the administration committees of the development zones. Responsible for raising funds, formulating plans, approving projects, relocating industry, acquiring land and constructing infrastructure, they bear the costs and risks and enjoy the benefits of land and zone development. With local authorized advantages and strong financial support from the center, the national-level and large-scale SEZs, including Ningbo, Dongguan and Chengdu, follow this model.
- **Private sector.** When China’s economy became more marketized, the private sector began to participate in SEZ development, especially after 2000. Under this model, the government selects private enterprises as first-level developers through bidding. The government is responsible for the macro affairs of the SEZ, such as urban and land-use planning and policies at the early stage of development, while the private developer leads remaining affairs. The level of finances and capability required makes this model applicable for small or medium-sized SEZs, such as the Shanghai Zizhu HNTDZ.
- **Public-private partnerships (PPPs).** In the PPP development model, a government agency or its holding company forms a development company, in a cooperation or joint venture with private enterprises, which assumes responsibility for the management of the development and construction of the zone. The administration committee is only responsible for administrative affairs and public services. This model makes full use of the government's authorized privileges in the zone and can advantageously attract various kinds of funds to the maximum extent. The China-Singapore Suzhou Industrial Park is one of the most successful examples.

Land acquisition: The selection of land for a specific SEZ is based on priorities that include locality and connectivity, availability of natural resources, and concentration of industries. Many early SEZs which were located in remote and sparsely populated places had to be demolished and relocated by local governments. The compensation for land expropriation might be direct, based on the value of the land, or in such forms as relocation of the community building or an employment guarantee within the development zone.

3.4 Favorable Economic Impacts

Chapter 2 discussed the anticipated gains of SEZs in terms of employment generation, export growth, economic diversification, industrialization, economic development outside the SEZ, foreign exchange earnings, FDI, and knowledge transfer. This section examines the extent to which China's SEZs contributed to these benefits.

3.4.1 SEZs and Economic Growth and Development

The literature generally agrees that the combination of favorable policies and the conducive mix of production factors in Chinese SEZs have resulted in high rates of economic growth in the country (Alder, 2013; Liu and Zhao, 2015; Wang, 2013). In 2006, for example, the five initial SEZs accounted for 5 percent of China's total real GDP, and the 122 ETDZs, HIDZs and FTZs together accounted for a combined 11.1 percent of China's total GDP (Yeung et al., 2009). The Suzhou Industrial Park (SIP) stands out as a striking example, achieving an annual average economic growth of around 30 percent since its inception. Occupying only about 3.4 percent of the total land, 7.4 percent of the population, and 6.3 percent of the industrial land, SIP contributes about 15 percent of Suzhou's GDP, 13 percent of its industrial output, 29 percent of its total trade, and 16 percent of its public revenues (Suzhou Municipality, 2014). Besides contributing to gradual economic reform in China, the SEZs have also played an important role in reducing poverty by creating jobs.

Outcomes vary. Owing to the unique characteristics of the Chinese economy, such as "China's unusual migration control", for example, Wang (2013) warns that "the positive effects demonstrated should be interpreted with caution" as the benefits reaped may not be homogenous across countries.

3.4.2 SEZs and Foreign Direct Investment

FDI from China's early SEZs soared in the wake of the country's opening of the economy: in 1981, the four zones accounted for 59.8 percent of the total FDI in China, with Shenzhen accounting for the lion's share at 50.6 percent. Three years later, the four SEZs still accounted for 26 percent of China's total FDI and by the end of 1985, realized FDI in the four zones stood at about 20 percent of the national total – amounting to USD1.17 billion (Wong 1987). In SIP, annual actually utilized foreign investments spiraled up from 1994 to 2013 (SIPAC 2014)¹⁴, and by the end of 2014, SIP had attracted 5,276 foreign investment projects, including 92 Fortune 500 companies, with a cumulative actually utilized foreign investment of USD26.7 billion and contractual foreign investment of USD47.0 billion (SIPAC 2015). Wang (2013) finds that China's SEZ policies increased per capita FDI on average, largely because of foreign-invested and export-oriented industrial enterprises. Moreover, the

¹⁴ In SIP, the annual actually utilized foreign investments increased from USD70 million in 1994 to USD1.6 billion in 2005 and USD2 billion in 2013 (with an accumulated total amount of USD25 billion in 2013) (SIPAC 2014)

majority of FDI inflow to the SEZs is new activity, and it seemingly does not crowd out domestic investment. Wang (2013) goes on to conclude that because of the “agglomeration economies, the SEZs increase the total factor productivity growth that provides justifications for such spatially-targeted subsidies.”

3.4.3 SEZs and Trade

Wu and Jiuli (2012) analyze the export-promoting effect of SEZs empirically and find that SEZs significantly boost the volume of exports. Huang et al. (2013) use disaggregated data from customs and find that SEZs have much higher exports on average.

3.4.4 SEZs and Technology Transfer

Wu et al. (2018) investigate the effect of SEZs on technological innovation by using county-level data from 1985-2011 and find that the establishment of SEZs promotes a county’s application and grant numbers in innovation patents, utility patents, and design patents by 15-25 percent. SIP, where manufacturing activity leaned towards labor-intensiveness at the outset, became one of the leading high-tech zones in China, following deliberate efforts of the management and local government. Its share of high-value-added services continues to rise - from 21% in 2000 to 40% in 2013. Since 2006, SIP’s patent applications have been increasingly steadily - by 2014, a total of 29,611 patents had been granted (of which 5,082 were invention patents).

3.4.5 SEZs and Institutional Change

The SEZs that were established and developed during China’s modernization phase were institutional experiments, and essentially different from other SEZs around the world, which were introduced predominantly in the interest of foreign capital or export processing. In fact, as Yang (2017) points out, all China’s SEZs have been seeking to provide experience and become models for national reform. Thus, their primary task involves developing systems, mechanisms, and developmental methods that are of a higher level, are universal or adoptable, and locally developed. The first-generation SEZs, for example, piloted many institutional changes such as the transfer of land based on negotiated prices, making a breakthrough in the state-owned land use and management system. They also introduced foreign capital, price reforms, and labor employment system reforms. Changes in the status and identity of labor in an enterprise—factors that were critical to attracting the right talent—were the key effects of institutional reform in China.

3.5 Experiences, Lessons, and Challenges

Many factors contributed to the success of China’s SEZs, but that success draws on some common key elements and points to some common lessons (Zeng 2015; UNDP 2015). In this section, we review the specific context in which China operated its SEZs and gained from them (Experiences), take note of some negative impacts on the Chinese economy and society (Lessons) and survey the possible uphill course the SEZs may have to contend with (Challenges).

3.5.1 Experiences

- ***Strong commitment to reform and pragmatism from top leadership.*** The determination and political commitment of the top leadership ensured a stable and supportive environment for reform. SEZ programs were integrated into national

development strategies and plans. Importantly, China did not copy ready-made models or “best practices” for reform but instead paved a very locally appropriate way toward a market economy. This sentiment is vividly captured in Deng’s famous saying: “No matter if it is a white cat or a black cat, as long as it can catch mice, it is a good cat.” Such pragmatism is crucial for achieving any successful reform.

- ***Preferential policies and infrastructural support.*** To encourage firms to invest in the zones, the SEZs instituted various preferential policies: inexpensive land; concessionary tax rates, breaks, and exemptions; rapid customs clearance; the ability to repatriate profits and capital investments; duty-free imports of raw materials and intermediate goods destined for incorporation into exported products; export tax exemption; streamlined administrative control; research funding; and a limited license to sell to the domestic market (Enright, Scott, and Chung 2005).
- ***Strong support and proactive participation of governments.*** The central government decentralized power and helped create an open and conducive legal and policy environment for the SEZs. At the same time, the local governments endeavored to build a sound business environment, not only sowing the seeds for an efficient regulatory and administrative system but also establishing good communication and utilities infrastructure. In addition, local governments continue to provide accounting, legal, business planning, marketing, import-export assistance, skills training, and management consulting services to many SEZs, especially to the HIDZs and ETDZs. In addition, the SEZ governments are able to make timely adjustments to policies and regulations in response to business needs and market conditions. For example, following success of the zones, the governments began to put more emphasis on technology-intensive or high-value-added sectors and to adjust their FDI policies to create a level playing field for both foreign and domestic firms.
- ***FDI and the Chinese diaspora.*** As SEZs emerged in a newly opened China in the 1980s, Hong Kong, Macao, and Taiwan were also beginning to upgrade their industrial structure and transfer out their labor-intensive manufacturing sectors. The cheap labor and good infrastructure in the SEZs, along with the “open door” policies and generous incentives, provided a great opportunity for FDI to flow into China from the diaspora. Given the culture, language, and location advantages, such investments were prominent at the beginning, especially for the early SEZs.
- ***Amenities for skilled labor.*** Favorable policies, such as the provision of housing, subsidies for children’s education, and assistance in “Hukou” transfer were also in place to attract skilled labor, including the overseas diaspora. A major impetus behind China’s SEZ success is acknowledged to be the country’s consistent focus on human resource development, both in developing SEZ expertise and in ensuring a skilled labor force.
- ***Receptivity to technology, learning, innovation, modernization, and strong links with the domestic economy.*** One of the key strengths of successful SEZs is their unique concentration of highly skilled people, including R&D personnel, especially in the HIDZs and ETDZs. Governments emphasize receptivity to technology and innovation, and on technology-intensive industries. The Shenzhen government took steps to protect intellectual property rights by issuing a number of policies and

regulations through a dedicated intellectual property office. As a result of these priorities, these SEZs have become nuclei of knowledge and technology generation, adaptation, diffusion, and innovation. The Shenzhen government also implemented many preferential tax policies and financial incentives to encourage high-tech industries and attract technology talents, such as the software and integrated circuits industries, R&D, and venture capital investment. In addition, the SEZs are closely linked to domestic enterprises and industrial clusters through supply chains or value chains—a connection that not only helps achieve economies of scale and business efficiency, but also stimulates synergistic learning and enhances industrial competitiveness.

- ***Clear objectives, benchmarks, and intense competition.*** The hundreds of successful SEZs in China all have clear goals and targets in terms of GDP growth, exports, employment, revenues, FDI generation, and the like. These expectations are a source of pressure for the government and a catalyst for increased efficiency as each SEZ strives to distinguish itself in service, quality of infrastructure, and appearance, to attract new enterprises and reach the targeted development goals.
- ***Location advantages.*** Most thriving SEZs in China are located in the coastal region or near major cities with a history of trade and business and thus have traditional linkages to international markets. They also have good access to major infrastructure, such as ports, airports, and railways.
- ***New applications.*** China has now begun using SEZs as a way to move its labor-intensive industries to markets that are more profitable and to support its domestic companies in venturing into foreign markets. China has also successfully used SEZs as a testing ground for economic and legal reforms, first to help ensure a smooth and gradual transition to a market economy, but later to test a range of new laws and regulations. This aspect of SEZs may be useful for Pakistan as it works to further liberalize its market economy and experiments with legal reforms. However, this SEZ feature only applies to large SEZs that include whole cities or administrative areas.

3.5.2 *Lessons*

Some negative impacts of SEZs on the Chinese economy and society need to be acknowledged.

- SEZs produced a strong polarization effect on labor, capital, technology, and other factors in the surrounding areas. Economic development disparities between SEZs and non-SEZs are often prominent, provoking a “geographically dual” economy.
- The possibility of “enclave-type” SEZs is imminent. Many of the new SEZs are designed for high-tech or service industry and require high innovation capabilities. Thus, they have few employment opportunities, for example, for the surrounding areas and therefore have a minor diffusion effect. Failing to act as growth poles for regional economic development, they may even exacerbate the imbalance of regional economic development.
- While SEZs still have latitude for first implementation and experimentation and spearhead the national reform and opening up processes, they also confront

diminishing policy-related comparative advantages. Reinforcing their own development, then, becomes their priority rather than coordinated development efforts with non-SEZ enterprises.

- It has been aptly pointed out by Shankar (2007) that the dazzle of foreign investment and technological booms by China's SEZs obscures a dark side: loss of land for farmers, social regression, and labor rights.

3.5.3 Challenges

SEZ success can be a double-edged sword. Some challenges faced by SEZs are a direct result of their success, for example when the government revokes privileged status or tails off preferential policies. There are also challenges arising from saturation of similar sector industries in competition. Some other important challenges faced by SEZs are described below.

- *Moving up the global value chain.* With the exception of some notable high-tech sectors that emerged in SEZs and clusters, China still competes mainly on low-cost manufacturing. Many SEZs and firms remain seriously constrained by limited innovation capacity and a shortage of skills. As economic competitiveness increasingly hinges on knowledge, technology and innovation, moving China's industries to high-value-added sectors (including services) is a challenge.
- *The sustainability of export-led growth.* The heavy export orientation of China's economy increases its vulnerability to global market shock and makes China a target of antidumping and trade lawsuits. As global protectionism increases, so does friction in global trade.
- *Environmental and resource constraints.* With increasing emphasis on climate change, two aspects related to environmental challenges call for particular attention in the context of SEZ firms: (a) the extensive amount of industrial waste and its relation to water, air, and land quality; and (b) the increasingly tough eco-standards set by industrial countries for products exported from developing countries.
- *Institutional challenges.* With the market economy well established across the country, further development will require even greater efficiency of institutions, particularly: a sound regulatory and legal system that includes a well-functioning IPR regime, a participatory monitoring and supervisory system, a good evaluation mechanism especially for public spending, and a sound social safety net.
- *Lagging social development.* Although some SEZs offer amenable living environments for their workforce, many of them do not have sufficient health and education services or public transportation to accommodate their increasing population. Some SEZs are isolated islands, at a distance from their host cities, offering few cultural and leisure activities.

Challenges for OETDZs in China: The OETDZs also face key challenges. Not least is the current management capability of zone developers who are largely Chinese industrial, engineering, or trading enterprise investors and lack specific experience in developing and managing industrial development zones. Additionally, there arise coordination difficulties with host government counterparts: practical hiccups involving laws, policies, government

services, and work efficiency concerns require effective communication, which is impeded by the unequal status of Chinese developers and host governments during negotiations. Moreover, many zones are compelled to develop their own infrastructure, which increases development costs. Lastly, zone developers face financing strains owing to high capital requirements for infrastructure development and high cost of finance in the host countries (World Bank, 2010).

3.6 Summary

China's experience with SEZs emphasizes the importance of local context: SEZ models should not be blindly replicated but should be adapted to fit into and benefit from local circumstances. Notably, while Suzhou Industrial Park follows the development model of Singapore's Industrial Park, the Chinese model has been adjusted to avail the concentration of high-end manufacturing and make use of its proximity to metropolitan Shanghai. Other lessons China has learned include the importance of long-term planning based on objective data, and of continuous government involvement in policy formulation, monitoring and provision of infrastructure. Another key aspect of China's SEZ achievement has been the continuous focus on human resource development—both developing SEZ expertise and ensuring a skilled labor force.

A reference, not a blueprint. When looking at lessons that can be drawn from China's SEZ experience, it is useful to recall that while SEZs continue to play an important role in China's development, they are only one of many components in that development. Considering these SEZ types and management models as a reference rather than a blueprint may be of benefit for Pakistani policy-makers when creating a national SEZ program or developing SEZs in specific local contexts. China has proven that SEZs can be a way to attract capital and create a large number of labor-intensive jobs in a short time. However, it is also important to note that China's success in attracting FDI was due not only to its SEZs and cheap labor, but also to the promising potential of its huge domestic market.

SEZs: Evolution, Concerns, and Potential for Industrial Development In Pakistan

After independence, Pakistan was an agrarian economy with a weak industrial base. Realizing the need for an industrial policy to kick-start industrial development, policymakers launched a series of Five-Year Economic Plans (Burki, 2008). Pakistan's industrialization narrative, however, has been characterized by upheaval as the country's economic policy shifted back and forth from liberalization to nationalization. Below, we summarize the significant phases in Pakistan's economic history.

- **First Five-Year Plan (1955-60).** The policy focused on investment in industries producing consumer goods to meet domestic needs. It protected industries like jute, cotton, sugar, cement, and cigarettes (Power, 1963; Winston, 1967; Islam, 1973; Hussain and Vaqar, 2011), but lacked any long-term objectives for industrial development (Brecher & Saiyid, 1972).
- **Third Five-Year Plan (1965-70).** Industrial development was included more comprehensively in a focus on small-scale industries (Zhao and Muhammad, 2013) related to jute, vegetable ghee, soda ash, caustic soda, and sugar.
- **1970s.** All large-scale enterprises and SMEs were nationalized – a deleterious move that echoed well into the following decade.
- **1990s.** The industrial sector was developed using privatization, deregulation, and delegation policies.
- **1998-2008.** To promote and facilitate small industries, the Small and Medium Enterprise Development Authority (SMEDA) was established in 1998 (Hussain & Vaqar, 2011). During the following decade, a policy of liberalization in the form of tariffs incentives and deregulation induced the private sector to propel industrial development forward (Burki, 2008; Hussain and Vaqar, 2011).
- **2010.** The eighteenth constitutional amendment abolished the concurrent list, devolving a number of subjects to provincial level including the trade and industry. However, the transition took time to take place.
- **2011.** The Ministry of Industries and Production (MOIP) drafted a National Industrial Policy based on the protection of large-scale industries like chemicals, fertilizers, and steel. The policy promoted value-added exports while discouraging imports.
- **2012.** The SEZ Act was promulgated, making the special incentives for SEZs a part of the constitution, with no fear of withdrawal.
- **2013.** Responsibility for formulating industrial policy and developing the industrial sector was formally devolved to the provinces. In 2016, the provincial government of Khyber Pakhtunkhwa (KPK) formulated the first provincial Industrial Policy, with the vision of developing infrastructure, promoting specific sectors in accordance with CPEC,

developing SEZs, rehabilitating closed industrial units, and providing specific incentives to the industries of KPK.¹⁵

- **2018.** Punjab launched Provincial Industrial Policy in 2018.

4.1 Evolution of Industrial Estates in Pakistan

Industrial estates (IEs) are not new to Pakistan (see Table 2). The MOIP has developed them for decades and several large cities have a history of specialized industrial clusters: an engineering cluster in Gujranwala, a fan cluster in Gujrat, leather, surgical instruments, and sports goods clusters in Sialkot, and a textile cluster in Faisalabad, to name a few. On account of poor implementation, however, the IEs have not been entirely successful (Khan and Saba, 2016).

EPZs. Administered by the Export Processing Zone Authority established in 1980, seven export processing zones (EPZs) have been developed (Mahmood, 2018).¹⁶ Although the plots are fully sold out, these EPZs have not yet reached their full production potential since businesses are still to be set up and made functional.

Table 2: IEs and EPZs in Pakistan
<p>INDUSTRIAL ESTATES (IEs): 71 11 in Khyber Pakhtunkhwa 26 in Punjab 7 in Baluchistan 27 in Sindh</p>
<p>EXPORT PROCESSING ZONES (EPZs) EPZs under the government sector Karachi EPZ (1989) Risalpur EPZ (2002) Sialkot EPZ (2005) Gujranwala EPZ (2013) EPZs under the private sector Saindak EPZ (2003) Tuwairqi Steel Mill EPZ (2006) Duddar EPZ (2009)</p>

4.2 Special Economic Zone Act, 2012: A Major Policy Change

In 2012, the SEZ Act was promulgated to facilitate new enterprises and initiate a new era of industrial development. Under this Act, seven SEZs were formally notified (see Table 3). The Act officially defined a SEZ as “a specialized zone with specific businesses functioning in a particular geographic area for the promotion of certain economic activities under certain policy measures not applicable to the rest of the country.”¹⁷ The zones are to be set up by the Federal or provincial governments either alone, in partnership with the private sector, or entirely through the private sector (SEZ Act, 2016). There are two applications from the private sector to develop SEZs on their own: one in Lahore, and another under negotiation between Sialkot CCI and the Government of Punjab. When the SEZ Act was amended in

¹⁵ KPK Industrial Policy, 2016 <http://www.kpezdmc.org.pk/content/industrial-policy>

¹⁶ Including Karachi Phase-II

¹⁷ <http://boi.gov.pk/InvestmentGuide/SEZ.aspx>

2016, SEZs were divided into eight sub-categories. The SEZ Act also lays out the governing process. Applications are submitted through the Federal Board of Investment (BOI) and approved by the Board of Approvals (BOA) – both central authorities. Applications received by provincial governments must also be shortlisted and forwarded to the BOI.

Table 3: SEZs notified under the SEZ Act, 2012

1. Khairpur Special Economic Zone, Khairpur, Sindh (136 acres)
2. Korangi Creek Industrial Park, Karachi, Sindh (230 acres)
3. Bin Qasim Industrial Park, Karachi, Sindh (940 acres)
4. M3 Industrial City in Faisalabad, Punjab (4,356 acres)
5. Quaid-e-Azam Apparel Park, Sheikhpura, Punjab (1,536 acres)
6. Value Addition City, Faisalabad, Punjab (225 acres)
7. Hattar Economic Zone, Khyber Pakhtunkhwa (424 acres)

Benefits provided to SEZs. The SEZ Act, 2016, directed Federal and provincial governments to provide public utilities and infrastructure to the zones. It provided incentives to both developers and enterprises at SEZs (see Table 4), allowing for additional benefits for high-tech enterprises. It also offered SEZs incentives for relocating industries from other countries: a reduced import bill, provision of plots on installments, 50 percent freight subsidy on the internal transportation of machinery, and one-window operation (Abbas and Saira, 2017).

Table 4: Incentives for SEZ Developers

1. Exemption from all taxes on income in relation to the development and operation of the SEZ for five years
2. Exemption from customs duties and taxes for all capital goods imported into the country
3. Exemption from all taxes on income for 10 years
4. Transparent procedures
5. One-window facility by BOI and at zone
6. Dry port facility
7. No sales tax on input goods, including electricity / gas bills
8. Duty-free vehicles allowed under certain conditions
9. Security arrangements
10. Duty-free import of machinery, equipment, and materials

4.3 Development of Priority Special Economic Zones (PSEZs) under CPEC

A number of challenges have historically restricted Pakistan’s industrial development like: lack of substantial investment, inadequate clustering of industries, weak institutions, unskilled human resource due to limited vocational education and brain drain, poor receptivity to modern technology, high business costs, and lack of hard and soft infrastructure. In this context, the launch of CPEC brings with it a promise of fast-tracked industrial development, which can potentially provide Pakistan with a strong and dynamic industrial base. The development of PSEZs is envisioned to consummate the industrial cooperation component of the CPEC agenda. Certain sectors—textiles, telecom parts, engineering, knowledge-based industries, marine products, and modern storage facilities for fruits and vegetables—are good candidates for joint ventures with Chinese companies to be based in these PSEZs.

Proposed PSEZs. Under CPEC, nine PSEZs are proposed: Allama Iqbal Industrial City, Faisalabad; Bostan Industrial Zone, Baluchistan; China Special Economic Zone Dhabeji, Sindh; Islamabad Capital Territory Model Industrial Zone, Islamabad; Marble City, Mohmand Agency; Moqpondass SEZ, Gilgit-Baltistan; Industrial Park at Port Qasim, near Karachi; Rashakai Economic Zone, KPK; and Special Economic Zone at Mirpur, AJK.¹⁸ The main distinction between the seven initial SEZs and the nine PSEZs is that China will support the PSEZs by relocating Chinese industries to those sites in Pakistan. According to the PBIT, it is expected that once these PSEZs are complete, they will have created 2 million jobs and a turnover of PKR 1 trillion.¹⁹

Preparing for the PSEZs: The BOI has established a dedicated CPEC-SEZ cell for facilitation of the agenda. The establishment of a PSEZ requires a minimum area of 50 acres, in addition to financing options for zone developers. PSEZs are open to all foreign and local investors and to joint ventures (Nigar and Najam, 2017). Specific amenities are proposed to make the zones attractive to investors (see Table 5).

Table 5: Amenities for SEZ Enterprises
1) One-stop shop
2) Electricity
3) Gas
4) Water
5) Sewerage and drainage
6) Waste water treatment
7) Local roads
8) Access road outside zone
9) Communications (telephone, Internet, cable TV)
10) Security (policing and check posts)
11) Boundary wall around the zone
12) Firefighting facilities
13) Academic and vocational training facilities
14) Display centers for products
15) Basic amenities such as:
a) Housing units for workers
b) Local shops
c) Schools
d) Dispensaries
e) Transport facilities
f) Banks

4.4 Status of “Doing Business” in Pakistan

Pakistan has registered modest but certain improvements in its Ease of Doing Business (DB) ranking: its 2020 rank is 108 after 28 points improvement in its 2019 rank i.e. 136 out of 190 countries whereas it was 147 in 2018. Pakistan’s score of 61 is only slightly below the South Asian average of 58.2. (See Table 4.1 for rankings of high DB and Asian countries.) It is important to highlight, however, that only the subsample of Karachi and Lahore was used for the DB ranking for Pakistan. Despite this discussion, such numeric can be misleading at times (despite low DB rank, Bangladesh still has attracted phenomenal amount of FDI).

¹⁸ Proposed PSEZ under CPEC <http://cpec.gov.pk/special-economic-zones-projects>

¹⁹ “Three industrial estates in Punjab given SEZ status,” June 11, 2016 <https://www.dawn.com/news/1264057/>

Table 4.1. Ease of Doing Business Rankings

Top 10 countries	Ranking		South Asian countries	Rankings	
	2020	2019		2020	2019
New Zealand	1	1	India	63	77
Singapore	2	2	Bhutan	89	81
Hong Kong	3	4	Nepal	94	110
Denmark	4	3	Sri Lanka	99	100
South Korea	5	5	Pakistan	108	136
United States	6	8	Maldives	147	139
Georgia	7	6	Bangladesh	168	176
United Kingdom	8	9	Afghanistan	173	167
Norway	9	7			
Sweden	10				

Source: World Bank: Doing Business Ranking 2020 <http://www.doingbusiness.org/en/rankings>

DB indicators. The DB rank is the average of 10 scores for different aspects of doing business in a given economy (Table 4.2 presents Pakistan’s scores). These factors inform policy with respect to improvement required at desired areas.

Table 4.2. Pakistan’s DB Rankings (out of 190 countries)

Indicators	Ranking		Indicators	Ranking	
	2020	2019		2020	2019
Pakistan’s overall DB rank	108	136	-	-	-
Starting a business	72	130	Protecting minority capacity	28	26
Dealing with construction permits	112	166	Paying taxes	161	173
Getting electricity	123	167	Trading across borders	111	142
Registering property	151	161	Enforcing contracts	156	156
Getting credit	119	112	Resolving insolvency	58	53

Source: World Bank: Doing Business Ranking 2020 <http://www.doingbusiness.org/en/rankings>

Reasons for improvements: Improvement in three parameters majorly moved Pakistan’s ranking from 147 to 108: speeding up the registration process by simplifying the complicated application process; formulating an online registration system, bringing transparency to the administrative and property registration process; and reducing insolvency procedures.

District rankings: In the DB 2010 report, 13 districts were ranked separately for seven indicators (see Table 4.3). It is evident that Faisalabad – with an outstanding performance on almost all seven indicators – is the most favorable place for developing SEZs and PSEZs, with Multan ranking second. While there are a few IEs in Multan²⁰, not a single SEZ has been planned there yet. This makes it a good candidate for a specialized cottage SEZ or a SEZ for small firms, and should be considered for SEZs or PSEZs in the future. However, we need fresh data on important districts to conclude concretely.

²⁰ According to the Punjab Statistical Book 2015, there are 456 industrial units in Multan, most of them are cottage industries.

Table 4.3. District DB Rankings for Pakistan, 2010

District	Overall DB ranking	Start a business	Deal with construction permits	Register property	Pay taxes	Trade across borders	Enforce contracts
Faisalabad	1	2	6	1	3	4	2
Multan	2	1	7	4	3	13	8
Lahore	3	3	3	4	3	13	8
Islamabad	4	1	8	3	1	11	10
Sheikhupura	5	9	8	5	3	7	6
Gujranwala	6	13	2	6	3	10	4
Sukkur	7	10	4	10	11	3	1
Peshawar	8	3	6	9	10	8	8
Karachi	9	3	10	7	3	12	10
Rawalpindi	10	8	5	7	3	12	10
Sialkot	11	12	11	1	3	5	10
Quetta	12	6	12	13	2	9	13
Hyderabad	13	11	13	11	11	2	7

Source: World Bank (2010).

SEZs for SMEs. As Pakistan has dispersed cities and a huge youth bulge²¹, the country's policymakers should consider developing zones for SMEs and cottage industries. SMEDA has identified clusters²² that could be used to develop the existing industrial infrastructure for specialized SEZs for SMEs (see Table 4.4)²³.

Table 4.4. SME Clusters Identified by SMEDA for Punjab and KPK

Punjab	Khyber Pakhtunkhwa
Agricultural implements, crankshaft, electric fittings, kino processing: Sargodha	Gypsum: Kohat
Auto body parts, rice husking: Mandi Bahauddin	Honey, salt: Karak
Auto parts, foundry, meat processing: Lahore	Honey: Tarnab, Peshawar
Bed wear, mango growers: Multan	Pharmaceuticals: Peshawar
Ceramics, darri, fan cluster, gas appliances, home appliances, light engineering, sanitary fittings: Gujranwala	
Coal mines: Choa Saiddan Shah Chakwal	
Cotton ginning, cotton seed processing: Rahim Yar Khan	
Dates: Muzaffargarh	
Foundry, wooden furniture: Gujrat	
Light engineering, power looms: Faisalabad	
Pottery: Taxila	
Potatoes: Okara	
Power looms: Hafizabad; Jalalpur Jattan	
Sports goods: Sialkot	
Wooden furniture: Rawalpindi	

Source: SMEDA official website.

²¹ 15 and 29 years of age, and 64 percent are under 30 (UNDP, 2018).

²² There is also a study under way at CoE-CPEC, and efforts are planned by the government of Punjab to map industrial clusters.

²³ https://smeda.org/index.php?option=com_phocadownload&view=category&id=151:cluster-profiles#
https://smeda.org/index.php?option=com_phocadownload&view=category&id=44:cluster-profiles

Room for improvements. Surprisingly, Karachi was ranked ninth in the district DB rankings (2010), with below-average performance in four of the seven indicators. As Karachi is home to three SEZs and a PSEZ, the government needs to take action to improve in specific areas, including the processes of registering property, obtaining construction permits, and enforcing contracts, in order to make it easier to do business in Pakistan’s industrial mega-city. A similar recommendation applies to Peshawar, which is ranked eighth as per available data. If SEZs and PSEZs are to be developed in selected districts, the authorities must first improve these indicators to promote a business-friendly environment for both domestic and international investors, or attracting and retaining foreign investment will remain a challenge.

Need for updated data. It is important to mention that despite general agreement on policy measures to be taken, more updated data is required. Although Sialkot received a low ranking, manufacturers and members of the Chamber of Commerce & Industry who were interviewed for this report were found to be more content with the business environment in Sialkot than with other districts sampled in this study (see Table A1, at Appendix-I).

4.5 Global Competitiveness: Status of Pakistan

Another immediate concern for policymakers involves improving Pakistani firms’ productivity and competitiveness. In the Global Competitiveness Index (GCI), Pakistan ranked 107th out of 140 countries in 2018 (as compared to 115th out of 137 countries in 2017) but second from the bottom among South Asian countries²⁴ (see Table 4.5).

Table 4.5. Global Competitiveness Index 2018

Top ten economies	GCI rankings 2018	South Asian countries	GCI rankings 2018
Switzerland	1	India	58
United States	2	Bhutan	NA
Singapore	3	Sri Lanka	85
Netherlands	4	Nepal	109
Germany	5	Bangladesh	103
Hong Kong SAR	6	Pakistan	107
Sweden	7		
United Kingdom	8		
Japan	9		
Finland	10		

Source: World Economic Forum (2018).

SAR GCI rankings. Table 4.6 shows the scores Pakistan and other South Asian countries received on the 12 pillars of the GCI. Although Pakistan has a better institutional structure than Bangladesh and Nepal, it lags behind the other four South Asian countries on macroeconomic environment, health and primary education, and higher education and training indicators. Notably, Pakistan ranks second in market size and third in innovation among South Asian countries. Nevertheless, it is a source of concern that Pakistan’s poor performance-related indicators could discourage new investors in SEZs and PSEZs.

²⁴ “GCI Ranking of Pakistan 2018” <http://reports.weforum.org/global-competitiveness-index-2017-2018/countryeconomy-profiles/#economy=PAK>

Table 4.6. GCI Rankings 2019 by Pillar

Pillars of GCI rankings 2019	India	Bhutan	Sri Lanka	Nepal	Bangladesh	Pakistan
Institutions	39	32	77	89	107	90
Infrastructure	66	89	85	119	111	110
Macroeconomic environment	80	78	94	31	56	106
Health and primary education	91	95	43	77	102	129
Higher education and training	75	90	78	108	117	120
Goods market efficiency	56	88	83	108	94	107
Labor market efficiency	75	24	131	97	118	128
Financial market development	42	67	83	73	98	96
Technological readiness	107	105	106	119	120	111
Market size	3	132	59	85	38	28
Business sophistication	39	77	59	119	91	81
Innovation	29	79	54	121	114	60

Source: World Economic Forum, 2018.

Areas for improvement. Improvement in the components of the GCI ranking needs long-term, consistent planning—a reform process that should begin immediately by the government. As central authorities take measures to facilitate SEZs, the establishment of international firms will help the country improve on about half of the GCI pillars.

4.6 Initiatives Taken by the New Political Regime

A new government came into power in Pakistan in August 2018 and after initial resentment of CPEC, eventually embraced it fully. In November 2018, the Prime Minister of Pakistan, Mr. Imran Khan, visited China, and the two governments signed 15 new agreements to widen the scope of CPEC investment. The following are some of the initiatives taken.

Attracting investment. The BOI has decided to set up a “Naya Pakistan Diaspora Fund” to promote SMEs, rural development, and infrastructure development. In addition, an investment framework was proposed to attract investment from countries like the UAE, Saudi Arabia, China, Japan, and Malaysia.²⁵ The initiative, however, still awaits any noticeable success. Moreover, at the 8th JCC meeting of CPEC (December 20, 2018, in Beijing), an MoU was signed covering industrial cooperation in such targeted industries as iron and steel, mines and minerals, petrochemicals, and textiles, to promote new investment and the relocation of industries in the PSEZs through joint ventures.

Training and cooperation. To train Pakistani youth in the skills needed in the high-tech industries that CPEC will encourage, a modern Center of Excellence (CoE) for skill

²⁵ “Tax regime to be changed to boost business, investment: Imran, 14th December 2018” <https://www.dawn.com/news/1451340>

development will soon begin functioning in Islamabad.²⁶ A Joint Working Group of Chinese and Pakistani policymakers also proposed an action plan for socioeconomic cooperation in six domains: vocational training, education, skill development, poverty alleviation, agriculture, water supply, and health care.²⁷

Role of BOI. The Chinese government has asked the BOI to take a lead role in terms of industrial development and be a bridge between the two stakeholders. For the first phase of developing the PSEZs, the Dhabeji, Rashakai, and Faisalabad PSEZs have been selected to ensure speedy progress.

Overseeing progress. On December 31, 2018, the Finance Minister reviewed progress on the initial requirements and development of PSEZs to ensure the provision of necessary facilities and infrastructure.²⁸ However, at the same time it was reported that provincial governments were having difficulty facilitating basic utilities and infrastructure (electricity, gas connections, and water supply, telecommunication, and broadband services) for PSEZs and SEZs.²⁹

Interest by other countries. A recent development under the new Government is that other countries in the region and around the world are showing an interest in becoming a part of CPEC: Qatar has expressed interest in investing in the Gwadar Port, and France and Saudi Arabia are considering investing in CPEC projects.³⁰ In the Gwadar Free Zone, till 2019, 30 companies have made direct investments worth USD474 million.

Political will for reform. Institutions and organizations seem to be well-intentioned and pragmatic under the new government, with policymakers well-informed and willing to bring reforms. One recent example is related to the World Bank's "Ease of Doing Business" report, the Chairman of BOI (in 2019) explained that the government is aware of the measures needed to improve Pakistan's DB situation, and that a target has been set to improve Pakistan's ranking, bringing it below 100 in the short run and around 50 over five years. During the process, the government has slashed the number of taxes imposed on new businesses from 47 to 16, and is working on reducing them further.

New SEZs approved. On March 04, 2020, the Prime Minister of Pakistan (who is also Chairman of the Board of Approvals for SEZs) has approved the notification of ten SEZs (including three PSEZs i.e. Allama Iqbal, Faisalabad (Punjab); Bostan (Balochistan) and Rashakai (KPK)). Besides, twelve SEZs in the public sector and six in the private sector are currently in the process of approval.

²⁶ <https://www.thenews.com.pk/latest/408086-china-to-train-pakistani-youth-for-cpec> China to train Pakistani youth for CPEC December 19, 2018.

²⁷ "CPEC 8th Joint Cooperation Committee (JCC) Meeting Held in Beijing, China on 20th December 2018" <http://cpec.gov.pk/news/147>

²⁸ "Asad Umar reviews progress of work on different economic zones" <https://www.thenews.com.pk/latest/412961-asad-umar-reviews-progress-of-work-on-different-economic-zones>

²⁹ "Provincial gov'ts struggling to facilitate CPEC economic zones, 31st December, 2018" <https://profit.pakistantoday.com.pk/2018/12/31/provincial-govts-struggling-to-facilitate-cpec-economic-zones/>

³⁰ "Qatar expresses interest in CPEC investment in Gwadar" <https://tribune.com.pk/story/1889424/1-qatar-expresses-interest-cpec-investment-gwadar/>; "France ready to invest in CPEC projects, 20th October, 2018" <https://www.thenews.com.pk/print/383238-france-ready-to-invest-in-cpec-projects>; "Saudi footprint in China's Belt and Road initiatives, 1st November, 2018" <https://tribune.com.pk/story/1838253/1-saudi-footprint-chinas-belt-road-initiatives/>

4.7 Risks, Issues, and Challenges Associated with SEZs and PSEZs

One of Pakistan's best-known failures can teach us important lessons about our SEZ experience. Gadoon Amazai IE was initiated in 1988 to generate employment and enhance living standards in KPK. Even though the IE initially registered a significant positive impact: Rs. 53.83 billion in investment, 35 industrial units, and employment for 14,843 people, the incentives were withdrawn in 1992, and 133 units were shut down (Nawaz, 2015). The project had met with resistance from industrialists in other provinces (left out of the incentives to Gadoon IE). Additionally, the zone lacked accessibility to the major cities, and its alienated location resulted in high transportation costs.

Another misstep, in the Quaid-e-Azam Industrial Estate (QIE), was related to the misuse of land. As QIE is close to the provincial capital Lahore, property prices are high. This led manufacturers to relocate to Sundar IE from QIE to get larger plots at lower cost, get up-to-date facilitation, and have better highway connectivity. After moving to the better-equipped IE, investors and manufacturers began selling or renting out their spaces at QIE for commercial activities. The non-industrial units are attracted to QIE by the relatively lower rents (compared to the main city), larger spaces, and better provision of utilities, especially electricity. Therefore, non-industrial units like TV stations and universities are becoming visible at QIE, occupying the plots meant for industrial estates and enterprises. The lesson is that better planning is needed to ensure the productive use of spaces meant for industrial production while providing planned IEs for new firms.

Factors to consider. Experience indicates that in establishing PSEZs, Pakistan will need to take into account the following factors: (a) location (ideally based on the competitiveness of that particular area); (b) alignment of human resources with the demands of sectors facilitated in PSEZs; (c) access to financial resources for domestic firms; (d) alignment of policies with the needs of Chinese and international enterprises; (e) assurance of low-cost utilities; (f) a business-friendly environment for both domestic and foreign investors that avoids political turmoil and security concerns; (g) transparency and ease in contractual and regulatory agreements; and (h) management of macro aspects (for example, concerns about a trade imbalance between China and Pakistan and about an increased burden of external debt for Pakistan) (Iqbal, 2017; PWC, 2017; Mahmood, 2018; Zhaoli, 2018). Although the CPEC presents huge opportunities for industrial development in Pakistan, these challenges need serious thought to avoid failures.

SEZ Prospects in Pakistan: Stakeholder Feedback

This section examines the prospects of SEZs in Pakistan, relying on feedback from stakeholders from both Pakistan and China. We analyze the preparedness of Federal and provincial policymakers, facilitators and investors, assess the awareness and expectations of these stakeholders, and examine the implications for policy.

5.1 Interview Methodology

Between September 2018 and February 2019, the team conducted 104 key informant interviews with stakeholders selected on the basis of desk review and document analysis related to SEZs in Pakistan and China (Appendix I provides more information about the stakeholders interviewed). Separate semi-structured questionnaires were prepared for policymakers, provincial BOIs, SEZ authorities (SEZAs), Chambers of Commerce and Industries (CC&Is) and manufacturers in China and Pakistan. The questionnaires included both open-ended and closed-ended questions.

5.2 Consensus on Impetus behind Establishing SEZs and PSEZs

An important question arises: do Pakistani and Chinese stakeholders share common ground regarding the impetus behind and expectations from SEZs and PSEZs? Policymakers in Pakistan are assured that the driving force behind the establishment of SEZs and PSEZs in Pakistan was (a) export-led growth and (b) a platform for industrial cooperation with China in specific and with the world in general. Stakeholder expectations in Pakistan center around employment generation, increased FDI, export promotion support, industrial development stimulus, and import substitution. SEZs are also anticipated to reduce business costs and improve ease of doing business in Pakistan.

Chinese respondents acknowledged the importance of attracting FDI, opening up the economy for integration with the world, and gaining long-term benefits in employment, technology and imitation, for example. However, for many Chinese respondents, the most important objective was institutional experimentation - to learn, explore and reform public management and systems in order to set examples for other regions to follow.

Any disparity between primary aims is an issue for Pakistan to consider - while experimentation was needed or worked in much of China's experience, is it applicable to Pakistan's current circumstances and industrial history? Not only the Chinese and Pakistani governments, but also the various other stakeholders need to share consensus on this issue.

"The objectives of the establishment of Hattar SEZ were employment generation and promotion of local resource utilization instead of importing it from the international market."

5.3 Industrial Sector Focus for PSEZs

China aims to support SEZs under CPEC – PSEZs – by relocating Chinese industries to these sites in Pakistan. The question arises: what goals or priority areas does this relocation of industry address? During interviews at MOIP, respondents asserted that the relocated Chinese industries would aim at bringing in technology and upgrading Pakistan's industrial setup. A respondent from Sialkot CC&I posited that the focus should be to reduce Pakistani

trade deficit and thus the emphasis should be on export-oriented businesses, such as raw materials, chemicals, polyester, and Chinese steel. Pakistani export-oriented firms, especially those in the production of sports goods and surgical instruments, for example, should also be facilitated for relocation to PSEZs to benefit from better business practices. Additionally, to cope with the level of competition from Chinese firms while ensuring the survival of domestic industry, one respondent from SCCI proposed 50:50 joint ventures with Chinese firms. Another suggestion was to avoid industries that overlap with Pakistani industries in favor of those that would provide for vertical integration instead. It was inferred during interviews that China's industrial sector is functioning at a far higher level than Pakistan's, especially in terms of value addition, and even if China relocates only sunset industries that are less attractive in the Chinese high-tech and R&D-based industrial framework, these would still be beneficial for Pakistan. The only concern is to vigilantly avoid relocating polluting industries – such as coal-based energy projects – that will become a liability in the near future.

“Quaid-e-Azam Industrial Estate was established with the objective of setting up a satellite town consisting of a residential area and an industrial estate side by side to accelerate industrial growth as well as urban development in Lahore.” (Respondent from Quaid-e-Azam Industrial Estate, Lahore, Pakistan)

The Pakistani government has not formally identified focus areas for PSEZ industrial activity. This is a problem on at least two accounts. Firstly, for success of PSEZ industries, current circumstances, such as existing labor skills, should be taken into account. Secondly, identification of focus areas must address our larger-scale expectations from PSEZ business activity, specifically our trade-deficit goals. It is imperative that the government lays out specific focus areas for PSEZ industrial activity.

“SEZs under CPEC are different and are termed as Prioritized SEZs: here, special collaboration will be sought from China under CPEC.” (Respondent from PBIT)

“There are a few specific priority areas identified for the relocation of industries, including agriculture equipment, automobile industry and SMEs-related industries in the CPEC PSEZs.” (Respondent from FPCCI)

“We are having [business-to-business] meetings with the Chinese and have frequent discussions with them on the joint ventures in PSEZs. We have proposed to the government to protect domestic investors by linking import and export activities with the planning of the PSEZs. Let the Chinese work here, but the interests and stakes of our domestic investors must also be taken care of.” (Respondent from FPCCI)

5.4 Financing of PSEZs

According to a respondent from CPEC Centre of Excellence (CoE), there are three models of financial arrangements for SEZs: public, public-private, and private. The provincial governments are responsible for financing the SEZs while the role of the Federal government is to facilitate the relocation of Chinese industries to PSEZs.

The respondents were also asked regarding the management models being followed at SEZs. It was informed that the SEZAs are responsible for the establishment and facilitation of the SEZs and with their compliance with rules and regulations. SEZ developers in each province look after infrastructure development. For example, KPEZDMC is looking after the establishment of Rashakai SEZ, with China Road and Bridge Corporation (CRBC) as co-developer under a PPP with a ratio of 10:90 for financing; KPEZDMC acquired the land, while CRBC would bear the cost of development. There are, however, different arrangements adopted in different provinces.

“The Hattar SEZ is a self-sufficient and self-financed project, with a little initial financing from KPK government. Once operational, the zone will not only recover the costs but would also generate funds for the KPK government.” (Respondent from Hattar SEZ)

“FIEDMC is working on a self-sustained model for SEZs. The initial loan is provided by the Government of Punjab for phase-wise development of the SEZ. The loan is utilized to generate revenues for the establishment of the SEZs, which will repay itself.” Respondent from FIEDMC)

5.5 Selection of Land for SEZs and PSEZs

Regarding the identification of land for SEZs and PSEZs, respondents had disparate views. One respondent maintained that the land for PSEZs was chosen on the basis of availability—as in the case of the Rashakai site in KPK province—rather than viability. Contrary views came from other respondents, for example from KP-BOIT, one of whom recounted that when the PSEZs were being planned, the then-Chief Minister of KPK insisted on including a PSEZ from the main KPK region (Rashakai) along with the Hattar SEZ because of its economic importance for adjoining areas. A respondent from MOIP instead asserted that land selection was “determined on the basis of existing strength of the area, business environment and the requirement of the SEZ.”

A conclusion drawn from the responses is that land for SEZs and PSEZ was selected through brainstorming during official meetings rather than on the basis of any comparative advantages of specific regions. Indeed, during interviews, no formal feasibility studies were shared by relevant offices. In view of the lessons learned from China and other countries, this is a red flag.

“Rashakai PSEZ is a highly viable project geographically as well as economically. Its strategic position connects it to the CPEC route and to nearby populated regions for a steady supply of labor force. It will prove to be a big boost for the province and its people.” (Respondents from KPEZDMC and KP-BOIT)

“The land for SEZs and PSEZs in Faisalabad was identified on the basis of factors including pre-feasibility studies, source of electricity (grid station / feeders), availability of drainage system and connectivity with the nearby logistics (airport, railway station, dry port).” (Respondent from FIEDMC)

5.6 Liaison on SEZs among Different Stakeholders

An ambience of cooperation: After initial reluctance, provincial governments are now allied with the central leadership and decidedly committed to the idea of SEZs. KPK and Punjab, in particular, have drafted provincial industrial policies and begun infrastructural development. The Federal government and the provinces have a positive relationship: SEZ developers, like FIEDMC, are satisfied, reporting full support from Federal organizations like the BOI and PBIT. Another important stakeholder, the FPCCI (Islamabad and Karachi offices) also reported strong liaison and coordination with the Federal government on CPEC-related matters. FPCCI has emerged as a central point of contact for Federal Board of Revenue, Ministry of Finance, Prime Minister Secretariat for CPEC, Planning Commission, CPEC Centre of Excellence, Chambers, BOIs, business associations, business communities, and the private sector. Hence, there are now greater chances of bridging information gaps, enabling businesses to communicate their concerns and suggestions to the relevant quarters. Additionally, both the national and provincial governments are reaching out to the private sector to develop awareness and gain positive engagement.

Lack of structured coordination. In the climate of cooperation between the center, the provinces and the private sector, what's missing is structured coordination: district CC&I reportedly still lack desired interaction with government agencies and have limited feedback from FPCCI. For example, a respondent from the Islamabad Chamber of Commerce and Industries (ICCI) reported the absence of any organized collaboration between the district Chambers and the MoPD&R regarding PSEZs. Similarly, the Lahore Chamber of Commerce and Industry (LCCI) denied being aware of any initiatives taken regarding PSEZs. These offices urged the BOI to arrange frequent awareness meetings.

There is a need to address clarity on the expectations that the Federal and provincial governments have from each other. It is noted, for example, that the government's engagements with FPCCI are more formalized than those with district CC&Is. Therefore, in addition to the intention of cooperation, concrete mechanisms are needed to create awareness among all the relevant stakeholders. Additionally and importantly, with respect to the Federal-provinces liaison, policymakers need to incorporate China's lessons in over-delegation to local governments. In China, too much delegation to local governments is part of the problem, as "virtuous competition" came up among the different provinces and cities. Some of the policies, such as land prices, were seen as too preferential. Also, many local governments reallocated land for infrastructure construction in the name of SEZs. Moreover, respondents cited lack of overall central coordination and planning as one key issue in Chinese SEZs.

Since its formal inception in 1984, FIEDMC has initiated two mega-projects: the establishment of Value Addition City and M-3 Industrial City in Faisalabad. FIEDMC is developing more than 4356 acres – an area more than the total land under industrial zones in the rest of Punjab.

"PBIT has proposed three important amendments in SEZ Act. Firstly, to include the high-tech industries such as IT industry, medical, health, and services industry. Secondly, to extend the deadline for incentives, and thirdly, for agricultural industry to be included in PSEZs." (Respondent from PBIT)

“Even the investors are unaware of the status of PSEZs, incentives being offered in these PSEZs, their development process, terms and conditions for joint ventures and last, but not least, the current status of CPEC post-regime change in the country.” (Respondent from LCCI)

5.7 Skills Development and Availability of Labor Force for SEZs

According to respondents, during FPCCI and BOI meetings, government officials have communicated their resolve to engage the larger share of skilled and semi-skilled Pakistani labor in industries relocating from China, with the proviso that key posts would be held by Chinese nationals as they are the primary investors. Roughly 80 percent of the human resources is expected be Pakistanis and 20 percent Chinese. Given the high cost of labor in China, respondents perceive that Pakistani labor will prove cost-effective and hence a major driver for relocation.

However, it appears that no formal study has been undertaken to identify the skill-set needed by prospective Chinese enterprises in PSEZs. This could only be addressed when policymakers are clear about the types of industry to target for relocation or technology transfer. Another red flag raised is the dismissive attitude of the government: the issue of work ethics was taken lightly during interviews with respondents wagering on the “learning by doing capacity” of the Pakistani labor force. These are concerns that the government and relevant agencies such as National Vocational & Technical Training Commission (NAVTTTC), and Technical Education and Vocational Training Authority (TEVTA) need to take seriously, as gambling on market forces might prove counterproductive for Pakistan.

“It is a fact that Chinese stakeholders showed concerns about the shortfall in the skilled labor that they needed for the projects. The demand for labor needed is perceived to be about 1 million annually for CPEC-related projects. However, China has been assured that the required local skilled labor will emerge with time.” (Respondent from FPCCI)

“The cost of labor in China is duly high, i.e. up to USD600, whereas it is around USD100-200 in Pakistan. It would therefore be cost-effective for China to employ Pakistani labor in their ventures in Pakistan.” (Respondent from SCCI)

5.8 Matching Skill-Sets

Regarding the initiatives taken by the authorities to enhance and match skills in the labor force, respondents from the MOIP stated that two national-level institutes, Pakistan Industrial Technical Assistance Centre (PITAC) and Technology Upgradation and Skill Development Company (TUSDC), are actively involved in labor training and skills enhancement. A respondent from the CPEC CoE stated that they have matched the skills sets that are available with those that are required using the list of projects under CPEC, and have shared their recommendations with higher authorities. Moreover, NAVTTTC and TEVTA are also actively participating in training to develop the skills of the labor force for the SEZs. As acknowledged by the Ministry of PD&R, relocation of Chinese industries will depend on their requirements of labor.

Businesses, too, seem to be aware that matching of skills is one of the major challenges for local industry. The ICCI is working to create awareness among the business community through four initiatives: a center for the training of the business community; a center of vocational training; an e-CPEC center for developing the skills of the business community with the coordination of Chinese stakeholders; and CPEC Platform, a think-tank for project identification and project financing.

At the same time, KPEZDMC is working on training the labor force to meet the demands of industry. However, it was observed during interviews that the industrial sector is still banking on on-the-job training. Respondents said that on-the-job training is more effective than traditional training provided at vocational training centers because it transfers up-to-date skills and practices to the employees on the spot.

It appears, then, that while the authorities and stakeholders are aware of the need for a trained labor force, planning for optimal industrial cooperation is still needed, and the roles of the provincial and Federal governments still need clarification.

“China is giving skills training to the local labor force and it has recently sent more than 500 of labor force from Baluchistan to China for skills training.” (Respondent from MOIP)

“We will help in relocating industries relating to the textile, shoemaking and other manufacturing sectors in order to improve value addition. These industries do not need a highly skilled labour force.” (Respondent from MoPD&R)

5.9 Infrastructure Development at SEZs

There seems to be some disparity among SEZs in terms of provision of basic infrastructure. The Hattar PSEZ and M3 Industrial City, Faisalabad, have fulfilled their infrastructure provision promises. Hattar has a well-connected road network, offers security and firefighting facilities and an adequate number of academic and vocational training institutes and local shops. Similarly, the team examined M3 city, Faisalabad, and found it to be well-maintained and satisfactory. Respondents, however, claimed that many of the existing SEZs still lacked basic facilities like sewerage systems and dedicated electricity, water, and gas connections. The unavailability of water for industrial use is cited as a major issue in Karachi. It is, recommended therefore, that these disparities be dealt with by more responsible observation and superintendence.

“The SCC&I has chalked out a plan to build a model SEZ with the Government of Punjab under PPP mode. The provincial land (530 acres) is already identified for building SEZs. Having successful projects like Sialkot International Airport and Air Sial (a recent project in the aviation industry), SCC&I has planned to get it operational by 2022.” (Respondent from SCCI)

“FIEDMC is a success story for SEZs in Pakistan where USD 1 billion investment was committed during the year 2018. Worldwide famous companies are interested to invest including Hyundai, Renault, pioneer companies of battery recycling and cans manufacturing units. There are different land holdings for SEZs ranging from 1 acre to 100 acres of land in which 5-7 multinational groups have 100 acres land holding like Renault and Hyundai.” (Respondent from PBIT)

“It takes almost 10 years for any industrial estate to be fully established. Provisional allotment of land has already been made, in which 10 companies have started civil works while two of them have already moved towards production process. However, the absence of basic utilities (which is the responsibility of the federal government) is the major reason for the delay in timely completion of the existing SEZs” (Respondent from KPEZDMC)

“The SEZs under CPEC will be completed by 2025 and three of these SEZs will become operational in coming months. All the investors will be provided with the basic facilities like electricity, gas, security and other infrastructure in these SEZs. Agro-based industries are focused for incentives in order to increase the agro exports.” (Respondent from Ministry of PD&R)

Quaid-e-Azam Industrial Estate (QIE), Lahore, one of the existing industrial zones, consists of more than 500 industrial units of textiles, pharmaceuticals, food, rubber, and glass. The QIE also has banks and a vocational training centre associated with TEVTA. A park is used for displays and exhibitions. The raw material and labour are readily available, and child labour is completely prohibited in the IE.

5.10 Dissemination and Marketing Strategies

The consensus from respondents is that there is much to be desired regarding dissemination of the CPEC potential. A respondent from LCCI stated that the average layman still perceives CPEC as just a corridor connecting China with Pakistan and is unaware of its multiple development projects and immense potential for investors in trade and industry. It was suggested that to address the knowledge and trust deficit between the government and the business community, the government should first establish a “model SEZ” to set an example before launching additional mega-development projects.

“In the case of CPEC, investors are ready to invest, stakeholders are present therein in the framework, but these two entities are not connected with each other. Political ownership is unclear. The Government must protect its investors by providing incentives and infrastructure to them because we are country of SMEs rather than mega multi-national companies or industries.” (Respondent from LCCI)

5.11 Chinese Perspective on CPEC

It has been reported with consensus that there has been good progress since the inception of CPEC in 2015. Various energy and infrastructure projects are progressing well, as is Gwadar Port. Much of the credit is given to high-level government commitment and policy support, along with sound China-Pakistan relations, the high level of strategic mutual trust, the complementary industrial structure, and the fact that the construction of the corridor meets the development needs of both countries.

It is widely acknowledged that Pakistan has given Chinese investors extremely favorable investment policies, especially in energy trade, infrastructure, and other key areas of cooperation. Chinese firms can enjoy preferential policies in renting lands and distributing goods, and Chinese power enterprises investing in Pakistan can be exempted from income tax and turnover tax. Pakistan also provides Chinese firms with legal services, foreign exchange guarantee, and export credit guarantee.

The ensuing opportunities for China are many. Energy cooperation opportunities are arising, especially power generating and transmission projects, as are transportation and industrial projects, including infrastructure construction (roads, railway, etc.) and industrial cooperation zone construction. Although most Chinese investment comes from China's large SOEs or largest transnational enterprises like Huawei and Haier, many business groups have visited Pakistan since the launch of CPEC—SOEs, private enterprises, and business associations. Some private business communities see CPEC as a path to win-win cooperation. They give a great deal of attention to local hard and soft facilities and infrastructures, the business and investment environment, and local industrial support capacity.

Almost all Chinese interviewees said that they were aware that there would be several SEZs under CPEC. They mentioned Pakistan's large population and market, the increasing supply of infrastructure in transport and power, and exports to other countries through the Gwadar Port as advantages. However, these are rather general advantages; not many of the interviewees could name on-the-ground business opportunities in specific or PSEZs in particular.

Challenges. Chinese firms see both opportunities and challenges in investing in Pakistan. As Pakistan still struggles with complicated administrative processes and lack of efficiency of public agencies, Chinese businesses agree that it is best to invest in groups to reduce risks and exchange information. Domestic political instability and serious partisan struggle are the major political concerns. On the social-economic side, the increase in national debt, decline in solvency, decline in industrialization, devaluation of the rupee, soaring trade deficit, and increase of unemployment in recent years are Chinese firms' main concerns. Interviewees are also strongly concerned about the security situation in Baluchistan, Khyber Pakhtunkhwa, and FATA.

5.12 Constraints for Pakistani investors at SEZs

The major constraints mentioned by manufacturers in Pakistan are the energy crisis, below-potential working of existing IEs/SEZs, congestion in cities, high cost of utilities, rising cost of raw material, and a perceived lack of cooperation in incentivizing investors by the government. They also cite cumbersome taxation, high mark-ups on loans, lack of continued provision of basic utilities in IEs/SEZs, and lack of vocational training centers in industrial zones. All these issues have persisted, and there is no specific framework for the business sectors to communicate their concerns to the relevant government offices.

In terms of CPEC awareness, manufacturers complained of the lack of clarity and absence of information at the government level regarding CPEC SEZs. The lack of representation of Pakistan's business community in the planning processes and the lack of consultation with them was strongly felt. It is perceived that authorities are not reaching out to manufacturers, creating a basic knowledge deficit and feelings of insecurity and threat regarding the highly competitive Chinese enterprises.

Nevertheless, a majority of the manufacturers considered CPEC to be an opportunity for Pakistan, but as long as joint ventures were used as the preferred model for industrial cooperation. They asked that the government provide a policy framework to facilitate such arrangements with China. They also demanded a level playing field for Pakistani and foreign investors in terms of similar incentives. They further advised automating and upgrading the industrial sector and tapping new markets for exports.

Conclusion and Recommendations

Internationally, SEZs have contributed to economies by bringing in growth rates, boosting regional development, generating employment opportunities, and providing basic infrastructural foundations. SEZs generate value-added product chains by creating space for new entrants in manufacturing markets. They generate resources for socioeconomic uplift by improving livelihoods and creating a demand for intermediate goods and services. SEZs also enhance the productivity and managerial skills of the workforce through exposure to international best practices. There is also technology transfer spillovers to domestic firms. Overall, the global competitiveness of a country is enhanced if the SEZs performs as intended.

In Pakistan, despite setting the stage for SEZs development, the government of Pakistan need to figure out the importance of macroeconomic stability and business environment outlook (specifically the narrative being built by the incumbent government) while eyeing for the success of SEZs as desired. There is need to remove the structural bottlenecks (like custom clearance issues, utility provisioning, skills-set availability etc.) as against relying mainly on tax exemptions only; assuming the incentives enough to attract foreign and domestic investors.

As a matter of fact, Pakistan has had long political instability and terrorism, which has resulted in macroeconomic instability, ultimately hindering the country's growth. Owing to the situation, in the near past, let alone the foreign investors, even the domestic investors valued high the economic opportunities abroad. Risk perceptions and accordingly the appropriate risk mitigation strategies are required to be carefully crafted to attract stable FDI flows in the country. By addressing impediments, Pakistan would not only deploy foreign investment in the SEZs but would also harness industrial comparative advantage, so Pakistan could be viewed as a competitive environment to operate. Hence, the sense of urgency on the implementer's part is needed to change business as usual.

The challenges both investors and government authorities face in developing SEZs and PSEZs factor around several issues. Among them, foremost are (a) concerns about competition from Chinese firms for Pakistan's existing industry, (b) transparency on the terms, conditions and opportunities related to CPEC, (c) clarity of financial and material incentives, (d) timely provision of promised facilities at SEZs, and (e) better coordination among stakeholders. Hence, to state the least, the government must present a "Model SEZ" to the business community initially and exhibit its capacity, commitment and resolve to deliver the promised zones. A proposal asking China's cooperation in establishing such a 'Model SEZ under CPEC', should be on the policy maker's table. The efficiency analysis in the future could only be furthered once the zones are developed as promised under the SEZ Act.

China's lessons and Pakistan's own early experience with SEZs have yielded a number of lessons, which we present in the form of actionable recommendations prioritized as short run, medium-term and long-term initiatives.

6.1 Immediate Steps Needed in the Short Run

Assuming a highly prioritized attention to the law and order, internal (political and economic) stability and energy situation as a given, an immediate concern facing the government with respect to SEZ success is to focus on boosting investor confidence. Concentrated efforts to enhance awareness regarding potential gains to private sector stakeholders should be a priority. The following concrete steps outline ways in which this objective may be achieved.

6.1.1 Improve Business Environment

1. The Federal government (as custodian of CPEC) and provincial authorities (as industries are provincial jurisdiction) are required to improve the DB indicators on which Pakistan is lagging. The metrics used for ranking the country's DB clearly point to the shortcomings that need attention. As a first step, just the simplification of the registration process and other procedural formalities (via One-Window Operation already envisioned in the SEZ Act) would further improve Pakistan's ranking by several points. These steps would also improve Pakistan's Global Competitiveness Index score, providing a reference point to attract FDI.
2. Pakistan is still ranked 108 (in 2019/20) despite a comprehensive 28 steps advancement from 136 in 2018/19. Such progression is clear associated with the improvements brought through IT-based solution (for registration, tax matters, electricity connections and customs) and land administration matters. Hence, operational One-Window Operation at SEZs offers great attraction to investors.
3. Moreover, it is important to highlight here that the 'Doing Business' ranking is based on findings from two main industrialized cities only i.e. Karachi and Lahore³¹. Therefore, the BOI (or PBOIT/PSEZA/SMEDA or other provincial bodies like Punjab Small Industries Corporation (PSIC)) should assess the same at the rest of the potential investment destinations across Pakistan. Such an exercise would on one side help in assessing the ground situation at the other important destination but will also bring to light (both for foreign and domestic firms) the best places to invest in Pakistan.

Stakeholders:

- a. BOI, SEZAs and concerned ministries/organizations (as outlines in SEZ Act, responsible for providing different support and facilities).
 - b. SEZAs and Provincial BOIT have to use the improved rankings for dissemination later.
4. Government should provide a platform and technical assistance for structuring and negotiating PPP deals. This will help in structuring base for joint ventures between foreign companies and local firms. Striking successful joint ventures

³¹ Missing important cities like Sialkot and Faisalabad

would eventually bring improvements in local work ethics and local capacities along with other obvious gains for local firms.

Stakeholders:

- a. BOI, Ministry of Commerce, FPCCI and district CCI.
5. Aligning curricula of universities, and technical & vocational training institutions to SEZ labor requirements is another immediate priority area for authorities. Detailed study is needed to understand the current skills status in Pakistan and to explore the potential skill requirements in the future, once the SEZs start to have presence of international firms. The sectors prioritization (discussed in detail below) would be instrumental in providing the basic guideline for such study.

Stakeholders:

- a. HEC (for guidelines and scholarships),
- b. Federal and Provincial Governments (for providing prospects and feedback obtained from potential national/international firms) and
- c. SEZ developers (for skill requirements at each SEZ as mandated to deliver trainings at each SEZ)
- d. Skill Development Council, Technology Upgradation and Skill Development Company, National Vocational and Technical Training Commission, Technical Education and Vocational Training Authority, Pakistan Industrial Technical Assistance Centre, SMEDA.

6.1.2 Introduce Necessary Amendments in SEZ Act and Adopt a Professional Approach for SEZ Development and Monitoring

1. The Board of Approvals is currently inappropriately comprised of elected government members (such as the Prime Minister or Chief Minister) and the bureaucracy (federal and provincial secretaries of various departments). These officials already have full time portfolios and therefore are unlikely to spare sufficient time (and possibly have insufficient professional expertise) to deliberate on various issues related to SEZs. Similar is the case with provincial SEZ Authorities. Instead, there should be an independent authority with a Board of Governors (comprising professionals, liable to performance audit and having a fixed tenure—like other regulatory authorities) to approve, supervise and facilitate SEZ matters.

Stakeholders:

- a. BOI; Ministry of Planning, Development and Reforms; and other relevant ministries like Law, Industries and Production etc. may be consulted to work out the composition of BOA and SEZAs.
- b. If run professionally, the BOI can also serve as a forum and work as BOA with presence of professional experts of the field.

2. Engaging professional expertise for the BOA and SEZA will also help avoid undue political or bureaucratic interference. The SEZ investment is not a political initiative by a specific political government, but rather an opportunity that needs to be harnessed efficiently. Therefore, the implementation mechanism should be geared towards facilitation rather than authority from the political and bureaucratic center.

Suggested composition:

- a. BOI (or the newly formed CPEC Authority) should take the ownership of SEZs and lead their establishment through the phases. An independent BOI, governed through the Board of Directors, is expected to provide the missing professional outlook to SEZs facilitation and be an answer to resolve the decision making complexities. The Public Private Partnership Authority (PPPA) can serve as a point of reference for constituting the said professional authority.
 - b. Public Private Partnership Authority (PPPA), by itself, can also be considered as a candidate to provide the required facilitation to SEZs in Pakistan and develop SEZs. Such a setting would even be more efficiency enhancing given the fact that the Authority could engage private sector only for projects which are financially viable and well thought out.
 - c. The said regulatory authority can follow the scheme of Public Private Partnership Authority (PPPA) or FIEDMC; a success story in Punjab.
3. Establish SEZ Endowment Fund. Currently there is financial crunch in the country and agencies lack funds. In order to ensure timely provision of utilities and other basic facilities (like bearing costs for the provision of 'One-Window Operation (OWO)' facility), a dedicated SEZ Endowment fund shall be established to initiate development without further delay.
 4. In the current setting, the federal as well as provincial governments evades responsibility for utility provisioning (like grid station, dedicated gas and transmission lines, and dedicated services for OWO including customs, FBR services etc.). It is even harder for the SEZ developers to incur such huge costs (e.g. dedicated grid station and OWO services) as it turns them less attractive once the costs are translated into plot prices. Therefore, a competent forum must be allocated certain funds to incur initially and reclaim afterwards to kick start progress and keep things going later.

Potential custodian:

1. BOI/CPEC Authority/each SEZA

6.1.3 Construct and Present a Model SEZ

1. The government must present a "Model SEZ" to the business community initially and exhibit its capacity, commitment and resolve to deliver the promised zones.

2. An IT-based SEZ at Islamabad is the best option as it can be delivered with minimum costs and efforts (provided that SEZ Act is amended relaxing the 'Area' requirement for IT based SEZ).
3. Secondly, for IT-SEZ to be located in Islamabad, the SEZ is expected to have best availability of skilled labor force. The selection of Islamabad is important given the fact that it has the presence of best IT Universities and has the potential to attract best minds from across the country being the federal capital. Moreover, to be located at the federal capital, such firms will have best visibility and hence faster connectively, warranting early success.
4. Instead of Area requirements (50 Acre for an SEZ), the government should allow high rise, well-connected buildings for IT-SEZs (may be at Federal and provincial headquarters initially-which can be extended later on for other candidate locations, if any). Lastly, for quick delivery, instead of building new SEZ, the IT-SEZ can be established (or declared) at an available high rise building within the mainland Islamabad which will already bypass various formalities like acquisition of land, construction (and its associated formalities) and getting utilities connections etc.

Stakeholders:

- a. BOA/BOI
5. The existing Incubation Centres at established and well-reputed universities can also be considered as hosts for such IT-SEZs. Such a setting would again bypass the immediate physical (and allied issues like getting utilities) at least in the short run. Moreover, such IT-SEZs will have a regular stream of young professionals to join cadres every year.

Stakeholders:

- a. HEC/ORICs
- b. National Incubation Centre; Incubation Centres at IBA, LUMS, NUST, COMSATS and alike

6.1.4 Implement Environmental Standards Upfront

1. Transfer of clean technology should be given a due priority while facilitating relocation of firms from China. Moreover, high environmental standards need to be instituted along with a system that ensures their enforcement. Changing standards at a later stage is often costlier than introducing high standards from the outset. Given consumers' growing interest in the environmental footprint of products, SEZ companies producing for international markets are likely to value high environmental standards if they can be marketed well. In this direction, internationally recognized certification schemes could be key to attracting foreign customers and firms.

Stakeholders:

- a. BOA/SEZAs

- b. SEZ Developers
- c. Pakistan Environmental Protection Agency, Ministry of Climate Change
- d. Building Control Authorities

6.1.5 *Rationalize the Selection of SEZs*

1. Initially, only the most feasible SEZs need to be developed. While Faisalabad, Dhabeji and Rashakai are good candidates for PSEZs³², it would be more efficient to grant SEZ status to an already existing IE, ensuring that the facilities promised under the SEZ Act are provided. This refers to the ongoing predicament at M3 SEZ at Faisalabad (on 4365 acres of land), which is still not fully developed, yet land acquisition has started for the PSEZ located just opposite the existing M3 SEZ. This is highly inefficient and is likely to exhaust meager public resources.
2. Instead, the existing SEZ at Faisalabad should be focused for development and relocation of industries from abroad. The reason rests in the fact that there is no fundamental difference between SEZ and PSEZs apart from the quality of the later to accommodate Chinese firms to relocate (which even the earlier does not restrict). In brief, policymakers should address efficiency concerns first when making a decision about launch of SEZs and PSEZs.
3. Pakistan needs to be realistic about what it can accomplish. At the moment, the federal and provincial governments are simultaneously working on seven SEZs and nine PSEZs, with a number of provincial SEZs/IEs in the pipeline (e.g. 11 zones proposed in KPK, 7 in Punjab). Undertaking so many ventures simultaneously risks not only diluting efforts and concentration but can also result in suboptimal resource allocation (possibly exhausting the limited funds on land acquisition and leaving insufficient funds for infrastructure development). Instead, SEZs should be developed in phases.
 - a. Start with the least-cost/most feasible SEZs (like ICT, Faisalabad, Hattar, and Karachi, as discussed above) and complete the 'Model SEZs' in the first phase ASAP. A model specialized SEZ (for high-tech and software industry) could be easily developed in Islamabad during the first phase as it could be developed with least resources and will provide an easy and secure avenue to foreign investors to invest in the federal capital city.
 - b. Once the first phase is completed and the SEZs are operational and populated, launch the second phase, benefiting from the lessons learned during the first phase. A good candidate for development of SEZ in the second phase is Gwadar, where it has bright prospects of attracting FDI and international firms once it establishes a free port city.
 - c. In the third phase, country-specific SEZs and large enterprise SEZs could be developed once we have enough experience with SEZs and convincing success stories to tell.

³² As already decided by the government given their location, resource outlook and to advance balanced distribution across three provinces in the first phase

- d. Nevertheless, as suggested earlier, a Model SEZ can be developed with the help of China under CPEC.
 - e. In the meantime, labor-intensive, less costly, specialized SEZs for SMEs, cottage industry, handicrafts, and the like can still be developed on the sidelines to capture the niche especially at foreign markets. Such SEZs are less capital-intensive and normally have lower demand for electricity, gas, and water facilities. Local government setup can be engaged at some stage in the development of SMEs/Cottage SEZs.
 - f. Once planned, proper homework regarding international markets, international quality standards and trademarks like “Fair Trade”³³ should be undertaken to gain maximum benefit. Ministry of Commerce and the Trade Development Authority of Pakistan must be assigned a role to play.
4. Detailed feasibility study across Pakistan is needed to explore the resource bases, labour availability as well as business and production prospects for potential SEZs. The assessment should focus on the underlying commercial viability of each location and site. This analysis should include an in-depth cost-competitive analysis of the selected location, to quantify the cost of doing business for the SEZ site location versus other comparison cities in the country, along cost factors such as labor, facilities, transportation, utilities, cost of capital, and taxes.

6.2 Medium Term Initiatives:

6.2.1 Incentivize Investment in Firms' R&D

1. Pakistan's industrial sector lags in research and development (R&D). To improve efficiency and productivity, both the businesses and the concerned ministries need to ensure higher R&D spending. Policy measures to be taken in this direction are regulations and enforcement mechanisms that create a market for and safeguard intellectual property rights. Additionally, recognition in the form of certificates or awards should be planned for best performing firms.

6.2.2 Prioritize the Sectors to be Included in SEZs

1. SEZs need to be placed where they can best complement Pakistan's comparative advantages. This needs to be validated through a detailed strategic planning, feasibility, and master planning process. Regional factors of production advantages (including availability of raw material and labor skills) and the needs of the country's industrial sector must be kept in mind while establishing SEZs and PSEZs as well as later on while allowing industries to set up businesses. Such plans will result in utilization of indigenous resources and thus contribute to local economy³⁴.

³³ Fairtrade is a charity foundation in United Kingdom which certifies products from certain companies that ensure sustainable prices to farmers and producers thus protecting their due rights.

³⁴ There are certain foreign production units at Sundar Industrial Estate, Lahore, where the firms have brought in the foreign labour along. This though might involve efficiency and work ethics issues of local labour force (which the authorities should resolve with most urgency) however, if that sense prevails, it will leave the local economy deprived of the benefits.

2. While allowing Chinese firms to relocate and invest at SEZs and PSEZs, it should still be ensured in prior that these do not overlap the product lines of existing domestic firms. If they do, Joint Ventures may be made a condition to ensure technology transfers and transfusion of better business practices into domestic production.
3. Similarly, vertical integration with Chinese firms be encouraged to upgrade business prospects of domestic firms as well as to facilitate entry into global value chain and be a part of global supply chain in the near future.
4. There are reports of unfriendly attitude towards technology transfer from the Chinese counterparts/firms where Chinese firms avoided training to local laborers. This issue needs to be tabled and negotiated at the relevant forum (JWG meetings) to devise an agreed upon mechanism for technology transfer.
5. Similarly, greater collaboration among Pakistani and Chinese SEZ firms and management needs to be initiated to benefits from their experiences and enhance future collaboration.
6. Specifically, three industries in Pakistan could be strengthened with supply chain integration: (a) agricultural and processed products for export; (b) the mechanical assembly and processing industry, such as mechanical and electricity products; and (c) the local medicine processing industry.
7. The Kashi SEZ and industrial parks in South Xinjiang Districts could be considered for cooperation. The Xinjiang autonomous region, with nine ETDZs and three HNTDZs, borders Pakistan and is the major region of cooperation between western China and Pakistan. SEZ cooperation could be promoted through a Border Economic Cooperation Zone (BECZ), as Xinjiang has already set up a BECZ in Yining, in the northwest of Xinjiang. Specific industries that could be considered for cooperation include:
 - **Garment and textile industry.** With support from both coastal and inland areas, Xinjiang's textile industry has exerted its strength in technical equipment and product design and has profited from the advantages of the Pakistani cotton supply.
 - **Photovoltaic power.** Xinjiang's photovoltaic power generation technology could provide technical guidance for the development of the photovoltaic industry in Pakistan.
 - **Building materials industry.** The new building materials products could be expanded to the market of Pakistan and its neighboring countries.

6.2.3 Revamp the Planning Processes for SEZs

1. A holistic planning approach will help coordinate efforts and avoid progress in one sector at the expense of another sector. To avoid future agricultural emergencies, for example, SEZs development on irrigated agricultural land should be avoided. Economic and financial feasibility should be made a mandatory part of any policy formulation activity, taking the opportunity costs into consideration.

2. In order to address the lack of coordination between the stakeholders in the planning and decision-making process for SEZs, it is important to ensure that all stakeholders – policymakers, implementers, private sector, Chambers, and associations – are on the same page. The planning framework could be based on the following steps:
 - First, a base meeting should be arranged among the policymakers – MOIP, MoPD&R, TDAP, Provincial BOIs and prominent Think Tanks (including CPEC Authority) – to lay out a plan for the prioritized development of existing IEs, EPZs, SEZs, and PSEZs.
 - This plan should then be shared with the facilitators (utility providers and SEZ developers at the federal and provincial levels) to ensure the implementation of measures suggested in the base meeting. Following the issuance of directions at the provincial and federal levels, a second meeting (with larger participation of policymakers and the major Chambers) should be arranged.
 - The decision-making process may then be expanded by involving manufacturers, SEZ developers, and banks. In this way, the dissemination of information, as well as inclusivity in policymaking, would be ensured at all levels.
3. SEZs must be integrated into national development strategies and plans.
4. ***Mistakes to avoid.*** Efficacy of these recommendations rests on a coordinated ability to avoid the following mistakes: (a) failing to develop institutional capacity to administer and enforce regulations at SEZs, (b) proceeding with a lack of inter-ministerial coordination and policy inconsistency, (c) approving SEZs without strong business cases, and (d) approving too many competing SEZs within a region.

6.2.4 Take Measures to Avoid Real Estate Activities at SEZs

1. It is observed that industrial zones are vulnerable to real estate activities. The difficulties usually arose when the developers fail to provide the promised facilities in time, thus barring their ability to ask investors for timely start of production activities. The situation ultimately leading to unwanted real estate activities where investors purchase and occupy plots without starting production. In fact, investors are offered plots (at full price), with promises to provide attractive incentives. However, the provision of basic utilities and other facilities takes much longer, so businesses are neither able nor being questioned to begin operations, largely due to failure on the part of planners and zone developers. Thus the plots are sold out without advancing production activities and even locking the potential firms out at the later stage (due to non-availability of plots). The relevant authorities (at the federal and provincial levels) need to ensure that the SEZs receive in time the infrastructure and facilities promised under the law. Moreover, the SEZ developers should make conditional transfer

linking the process to initiating the production (as already being practiced by KPEZDMC).

- One approach would be to offer plots on partial payments (with the number of installments depending on the stage of development), with the provision that the final payment is due only when the promised facilities are provided. This will make the SEZ developers and the government accountable to deliver the promised facilities in time. Similarly, the start of production should be time-bound—that is, the transfer of land ownership (or lease agreement) should be made conditional on production activities.

6.3 Long Term Measures:

6.3.1 *Prioritize the Sectors to be Included*

1. In the long run, the main field of industrial cooperation between China and Pakistan is the manufacturing sector. The expectation is for China to help Pakistan integrate into the global value chain through the transfer of manufacturing knowledge and technology and the promotion of bilateral industrial cooperation. At present, the textile industry is the most important and competitive of Pakistan's manufactures, and the comparative advantages of China and Pakistan in the textile industry do not overlap. Thus, the cooperation and joint ventures between the two countries should be started with the textile industry, and then expanded to food processing, leather, cement, and chemical fertilizer, as well as the engineering, machinery, electronics, automobile, chemical, and other industries developed in recent years in Pakistan. A proper study is needed to pin point areas of potential cooperation between Pakistani and Chinese business community.
2. In relocating industries from China, the government should systematically select priority areas that will bring in technology and upgrade the existing industrial setup in the country instead of competing it out. Special attention is needed to allow the value addition of products currently being manufactured in Pakistan—an arrangement that will bring in foreign exchange through value-added exports.

6.4 Miscellaneous Steps

1. Incentivize the use of energy-efficient and renewable energy technologies in SEZs.
2. Launch tailor-made training and exchange programs for Pakistan Government representatives, SEZ managers and labor.
3. Support technical education and training for industries targeted at SEZs.
4. Establish a funding window for SEZ enterprises and developers.

REFERENCES

- Abbas, Ahsan, and Saira Ali. 2017. "Nine Proposed Priority SEZs under CPEC and SEZ Act; an Approach to Industrial Development." CoE CPEC Working Paper No. 016/2017. Retrieved from <https://cpec-centre.pk/wp-content/uploads/2018/04/016.pdf>
- Aggarwal, A. 2005. "Performance of Export Processing Zones: A Comparative Analysis of India, Sri Lanka, and Bangladesh." Working Paper 155, Indian Council for Research on International Economic Relations, New Delhi.
- Aggarwal, A., Hoppe, M., and Walkenhorst, P. (2009). Special economic zones and economic diversification: Some evidence from South Asia. *Breaking into New Markets*, 223.
- Ahrens, J., and Meyer-Baudeck, A. (1995). Special economic zones: Shortcut or roundabout way towards capitalism? *Intereconomics* 30(2): 87-95.
- Akinci, Gokhan, and James Crittle. (2008). "Special economic zone: performance, lessons learned, and implication for zone development" (English). Foreign Investment Advisory Service (FIAS) occasional paper. Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/343901468330977533/Special-economic-zone-performance-lessons-learned-and-implication-for-zone-developmentAkinci>,
- Alder, S., L. Shao, and F. Zilibotti (2016). "Economic Reforms and Industrial Policy in a Panel of Chinese Cities." *Journal of Economic Growth* 21(4): 305-349.
- Al Raqbani, and Fahad Saeed. (2014). "Special Economic Zones; Strengthening Abu Dhabi's Economy and Growing Human Capital." *The Economic Review*.
- BEPZA. (2016). "BEPZA Annual Report 2015-16." Bangladesh: Bangladesh Export Processing Zones Authority. Retrieved from <http://bepza.gov.bd/reports>
- Burki, S.J. (2008). "Changing perceptions, altered reality: Pakistan's economy under Musharraf, 1999-2006." Oxford University Press. Retrieved from https://www.jstor.org/stable/pdf/41260909.pdf?seq=1#page_scan_tab_contents
- Burki, S. J. (2008). "Industrial Policy: Domestic challenges, Global imperatives, and Pakistan's choices." *Lahore Journal of Economics* 3(3). Retrieved from <http://www.lahoreschoolofeconomics.edu.pk/EconomicsJournal/Journals/Volume%2013/Issue%20SP/03%20Shahid%20Javed%20Burki%20f.pdf>
- CDE. (2012). "Special Economic Zones; Lessons for South Africa from International Evidence and Local Experience." Centre for Development and Enterprise. Retrieved from <https://www.cde.org.za/special-economic-zones-lessons-for-south-africa-from-international-evidence-and-local-experience/>
- Chang, H. J. (2006). "The East Asian development experience: the miracle, the crisis and the future." Zed Books. Retrieved from [https://books.google.com.pk/books?hl=en&lr=&id=nSqXpDiQ4ggC&oi=fnd&pg=PR7&dq=Chang,+H.+J.+\(2006\).+The+East+Asian+development+experience:+the+miracle,+the+crisis+and+the+future.+Zed+Books.&ots=JsK4syhWvx&sig=FVf8U26jxqPu_FLuW35KISAMRIA#v=onepage&q=Chang%2C%20H.%20J.%20\(2006\).%20The%20East%20Asian%20development%20experience%3A%20the%20miracle%2C%20the%20crisis%20and%20the%20future.%20Zed%20Books.&f=false](https://books.google.com.pk/books?hl=en&lr=&id=nSqXpDiQ4ggC&oi=fnd&pg=PR7&dq=Chang,+H.+J.+(2006).+The+East+Asian+development+experience:+the+miracle,+the+crisis+and+the+future.+Zed+Books.&ots=JsK4syhWvx&sig=FVf8U26jxqPu_FLuW35KISAMRIA#v=onepage&q=Chang%2C%20H.%20J.%20(2006).%20The%20East%20Asian%20development%20experience%3A%20the%20miracle%2C%20the%20crisis%20and%20the%20future.%20Zed%20Books.&f=false)

- Cheung, K. Y., and P. Lin. (2004). "Spillover Effects of FDI on Innovation in China: Evidence from the Provincial Data." *China Economic Review* 15: 25-44.
- Chu, D. K. (1987). China's Special Economic Zones: Expectations and Reality. *Asian Affairs: An American Review*, 14(2), 77-89.
- CIIP. (2017). "Special Economic Zones: An Operational Review of their Impacts." Washington D.C.: Competitive Industries and Innovative Program, World Bank Group. Retrieved from [http://documents.worldbank.org/curated/en/316931512640011812/pdf/P154708-12-07-2017-1512640006382.pdf](http://documents.worldbank.org/curated/en/316931512640011812/pdf/P1547081207-2017-1512640006382.pdf)
- Cling, J.-P., M. Razafindrakoto, and F. Roubaud. (2005). "Export Processing Zones in Madagascar: A Success Story under Threat?" *World Development* 33: 785-803.
- COMCEC, Coordination Office. (2017). "Special Economic Zones in the OIC Region: Learning from Experience." Standing Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation (COMCEC). Retrieved from http://www.sbb.gov.tr/wpcontent/uploads/2018/11/Special_Economic_Zones_in_the_OIC-Region.pdf
- Davies, B. Ronald, and Arman Mazhikeyev. (2015). "The Impact of Special Economic Zones on Exporting Behavior." Working Paper Series, UCD Centre for Economic Research. Retrieved from <https://ideas.repec.org/p/ucn/wpaper/201528.html>
- Deming. Luo, Yanjun Liu, Yiyun Wu, Xiwei Zhu, and Xiangrong Jin (2015). "Does development zone have spillover effect in China?" *Journal of the Asia Pacific Economy* 20(3): 489-516.
- Devadas, V., and Vaibhav Gupta. (2011). "Planning for Special Economic Zone: A Regional Perspective." Institute of Town Planners, India Journal 53-58. Retrieved from http://www.itpi.org.in/uploads/journalfiles/apr5_11.pdf
- Engman, M. (2011). Success and Stasis in Honduras' Free Zones. *Special Economic Zones*, 47.
- Farole, Thomas. 2011. "Special Economic Zones in Africa: Comparing Performance and Learning from Global Experience." Washington, DC: World Bank.
- Farole, T., and G. Akinci (eds.) (2011). *Special Economic Zones: Progress, Emerging Challenges, and Future Directions*. Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/752011468203980987/Special-economic-zones-progress-emerging-challenges-and-future-directions>
- Fenwick, Ann. (1984). "Evaluating China's Special Economic Zones." *Berkeley Journal of International Law*. Retrieved from <https://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?referer>
- Fu, Xiaolan, and Yunning Gao (2007). "Export Processing Zones in China: A survey." Technical Report, International Labor Organization.
- Gereffi, Gary, John Humphrey, and Timothy Sturgeon. (2005). "The governance of global value chains." *Review of International Political Economy* 78-104. Retrieved from http://www.fao.org/fileadmin/user_upload/fisheries/docs/GVC_Governance.pdf

- Hakimian, Hassan. (2009). "Iran's Free Trade and Special Economic Zones: Challenges and Opportunities." Conference on Iranian Economy at a Crossroads: Domestic and Global Challenges. London: University of Southern California (USC). Retrieved from https://eprints.soas.ac.uk/8297/1/FreeZonesinIran_HH_USCSept2009.pdf
- Hausmann, R., Hidalgo, C. A., Bustos, S., Coscia, M., Simoes, A., and Yildirim, M. A. (2014). "The atlas of economic complexity: Mapping paths to prosperity". MIT Press. Retrieved from https://atlas.media.mit.edu/static/pdf/atlas/AtlasOfEconomicComplexity_Part_I.pdf
- Hausmann, R., Hwang, J., and Rodrik, D. (2007). "What you export matters." *Journal of Economic Growth* 12(1): 1-25. Retrieved from <https://ideas.repec.org/a/kap/jecgro/v12y2007i1p1-25.html>
- Hausmann, R., and Klinger, B. (2007). "The structure of the product space and the evolution of comparative advantage" (No. 146). Centre for International Development at Harvard University. Retrieved from <https://ideas.repec.org/p/cid/wpfacu/146.html>
- Hidalgo, C. A., and Hausmann, R. (2008). "A network view of economic development." *Developing alternatives* 12(1): 5-10. Retrieved from https://static1.squarespace.com/static/5759bc7886db431d658b7d33/t/5783bd92b3db2b8f172eb722/1468251540792/HidalgoHausmann_DAI_2008.pdf
- _____. (2009). "The building blocks of economic complexity." *Proceedings of the National Academy of Sciences* 106(26): 10570-10575. Retrieved from <http://www.pnas.org/content/pnas/106/26/10570.full.pdf>
- Hidalgo, César A., Bailey Klinger, A-L. Barabási, and Ricardo Hausmann. (2007). "The product space conditions the development of nations." *Science* 317(5837): 482-487. Retrieved from <http://science.sciencemag.org/content/317/5837/482>
- Hirschman, A. O. (1957). "Economic policy in underdeveloped countries." *Economic Development and Cultural Change* 5(4): 362-370. Retrieved from <https://www.journals.uchicago.edu/doi/abs/10.1086/449745?journalCode=edcc>
- Huang Jiuli, Wu Min, and Bao Qun. (2013). "SEZs, Contracting System and Comparative Advantages." *Management World* 11,
- Hussain, S. S., and Ahmed, V. (2011). "Experiments with industrial policy: The case of Pakistan" (Working Paper No. 124). Islamabad: Sustainable Development Policy Institute. Retrieved from <https://www.sdpi.org/publications/files/Experiments-with-Industrial-Policy.pdf>
- Hussain S.T., Khan U., Malik K.Z., and Faheem A. (2012). "The Constraints to Industry in Punjab, Pakistan." *Lahore Journal of Economics* 17:135-189. Retrieved from <http://121.52.153.178:8080/xmlui/handle/123456789/6043>
- Imbs, J., and Wacziarg, R. (2003). "Stages of diversification." *The American Economic Review* 93(1), 63-86. Retrieved from https://econpapers.repec.org/article/aeaecrev/v_3a93_3ay_3a2003_3ai_3a1_3ap_3a63-86.htm

- Industrial Policy of KPK 2016. Retrieved from https://s3.amazonaws.com/academia.edu.documents/33820935/06_A._R._Kamal.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1543775632&Signature=s1Y5Qr%2Bscq7K7egTKT5j%2BFKKq7Y%3D&response-content-disposition=inline%3B%20filename%3DKey_Issues_in_Industrial_Growth_in_Pakis.pdf
- Iqbal, S. (2017). "Trade Balance Tilts Further in Beijing's Favour." *Dawn News*. Retrieved from <https://www.dawn.com/news/1349800>
- Ishtiaq, N., and Chaudhry, A. (2018). "Developing a Diverse Industrial Structure for Long-Term Growth: A Critical Analysis of Pakistan's Industrial Planning." Retrieved from <https://pide.org.pk/psde/pdf/AGM33/papers/Ahmed%20Chaudhry.pdf>
- Islam, N. (1973). "Industrial Development in Pakistan." In *Development Planning and Policy in Pakistan 1950-70*, edited by Moin Baqai and Irving Brescher. National Institute of Social and Economic Research, Karachi.
- Kaldor, N. (1970). "The case for regional policies." *Scottish Journal of Political Economy* 17(3): 337-348. Retrieved from <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-9485.1970.tb00712.x>
- Kemal, A. R. (2006). "Key Issues in Industrial Growth in Pakistan." *Lahore Journal of Economics* 11.
- Khan, Karim, and Saba Anwar. (2016). "Special Economic Zones (SEZs) and CPEC: Background, Challenges and Strategies." Retrieved from <http://www.pide.org.pk/psde/pdf/AGM32/papers/Special%20Economic%20Zones.pdf>
- KMPG. (2009). "A Guide to Special Economic Zones in Poland." Poland: KMPG.
- _____. (2015). "Analysis of the Special Economic Zones Act, 2015." Kenya: KMPG. Retrieved from <https://assets.kpmg.com/content/dam/kpmg/ke/pdf/tax/analysis-of-the-special-economic-zone-act.pdf>
- Kuraishi, Anam, and Mustafa Hyder. (2017). "The Reality of China-Pakistan Economic Corridor (CPEC): Facts vs. Fiction." *Corridors, Culture and Connectivity*, Pakistan-China Institute. Retrieved from <https://www.pakistan-china.com/annual-reports/monologue4.pdf>
- Kusago, Takayoshi, and Zafiris Tzannatos. (1998). "Export processing zones: A review in need of update." Social Protection Group, Human Development Network, World Bank. Retrieved from <http://documents.worldbank.org/curated/en/194361469672186226/Export-processing-zones-a-review-in-need-of-update>
- Levien, M. (2013). Regimes of dispossession: From steel towns to special economic zones." *Development and Change*, 44(2), 381-407.
- Lewis, W. A. (1954). "Economic development with unlimited supplies of labour." *The Manchester School*, 22(2), 139-191. Retrieved from <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-9957.1954.tb00021.x>

- Litwack, J. M., and Qian, Y. (1998). "Balanced or unbalanced development: special economic zones as catalysts for transition." *Journal of Comparative Economics*, 26(1): 117-141.
- Liu, Ruimin, and Zhao, Renjie (2015). "Do National High-Tech Zones promote regional economic development?" *Management World* 8.
- Liuhto, Kari. (2009). "Special Economic Zones in Russia- What do the Zones Offer for Foreign Firms?" Electronic Publications of Pan-European Institute. Retrieved from <https://ideas.repec.org/a/rnp/ecopol/0958.html>
- Mahmood, Zafar. (2018). "Opportunities and Challenges of Special Economic Zones under CPEC for Pakistan." The International Academic Seminar on Industrial Cooperation and Construction of Industrial Zones, CPEC. China: Centre for Pakistan Studies of Peking University. Retrieved from https://www.researchgate.net/publication/322486749_Opportunities_and_Challenges_of_Special_Economic_Zones_under_CPEC_for_Pakistan
- Mallikarjuna, K. G. (2014). "A Comparative Study on Indo-Chinese SEZs." *International Journal of Research in Humanities, Arts and Literature*. Retrieved from <http://oaji.net/articles/2014/488-1394001536.pdf>
- Manasan, Rosario G. (2013). "Export processing zones, special economic zones: Do we really need to have more of them?" Policy Institute for Development Studies. Retrieved from <http://www.eldis.org/document/A72229>
- Mukherjee, A., Pal, P., Deb, S., Ray, S., and Goyal, T. M. (2016). SEZs in Select Countries: A Comparison with India." In *Special Economic Zones in India* (pp. 15-50). New Delhi: Springer.
- Nawaz, F., Azam, M. F., and Noor, N. (2015). "The Dilemma of Gadoon Amazai Industrial Estate, Khyber Pakhtunkhwa." *Journal of Economic and Sustainable Development* 6: 2222-1700.
- Nel, Etienne, and Christian Rogerson. (2014). "Re-spatializing development: Reflections from South Africa's recent re-engagement with planning for Special Economic Zones." *Urbani Izziv* SS24-S25. Retrieved from <https://www.ceeol.com/search/article-detail?id=30651>
- Nigar, Neelum, and Najam Rafique. (2017). "CPEC – Fast Tracking Work on SEZs." China Study Centre ISSI. Retrieved from http://issi.org.pk/wp-content/uploads/2017/10/IB_Neelum_October_24_2017.pdf
- Noman, A. (2015). "The Return of Industrial Policy and Revival of Pakistan's Economy: Possibilities of Learning, Industrial and Technology Policies." Retrieved from <http://121.52.153.178:8080/xmlui/handle/123456789/14040>
- Pahariya, N C. (2007). "An Assessment of Potential Costs and Benefits of SEZs in India." India: CUTS International. Retrieved from <http://www.cuts-citee.org/pdf/rreport07-05.pdf>
- Palit, A. (2009). Growth of special economic zones (SEZs) in India: issues and perspectives. *Journal of Infrastructure Development*, 1(2), 133-152.

- PCI. (2017). "The Economic Benefits of the Modern Silk Road: The China-Pakistan Economic Corridor (CPEC)". The Association of Chartered Certified Accountants. Retrieved from https://www.accaglobal.com/content/dam/ACCA_Global/professional-insights/The-modern-silk-road/pi-economics-modern-silk-road.pdf
- Power, S.H. (1963). 'Industrialization in Pakistan: A case of Frustrated Take-off?' *Pakistan Development Review*. Retrieved from https://www.jstor.org/stable/41258128?seq=1#page_scan_tab_contents
- Prebisch, R. (1950). "The Economic Development of Latin America and its Principal Problems." *Economic Bulletin for Latin America* 7: 1-12. Retrieved from <https://repositorio.cepal.org/handle/11362/29973>
- PriceWaterhouseCoopers. (2017). "Repaving the Ancient Silk Routes." Retrieved from <https://www.pwc.com/gx/en/issues/growth-markets-centre/publications/repaving-the-ancient-silk-routes.html>
- Raheem, A. Abdul. (2011). "Impact of Special Economic Zone (SPZ) on Human Development and Poverty Reduction: An Indian Experience." *International Journal of Multidisciplinary Research*. Retrieved from https://s3.amazonaws.com/academia.edu.documents/35715020/sez2.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1543771980&Signature=hluMuS%2B%2BC1B8wzYXUGl9vM0rLQI%3D&response-content-disposition=inline%3B%20filename%3DIMPACT_OF_SPECIAL_ECONOMIC_ZONE_SPZ_ON_H.pdf
- Rolfe, R. J., D. P. Douglas, and B. Kagira. (2004). "Footloose and Tax Free: Incentive Preferences in Kenyan Export Processing Zones." *South African Journal of Economics* 72: 784-807.
- Scheepers, Coenrad Muller. (2013). "A Case Study for Special Economic Zones in South Africa as a Means of Attracting Foreign Direct Investment." Doctoral Dissertation, University of Pretoria. Retrieved from <https://repository.up.ac.za/handle/2263/30028>
- Schumpeter, J. A. (1942). "Capitalism, Socialism and Democracy." New York: Harper. Retrieved from <https://eet.pixel-online.org/files/etranslation/original/Schumpeter,%20Capitalism,%20Socialism%20and%20Democracy.pdf>
- Shankar, G. (2007). "Negative Aspects of Special Economic Zones in China." *Economic and Political Weekly* 42(17): 1492-1494.
- Shakir, M. H., & Farole, T. (2011). The Thin End of the Wedge: Unlocking Comparative Advantage through EPZs in Bangladesh. *Special Economic Zones*, 25.
- Shayah, M. Hazem, and Yang Qifeng. (2015). "Development of Free Zones in United Arab Emirates." *International Review of Research in Emerging Markets and the Global Economy* 2311-3200. Retrieved from https://www.researchgate.net/profile/Hazem_Shayah/publication/273321578_Development_of_Free_Zones_in_United_Arab_Emirates/links/54fe91120cf2eaf210b3415d.pdf

- Simavi, Sevi. (2011). *Fostering women's economic empowerment through special economic zones: comparative analysis of eight countries and implications for governments, zone authorities and businesses* (English). Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/657561468148771219/Fostering-womens-economic-empowerment-through-special-economic-zones-comparative-analysis-of-eight-countries-and-implications-for-governments-zone-authorities-and-businesses>
- Sinenko, Olga, and Igor Mayburov. (2017). "Comparative Analysis of the Effectiveness of Special Economic Zones and Their Influence on the Development of Territories." *International Journal of Economics and Financial Issues* 115-122. Retrieved from <https://econpapers.repec.org/article/ecojourn1/2017-01-17.html>
- Singer, H. (1950). "The Distribution of Gains between Investing and Borrowing Countries," *American Economic Review* 40(May): 473-485.
- Sivalingam, G. (1994). "The economic and social impact of export processing zones: The case of Malaysia." International Labour Organization. Retrieved from <https://ideas.repec.org/p/ilo/ilowps/993049733402676.html>
- Syed, Jawad. (2018). "China's Belt and Road Initiative: A Perspective from Pakistan." LUMS/CPMI/2018/05/2. Retrieved from https://cpmi.lums.edu.pk/sites/default/files/user376/bri_pakistan_perspective_10may2018.pdf
- Tantri, M. L. (2011). "The Dynamics of SEZs over EPZs: A Case Study of Santacruz SEZ." *Journal of International Economics* (0976-0792), 2(1).
- Tong, Liang. (2015). "CPEC Industrial Zones and China-Pakistan Capacity Cooperation." *Strategic Studies Journal* 174-184. Retrieved from http://www.issi.org.pk/wp-content/uploads/2015/12/Liang-Tong_3435_SS_41_20142015.pdf
- Tynel, Pawel, Agnieszka Skret Bednarz, Agnieszka Roman, Marek Rozkrut, and Anna Pietrzak. (2013). "Poland – A True Special Economic Zone." Ernst & Young Global Limited. Retrieved from <http://www.ksse.com.pl/files/page/Centrum%20prasowe/Raporty/EY.pdf>
- UNESCAP. (2005). "Free Trade Zones and Port Hinterland Development." New York: United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). Retrieved from https://www.unescap.org/sites/default/files/pub_2377_fulltext.pdf
- United Nations Industrial Development Organization. (2015). "Industrial Development Report 2016. The Role of Technology and Innovation in Inclusive and Sustainable Industrial Development." Vienna: UNIDO. Retrieved from https://www.unido.org/sites/default/files/2015-12/EBOOK_IDR2016_FULLREPORT_0.pdf
- Wang, J. (2013). "The Economic Impact of Special Economic Zones: Evidence from Chinese Municipalities." *Journal of Development Economics* 101: 133-147.

- Wang, Xiao. (2013). "The Role of Economic Development Zones in National Development Strategies: The Case of China." Pardee RAND Graduate School Dissertation Series. Retrieved from https://www.rand.org/pubs/rgs_dissertations/RGSD320.html
- Warr, Peter, and Jayant Menon. (2016). "Cambodia's Special Economic Zones." *Journal of South-east Asian Economies* 273-290. Retrieved from <https://muse.jhu.edu/article/647390/summary>
- Wei, X. (2000). "Acquisition of Technological Capability through Special Economic Zones (SEZs): The Case of Shenzhen SEZ." *Industry and Innovation* 7: 199-221.
- Winston, G.C. (1967). "Consumer Goods or Capital Goods—Supply Consistency in Development Planning." *Pakistan Development Review*, Autumn 1967. Retrieved from <https://www.jstor.org/stable/41257966>
- Wong, E. L. (1987). Recent developments in China's special economic zones: problems and prognosis. *The Developing Economies*, 25, 1.
- Wong, Kwan Yiu. (1987). "China's Special Economic Zone Experiment: An Appraisal." *Human Geography* 69(1): 27-40. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/04353684.1987.11879532>
- World Free Zones Organization. (n.d.) "Index Cards on Pakistan Export Processing Zones and Special Economic Zones." France: World Free Zones Organization. Retrieved from https://www.worldfzo.org/Portals/0/OpenContent/Files/487/Pakistan_FreeZones.pdf
- World Trade Organization. (2015). "Trade Policy Review". WTO Secretariat. Retrieved from https://www.wto.org/english/tratop_e/tpr_e/tp411_e.html
- Wu Min, and Huang Jiuli. (2012). "Lump-sum preferential policies and regional export: a comparison between SEZs and non-SEZs." *Southern Economy* 7(30): 87-102.
- Wu Min, Huang Jiuli, and Liu Chong. (forthcoming). "Special Economic Zones Policy and Technological Innovation: Evidence from Patent Data."
- Xiaoyang, Tang. (2015). "How do Chinese 'Special Economic Zones' support Economic Transformation in Africa?" Supporting Economic Transformation SET. Retrieved from <https://www.scribd.com/document/338303634/How-Chinese-SEZs-Support-Economic-Transformation-in-Africa>
- Yeung, Yue-man, Joanna Lee, and Gordon Kee. (2009). "China's Special Economic Zones at 30." *Eurasian Geography and Economics* 222-240. Retrieved from <https://www.tandfonline.com/doi/abs/10.2747/1539-7216.50.2.222>
- Yuan, Y. (2017). "The Dynamic Evolution of China's Special Economic Zones and their Practice." In Y. Yuan (ed.), *Studies on China's Special Economic Zones*, Social Sciences Academic Press.
- Zeng, Douglas Zhihua. (2010). "Building Engines for Growth and Competitiveness in China: Experience with Special Economic Zones and Industrial Clusters." Washington DC: World Bank. Retrieved from <https://elibrary.worldbank.org/doi/abs/10.1596/978-0-8213-8432-9>

- _____. (2011). "How do Special Economic Zones and Industrial Clusters Drive China's Rapid Development?" Washington, DC: World Bank. Retrieved from <http://documents.worldbank.org/curated/en/310891468018256346/How-do-special-economic-zones-and-industrial-clusters-drive-Chinas-rapid-development>
- _____. (2012a). "SEZs in Africa: Putting the Cart in Front of the Horse?" (blog). Washington, DC: World Bank.
- _____. (2012b). "An Overview of Six Economic Zones in Nigeria: Challenges and Opportunities." World Bank Policy Note. Washington, DC: World Bank.
- _____. (2015). "Global Experiences with Special Economic Zones." Policy Research Working Paper, Trade and Competitiveness Global Practice Group. Washington, DC: World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/810281468186872492/Global-experiences-with-special-economic-zones-focus-on-China-and-Africa>
- _____. (2015a). "Global Experiences with Special Economic Zones: Focus on China and Africa." World Bank Policy Research Working Paper 7240. Washington, DC: World Bank.
- _____. (2015b). "Why Are More Countries Embracing Industrial Zones?" (blog) The Trade Post, World Bank. May 5.
- _____. (2016). Special Economic Zones: Lessons from the Global Experience, PEDL Synthesis Paper Series, No. 1.
- Zhao, M., and Farole, T. (2011). Partnership Arrangements in the China-Singapore (Suzhou) Industrial Park: Lessons for Joint Economic Zone Development.
- Zhao, Y., and Mudassar, M. (2013). "A Research on Industrial Structure Evolution and Adjustment in Pakistan." *International Journal of Business and Social Science*, 4(9). Retrieved from http://ijbssnet.com/journals/Vol_4_No_9_August_2013/16.pdf
- Zhaoli, L. (2013). "Economic Corridor will be lever for all of South Asia." *Global Times*. Retrieved from <http://www.globaltimes.cn/content/800223.shtml>
- Zia, Muhammad Muzammil, Benaash Afzal Malik, and Shuja Waqar. (2017). "Special Economic Zones (SEZs): A Comparative Analysis for CPEC SEZs in Pakistan." CoE, CPEC Working Paper Series. Retrieved from <https://cpec-centre.pk/wp-content/uploads/2018/04/012-updated.pdf>

1. Methodology

Following data collection tools were used in conducting the study:

- Desk review to examine international best practices related to SEZs, with a special focus on China.
- Document review to analyze planning processes related to SEZs in Pakistan, such as selection criteria and future expected benefit targets.
- Key informant interviews with policymakers, SEZ authorities, entrepreneurs and manufacturers (producing at the currently established zones) and Chambers of Commerce and Industry to identify promises and perils related to SEZs in Pakistan and China (see complete list below).

Table A1. Stakeholders Interviewed

Names of stakeholders	Number of Interviews
Interviews from Pakistan	
Ministry of Planning, Development & Reform (MoPD&R)	3
Federal Board of Investment (BOI), Islamabad	2
Ministry of Industries and Production (MOIP), Islamabad	4
CPEC Centre of Excellence (CPEC CoE), Islamabad	2
Federation of Pakistan Chambers of Commerce and Industry (FPCCI), Islamabad and Karachi	3
Islamabad Chamber of Commerce and Industry (ICCI)	1
Lahore Chamber of Commerce and Industry (LCCI)	5
Sialkot Chamber of Commerce and Industry (SCCI)	1
KPK Board of Investment and Trade (KP-BOIT)	3
Punjab Board of Investment and Trade (PBIT)	2
Sindh Board of Investment	2
Khyber Pakhtunkhwa Economic Zones Development and Management Company (KPEZDMC)	2
Faisalabad Industrial Estate Development & Management Company (FIEDMC)	3
SEZA, Department of Commerce and Industry, Balochistan	1
Hattar SEZ Site Office, Haripur, KPK	2
Lahore Township Industries Association	1
Sialkot Export Processing Zone	1
SEZs and non-SEZs manufacturers	7
Interviews from China	
Local government officials: officials with Administration Committees and Enterprise Representatives from SEZs in Shenyang of Liaoning Province, Ningbo of Zhejiang Province, Suzhou of Jiangsu Province, Chengdu of Sichuan Province, and Dongguan of Guangdong Province.	60
Total	104

Important Bodies Related to SEZs and Their Management

Board of Approval. The composition of Board of Approvals (BOA) is as follows:

- i. The Prime Minister of Pakistan, who shall be the Chairperson of the BOA;
- ii. The Minister for Finance, who shall be the Vice Chairperson of BOA;
- iii. The Minister for Industries;
- iv. The Minister for Production;
- v. The Minister for Commerce;
- vi. The Minister for State and Frontier Regions Division;
- vii. Two members of Majlis-e-Shoora (Parliament) to be nominated by the Prime Minister (one from each House);
- viii. The Chairman of the BOI;
- ix. The Deputy Chairman, Planning Commission;
- x. The Chief Minister of each Province;
- xi. The Chairman of the Federal Board of Revenue;
- xii. Governor, State Bank of Pakistan;
- xiii. Secretary BOI;
- xiv. Executive heads of the Provincial investment boards by whatever names known or, if no such board is established, a nominee of the Government of such province, having adequate relevant professional experience; the tenure of such nominees shall be three years;
- xv. The President of the Federation of the Pakistan Chambers of Commerce and Industry;
- xvi. The President of the Pakistan Business Council;
- xvii. The President of the Overseas Chamber of Commerce and Industry;
- xviii. A professional having adequate relevant experience to be nominated by the Prime Minister of Pakistan.

Hierarchy

1. BOA
 - 1.1. BOI (secretariat)
 - 1.2. Approval Committees
 - 1.2.1. Term of office shall be three years
2. SEZ Authorities
 - 2.1. Composition:
 - 2.1.1. The Chief Executive Officer of a SEZ Authority (SEZA) shall be appointed by the respective Chief Minister of the Province and shall be a professional having minimum of 15 years' experience in handling and managing reputable organizations at national level
 - 2.1.2. Members to be appointed by the Chief Minister and BOA shall be purely from private sector
 - 2.2. SEZ Committee
 - 2.3. SEZ Developers
3. SEZ Enterprises

Appendix IV

List of Industrial Estates³⁵

Name of IE	Year	Location	Area (acres)	Type of industry
Punjab				
Industrial Estate Musaberk Mian Chunnu	1989	GT road and Wasim Beverages at Chak No.46/15-L.	55.5	Textiles, food, chemicals
Industrial Estate Khanewal	1993	Lodhran National Highway	64	Food, cottage and handicrafts, textiles
Industrial Estate - I Sialkot	1961	Wazirabad Road	98.5	Sports goods, kitchen utensils, cutlery, surgical instruments
Industrial Estate Daska Road Sialkot	1963	Kot Lakhpat, Lahore Kasur Road	9.75	Engineering, electrical fittings, chemicals, consumer goods, steel products
Industrial Estate Raiwind Road, Lahore		40 km from Lahore	112	Textiles, sugar, power generation, garments, chemicals, engineering, food
Kot Lakhpat Industrial Estate Lahore	1960	Kot Lakhpat, Model Town Lahore	875	Engineering, electrical fittings, chemicals, consumer goods, steel products
Lahore Kasur Road Industrial Estate Lahore	1994	Kasur Road, Lahore Kasur Road	80	Pharmaceuticals, soft drinks, leather processing, consumer goods
Industrial Estate Burewala	1992	15 km Chichawatani-Burewala Road	48	Food, textiles
Industrial Estate Gujrat	1961-62	Main GT Road 6 km from city	126.32	Electrical items, furniture
Industrial Estate Shorekot		Rakh Matla Jhang Road, Shorekot	100	Not specified
Industrial Estate-I, Gujranwala	1978	Khiali By-Pass, 8 km from main city	106.15	Engineering, chemicals, textiles, ceramics, leather
Industrial Estate-II, Gujranwala	1960-61	G.T. Road, Gujranwala	103.5	Ceramics, electrical machines, domestic machines, consumer goods, fabrication,
Industrial Estate Jhelum	1978	6 km from main city on GT Road	52.06	Engineering, furniture, food
Industrial Estate Sahiwal	1983	Kutchra Harapa Road, Sahiwal, 6 km from main city	51.99	Food, Textiles
Industrial Estate Faisalabad	1975	Nalka Kohala Road, 15 km from main city	258.03	Textiles
Industrial Estate	1976	Talibwala Road, 8 km	51.15	Textiles

³⁵ Source: http://www.findpk.com/yp/Biz_Guide/html/industrial_zones.html

Sargodha		from main city		
Industrial Area Jauharabad	1981	20 km from District Court, Jauharabad	NA	NA
Industrial Area Bhakkar	1985	20 km from District Court, Bhakkar	NA	NA
Industrial Estate, Mandi Town, Layyah	1954	Adjacent to Layyah Sugar Mills, Layyah		
Industries Estate, Bahawalpur	1961-62	Multan Road, Bahawalpur	51.8	
Industrial Estate, Chakwal	1979	Rawalpindi Road, Chakwal	16.86	Poultry feed, food
Industrial Estate, Gujjar Khan	1979	G.T. Road, Gujjar Khan	17.44	Food, beverages, handicrafts, light engineering.
Industrial Estate Sheikhupura	1950	30 km from Lahore on Motorway	20 km ²	
National Industrial Zone (RCCI Industrial Estate) Rawat Link Road Rawalpindi	1985	G.T. Road, Rawat	1250	Chemicals, engineering, food
Industrial Estate Bahatar Road Taxila	1993	7 km Taxila Bahatar Road	104.75	Food, beverages, handicrafts, light engineering.
Industrial Estate Multan	1983	Multan	743	
KPK				
Industrial Estate Peshawar	1965-66	Jamrud Road, Peshawar	868	Furniture, food, engineering, marble
Small Industrial Estate, Phase-I, Mardan	1974-75	Nowshera Road, near Rashaki	50	Food, beverages, handicrafts, light engineering
Small Industrial Estate, Phase-II, Mardan	1981-82	Nowshera Road, near Rashaki	40	Food, beverages, handicrafts, light engineering
Small Industrial Estate Abbottabad	1973-74	Mansehra Road	50	Food, furniture
Small Industrial Estate Kohat	1984-85	Dhoda Road	40	Food, beverages, handicrafts, light engineering.
Industrial Estate Hattar	1984-85	Kot Najibullah, Haripur	1063	Large chemical plants, heavy electrical engineering, food, textiles, steel, vegetable oil
Industrial Estate Gadoon Amazai	1986-87	Near Tarbela, Topi, District Swabi	1116	Engineering, chemicals, textiles, consumer products, plastic, auto parts, cement

				bags, steel, paper products, pharmaceuticals
Industrial Estate D.I. Khan	1990-91	D.I. Khan – Multan Road, 19 km from D.I. Khan City	189	No industry established yet
Industrial Estate Nowshera	1993-94	Nowshera – Mardan Road, Risalpur	108	Special furniture, electric bulbs
Industrial Estate Ghazi	1994	23 km from Lawrancepur Junction on Peshawar – Islamabad Highway	90	Not specified
Industrial Estate Mattani	1994	Mattani Village, Indus Highway	30	No industry established
Sindh				
SITE Karachi	1947	Mango Pir Road Karachi District West	4460	Engineering, textiles, consumer goods, defense vendors, auto parts, etc.
SITE North Karachi	1983	Scheme No 33 North Karachi	1029	Textiles & garments, hosiery, light engineering, soap, poultry, electronics, cotton, dyeing, bleaching, printing, packing
Korangi Industrial Area	1961-69	Southeast of Karachi about 20 km from the city center	3500	Cotton yarn, textiles & garments, hosiery, leather products, jute thread, soap, pharmaceutical products, cosmetics, sanitary items, basic chemicals, paints, LPG plants
Nooriabad Industrial Estate Dadu	1983	District Dadu on Super Highway 90 km from Karachi	3342	Textiles, light engineering, food P processing, chemical plants
Small Industrial Estate Dadu	1982-83	Dadu Johi Haka, Dadu	10.7	Food, beverages, handicrafts, light engineering
Industrial Estate Hyderabad	1950	Tando Mohammad Khan Road, Hyderabad	1264	Textiles, heavy engineering, light engineering, glass bangles, beverages, pharmaceuticals, carpets, garments,
Industrial Estate Hyderabad	1985-86	Hyderabad Super Highway	50.1	Food, garments, handicrafts
Industrial Estate Tando Adam	1952	Tando Adam	150	Textiles, cigarettes, cooking oil, ice, engineering
Industrial Estate Tando Adam	1992-93	Hyderabad Road, Tando Adam	13.5	Power looms industry

Industrial Estate Kotri	1962	Kotri District Dadu	1875	Textiles, light engineering, flour mills, copper wire, beverages
Industrial Estate Sukkur	1963	Shikarpur Road, Sukkur	1060	Light engineering, poultry farm, soap factory, flour mills
Industrial Estate Nawabshah	1985-86		239	Viscose plant, sugar mill
Industrial Estate Nawabshah	1985-86	Nawabshah main road	50	Food, handicrafts, auto workshops
Industrial Estate Sukkur	1963-64	Sukkur	110	Food, bangles, garments, small vendors of auto parts
Industrial Estate Larkana	1964-65	Larkana City	59	Food, garments
Industrial Estate Mirpurkhas	1974	Mirpurkhas City	5	Food, garments, handicrafts
Mall Industrial Estate Mirpurkhas	1985-86	Mirwah Road, Mirpurkhas	51.2	Food, beverages, handicrafts, light engineering
Industrial Park Mirpurkhas	1974			Food, beverages, handicrafts, light engineering
Industrial Estate Sehwan	1974	Indus Highway, Sehwan	5	Food, beverages, handicrafts, light engineering.
Industrial Estate Shikarpur	1984-85	Shirkarpur City	36	Food, beverages, handicrafts, light engineering.
Industrial Estate Kandhkot	1984-85	Thull Road, Kandhkot	14.4	Food, beverages, handicrafts, light engineering.
Industrial Estate Badin	1985-86	Kadan Road	30.2	Food, beverages, handicrafts, light engineering.
Industrial Estate Sanghar	1985-86	Sanjbore Road, Sanghar	45	Food, beverages, handicrafts, light engineering
Industrial Estate Thatta	1986-87	Ghulamullah Road, Makli, Thatta	50	Food, handicrafts
Industrial Estate Gambat	1991-92	Gambat	15	Power looms
Industrial Estate Rohri	1992-93	National Highway Ali-Wahan, Rohri	46.4	Food, beverages, handicrafts, light engineering.
Port Qasim Industrial Zones:	1980	Port Qasim	2700	Port-related activities
North Western Industrial Zone,			acres + 8300	
Eastern Industrial Zone,			acres + 1000	
South Western Industrial Zone			acres	

Baluchistan				
Hub Industrial & Trading Estate	1982	Hub, District Lasbela		Power generation, plastics industries
Uthal Industrial Estate	1976	Along main RCD Highway at Uthal District, Lasbela		Food, beverages, handicrafts, light engineering.
Windher Industrial & Trading Estate	1989	80 km from SITE, Karachi, Lasbela		Not specified
Industrial Estate Dara Murad Jamali	1987-88	Dara Murad Jamali	40	Food, beverages, handicrafts, light engineering.
Quetta Industrial & Trading Estate	1986-87	Sariab By Pass 13 km from Quetta City		Food, beverages, handicrafts, light engineering.
Small Industrial Zone Quetta	1960	Girki Road, Quetta		
Gadani Industrial Estate	1974	Gadani, Lasbela District	50	Ship breaking





An abstract graphic design featuring a complex pattern of overlapping, semi-transparent blue and light blue geometric shapes, including triangles, rectangles, and lines, creating a sense of depth and movement. The pattern is set against a white background.

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