# A MIXED METHOD APPROACH TO IDENTIFY POTENTIAL DRIVERS AND BARRIERS FOR SEZS UNDER CHINA PAKISTAN ECONOMIC CORRIDOR

By

Saira Naeem

(00000172674)

A Thesis submitted in partial fulfillment of

The requirement for the degree of

Master of Science
In
Urban and Regional Planning



**Department of Urban and Regional Planning** 

**National institute of Transportation (NIT)** 

School of Civil and Environmental Engineering (SCEE)

**National University of Science and Technology (NUST)** 

Sector H-12, Islamabad, Pakistan

(2020)

# A MIXED METHOD APPROACH TO IDENTIFY POTENTIAL DRIVERS AND BARRIERS FOR SEZS UNDER CHINA PAKISTAN ECONOMIC CORRIDOR

Submitted by

# Saira Naeem

(NUST2016MSU&RP00000172674)

has been accepted towards the partial fulfilment of the requirements for the degree of Masters of Science in Urban and Regional Planning

Dr. Abdul Waheed
Supervisor
Department of Urban and Regional Plannin
National Institute of Transportation, SCEE, NUST, Islamabad

## THESIS ACCEPTANCE CERTIFICATE

Certified that final copy of MS thesis written by Mrs. Saira Naeem, Registration No. NUST2016MSU&RP00000172674, of NIT-SCEE has been vetted by undersigned, found complete in all respects as per NUST Statutes / Regulations, is free of plagiarism, errors, and mistakes and is accepted as partial fulfillment for award of MS degree. It is further certified that necessary amendments as pointed out by GEC members of the scholar have also been incorporated in the said thesis.

Signature:
Name of Supervisor: Dr. Abdul Waheed
Date:
Signature (HOD):
Date:
Signature (Dean/Principal):
Date:

### **ABSTRACT**

Modern-day special economic zones (SEZs) originated as a result of an export-oriented industrialization strategy. Many countries established these zones to attract foreign direct investment and to generate employment. These zones have been used as a tool to experiment policies and have played a major role in the development of various economies like China and Philippines. Where there are many successful SEZ many have failed to achieve their objectives. International literature covers a lot of aspects of failure and success of SEZ but no detailed study has been carried out on the EPZ of Pakistan to identify the issues faced by these zones and loopholes in the policy of Pakistan towards SEZs. Pakistan is opening several SEZs at various locations under CPEC- a joint venture between China and Pakistan. This study's aim is to explore and explain the drivers and barriers for the success of special economic zones in the context of Pakistan. A mix method approach is used to understand the drivers and barriers. A questionnaire comprised of drivers and barriers was filled by 68 respondents. The result shows that Incentives, Government Support Mechanism, and Infrastructure are among the top-ranked drivers with poor backward linkages as a major barrier in the success of the SEZs. Further to validate the results of the questionnaire, 21 in-depth interviews were conducted from academicians, industrialists, specialists, and policymakers. Apart from the drivers mentioned in literature and quantitative survey, interviewees presented new dimension of focus on SMEs and Public-Private partnerships. They believe joint ventures between Pakistan and Chinese firms will bring more opportunities for innovation and technology transfer. This study also provided few gaps, such as identifying missing linkages in global value chains and focusing individual SEZs for policymaking may be looked by future researchers. Further, time and resources did not allow researcher to contact more people who were involved in EPZs and might have given a more in-depth insight into the issues faced.

# **DEDICATION**

To My

# "Father"

Dr. Muhammad Nawaz (T.I)

Whose persistence made me do what I never believed, I could!!!

### **ACKNOWLEDGMENTS**

Firstly – All Praises are for the Almighty who provided everything that was required to fulfill this task. I would like to thank my respected supervisor Dr. Abdul Waheed, for his guidance, encouragement and advice throughout the research phase and for accommodated all the issues that came along the way. I also want to thank my teachers Dr. Asghar Naeem and Dr. Irfan Rana for their support.

I must express my gratitude for my entire family without whom this master's degree would have remained a dream. My parents who pushed me into doing masters and then throughout the entire time kept on pushing me to complete the degree on time. My husband who had been my mentor, teacher, and driver throughout these years, and along with this he had to bear all my rantings and whining. My mother in law who was always there as big support and especially took care of my kids when I was away for hours and I knew they were in the best hands and I could focus on my work. My four kids who I couldn't give enough quality time during the MS, but they were always supportive and understanding.

# **Table of Content**

Abstract	ii
Dedication	v
Acknowledgment	vi
List of Acronyms	x
List of Tables	xii
List of Figures	xiii
Chapter 1	1
Introduction	
1.1 Background	
1.2 Problem Identification	
1.3 Research Objectives	
1.4 Scope of the Study	
1.5 Significance of the Research	4
1.6 Structure of the Thesis	4
CHAPTER 2	5
LITERATURE REVIEW	5
2.1 Industrial Development Strategies of the 1900s	5
2.1.1 Primary commodity trade	
2.1.2 Import Substitution Industrialization	6
2.1.3 Export Oriented Development	7
2.2 Changes in Industrial Trends	8
2.3 Role of Industries and Foreign Direct Investment (FDI) In Development	8
2.4 Export-Oriented Development and Special Economic Zones:	10
2.5 Special Economic Zones (SEZ)	10
2.6 Early Development / Evolution of SEZs	11
2.7 Economic zones and stages of competitive development	12
2.8 China's Model of SEZs	14

2.8 SEZs as a Policy Tool:	16
2.9 Key Factor for Success of SEZs	18
2.10 Reasons for failure of SEZs	20
2.11 Pakistan Economic Development	21
2.12 Pakistan's adventure with EPZs	22
2.13 Pakistan and SEZs under CPEC	23
2.14 Summary of Literature Review	25
CHAPTER3	27
RESEARCH METHODOLOGY	27
3.1 Study Area	27
3.2 Data Collection	28
3.3 Primary Data	28
3.3.1 Questionnaires Surveys	28
3.3.2 Interviews	29
3.3.3 Observation	31
3.4 Sampling size and framework:	31
3.5 Data Analysis Techniques	31
CHAPTER 4	32
Data Analysis and Interpretation of Results	32
4.1 Quantitative Analysis	32
4.1.1 Demographic profile of Sampled Respondents	32
4.2 Descriptive Analysis	33
4.2.1 Connectivity:	34
4.2.2 Infrastructure:	35
4.2.3 Government Support Mechanism (GSM):	37
4.2.4 Forward and Backward Linkages:	39
4.2.5 Regulatory Framework:	40
4.2.6 Incentives:	42

4.2.7 Cross comparison of responses based on occupation
4.3 Barriers
4.3.1 Forward and Backward Linkages
4.3.2 Government Support Mechanism
4.3.3 Regulatory Framework
4.3.4 Zone Management
4.3.5 Levene statistics for barriers
Chapter 5
Qualitative Analysis
5.1 Political Influence
5.2 Vision and objective of SEZ
5.3 Leading way57
5.4 Financial Incentives
5.5 Government Support – Facilitation
5.6 Joint Ventures and PPP
5.7 Large business vs SMEs
5.8 Miscellaneous
Chapter 6:
Conclusion and Recommendation
6.1 Recommendations 69
6.2 Limitations
6.3 Future Research
references

### LIST OF ACRONYMS

BOA Board of Approval

BOI Board of investment

CoE-CPEC Center of Excellence- China-Pakistan Economic Corridor

CPEC China-Pakistan Economic Corridor

EPZ Export Processing Zone

EPZA Export Processing Zone Authority

FCCI Faisalabad Chamber of Commerce and Industries

FDI Foreign Direct Investment

FISDM Faisalabad Industrial State Development and Management

Company

FTZ Free Trade Zone

GDP Gross domestic product

GSM Government Support Mechanisms

GVC Global Value Chain

ISI Import-substitution industrialization

KEPZ Karachi Export Processing Zone

KPI Key performance Index

MOI&P Ministry of Industries & Production

OBOR One Belt One Road

PPP Public Private Partnership

RFW Regulatory Framework

SAP Structural Adjustment Program

SDG Sustainable Development Goals

SDPI Sustainable Development Policy Institute

SEZ Special Economic Zone

SME Small-to-Medium Enterprise

UN United Nations

UNCTAD United Nations Conference on Trade and Development

# LIST OF TABLES

Table 1: Exports from EPZ (figure in Million US Dollar)	23
Table 2: Proposed SEZs	24
Table 3: EPZ vs SEZ in Pakistan	25
Table 4: Informants' Profile	30
Table 5 Frequency Distribution	33
Table 6: Descriptive Statistics Connectivity	34
Table 7: ANOVA Statistics - Connectivity	35
Table 8: Descriptive Statistics - Infrastructure	36
Table 9: ANOVA Statistics - Infrastructure	36
Table 10: Descriptive Statistics – GSM	37
Table 11: ANOVA Statistics - GSM	39
Table 12: Descriptive Statistics – Linkages	40
Table 13: ANOVA Statistics – Linkages	40
Table 14: Descriptive Statistics – Regulatory Framework	41
Table 15: ANOVA Statistics - RFW	41
Table 16: Descriptive Statistics – Incentives	42
Table 17: ANOVA Statistics - Incentives	43
Table 18: Crosstab Occupation x Income Tax Concession	45
Table 19: Crosstab Occupation x Exemption on Dividends	46
Table 20: Crosstab Occupation x Concession on income tax of foreign technicians	47
Table 21: Crosstab Occupation x Cash Subsidy	48
Table 22: Crosstab Occupation x Industry-Specific cash Subsidy	49
Table 23: Descriptive Statistics – Barriers (Linkages)	50
Table 24: Descriptive Statistics – Barriers (GSM)	51
Table 25: Descriptive Statistics – Barrier (RFW)	52
Table 26: Descriptive Statistics – Barrier (Zone Management)	53
Table 27: Levene statistics for barriers	54
Table 28: Summary of Results	54

# LIST OF FIGURES

Figure 1: Historical trend in SEZs	12
Figure 2: stages of competitive development	13
Figure 3: Main elements in regulatory framework of SEZ	19
Figure 4: Ranked mean of the Drivers	44
Figure 5: Ranked mean of the Barriers	54

### CHAPTER 1

### Introduction

### 1.1 Background

Economic zones have played a pivotal role in boosting economies of developing countries across the globe. Dating back to 14<sup>th</sup> and 15<sup>th</sup>century these zones have been used as an instrument to trigger exports and attract investment. These zones are concentrated in central Asia, Latin America, Africa and eastern and central Europe (Farole & Akinci, 2011). Economic zones are set up as a catalyst to trigger industrial activities in a region and to attract foreign direct investment (FDI), mainly in the manufacturing sector to increase exports and generate employment (Zeng, 2015). If implemented properly these zones have a far-reaching effect and contribute to regional development by creating forward and backward linkages, capacity building of the local workforce, infrastructure development and technology transfer (Ahrens & Meyer-Baudeck, 1995; Alkon, 2018; Zeng, 2012). Where many countries have benefited from these zones, it hasn't been a success story for all. For instance African countries and India are still struggling in achieving the desired output and growth (Alkon, 2018; Bräutigam & Xiaoyang, 2011; Cowaloosur, 2014; Levien, 2012).

Special economic zone is a geographically delimited area, often secured at its boundaries where policies are experimented. The first successful special economic zone was set up in Shenzhen in 1980 when China decided to restructure its economy from socialist to capitalist. This SEZ was remarkably successful and in a matter of 30 years it converted from a small fishery village into "the fastest" growing city of the world. China owes its economic development to the special economic zones and clusters which converted her from agriculture to industry-based economy. Many countries replicated the Chinese model of the SEZ to achieve the same economic prosperity, but the output was different at every location. This confirmed the hypothesis that there is no perfect formula for the success of a special economic zone but there are prerequisites for functioning of an SEZ. These include good connectivity to ports, airports, stations, on and off-site, infrastructure, and availability of cheap labor. The investor seeks to invest in an area that has political stability, offer s tax subsidies and incentives either fiscal, commercial or both. Last but not least there should be a development strategy that is aligned with the country's development objectives but at the same time is based on market demand and is free from political influence.

In Pakistan, 75 industrial states have been established (Mahmood, 2018). A few among these were successful while others failed to provide potential benefits due to factors like connectivity issues, lack of skilled labor and insufficient infrastructure. Currently there are 8 SEZ/EPZ in Pakistan namely in Karachi, Risalpur, Sialkot, Gujranwala, Rashkai, Gadoon, and Hathar. Despite all these SEZ Pakistan has experienced a very slow growth rate of 0.4% in 2008-09 to 4.1% in 2014-15 and 5.3% in 2017. Pakistan has a potential of annual growth rate of 7.5%-8% but is failing to achieve it because of its inherent structural weakness.

However, a potential game-changer China Pakistan Economic Corridor (CPEC) might provide the financial boost to strengthen infrastructural capabilities. Among many proposed projects are nine SEZs that have been proposed throughout Pakistan under CPEC. These SEZs can prove to be game-changer for Pakistan's industrial growth; however careful planning, focusing on best practices and avoiding the mistakes previously made can help to achieve potential growth. Therefore, this study aims to identify the drivers and barriers for successful implementation of SEZs. Assessing current policies and practices adopted for CPEC and matching them with successful SEZs across the world will help in proposing a strategy for SEZs that can be used as a catalyst for industrial development by minimizing the chances of failure and make them more successful.

### 1.2 Problem Identification

There is no perfect formula for the success of SEZs but there are essential prerequisites to achieve that. These prerequisites include good infrastructure, connectivity to major markets and ports, availability of labor, tax subsidies and the political will of the government. To overcome the infrastructural and connectivity gap many projects have been initiated under which are meeting their targeted goals. After laying the basic infrastructure comes the most important part of setting up SEZs across the country. These SEZs are the backbone of this corridor project which would trigger the economic activity in Pakistan and increase trade with the neighboring countries. Not only this it would at the same time generates employment opportunities and strengthens the forward and backward linkages. But for this all to materialize and give the desired outcomes a development strategy for each SEZ is required as every location of these zones has a different set of barriers and strengths. Locational advantages vary from being resource-rich land, availability of highly qualified labor, infertile land ideal for industrial use to strong industrial backing from

surrounding areas. Locational disadvantages include factors like lack or incompetent labor, lack of economic activities that need to be triggered, insufficient off-site infrastructure, etc.

In the case of Pakistan, locational advantages/disadvantages differ greatly from region to region. And the vision behind the development of economic zone in these regions is different as well. For instance, Faisalabad is an industrial city with well-developed infrastructure and the vision behind the SEZ is to increase trade and promotion of investment. Whereas, Rashakai is a newly developed region with very small number of local populations. The need is to develop the surrounding region and increase employment. Therefore, each SEZ requires a strategy to accomplish the vision. The strategy would attract local and foreign investment. To attract FDI something new needs to be offered which is not present in other economic zones. This something new comes from the regional context. The need of the time is to develop strategies for these zones which would meet the vision of these zones and offer benefits to the regions by attracting FDI promoting industrial development and minimizing the possible negative impact which comes with the development of these zones.

The success of SEZs depends on the policies and strategies formulated especially for a specific SEZ. CPEC authorities have approved 9 SEZs under CPEC project and the location of each SEZ brings different challenges to deal with. It is, therefore, utmost important to understand dynamics of each SEZ and a different strategy be made for successful implementation of each SEZ.

### 1.3 Research Objectives

- To identify factors for successful implementation of SEZs
- To identify barriers in the successful implementation of SEZs
- To rank drivers and barriers according to their importance.
- To understand the perspective of different stakeholders on SEZ
- To propose a strategy for the successful implementation of SEZ.

### 1.4 Scope of the Study

There are 9 special economic zones proposed under CPEC. Each zone requires a separate strategy for its development as each has its own constraints and strengths, thus require different agendas for development. Time and resources don't allow such vast research in a single study. Therefore, the scope of the study is limited to Faisalabad-M3 SEZ.

### 1.5 Significance of the Research

SEZs will contribute to urban and regional development. Currently, CPEC is being considered as the most important thing happening to Pakistan. In CPEC Center of Excellence (CPEC-CoE), focus of research is on various issues including SEZs development, their potential impact on industry and understanding factors critical for the success of SEZs. Therefore, this topic will help in identifying critical factors, strategies and best practices that can prove to be beneficial for successful implementation of SEZs.

### 1.6 Structure of the Thesis

The thesis write-up is divided into five chapters:

- 1. Chapter 1: This chapter covers the general introduction of research topic, background, problem statement, research questions, significance, objectives, and limitations of the study.
- 2. Chapter 2: This chapter covers in detail the literature from different reports and research papers that is available in special economic zones. The evolution of the zones, their contribution in the development of underdeveloped countries and socio-economic impact as has been discussed in order to identify the factors that act as a driver or barrier in the success of these zones.
- 3. Chapter 3: This chapter covers the overview of research methodology to carry out the research. The chapter presents the sample size, sampling framework, methods of data collection and techniques to analyze the data
- 4. Chapter 4: This chapter comprises of data analysis and interpretation of results and ranking in order of priority according to different stakeholders through quantitative analysis. Comparative analysis of the differences of opinion between academecians, industrialists, policy makers and zone developers is also conducted through Levene's test.
- 5. Chapter 5: Qualitative analysis of interviews through thematic analysis to identify factors influencing the success and failure of special economic zones.
- 6. Chapter 6: in this chapter, the conclusion is drawn from the theoretical results derived in the previous chapter. The results are integrated with the existing literature.
- 7. References: in APA style, it has a list of all references
- 8. Appendix: Questionnaire is attached in this section.

### **CHAPTER 2**

### LITERATURE REVIEW

### 2.1 Industrial Development Strategies of the 1900s

At the time of the Second World War, multiple present-day countries were under colonial rule. Britain, France, Germany, and Russia were the main empires controlling massive areas of South Africa, Asia, Europe, and South America. At the end of Second World War, owing to the economic conditions of the empires and the dynamically changing world views, these colonies were gradually declared independent. This surfaced new problems for the neo developed entities. Hundreds of years of colonial rule over these countries had stagnated their economic development as the conditions under which an economy flourishes were severely lacking (Lee, 2018). Excolonies were mostly in the southern hemisphere, these were agricultural areas and rich in raw materials like coal, gas, oil, minerals and even gold. While on the other hand developed countries were the old masters in the Northern hemisphere; who had taken full advantage of the raw materials from their colonies and established themselves as industrial states, with urbanization, modernization and focus on issues unheard of in the developing countries (Rodney, 1972). In 1940s, 50s and 60s when the countries were gaining political independence a new form of imperialism was emerging in which these 'underdeveloped countries' would be dominated by global economies.

### 2.1.1 Primary commodity trade

"In a way, underdevelopment is a paradox. Many parts of the world that are naturally rich are actually poor and parts that are not so well off in wealth of soil and sub-soil are enjoying the highest standards of living" (Rodney, 1972).

In the words of Walter Rodney from his book "How Europe Underdeveloped Africa" has our modern-day paradox which has its roots in colonialism. Colonies contributed to the development

and industrialization of Europe, France, the United States, and Great Britain by providing raw material and labor. Primary commodity trade (trade of agriculture products and mineral resources) was continued by these ex-colonies. The raw materials exported were far cheaper and subject to violent swings in demand and reduced purchasing power as compared to the finished goods imported (Landsberg, 1979). As these countries were dependent on imports of manufactured goods, despite lacking sufficient foreign exchange to maintain the level of growth and consumption, thus they were indebted (Bruton, 1998). And an unbridgeable gulf of economies was created, rich became richer, and poor became poorer (Betts, 2012)

### 2.1.2 Import Substitution Industrialization

Various studies show that countries in the South, whose economic activities are dominated by agriculture produce and export of raw material, have lower GDP per capita, and fall under low-income countries, whereas industrialized countries in the North associated with exports of manufactured goods have higher GDP and better social conditions (Maddison, 1983). To change the structure of the economy from agrarian to industrial in developing countries, economists and international organizations concerned with development in the 1950s' and 60s recommended import-substitution (ISI) as a model for development. Many developing countries (including Mexico, Brazil, Argentina, Bolivia, Pakistan, India, Philippines, Indonesia, Kenya, etc.) adopted this strategy while 4, namely, Singapore, Taiwan, Hong Kong, and South Korea adopted exportoriented approach (Edwards, 1993). The goal was to produce locally, increase industrialization and to stop the imports of finished products (Landsberg, 1979). It was the first trade strategy devised for economic development to bridge the rising gap of world economies.

Import substitution failed to produce the desired outcomes as it was strongly inward-oriented approach of development (Edwards, 1993). This strategy initially produced jobs in the local market and supported the local industries but healthy competition with foreign goods was nonexistent. As the countries began to industrialize the need to import raw material, machinery, spare parts that were not available locally increased. ISI was biased against exports, and the policies to decrease imports ended up in increasing the domestic prices of goods. An environment was created that discouraged learning, innovation, and growth because the local industries were not exposed to internationally competitive industries. The developing world ended up being more indebted to the developed world. Although. Domestic aggregation of supplies leads to inflation of economy and

trade was also affected. Therefore, import substitution was given up for export-oriented approach in late 1960s to early 1970s (Landsberg, 1979).

### 2.1.3 Export Oriented Development

As previously mentioned, four countries already opted for the export-oriented approach from the beginning; however, the rest of the countries adopted it after facing failure in ISI. The objective behind export-led development was to export manufactured goods instead of primary commodities to the developed capitalist countries. This would help the countries in industrialization, earn them foreign exchange, generate employment and trigger domestic capitalistic development (Landsberg, 1979). As a result of this shift towards production of manufactures for export, the share of exports of the developing countries increased from 21% in 1967 to 27% in 1971 to 40% in 1976. The success of export-oriented development was due to the growth of labor-intensive manufacturing industry (like electronics, clothing, shoes) mass production, new technological innovation in transportation, communication and international subcontracting by the industrialized countries like U.S, Germany etc. (Song, 2012) Through international sub-contracting multinational corporations established low cost production centers in developing countries to provide cheap exports to developed capitalistic countries. The availability of cheap labor in developing countries is the main attraction for these multi-national companies. Under-developed host country benefits through technology transfer and employment generation through this process of industrialization (Zeng, 2015).

The underdeveloped countries have benefitted from export-led policies by triggering the process of industrialization and improving there GDP. However, this approach obstructs the growth of internally articulated, self-expanding economy (Landsberg, 1979). The self-expanding economy responds to the need of majority of population through convergence of needs, domestic demand, investment, and resource use. And creates new consumption and production cycles by creating new demands and needs. But in the export-oriented development the peasant and working-class can't put their needs into effective demand due to inability to afford the local produce. The middle and upper class prefer imported goods over local produce; therefore the local production is targeted for export.

### **2.2** Changes in Industrial Trends

Industrialization began in Great Britain in early eighteenth century, followed by European countries United states and reached Germany, Russia, Japan respectively by the end of nineteenth century (Pollard, 1990). Apart from Argentine, Brazil, and South-Africa, industrialization bypassed the developing countries. The developing world joined the race in the post-war period. Technological advancement in transport, infrastructure and communication had expanded the opportunities of trade. Primary commodities were exported from the developing countries to the developed countries and the finished manufactured goods were then exported back to the developing countries. Industrialization became the engine of growth and development of the now developed world (Szirmai, 2012).

After World War 2, the manufacturing sector slowly started shifting to the developing world, as the 'Fordism' took over the developed countries in the '60s and '70s. "Fordism broke down what had been an extremely rigid technology, and an equally rigid organization of the labor process, into its component parts, in order to reassemble it according to the principles of its own rationality" (Clarke, 1990). This led to standardization of products and employment of assembly lines and mass productions. However, soon it was realized that different countries had different competencies and different subparts can be imported from there. Such modular approach soon combined with rise of communication technology and led to global value chain. One product encompassed parts from different parts of world, each specializing in that very particular part and raw material. By the year 2005, the share of advanced economies in manufacturing had decreased to 17% from 31% in 1945 as a result of deindustrialization in these countries (Szirmai, 2012). The manufacturing sector was shifted to developing countries whereas the developed countries had moved towards service industry.

### 2.3 Role of Industries and Foreign Direct Investment (FDI) In Development

In the past 200 years, all the countries that gained economic growth and development were through industrialization (Murphy, Shleifer, & Vishny, 1989). There are no important examples of success in economic development in developing countries since 1950, which have not been driven by industrialization. All the Asian success stories are stories of industrialization. Neither tourism, nor primary exports, nor services have played a similar role, except for software services in India since 2000 (Bruton, 1998; Szirmai, 2012). According to Szirmai the reasons for economic development in comparison to agriculture are as follows:

- The productivity of manufacturing sector is higher than of agriculture
- Manufacture sector contributes to capital accumulation. Capital intensity is high in mining, manufacturing, utilities, and transport, whereas it is much lower in agriculture and services
- The transfer of resources from manufacturing to services provides a structural change burden in the form of Baumol's disease. As the share of the service sector increases, aggregate per capita growth will tend to slow down.
- Manufacturing sector offers special opportunities for economies of scale, which are less available in agriculture or services.
- The manufacturing sector offers special opportunities for both embodied and disembodied technological progress (Cornwall, 1977). Technological advance originates in the manufacturing sector and diffuses from there to other economic sectors such as the service sector.
- Linkage and spillover effects (Szirmai, 2012)

In the past, the National government would control the entire economy but with globalization, regions have become more important than the entire economy. Regions prosper and create a catalytic trickle-down effect to boost up the surrounding region and have a far-reaching effect e.g. Shenzhen. Traditionally National policies were devised to support the local dying industries which in the long run proves less beneficial for the people as by supporting weak and unproductive industries the manufacturing cost increases and the product is sold at a higher rate in the market. Whereas, same could be provided to the people at a much cheaper cost by promoting FDI. The foreign direct investment would also create job opportunities and improve the living standard of people (Ohmae, 1993). This model which flourished because of globalization gave rise to foreign direct investment in underdeveloped countries which had local regional advantages like surplus cheap labor, availability of cheap raw material and easy laws regarding industrialization and environmental protection. FDI promotes industrialization and upgrades the economy by creating backward and forward linkages (Wang, 2013; Yao, 2006). China is a prime example of industrialization and development through FDI. China adopted foreign technology and international business practices through FDI and gained remarkable economic growth in the past quarter-century (Wang, 2013).

### 2.4 Export-Oriented Development and Special Economic Zones:

There are two ways of opening the economy for the international market, first is liberalization of market. In market liberalization, government control over the market is loosened or removed to attract private companies to invest (Ahrens & Meyer-Baudeck, 1995). Second is to open SEZ to attract multinational cooperation to come open industries in these confined zones, use the local raw material, cheap labor along with tax rebates/ exemptions and other incentives offered by the state to speed up the pace of industrialization in the country. Special economic zones have been used by various countries to experiment with the policies to create favorable environment for industrializations. The state's policies are not applicable inside the zones. Hence developing countries offer its cheap labor and raw material to private industries at the same time protecting them from the structural weaknesses like deficient market-oriented institutions, lack of horizontal and vertical mechanism for coordination and conflict resolution, financial system backwardness, distorted industrial structure and political upheavals (Ahrens & Meyer-Baudeck, 1995). The inherent structure and incentives offered attract foreign investment, and industrialization is set off. The host country benefits from the FDI, employment opportunities, increased trade and exports. The policies inside the zones differ from one another. Some zones are specifically export-oriented and all the manufactured goods are exported, others allow a set percentage of manufactured goods to flow in the local economy and rest is exported. These exports increase the foreign reserves of the host state. In the long run, forward and backward linkages are strengthened, and industrial technology is transferred.

### 2.5 Special Economic Zones (SEZ)

Special economic zones have been operationalized in diverse ways around the world and different terminologies have been used for these zones. In Costa Rica, Mexico, Panama these zones are known as Maquiladoras, Ireland, UAE, Venezuela uses the term Free zones, and Special economic zone in China and India (Armas et al., 2007). Neveling says that Export processing zones were initially known as Free trade zones, then came to be known as export processing zone and are now known as special economic zones (Neveling, 2015). Over time these enclaves have evolved and purpose of establishing them has differed depending upon the need of the host economy. These zones are established mainly to fulfill one or more of the following purposes

- (i) Attracting foreign direct investment (FDI);
- (ii) Serving as "pressure valves" to alleviate large-scale unemployment;

- (iii) Supporting a wider economic reform strategy; and
- (iv) Acting as experimental laboratories for the application of new policies and approaches. (Farole, 2011)

According to Zeng Douglas, a senior economist at the Financial and Private Sector Development Department of the Africa Region, World Bank, "The term "special economic zones" (SEZs) covers a broad range of zones, such as free-trade zones, export-processing zones, industrial parks, economic and technology-development zones, high-tech zones, science and technology parks, free ports, enterprise zones, and others." (Zeng, 2016)

In this paper we will use the definition issued by Board of Investment (BOI) according to which "Special Economic Zone (SEZ) is a blanket term for various types of specialized zones with specific types of enterprises operating in a well-defined geographic area where certain economic activities are promoted by a set of policy measures that are not generally applicable to the rest of the country"

### 2.6 Early Development / Evolution of SEZs

The existence of Free zone can be traced back to the Roman era. They were found in the port cities of the roman empire to provide facilities of storage and trans-shipment of goods for the trade. Free ports have been used to promote entrepot trade in 18<sup>th</sup> century in Gibraltar, Singapore, Hong Kong, Hamburg, and Copenhagen as no taxes were applied on the transshipment (Farole & Akinci, 2011).

The first modern-day like special economic zone was established in 1947 in Puerto Rico as a result of U.S tax incentive program on this island as an attempt of decolonizing its last of the colony (Neveling, 2015). Here ten years tax exemption was offered on production along with cheap lease of industrial plots and cheap labor. These incentives gave boom to industrialization which led to increased employment, exports, and foreign trade investment (Dietz, 2019). Puerto Rico became a development model for third world countries through its 'export-oriented policies'. It wasn't created as an economic zone but the policies implemented to curb communism in Puerto Rico and move it towards capitalism became the foundation stone of an economic zone (Neveling, 2015).

The first export processing zone (EPZ) was established in 1959 in Shannon, Ireland. In the 1960s many experimental such zones were made in various countries like India, Singapore, Taiwan, Iceland, etc. (Pakdeenurit, Suthikarnnarunai, & Rattanawong, 2014). 1970s saw a global spread of these zones. Attributing to the success of these zones in increasing industrialization, exports, and

employment. World bank in 1980s added the condition of establishing EPZ/SEZ for all the countries that were indebted to world bank in its structural adjustment program(SAP) (Neveling, 2015). As a result of the condition applied by world bank the total number of SEZ increased from 79 in 1975 to 197 in 1986 and in 1997 they rose to 845 in number (Angko, 2016). According to UNCTD annual report 2019 there are approximately 5400 SEZs in 147 economies of the world.

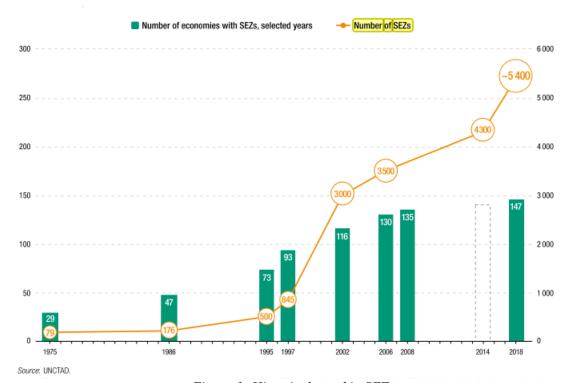


Figure 1: Historical trend in SEZs

Half of these SEZs are China whereas other economies hosting high number of SEZ include India, the United States, and Philippines.

### 2.7 Economic zones and stages of competitive development

Economic zones are used by countries as a strategy for economic growth and to improve a location's competitiveness at the local, regional and national levels. By increasing the competitiveness, productivity increases. There are four stages of national competitive development, factor drive, investment-driven, innovation-driven and wealth driven (Porter, 1990). In the first three stages the economy of the nation is continuously upgrading itself, and on reaching the fourth level the decline starts as to sustain productivity growth continuous upgradation is required (Porter, 1990). In the first stage the countries benefit from primary mode of productions like natural resources, agriculture and inexpensive semi-skilled labor. At this stage an economy usually exports raw material to developed countries and invest in industrial parks. In

the second stage namely investment-driven, the national competitive advantage is based on a country's ability to attract FDI. In this a country invest in infrastructure development, creates a business-friendly environment and regulatory framework and offers attractive investment incentives to foreign multinational companies. During the transition from stage 1 to 2 the country established special economic zones to achieve rapid economic growth. When the transition is complete the country's priority is to move towards innovation and sustainability in order to efficiently compete in knowledge economy (UNIDO, 2015). This is the stage when a country develops eco-industrial Park for higher stages of economic development. In the transition stage towards innovation technology parks are established to compete in the knowledge economy. When an economy reaches stage 3 which is innovation-driven, the prime aim is to produce new knowledge. In this stage sustainability is the main driver to their success. Such economies have innovation districts, technology parks and eco-industrial parks (e.g. Singapore, Switzerland, and united states) (UNIDO, 2015). The stages of national competitions and their relation to various types of economic zones are shown in figure 2.



Figure 2: stages of competitive development

The role of the government in this whole process is as a catalyst and enabler by encouraging companies to raise their aspirations and increase their levels of competitive performance (Porter, 1990). An SEZ or FTZ has its own life cycle. As production costs or the costs of doing business increase, zones need to be more innovative to move up the global value chains. Most economies start with relatively low-tech and labor-intensive sectors, and then gradually move towards highered of the value chains and more knowledge-intensive service sectors. However, this is not an

easy process. Making a successful transition requires skillful leveraging of both market forces and governmental support' (Douglas, 2016)

### 2.8 China's Model of SEZs

China industrialized in three decades and accomplished what took the west three centuries. It went through three main stages as did all other industrialized states in the previous centuries, namely: proto-industrialization(1978-1988), first industrial revolution(1988-1998) and second industrial revolution(1998-present) (Wen, 2016). In the first stage millions of rural enterprises sprouted in the vast countryside of China. In the second stage, it focused on the mass production of labor-intensive light consumer goods throughout China. The output from the rural areas increased by 28 percent every year from 1978-2000. The second industrial revolution in China saw the mass production of the means of mass productions. The unmatched growth in China was the result of Special economic zones that were set up in 1970s, correct development strategies and industrial policies (Wen, 2016). Today China hosts over half of the SEZs of the world (UNCTAD, 2019).

Major factors for success and lessons learned from SEZ in China according to Douglas Zhihua Zeng (a senior economist at the Financial and Private Sector Development Department of the Africa Region, World Bank) are as follows:

- Strong commitment to reform and pragmatism from top leadership: china has a unique
  culture and political system, so instead of implementing ready-made models China
  experimented its own way toward market economy under the committed top leadership
  who were determined to bring a gradual change in the economy.
- Preferential policies: incentives were given to attract firms into these zones like tax break, inexpensive land duty-free imports, etc. Policies were also devised to attract skilled labor, such policies included provision of housing, research funding, etc.
- Institutional autonomy: SEZ had its own legislative authority to develop municipal laws and regulations in accordance with national laws and regulations including local tax rate and structure and to govern and administer these zones. This gave SEZ the freedom to make new policies that would vitalize the economy. Some of the examples of experimentation with new policies in China are: Companies inside the zones could dismiss unqualified and underperforming staff and adjust wages and compensation rates to reflect market situation. Wage reform was introduced in which compensation

was based on 3 elements: base pay, occupational pay and variable allowance. Minimum wage and insurance packages were also adopted. These were new measures for China. In Shenzhen the system of government approval within 24 hours was introduced to improve administrative efficiency. And Tianjin Economic-Technological Development Area (TEDA) invited renowned universities to establish campuses in the zone to conduct vocational education and industry-related research.

- Strong Support and Proactive Participation of Government: Central government decentralized its power for a conducive legal and policy environment for the SEZs and local governments created a sound business environment by putting in place an efficient regulatory and administrative system and good infrastructure such as roads, water, electricity, gas, sewerage, telephone, and ports. In the case of Kunshan, all infrastructure was laid by local government on self-finance basis. Local government provided various business services to many SEZs like accounting, legal, business planning, marketing, import-export assistance, skill training, and management consultation.
- The SEZ governments made timely adjustments to relevant policies and regulations based on business needs and market conditions, as well as on the development stage. After the zones were successful, the governments began to put more emphasis on the technology-intensive or high–value-added sector. They modified their FDI policies to create a level playing field for both foreign and domestic firms.
- Land reforms: In China, all land belongs to the state but in 1981 *Provisional Regulations of Land Control in the Shenzhen SEZ* was passed which allowed investors to apply to the SEZ authorities for a Land Use Certificate, which was good between 20-50 years depending on the sector and type of activity. In addition, land use fees were charged within SEZ from us 2-6\$/sqm/year for industrial land and 15-42\$/sqm/year for commercial land. These fees provided initial finance for infrastructure development. For land transferring, 'open competition' system was set up, and land was auctioned. This brought revenues, efficiency, and transparency to land management system. Negotiation based land transfer system was banned in Shenzhen. Shenzhen SEZ also led China in adopting the Western concept and practice of land use planning and zoning system to meet market needs. For that a

land-use master plan was developed which was legally enforced and politicians were prohibited from altering it.

- One-stop-shop was established to process all government established a One-Stop-Shop to process all land transactions and development procedures in one location.
- Foreign Direct Investment and the Chinese Diaspora were invited to invest in these zones.
- Technology Learning, Innovation, Upgrading, and Strong Links with the Domestic Economy were established.
- Innovative Cultures were promoted.
- Clear Objectives, Benchmarks, and Intense Competition were set.
- Location Advantages.

The Chinese experience with special economic zones has been very successful in terms of economic development and GDP growth but at the same time, it had its shortcomings which can't be overlooked for the adverse effect it has on society. In its rapid industrialization process, environmental pollution has been overlooked. According to world bank the environmental cost of pollution in China is between 3.5-8 percent of the GDP (World Bank, 2007). Chinese government is addressing this issue with establishing low carbon pilot program in 13 Chinese provinces and cities by adopting tougher environmental standards (Zeng, 2015). Secondly a misbalance between industrial development and social dimension has been created. The western Chinese provinces are far less developed than their eastern counterparts where most of the economic zones are located. The western regions lack basic social and urban services and stark difference between the rich and the poor is created.

### 2.8 SEZs as a Policy Tool:

Special economic zones are 'special' as the features offered inside the zone are quite different from that outside the zone. In these zones more liberal regulatory regime prevails regarding labor, land use and FDI. One-stop service is offered which makes the process of registration and licensing hassle-free for the investors. Incentives and subsidies offered inside the zone make these zones more attractive to the investor. The availability of basic reliable infrastructure like, gas, electricity, water, roads, railway, and transit which is mostly not available to the underdeveloped domestic economy makes these zones 'special' at multiple levels and attracts local and international industries (Zeng, 2016).

The zones are used for experimenting different policies. Many countries like China and Mauritius have used these zones to shift its developmental policies from inward-looking to export-led (Farole, 2010). These zones in the initial stage of transformation offer the foreign investor a protected environment to operate and the government time for testing various reforms (Farole, 2010). The objectives for the zone development include different motives like SME development, foreign exchange, economic diversification, investment and trade, foreign currency accumulation sector development, regional development, job creation and industrialization (COMCEC, 2017a; Flynn, 2015). Zones serve as a policy means in facilitating trade and financial liberalization, enhancing resource utilization, and promoting economic growth and structural changes (Ge, 1999a). These policies must be aligned with country's development objective and should meet the market demand for a zone to be successful (Ackermann et al., 2012). Economies in east and south East-Asia that were focused on using zones as an industrial policy tool by focusing on development of specific industries and value chain components and relied on factors like production, market linkages, skill and technology have unlocked the potential of zones in a catalytic manner and have contributed more to the national economic development (Farole, 2010; UNCTAD, 2019). Whereas economies who have followed multi-activity approach without promoting any specializations and clustering inside the zones ended up turning the zones into mere investment promotion tools. Such zone failed to develop linkages with the local economy and were only enclaves with incentives in limited geographical areas (UNCTAD, 2019). Thomas Farole, a Lead economist in the World Bank's Social Protection and Jobs Global Practice states:

"Policies to promote links between SEZs and the domestic economy are the key to realizing the dynamic potential of zones. Countries that have been successful in deriving long-term economic benefits from their SEZ programs have established the conditions for ongoing exchange between the domestic economy and investors based on the zones. This includes investment by domestic firms into the zones, forward and backward linkages, business support, and the seamless movement of skilled labor and entrepreneurs between the zones and the domestic economy. From a policy perspective, this suggests shifting from the EPZ model to an SEZ model that eliminates legal restrictions on forward and backward linkages and domestic participation. But it will also require implementation of much broader policies beyond the scope of the SEZ program,

including: 1)promoting skills development, training, and knowledge sharing; 2) promoting industry clusters and targeting linkages with zone-based firms at the cluster level; 3) supporting the integration of regional value chains; 4) supporting public-private institutions, both industry-specific and transversal; and 5) ensuring labor markets are free to facilitate skilled labor moving across firms" (Farole, 2010).

Strong and proactive participation of government and adoption of a suitable developmental model through strategic planning and industrial positioning are very important for the success of any SEZ (Ackermann et al., 2012; Ahrens & Meyer-Baudeck, 1995). In Taiwan and South Korea, the government provided technical assistance and encouraged forward and backward linkages through policy intervention. In Mason Free Zone of South Korea, the zone administrators actively promoted inter-linkages between investors and local firms by allowing preferential access to intermediate goods and raw materials to local companies supplying FTZ firms (Zeng, 2015). The Philippines has experienced tremendous economic growth through its eco-zones, which focus on agro-industry, tourism, recreation, commerce, and financial services. Eco-zones' share of national merchandise exports increased from 22 percent in 1995 to 76 percent in 2003, and eco-zones' share of national foreign direct investment increased from 30 percent in 1997 to over 81 percent in 2000 (FIAS, 2008).

### 2.9 Key Factor for Success of SEZs

According to the UNCTAD world investment report 2019, there are three criteria for the success of special economic zones:

- Strategic focus
- Regulatory framework and governance
- The value proposition for investors

*Strategic focus* refers to the country's economic policies towards industrialization and building local value chain and developmental programs for the success of the zones.

Regulatory framework varies from public, private and public-private partnerships (PPP). Various governance models exist and are adopted based on the objectives and the desired strategic focus of the individual SEZ. The legal framework for SEZs originates from the National SEZs laws and custom and other legal frameworks. The study conducted on African SEZ has shown that private sector participation in strategic planning and policy decisions positively affect a zone program and development of public-private institutions should be promoted (Farole, 2010). The main elements in regulatory framework of SEZ are shown in figure 3.



Figure 3: Main elements in regulatory framework of SEZ

The value proposition includes the benefits and incentives offered by the SEZ to the investors inside the zones. These are defined in the SEZ legal framework of every country. These include tax rebates, subsidized services, free tariffs, etc. These incentives are more or less the same across most types of zones (UNCTAD, 2019). Fiscal and non-fiscal incentives along with availability of low-cost unskilled labor play a role in kick-starting a zone program by giving it a comparative advantage but these factors are not sustainable (Farole, 2010; Frick, Rodríguez-Pose, & Wong, 2019). Incentives don't affect SEZ performance rather it is the availability of labor in close proximity, skill straining for the labor and a pre-existing market and industries that plays a vital role in the success of SEZ by supporting clustering and specialization efforts inside the zone (Anwar, 2015; Farole, 2010; Frick et al., 2019; UNCTAD, 2019). The pre-existing market supports domestic investment into zones and creates backward linkages with the local economy.

Other than the key factors for the success of SEZ as discussed above, new challenges are arising for the upcoming SEZ for competitive development. New challenges facing SEZs are:

- Sustainable development imperative
- The new industrial revolution and digital economy
- Changing patterns of international production

Business operations around the world are changing due to sustainable development goals (SDG). These SDG have also impacted SEZs as relaxed environmental and social standards are no longer a competitive advantage to attract investment. Some of the zones are shifting towards sustainable operations like waste management plants, renewable energy installations, and common health and safety services (UNCTAD, 2019). The business operations have also been affected by the new industrial revolution. The companies (esp. reshoring companies) are incorporating digital technologies, advanced robotics, 3-D printing, big data and internet of things in manufacturing processes, services and GVCs. This brings new opportunities and challenges for the new SEZ as the old competitive advantage are being replaced by the new ones. Changing patterns of international production is another factor affecting the SEZ operations as the companies are constantly on the lookout for strategic location for low-cost production sites. The companies are more driven by economic and policy factors than by production advantages (UNCTAD, 2019).

### 2.10 Reasons for failure of SEZs

Johansson and Nilsson (1997) assert that countries that fail to eliminate trade restrictions and fail to adopt export-oriented strategies are less likely to experience positive impacts on exports. For example, the Dominican Republic developed a rationale for SEZs and created what many considered to be successful SEZs with catalyst effects, increased employment and high levels of productivity (Rhee et al., 1990); nevertheless, SEZs in the Dominican Republic did not have a significantly positive impact on exports. The country continued to practice import substitution policies and maintained a series of trade barriers, which stunted the impact of SEZs on exports. SEZs in the Dominican Republic today continue to be largely isolated from the rest of the economy (Carneiro et al., 2015). In 2008, after a 40-year-long record with SEZs, India's SEZ exports represented only 5 percent of overall exports; by contrast, in a short span of time, SEZ exports accounted for nearly one-fifth and one-third of exports in Bangladesh and Sri Lanka, respectively (Aggarwal, et al., 2008) At the time of these findings, India was undertaking a major expansion of

its SEZ policy; nevertheless, recent studies, including a report by the Controller and Auditor General's office in India, continue to highlight the mixed success of India's SEZ policy (CAG, 2014).

One of the main differences between zone programs that have been successful and sustainable and those that have either failed to take off or have become stagnant enclaves is the degree to which they have been integrated into the broader economic policy framework of the country. Successful zones programs do not simply view zones as a static instrument of trade and investment policy. Zones have generally failed to have a catalytic impact in most countries in part because they have been disconnected from wider economic strategies – often zone programs are put in place and then left to operate on their own, with little effort to support domestic investment into the zones, to promote linkages, training, and upgrading. Unlocking the potential of zones requires clear strategic integration of the program along with government playing a leading, active role in potentiating the impact of the zone (Farole, 2010).

### 2.11 Pakistan Economic Development

Before partition, the region that became Pakistan was known as the "breadbasket" of sub-continent (Zaidi, 2005). This region produced agriculture commodities like cotton, jute, and wheat whereas industrial goods were imported from India. Pakistan started its journey from a non-existent industrial base. Pakistan adopted Import-Substitution as its first industrialization and trade policy. In the first decade (1949-58) the growth rate of industry was very high with 23.6% increase in large scale manufacturing. By the end of 1950s Pakistan was producing export surplus. The second decade (1958-68) is known as decade of development. In this era liberal trade policies were adopted along with IS. Import liberalization was adopted to encourage private sector to invest. In 1965 the exports of Pakistan were greater than combined exports of South Korea, Turkey, Thailand and Indonesia. In this period the nature of IS had also changed from wholly consumer goods industry to intermediate and capital goods industry (Ahmed, 1980; Zaidi, 2005).

During this period agriculture was greatly neglected, and the inequalities between the east and the west increased. In the third decade industries were nationalized and in the fourth decade most of the industries were denationalized under Zia's rule. Pakistan went to IMF in 1998 and many times after that. Pakistan's economic reform program since then has capitulated to the requirements of IMF and the World Bank and the governments have failed to come up with an independent economic/industrial development program (Zaidi, 2005).

Pakistan has moved from being an agriculture-based economy when agriculture contributed to 65% in 1950-51 percent to 20% in 2016-17 (40 percent of population is linked with agriculture) towards services which contributes almost 59% is the major driver of economy, whereas manufacturing sector has been overlooked, and its contribution has decreased from 25% in 2011 to 22.8% in 2017("• Pakistan - GDP distribution across economic sectors 2017 | Statista," n.d.).

### 2.12 Pakistan's adventure with EPZs

"EPZs are normally fenced-in estates with strict customs controls and most of the products (normally over 80 percent) produced in these zones must be exported. This model was successful in many countries, such as the Republic of Korea, Taiwan, China, Vietnam, Bangladesh, Mauritius, the Dominican Republic, and El Salvador" (Farole and Akinci, 2011). In 1983-84 first EPZ was set up in Karachi when Pakistan shifted its industrial development strategy from Importsubstitution to export-oriented(Akhtar, 2004) The objective of these zones was to boost exports to increase foreign exchange earnings. Pakistan incorporated the export-oriented industrialization strategy through EPZs later than other Asian countries(Akhtar, 2004). According to World Bank employment data of EPZ in 1990s, Pakistan had only 1 EPZ namely KEPZ and employed 2000 people which were only 0.048 of the total people employed in industrial sector. This was the lowest percentage of employment among the southern Asian countries (Schrank, 2001). Pakistan now has total of 7 EPZ namely, Karachi EPZ(1983), Saindak EPZ(2003), Duddar EPZ(2004), Gujranwala EPZ(2005), Risalpur EPZ(2002), Sialkot EPZ(2005) and Tuwairqi Steel mills Ltd(2005) (Mukhtar, Ain ud din, Zohur ul Islam, & Ramzan, 2013). In addition, there are industrial parks. These industrial parks are independent entities. More than 75 industrial estates have been established in Pakistan (Mahmood, 2018) The most developed among the eight zones are KEPZ. According to an estimate there were 30,000-35000 people employed in these zones in the year 2012(Chairman EPZ Pakistan, 2012). Whereas exports from these zones combined were US\$ 348 Million in 2007-08, which increased to US\$ 500 million in 2009-10 (EPZ, 2010), whereas for the period 2014-2015 exports from EPZA were recorded at US \$ 480.850 million (year book 2014-15, Ministry of Industries & Production (MOI&P)).

Comparative research studies and reports in literature depict that the economic share of EPZs of Pakistan is not much impressive and its economic share in the country lags behind neighboring countries (Mukhtar et al., 2013). In Bangladesh eight zones attracted 412 firms which employed 350,000 people and invested \$2.6 billion(IFC, 2016). In the Dominican Republic the industrial

free zones saw a rise in employment from 500 in 1970 to 200,000 in 2007. The jebel Ali Free Zone in Dubai houses more than 7,000 firms that employ 13 percent of Dubai's total workforce (FIAS, 2008). The results showed the absolute and relative SEZ growth to national growth for the period of 2007–2012. Among the 22 countries, only the zones in Pakistan experienced absolute negative growth rates during the period of analysis (Frick, Rodríguez-Pose, & Wong, 2018). Another study carried out on the SEZs in Pakistan concluded that the major impediments in the growth of SEZs in Pakistan are its law and order situation, political instability, the lack of security, insufficient infrastructure, frequent power failures, and non-availability of skilled labour (Mukhtar et al., 2013)

Table 1: Exports from EPZ (figure in Million US Dollar)

Sr. No	Name of Export	Export during	Cumulative export
S1. NO	Processing Zones	2014-15	since inception
1	Karachi	386.998	4049.456
2	Saindak	88.935	1747.479
3	Duddar	Operation	24.289
		suspended for up-	
		gradation	
4	Risalpur	1.110	13.274
5	Sialkot	0.660	7.580
6	Tuwairqi Steel	3.092	28.947
7	Gujranwala	0.055	0.092
Total		480.850	5871.116

Source:(Schrank, 2001)

### 2.13 Pakistan and SEZs under CPEC

Pakistan's strategic location is of great interest to its neighboring countries (Sahir & Qureshi, 2007). Pakistan is the shortest link between China and Middle East and Baluchistan provides the shortest route from Gwadar to Kashgar with eventual possibility of linking it to Central Asian states. To make the most of this opportunity Pakistan and China begun a joint venture in 2015 to establish the china Pakistan economic corridor also known as CPEC. It is a subproject of china's One Belt One Road (OBOR) which will connect 60 countries of Asia, Europe and Africa to promote economic integration in the region. CPEC is a 3000-kilometers network of road, railways, and pipelines to transport oil and gas from southern Pakistan's Gwadar port to Kashgar city. It will

provide China an alternative and shorter route for its energy imports from the Middle East, thereby reducing shipping costs and transit times. Whereas heavy investment on infrastructure projects will be made in Pakistan which includes roads, railway networks, and energy generation projects which will be fully operational by 2030 (Saqib Irshad, Xin, & Arshad, 2015). The first phase of infrastructure development is in its final stages. Pakistan is entering the second phase of development of growth corridor under CPEC, which includes establishment of 9 SEZ across the country. Details of the nine proposed SEZs are mentioned in the table below

Table 2: Proposed SEZs

S.No	PROJECT	AREA
		(acres)
1	Rashakai economic zone, M-1 Nowshera,	1000
	KPK	
2	China special economic zone dhabeji,	1000
	Sindh	
3	Bostan industrial zone	1000
4	Allama Iqbal industrial city, M-3	3000
	Faisalabad	
5	ICT model industrial zone, Islamabad	200-500
6	Industrial park on Pak steel mills at Port	1500
	Qasim, Karachi	
7	Special economic zone, Mirpur, AJK	1078
8	Mohmand marble city, FATA	-
9	Moqpondass SEZ Gilgit-Baltistan	250

Among the 9 zones mentioned, 5 zones have been prioritized for the first phase of implementation, they are Faisalabad, Rashakai in Khyber-Pakhtunkhwa, Dhabeji in Sindh, Islamabad SEZ and Boston SEZ in Baluchistan (minister of finance, Asad <u>U</u>mer 4<sup>th</sup> Feb'19) The zone proposed under CPEC are slightly different from their previous counterparts in certain aspects as can be seen in the table below

Table 3: EPZ vs SEZ in Pakistan

EPZ	SEZ (act, 2012)
fall under the jurisdiction of the federal	fall under the jurisdiction of the
government	Provincial government
EPZA to act as Secretariat of Board of	BOI to act as Secretariat of Board of
Approvals and Approvals Committee	Approvals and Approvals Committee
No Minimum area	Minimum area requirement =50 acre
	No maximum limit
Purely industrial area	An SEZ shall use 70% of the area for
	purpose of operations of zone
	enterprises, 10% for commercial use
No academic and vocational training	The SEZ shall have appropriate academic
facilities	and vocational training facilities
The domestic market is available to the	Not defined yet
extent of 20%. (exceptions may be	
available under special circumstances)	
Developed land on competitive rates for	
30 years	

#### 2.14 Summary of Literature Review

Modern-day Special economic zones originated as result of export-oriented industrialization strategy. Many countries established these zones to attract foreign direct investment and to generate employment. SEZ has been used as a tool to experiment policies. There are many different types of SEZs. The type of SEZ varies according to different competitive stage of development of host economies, most advanced economies have Eco Park, and innovative districts whereas new transitioning economies have industrial parks and SEZs. SEZs have played a major role in the development of various economies like China and Philippines. Where there are many successful SEZ many SEZs have failed to achieve their objectives. There are many factors that contribute to the success and failure of SEZ. Quality infrastructure, connectivity to local markets, availability of skillful cheap labor, attractive incentives for the investors, government support mechanism to curb the inherent weaknesses in the economy, regulatory

reform and integration of SEZ policy in the country's development policy are the main drivers for the success of SEZ. Modern-day SEZ has newer challenges and expectations for success e.g. innovation, sustainable operation according to SDG and incorporation of digital technology in the business operation like manufacturing, services, GVC, etc. International literature covers a lot of aspects of failure and success of SEZ. They are country-specific case studies and general recommendations available in the World Bank, UNCTAD and FIAS report other than research papers on different SEZ models of different countries. But no detailed study has been carried out on the EPZ of Pakistan to identify the loopholes in the policy of Pakistan towards SEZs.

Pakistan has its share of failed experiments with EPZs. Pakistan's previous industrial policy was import substitution, which is now being shifted to export-oriented. It is in the transitioning stage from factor-driven to investment-driven. In this process it is opening several SEZs at various locations under CPEC- a joint venture between China and Pakistan. There is little literature available on the issues that Pakistan faced with EPZs and reasons behind it failing to generate substantial employment, creating backward and forward linkages, transferring technology and upgrading the local workforce skill level. The drivers and barriers in the local context have not been researched either. In this study the aim is to touch some of the unexplored areas in the context of Pakistan by identifying the drivers and barriers for the success of special economic zones of Pakistan. This will be done by surveying and interviewing various stakeholders who are involved with CPEC and SEZ one way or another. And to give finally propose a strategy for the upcoming SEZs by evaluating the factors of success and failure by ranking them in order of importance and deriving results from the interviews by doing its thematic analysis.

## CHAPTER 3

#### RESEARCH METHODOLOGY

There are two basic ways to conduct research i.e. qualitative and quantitative (Abrahams, 2008). These approaches are paradigms that provide directions, guidelines, and procedures to carry out research and choose an epistemological and methodological approach. Hence it is critical is to define the paradigm applied in the thesis. But even more important question is which approach is best suited to understand type of research questions and research objectives. In this regard it is argued that whenever objective of research is to substantiate the existing theories empirically by testing framework among large number of peoples to generalize the natural law, then quantitative research is more suitable (Bell & Bryman, 2007). Whereas, when nature of problem and phenomenon is under-theorized, lacks enough knowledge and theories, or the purpose is to explore the new dimension than qualitative research is more advisable.

The core objective of this study, as mentioned in chapter 1, is to identify factors that contribute to success and failure of SEZs, further same factors will be used to evaluate the chances of success and failure of SEZs proposed under CPEC. Thus, the nature of problem requires understanding of factors identified by different researchers in different countries and to re-confirm those factors in current scenario of Pakistan. To re-confirm these factors a descriptive (quantitative) study seems more feasible, detailed discussion is conducted later in the chapter. Further, as every SEZ possesses unique characteristics and chances to succeed, in-depth understanding of each SEZ taken in this study is important. To gather in-depth information and understand different points of view of stakeholders a qualitative method of inquiry seems more appropriate. Hence, this study will use a mixed-method of inquiry in which both quantitative and qualitative methods of inquiry will be used to unleash the real issues and factors that can contribute to the success and reduce the chances of failure of SEZs.

#### 3.1 Study Area

The objective of the study is to understand the barriers and drivers for SEZs and propose potential strategies for SEZs. To achieve this all the EPZ are part of the study are. The questionnaire is

circulated to the industries established in EPZs and industrial areas of Lahore and Sialkot. For this study Quaid e Azam industrial zones in Lahore and one SEZ located at Faisalabad are visited.

#### 3.2 Data Collection

Data collection is a very major and critical part of any research. *Data collection* is a process of collection of information from all the relevant resources they can either be primary or secondary data resources. Informative and accurate data helps to achieve the objectives and provide answers to research questions. On the data, the analysis must be performed and through analysis useful information and results will be collected which will help to reach the research conclusion. The scope of my research is both qualitative and quantitative.

Data collected for this research is from

- Primary data resources
- Secondary data resources

There is a scarcity of studies conducted about the EPZs and hardly any material can be found which provides a holistic view of factors contributing to the success or failure of EPZs in Pakistan. Therefore, factors for success and barriers were derived from international literature on SEZ and EPZs. Policy document regarding SEZ and EPZs were also analyzed

#### 3.3 Primary Data

Primary data has been collected through the following data collection techniques:

- Questionnaire
- In-depth interviews
- Observation

#### 3.3.1 Questionnaires Surveys

Questionnaire surveys were designed for the factors and barriers that contribute to the success or failure of any SEZ. These factors were derived from existing literature available on the subjects. In case of Pakistan there is not much scientific research available that evaluates the performance of the 7 EPZs over the past 25 years since their inception. Therefore, it becomes important to

validate the factors derived from international literature from the stakeholders investing in these EPZs of Pakistan. To do this the questionnaires were emailed to the following communities

- Industrialists involved in EPZs and SEZs of Pakistan
- Policymakers (BOI, CPEC-CoE, BOA, EPZA,)
- Academicians (NUST, PIDE, Iqra Islamabad, Baluchistan University and UET Lahore)
- Zone developers

The questionnaire was designed on the Likert scale of 10 which at the stage of analysis was converted to a scale of 5. The value assigned to each number is shown in table 1.

1			2	3	4	5
Not	at	all	Slightly	Moderately	Very important	Extremely
import	tant		important	important		important

### 3.3.2 Interviews

Interviews are important to gain more in-depth insight into the issue and help in exploring the problem under study. For this study interviews from academicians, industry experts and policymakers were conducted to better understand the barriers and drivers that played role in failures and success of EPZs. Further, to relate these factors with SEZs, experts were asked about the potential drivers for the success of SEZs, especially for the case of Faisalabad. Open-ended semi-structured interviews were conducted to extract maximum information from the informants. Standardized interviews help to obtain comparable responses that lead to more elaborated and valid results. For effective data collection open-ended probing questions separated by throw-away questions were asked. Usually throw-away questions are asked to build understanding and cohesion with the informants. The questions revolved around understanding of informants regarding EPZs and SEZs, their perception about EPZs performance and reason for their not achieved desired performance. Further the informants were asked about CPEC and SEZs and chances of their success and step to be taken to make them successful. In the following table informants' profile is provided with numbers, as informants did not allow to use their name, they will be referred to their numbers while quoting an excerpt from their interview

Table 4: Informants' Profile

Informant	Affiliation	Designation	Experience
Informant 1	Academia	Professor	35 Years
Informant 2	Academia	Professor	41 Years
Informant 3	Academia	Associate Professor	21 Years
Informant 4	Academia	Associate Professor	19 Years
Informant 5	Academia	<b>Assistant Professor</b>	11 Years
Informant 6	Academia	<b>Assistant Professor</b>	13 Years
Informant 7	Industrialist	Vice President FCCI	46 Years
Informant 8	Industrialist	Member FCCI	39 Years
Informant 9	Industrialist	Member SCCI	24 Years
Informant 10	Industrialist	Director CPEC Study	40 Years
		FCCI	
Informant 11	Industrialist	Owner	13 Years
Informant 12	Industrialist	Owner	8 Years
Informant 13	Industrialist	Owner	11 Years
Informant 14	Industrialist	Owner	7 Years
Informant 15	Industrialist	Owner	4 Years
Informant 16	Policy Maker	CoE-CPEC	12 Years
Informant 17	Policy Maker	CoE-CPEC	9 Years
Informant 18	Policy Maker	BOI	24 Years
Informant 19	Analyst	Member PM advisory	39 Years
		council	
Informant 20	Analyst	SDPI	24 Years
Informant 21	Analyst	Chief Auditor UN	18 Years
		Audit Committee for	
		<b>Development Projects</b>	

#### 3.3.3 Observation

Observation plays a key role in understanding the current situation in the study area. By visiting and making observations allows us to identify infrastructural development and volume of activities being performed there. This helps to analyze qualitative and quantitative data in better way and provide a better and comprehensive understanding of the problem.

### 3.4 Sampling size and framework:

Snowball sampling techniques were used because the candidate needs to have knowledge about the topic which is missing among the masses. The research started from chamber of commerce, from there contact numbers of industrials that were taken who have industries in the existing EPZs. For academician the profile of the staff members of various universities was viewed. Those who were linked with developing economics, macro-economic and social sciences were selected for the survey. Several research papers on CPEC have appeared in the last 4 years. From these papers the authors were traced, and questionnaire was emailed to them. A total of 120 questionnaires were sent via email out of which 68 responses were received. The reason for such low response probably was that the questionnaire was very long and time demanding, and very few people responded or completed the survey. The highest response received was from the industrialists, then academicians followed by policymakers and zone developers respectively.

#### 3.5 Data Analysis Techniques

Descriptive analysis is conducted to understand the dynamics of data collected and the sample that took part in the survey. This is followed by non-parametric Levene's test. After that crosstab analysis is conducted for certain factors to understand difference in groups according to their occupation. SPSS is used to analyze the data and extract meaningful interaction among the responses.

For qualitative analysis thematic analysis is used and combined with the results of the survey. Interviews are analyzed by first understanding frequency of terms used then coding them into meaningful factors. After that those codes are used to extract themes and these themes are used to provide a logical understanding of the results acquired from quantitative analysis.

## **CHAPTER 4**

## DATA ANALYSIS AND INTERPRETATION OF RESULTS

The objective of this research was to identify the factors which may act as a driver or barrier in the establishment of Special Economic Zones. This chapter presents the data collected from the questionnaire of stakeholders and interviews with field experts. The gathered statistic from questionnaires was inserted into SPSS software to generate output in tabular form. The analysis was performed on the collected data through questionnaires such as descriptive analysis, correlation and Levene's test to conclude the results. The findings and results are presented in this chapter below.

## **4.1 Quantitative Analysis**

## 4.1.1 Demographic profile of Sampled Respondents

The questionnaire was circulated among 120 different stakeholders which include industrialists, academicians, policymakers, zone developers, and bankers. The bankers didn't participate in the survey because of their official obligations. Among the 120 people who were selected, 68 of them participated in the survey. Of the 68 people who participated in the survey 50% were industrialists, 19% were academicians, 16% were policymakers and 15% were zone developers. Table 5 shows the frequency distribution of the sample population. The participants of the survey were from government and private organizations both. The work experience of the sample population was divided into four groups, 18% of the respondents had experience less than 5 years, 37% between 5 to 10 years, 25% between 10 and 15 years and 20% population had more than 15 years of experience, as can been seen in table 5. The expertise of the sample population in their respective fields can be seen, as 82% of the participants have been in the field for more than 5 years and have experienced the issues associated with industrialization in Pakistan.

Table 5 Frequency Distribution

			Valid	Cumulative
		Frequency	Percent	Percent
<b>=</b>	Academician	13	19.1	19.1
tio]	Industrialist / Investor	34	50.0	69.1
ıba	Zone Developer	10	14.7	83.8
occupation	Policy Maker	11	16.2	100.0
•	Total	68	100.0	
on	Government	12	17.6	17.6
zati	Private	43	63.2	80.8
Organization type	University (academia)	13	19.1	100.0
Or	Total	68	100.0	
	Less than 5 Years	12	17.6	17.6
of ence	Between 5 and 10 Years	25	36.8	54.4
years of experience	Between 10 and 15 Years	17	25.0	79.4
ex ~	Above 15 Years	14	20.6	100.0
-	Total	68	100.0	

## **4.2 Descriptive Analysis:**

The survey questionnaire had questions about infrastructure, connectivity, regulatory framework (RFW), fiscal and non-fiscal incentives, government support mechanism (GSM), and forward and backward linkages. The results of the questionnaire were put into SPSS and descriptive analysis was run on it to get the range, mean and standard deviation of each factor as per different stakeholders. The data was not normally distributed as can been seen from the results of descriptive statistics. The means of the factors were mostly positively skewed. Therefore, A non-parametric Levene's test was used to verify the equality of variances in the samples(homogeneity of variance)(p>.05) (Nordstokke & Zumbo, 2010; Nordstokke, Zumbo, Cairns, & Saklofske, 2011). In SPSS it's not possible to perform Levene's test in a single step for non -normally distributed data. Therefore, the data was prepared by creating three new variables namely: ranked data, group mean ranks and deviation from mean ranks. One-way ANOVA was then executed on the individual differences (deviation from mean ranks). In Levene's test if the p-value or significance is above 0.05 then the null hypothesis is accepted and there is equality of variance. If the p-value is below 0.05, the null hypothesis is rejected, and it is assumed that the differences

in variance or spread between the academecians, industrialists, policy makers and zone developers are statistically significant.

## 4.2.1 Connectivity:

The group 'connectivity' had seven questions as can be seen in table 6. In this the respondents gave highest importance to connectivity of special economic zones to road network, dry port, and railway network with mean of 4.8, 4.26, and 4.19 followed by connectivity of SEZ to local markets and international market with mean of 3.84 and 3.60 and connectivity of seaport and airport at 3.01 and 2.84 respectively. The mean of all these factors was positively skewed. The combined mean of all the seven factors is 3.79. The stakeholders gave highest importance to connectivity via road and railway network as compared to sea and by air. The transportation system of Pakistan is dependent on road transport with 90 percent of national passenger traffic and 96 percent of freight movement being carried out through this mod. Of the 9 proposed SEZs under CPEC, 7 SEZs are situated far off from the sea and are dependent on railway and road network for transportation of goods. The railway is the cheapest form of transportation available. Despite its deplorable condition its importance is evident from the result that stakeholders want the railway network to be connected to SEZs.

Table 6: Descriptive Statistics Connectivity

Connectivity	Minimum	Maximum	Mean	combined Mean
Road network	4	5	4.8	
Dry port	3	5	4.26	
Railway Network	3	5	4.19	
Connectivity of SEZ to local markets	3	5	3.84	
Connectivity of SEZ to international markets	2	5	3.60	3.79
Seaport	2	5	3.01	
Airport	1	4	2.84	

The geo-strategic location of Pakistan is of high importance to neighboring countries like China and Eurasian hinterland. Through Pakistan they can get access to shortest trade route to the rest of the world via the Arabian sea at its south with deep-sea port at Gwadar and Port Qasim and Karachi port in Karachi (Masood, Farooq, & Hussain, 2016). A well-developed interconnected road and

railway network will increase the trade from these routes and will attract more industries and investment to the proposed SEZs from these countries. Whereas the mean value of connectivity to airport is 2.84 which is more towards neutral value. The respondents interviewed during the survey were all local to Pakistan. And since they won't be traveling abroad as much as the foreign investors will be, we can account the neutral mean of access to airport to the sample of respondents and to the costly mode of transportation that air freights are.

Connectivity to the local market was given higher importance than connectivity to international market with only a slight difference of 0.24 points. Both these factors are equally important but the higher mean to the connection to local market depicts that the stakeholders are interested in developing backward linkages with the international firms investing inside these zones, this result is also consistent with literature which states that for the success of any SEZ it is important that it is in close vicinity to local market with focus on developing value chains with the local economy, otherwise the SEZ turns into mere enclaves with incentives (UNCTAD, 2019). Proximity to large markets and preexisting industrial estates increase SEZ performance(Frick et al., 2019)

Table 7: ANOVA Statistics - Connectivity

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	143.033	3	47.678	.637	.594
Within Groups	4789.302	64	74.833		
Total	4932.335	67			

The p-value or significance is 0.594 for the factors related to connectivity (table 7), which means that the equality of variance exists among academecians, industrialists, policy makers and zone developers. All stakeholders agree that connectivity to the railway, dry port, seaport, local market, and international market are considered very important for the success of any SEZ.

#### 4.2.2 Infrastructure:

There were four questions related to infrastructure provision (refer to table 8). Among the questions, uninterrupted access to energy resources (like gas, electricity) and uninterrupted access to ICT (internet and telephone) had the highest mean of 4.19 and 4.15 with the range of replies between 4 and 5 on the Likert scale of 5. Pakistan's infrastructure situation is relatively poor by international standards. Frequent power failures are experienced throughout the country which has hindered industrial growth in the last decade and resulted in closure of industries and

installation of in-house generation power plants on industrial sites (Hasan, 2010). The availability of uninterrupted access to energy resources and information and communication technology received high mean and range of replies falling both factors in the same degree of importance. In various countries provision of modern, efficient and reliable infrastructure has been used to attract FDI (Aggarwal, 2005; FIAS, 2008), and our stakeholders expect the same.

Table 8: Descriptive Statistics - Infrastructure

Infrastructure	Minimum	Maximum	Mean	Combined mean
Uninterrupted access to Energy resource (Electricity, Gas, etc)	4	5	4.19	
Uninterrupted access to ICT (internet and telephone	4	5	4.15	
Provision of housing for the labor inside or on walking distance to SEZ.	3	5	4.07	3.88
Availability of social infrastructure (hospital, fire station, hotel, and recreation facility) inside the zone.	1	5	3.12	

Provision of housing for the labor inside the SEZ or in the walking distance to the zone had the mean of 4.07 followed by availability of social infrastructure (like hospital, fire station, hotel, and recreation facility) inside the zone had the mean of 3.12 with the range of replies between 1 and 5. The comparatively low mean of social infrastructure to hard infrastructure shows that stakeholders are still thinking of SEZ model in the line of EPZ model of Pakistan in which availability of social infrastructure was not given much importance. The variability in the range of replies indicates the level of understanding of the importance of the factor by different stakeholders. Academicians rated the factor 4 and 5 whereas reply of the industrialist and policymaker ranged between 1 and 4.

Table 9: ANOVA Statistics - Infrastructure

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	147.341	3	49.114	.643	.590
Within Groups	4888.492	64	76.383		
Total	5035.833	67			

The significance is greater than 0.05, hence the null hypothesis exists and academician, policymakers, zone developers, and industrialists agree on the provision of proper infrastructure

for the SEZ site (table 9). The combined mean of factors related to infrastructure is 3.88 which is positively skewed and considered important by all stakeholders as can be seen in table 8. The mean value fell below 4 because of very low mean of the factor social infrastructure whereas all the other factors had mean above 4.

## 4.2.3 Government Support Mechanism (GSM):

Table 10: Descriptive Statistics – GSM

GSM	Minimum	Maximum	Mean	Combined mean
Institutional autonomy	4	5	4.68	
Political stability	4	5	4.51	
Strong support and proactive participation of Government	3	5	4.47	
Transparency in investment	3	5	4.43	
Security	4	5	4.37	
a transparent and stable legal and administrative framework	4	5	4.37	
Accountability of institutions	4	5	4.29	
a strong commitment by political authorities to establish an open market economy.	4	5	4.28	
Promote private sector participation and public-private partnerships (PPPs), along with technical assistance for structuring and negotiating PPP deals.	3	5	4.22	4.09
Rapid custom clearance	4	5	4.22	
horizontal and vertical mechanism for coordination and conflict resolution	4	5	4.19	
Availability of skilled labor	4	5	4.18	
Technical and vocational educational system in the country	2	5	3.81	
Availability of unskilled labor	3	4	3.74	
Technical and vocational school inside the zones	1	5	2.99	
College and universities inside the zone	1	5	2.74	

Government Support Mechanism included questions regarding the stable macroeconomic environment, reliable legal framework and investment on human capital as can be seen in table 10. There were 16 questions regarding GSM in the questionnaire. The mean of Institutional autonomy, political stability, strong support and proactive participation of government, transparency, security, transparent and stable legal administrative framework, accountability of institutions, public-private partnership, rapid custom clearance and horizontal and vertical mechanism for conflict

resolution were highest among the factors with mean ranging between 4.68 and 4.19 and the replies ranging between 3 and 5 on the Likert scale of 5.

The results put a strong emphasis on political stability, macroeconomic stability and good governance practices. Literature suggests that organizational inefficiency, lack of governance and poor regulatory environment and business environment are some of the key reasons for the poor economic performance of the zones across the globe (Anwar, 2015; COMCEC, 2017b). According to Dorsati Madani, 'governance is key to the success of EPZs. The provision of efficient bureaucratic and economic services, a clear and transparent legal and regulatory structure, an unfettered and stable policy framework, and non-preferential treatment of economic actors allow an arena prone to success' (Ackermann et al., 2012). Another study conducted on the impediment in EPZs in Pakistan concluded that "The major impediment identified in growth of EPZ and attracting foreign investment is poor law and order condition of Pakistan. They stated that the safety and political instability problem is affecting investors at two levels. First, such security concerns have created a poor perception of Pakistan in international markets and the investors in these markets have become strongly skeptical about Pakistan's ability to supply consistently. This has resulted in loss of several investors where they have refused to work with Pakistani companies. Secondly, the domestic crime situation and ineffectual role impede the activity of the investors. They feel that insecurity about life, property, and assets" (Mukhtar et al., 2013)

The factor 'availability of skilled labor' had a mean of 4.18 with range of replies between 4 and 5, whereas the factor 'availability of unskilled labor' had a mean value of 3.81 with range of replies between 3 and 4. This indicates that skate holders consider availability of skilled labor more important for the success of SEZ than the availability of unskilled labor. But at the same time the factors which dealt with up-gradation and training of local workforce like introducing technical and vocational systems in the country, provision of technical and vocational schools inside the zones and colleges and universities inside the zones had a mean of 3.81, 2.99 and 2.74 respectively. Technical and vocational training is considered important by the respondents and should be introduced across the country, but they don't consider it important to give provision of these facilities inside the zones. According to report on SEZ by World Bank 'zone programs that recognize the value of skilled workers and seek to provide the social infrastructure and working

and physical environment in which such workers thrive will be in a position to facilitate upgrading' (Farole and Akinci 2011, Douglas, 2016)).

Table 11: ANOVA Statistics - GSM

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	223.905	3	74.635	.721	.543
Within Groups	6629.009	64	103.578		
Total	6852.914	67			

The p-value for government support mechanisms is 0.543 indicating a null hypothesis and equality of variance among the academecians, industrialists, policy makers and zone developers (table 11). The academicians, policymakers, zone developers, and industrialist are all on the same ground and give high importance to government support mechanisms for the successful implementation of special economic zones as can be seen from the mean value of 4.09 for this group which is higher than combined mean for infrastructure and connectivity. This value shows that all the stakeholders believe that the foremost measure is that government must support and take serious directional measures for the success of SEZ

#### 4.2.4 Forward and Backward Linkages:

The group linkages had questions related to the factor which promote forward and backward linkages in an economy according to different researches carried on different special economic zones in various countries. All the factors in this group had their mean between 4 and 5, making all the factors fall in the category of very important to extremely important for promoting forward and backward linkages as can be seen in table 12.

Table 12: Descriptive Statistics – Linkages

Linkages	Minimum	Maximum	Mean	Combined mean
Promoting local investment in zones.	4	5	4.81	_
Promoting knowledge sharing between the zones and local industry	4	5	4.68	
Use of local raw material in industries	4	5	4.66	
How important is forward linkage (between firms and consumer market)	4	5	4.54	
How important is backward linkage (between firms and supplier market)	4	5	4.46	4.52
integration of regional value chains	4	5	4.43	
Production of exportable	4	5	4.32	
technological compatibility between SEZ and domestic economy (promotes technology transfer)	3	5	4.25	

Promoting local investment in the zone was the most important factor followed by promoting knowledge sharing between zones and local industry and use of local raw material in zones with a mean of 4.81, 4.68 and 4.66 respectively. These factors are essential for technology transfer and creating backward linkages as through this industrial spillover takes place leading to up-gradation of practices and technology in domestic economy (Cheesman, 2012).

Table 13: ANOVA Statistics – Linkages

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	472.506	3	157.502	1.960	.129
Within Groups	5143.364	64	80.365		
Total	5615.870	67			

For 'linkages, the p-value or significance is 0.129 which is above 0.05 and hence the Equality of variance exists among academecians, industrialists, policy makers and zone developers (table 13). The combined mean for linkages is 4.52 which is more tilted towards extremely important (greater than 4.5) shows that all the stakeholder consider developing linkages with the local economy extremely important to profit from SEZ developmental effects both direct and catalytic

## 4.2.5 Regulatory Framework:

The regulatory framework included factors related to guidelines related to labor laws like minimum wage, labor laws, assistance that should be provided to the labor by their employees like health care facilities, assistance in education of children, daycare facility and accommodation as can be seen in table 14. These factors had mean between 4 and 5. This shows that labor laws for labor welfare are considered important by all the stakeholders as these factors affect the performance and productivity of the labor directly and indirect. Factor related to zone-specific laws and operationalization of labor unions inside the zones had lower mean between 3 and 4 and were not considered very important by the respondents. Whereas the mean value of 4.06 shows that the overall opinion of the respondent is close to very important on scale of 5 on Likert scale

Table 14: Descriptive Statistics – Regulatory Framework

RFW	Minimum	Maximum	Mean	Combined Mean
Labor laws applicable inside the zone	4	5	4.69	
Standardized procedures for exemption from excise duties	4	5	4.43	
Zone specific labor laws	4	5	4.41	
strategic planning and demand-driven approach	4	5	4.26	
Provision of healthcare facilities for labor and his family	3	5	4.19	
Subsidy on the education of children	3	5	4.13	
uniform regulations for all zones	3	5	4.07	
ensuring that labor markets are free to facilitate the movement of skilled labor across firms	3	5	4.06	4.06
On-site day-care for young children	3	5	4.03	
Guidelines on minimum wages	3	5	4.03	
Labor unions	2	5	3.99	
Guidelines on additional benefits to be paid by the employers in general	3	5	3.90	
Flexibility in hiring and firing workers	2	5	3.65	
Limited license to sell into the domestic market	2	5	3.57	

For 'regulatory framework', the p-value or significance is 0.617 which is above 0.05 indicating that the null hypothesis exists and there is equality of variance among academecians, industrialists, policy makers and zone developers (table 15). There is no difference of opinion between academicians, policymakers, and industrialists. All the respondents agree that regulatory framework is important and must be incorporated to ensure the success of any special economic zone.

Table 15: ANOVA Statistics - RFW

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	183.167	3	61.056	.600	.617
Within Groups	6508.858	64	101.701		
Total	6692.024	67			

#### 4.2.6 Incentives:

There were 17 questions related to incentives in the questionnaire as listed in table 16. These included fiscal and non-fiscal incentives like desirable land, tax reduction or exemption, access to credits and loans, one window operation, smart incentives and subcontracting licenses. The mean of the factors for incentives varied between 4.54 and 3.32. the most desirable incentives according to the stakeholder were 'the ability to repatriate profits and capital investment', 'one window operation' 'subsidized services', 'foreign currency loan and incentives on smart office setup' with mean of 4.54, 4.53, 4.34 4.31 and 4.16 respectively. Whereas factor 'export tax exemption', international subcontracting license, local subcontracting license inexpensive land and duty-free imports of raw material had the lowest mean of 3.72, 3.63, 3.62, 3.47 and 3.32 respectively.

Table 16: Descriptive Statistics – Incentives

Incentives	Minimum	Maximum	Mean	Combined mean
The ability to repatriate profits and capital investment	3	5	4.54	
one-window operation	3	5	4.53	
Subsidized services	2	5	4.34	
foreign currency loan from abroad under direct automatic route	3	5	4.31	
Incentive on Smart office setups (Technology-based operations, ICT implementation)	2	5	4.16	
convertibility of the domestic currency, including capital-account for foreign investors/ trade in local currency	3	5	4.15	
exemption from regional taxes	2	5	4.15	
Exemption/concession on income tax on salaries of foreign technicians	2	5	4.10	4
Low degree of protection (no quantity restriction on imports and exports, low tariffs)	2	5	4.03	
Depreciation allowances	3	5	4.00	
foreign currency loan from abroad under direct automatic route	1	5	3.99	
Exemption of income tax on interest on borrowed capital	2	5	3.97	
export tax exemption	2	5	3.72	
international subcontracting license	2	5	3.63	
local subcontracting license	2	5	3.62	
inexpensive land	1	5	3.47	
duty-free imports of raw material	1	4	3.32	

The p-value for incentives is 0.04 which is below 0.05, therefore, in this case, the null hypothesis is rejected (Table 17). The differences in variance between academecians, industrialists, policy makers and zone developers are statistically significant. 'Incentives' is the only group where the difference of opinion exists among the group. Academia and government believe that incentives are not the most important factor for the success of SEZ whereas industrialists have given high importance to incentives as their own interest is vested in it. The combined mean of incentives is 4 which makes it very important on the Likert scale of 5. This result is contrary to literature which suggests that incentives are not the most important factor for the success of SEZ, instead they are merely an attracting tool for the foreign industry to improve productivity and investment environment, and the SEZ outcomes are not correlated to SEZ outcomes (Farole, 2010; Frick et al., 2019). It is also argued that companies are not attracted by the package of incentives but by availability of quality infrastructure, cheap labor and proximity to local industrial clusters (Aggarwal, 2005).whereas our result contradicts that as combined mean for infrastructure is 3.88, connectivity is 3.79 and for incentives is 4. The respondent gave higher importance to incentives than to infrastructure and connectivity.

Table 17: ANOVA Statistics - Incentives

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	323.508	3	107.836	2.929	.040
Within Groups	2356.607	64	36.822		
Total	2680.115	67			

According to the mean scores, factors are ranked from most to least important and shown in the figure 4. Linkages with means score of 4.52 (out of 5) is ranked the highest among the drivers taken for the study. GSM and Regulatory framework are ranked 2<sup>nd</sup> and 3<sup>rd</sup> respectively with marginal difference of .03 in the means. The top three factors are primarily linked directly with government involvement. Despite the general assumption that incentives are considered most important, results show that incentive are ranked at fourth number. One of the reasons for that is policy makers and academicians are sceptical towards incentives and believe that it is less important. Further in qualitative analysis perception of multiple stakeholders with respect to incentives is discussed in detail. Infrastructure and Connectivity are in the last two spots, a reason for that could be that respondents believed that infrastructure is not as important as the products or industry being involved in the SEZs. One of the reasons for connectivity to score low could be

the low importance of Airport and Seaport, as shown by the responses. Detailed discussion regarding the reasons of such responses is given in qualitative analysis.

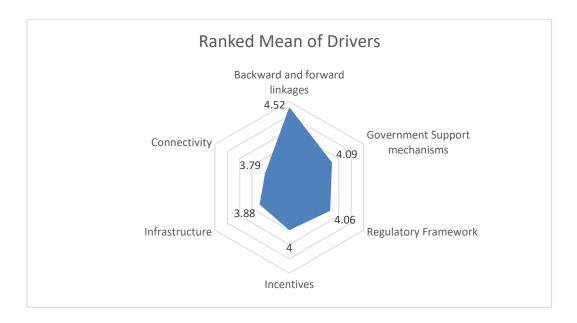


Figure 4: Ranked Mean of the Drivers for Success of SEZs

## 4.2.7 Cross comparison of responses based on occupation

Cross tabulation is a quantitative research method best suited for analyzing the relationship between two or more variables. Crosstab analysis was used to analyze the results of five questions in the questionnaire which were on ordinal scale. In these questions relationship within the data needed to be extracted. The results of the analysis are given below.

Table 18 shows the responses to the question "For how many years should income tax concession be given to the industries investing in the zone?" The chi-square significance value showed in the last column reads 0.028 which is significant (p<0.05). This shows that the academecians, industrialists, policy makers and zone developers significantly differ from each other and show different behavior towards income tax concession. While academicians' response was tilted towards lower scale of 2 years or 5 years, industrialists have shown interest in having concessions

for 5 years and 10 years. Zone developers had diverse opinions of 2, 5 and 10 years concession and policymakers were inclined towards offering 5 years concession.

Table 18: Crosstab Occupation x Income Tax Concession

			Income tax	concession			Chi- Square
occup	ation	0 years	2 years	5 years	10 years	Total	P - value
Academician	Count	2	5	5	1	13	
	% within occupation	15.4%	38.5%	38.5%	7.7%	100.0%	
Industrialist /	Count	0	3	18	13	34	
Investor	% within occupation	0.0%	8.8%	52.9%	38.2%	100.0%	
Zone	Count	0	4	3	3	10	
Developer	% within occupation	0.0%	40.0%	30.0%	30.0%	100.0%	0.028
Policy Maker	Count	1	2	7	1	11	
	% within occupation	9.1%	18.2%	63.6%	9.1%	100.0%	
Total	Count	3	14	33	18	68	
	% within occupation	4.4%	20.6%	48.5%	26.5%	100.0%	

To the question 4.4% of the respondents said that no income tax concession should be given, 20.6% believed 2 years concession should be given, 48.5% believed 5 years concession should be given and 25.5% said 10-year concession should be given. The stats show that the highest votes were for 5 years concession followed by 10 years, 2 years and 0 years respectively. Among the 13 academicians who participated in the survey 5 voted for 2 years concession and 5 voted for 5 years concession whereas only 2 voted for no concession and 1 voted for 10 years concession. Of the 34 industrialists, 18 voted for 5 years concession, 13 voted for 10 years concession, 3 went for 2 years and none voted for no concession. Out of 10 zone developers 4 voted for 2 years concession and for 5- and 10-years concession there were 3 votes each. The last group consisted of 11 policymakers, in which 7 voted for 5 years, 2 voted for 2 years and there was 1 vote for 10 years and no concession each.

Table 19 shows the responses to the question," for how many years there should be exemption on dividend for the companies investing inside the zones?". The Chi-square significance value is 0.001 which is significant (p<0.05) as can be seen in the last column of the table. This shows that there is significant difference in opinion on exemption on dividends among the academecians, industrialists, policy makers and zone developers. The overall inclination of all the academecians, industrialists, policy makers and zone developers was towards 5 years exemption.

Table 19: Crosstab Occupation x Exemption on Dividends

		Exemp	tion on div	idends		Chi-	
occupation		0 years 5 years 10 years		10 years	Total	Square	
Academician	Count	5	7	1	13		
	% within occupation	38.5%	53.8%	7.7%	100.0%		
Industrialist	Count	0	21	13	34		
/ Investor	% within occupation	0.0%	61.8%	38.2%	100.0%		
Zone	Count	0	7	3	10		
Developer	% within occupation	0.0%	70.0%	30.0%	100.0%	0.001	
Policy	Count	5	5	1	11		
Maker	% within occupation	45.5%	45.5%	9.1%	100.0%		
Total	Count	10	40	18	68		
	% within occupation	14.7%	58.8%	26.5%	100.0%		

To this question 14.7% of the respondents said that no exemption on dividend should be given, 58.8% believed 5 years exemption should be given and 26.5% believed 10 years exemption should be given. The stats show that the maximum votes were for 5 years exemption on dividends followed by 10 years, and 0 years respectively. Among the 13 participating academicians 5 voted for no exemption, 7 voted for 5 years exemption whereas only 1 voted for 10 years exemption. Of the 34 industrialists none voted for no exemption, 21 voted for 5 years exemption and 13 voted for 10 years exemption. Out of 10 zone developers there were no votes for no exemption 7 went for 5 years of exemption and for 3 for 10-years exemption. Of the 11 policymakers there were 5 votes for no exemption and 5 years exemptions and only one for 10 years exemption.

Table 20 shows the responses to the question, "how much concession should be given on income tax on salaries of foreign technicians". The Chi-square significance value is 0.016 which is significant (p<0.05) as can be seen in the last column of the table. This shows that there is significant difference in opinion on income tax concession of the foreign technicians among the academecians, industrialists, policy makers and zone developers.

Table 20: Crosstab Occupation x Concession on income tax of foreign technicians

		concession on income tax on salaries of foreign technicians								
Occupation		No Exemption	3 years	5 years	complete exemption	Total	Square			
Academician	Count	6	2	5	0	13				
	% within occupation	46.2%	15.4%	38.5%	0.0%	100.0%				
Industrialist	Count	0	6	27	1	34				
/ Investor	% within occupation	0.0%	17.6%	79.4%	2.9%	100.0%				
Zone	Count	2	2	6	0	10	0.016			
Developer	% within occupation	20.0%	20.0%	60.0%	0.0%	100.0%				
Policy	Count	3	4	4	0	11				
Maker	% within occupation	27.3%	36.4%	36.4%	0.0%	100.0%				
Total	Count	11	14	42	1	68				
	% within occupation	16.2%	20.6%	61.8%	1.5%	100.0%				

The inclination of academicians was towards no exemption with 6 out of 13 opting for this option, whereas 5 opted for 5 years concession, 2 for 3 years. The industrialists were more inclined towards 5 years concession with 27 of 34 opting for this, whereas 6 opted for 3 years and only one opted for complete exemption of tax on salaries of foreign technicians. Most zone developers were in favor of 5 years concession with 6 of 10 zone developers opting for this option, whereas 2 opted for no concession and 2 for 3 years concession. Policymakers on the other hand had mix opinion with no clear inclination with 4 of 11 policymakers opting for 3 years of concession and 4 opting for 5 years and the remaining 3 opting for no concession on the income tax of foreign technicians.

Table 21 shows the responses to different scenarios when cash subsidy should be given to firms. The Chi-square significance value is 0.001 which is significant (p<0.05) showing that there is significant difference in opinion on nature of cash subsidy to be given to firms among the academecians, industrialists, policy makers and zone developers.

Table 21: Crosstab Occupation x Cash Subsidy

			ca	ash subsidy s	shall			
Occupation		Not be provided	be provided on export potential	be provided based on local need	be provided based on industry	be provided based on a combination of export, local need, and industry	Total	Chi- Square
Academician	Count	8	2	1	1	1	13	
	% within occupation	61.5%	15.4%	7.7%	7.7%	7.7%	100.0%	
Industrialist	Count	0	4	3	9	18	34	
/ Investor	% within occupation	0.0%	11.8%	8.8%	26.5%	52.9%	100.0%	
Zone	Count	2	3	0	2	3	10	
Developer	% within occupation	20.0%	30.0%	0.0%	20.0%	30.0%	100.0%	0.001
Policy	Count	5	2	1	2	1	11	
Maker	% within occupation	45.5%	18.2%	9.1%	18.2%	9.1%	100.0%	
Total	Count	15	11	5	14	23	68	
	% within occupation	22.1%	16.2%	7.4%	20.6%	33.8%	100.0%	

The inclination of academicians is more towards that no subsidy should be given with 8 of 13 opting for this option. The industrialists, on the other hand, were more inclined towards subsidy be provided based on combination of export, local need, and industry with 18(52.9%) of 34 industrialists opting for this option. The zone developers had a mixed opinion on this question with clear inclination as can be seen the table 17. The policymakers however were more inclined towards giving no cash subsidy. If we look at the total sample and the percentages within occupations 33.8 % of the sample selected cash subsidy shall be provided based on combination of export, local need and industry, 22% opted for no cash subsidy, 20.6% went for cash subsidy

shall be provided based on industry, 16.2% on export potential and 7.4% cash subsidy based on local need.

Table 22 show the responses to the question "which industry shall receive cash subsidy on priority bases among agriculture, manufacturing, and services". The Chi-square significance value is 0.44 which is insignificant (p<0.05) showing that null hypothesis exists and there is no difference in opinion among academecians, industrialists, policy makers and zone developers on which industry should receive the subsidy.

Table 22: Crosstab Occupation x Industry-Specific cash Subsidy

	industry-specific cash subsidy on a priority basis						
Occupation	ì	Agriculture	Manufacturing	Services	Total		
Academician	Count	5	8	0	13		
	% within occupation	38.5%	61.5%	0.0%	100.0%		
Industrialist	Count	10	20	4	34		
, ,	% within occupation	29.4%	58.8%	11.8%	100.0%		
Zone	Count	4	6	0	10		
Developer	% within occupation	40.0%	60.0%	0.0%	100.0%	0.44	
Policy	Count	6	5	0	11		
Maker	% within occupation	54.5%	45.5%	0.0%	100.0%		
Total	Count	25	39	4	68		
	% within occupation	36.8%	57.4%	5.9%	100.0%		

The percentages within occupations of the total sample show that 57.4% believe that manufacturing sector should be supported and given subsidy followed by agriculture with 36.8% responses and only 5.9% responses were for services sector. If we look within occupations among academicians 8 of 13 opted for manufacturing and 5 for agriculture. Amongst industrialists 20 opted for manufacturing, 10 for agriculture and 4 for services. Zone developers were more inclined towards manufacturing with 6 out of 10 opted for this choice and the remaining 4 chose

manufacturing. The response of policymakers on the other hand was tilted towards agriculture with 6 out 11 chose agriculture while the rest opted for manufacturing.

#### **4.3 Barriers**:

For analysis, the factors of barriers were grouped into four groups, namely linkages, government support mechanisms, regulatory framework, and zone operations. These results are as follows:

## 4.3.1 Forward and Backward Linkages

There were two factors in the group linkages (table 23) i.e. dependence of companies on parent company hinders backward linkages in the economy and lack of skilled labor hinders technology transfer. The mean for both the factor was between 4(very important) and 5 (extremely important). The combined mean was 4.24, hence showing that both these factors are important barriers in creating backward linkages in an economy. The barrier of dependent subsidiary in creating backward linkages is also supported by studies carried out by UNIDO and OECD, which confirm that more independent a subsidiary is, more likely it is to create backward and forward linkages in the host economy(Ahrens & Meyer-Baudeck, 1995). Whereas lack of skilled labor leads to low productivity as skill acquisition of unskilled labor is labor as they are involved in the production process which is low-skill and low-tech(Ackermann et al., 2012). Transfer of technology without skilled human resource is not possible and is unsustainable as the new technology is highly sophisticated and require specialized set of skills.

Table 23: Descriptive Statistics – Barriers (Linkages)

	Minimum	Maximum	Mean	Combined Mean
subsidiaries dependent on the parent company won't contribute to creating backward linkages in the local economy	3	5	4.22	4.24
Lack of skilled labor hinder technology transfer	3	5	4.26	

### 4.3.2 Government Support Mechanism

Table 24 shows the barriers which are related to government support mechanism. Among the factors, the biggest barrier according to stakeholders is that the zones are driven by political agenda instead of a strong business case or demand of the business community with the mean value of 4.43. Second is lack of coordination between government and the private parties in infrastructure provisions (mean 4.43) which ends up yielding poor quality infrastructure and inability to complete

project in the given time resulting in increased cost of the projects. The high mean to this barrier aligns with researches on different SEZ, for instance in Vietnam no infrastructure was laid to connect zone to main trade route due to poor coordination between government and private developers (FIAS, 2008). Financial system backwardness and the system of relative prices both discourage foreign direct investment, and the mean of both the factors were 4.28 and 4.19 respectively.' Subsidized rent and other services' are another barrier that is considered a barrier in SEZ success with mean of 4.16. The inability of government to provide vocational centers for skill-building of the local workforce is another barrier (mean 4.06) which hinders backward linkage creation. All the barriers of government support mechanisms had high mean value between 4 and 4.5 except for' Weak sustainability practices like poor enforcement of environmental standards' and 'most fertile agriculture land acquired for SEZ' which had the mean of 4 and 3.84 respectively. Since acquiring a fertile land for SEZ does not directly affect the performance of SEZ and is more of an environmental and agricultural productivity issue, this was considered less of a barrier by the stakeholders. This also shows lack of awareness among the stakeholders regarding sustainable operations in industrialization. The combined mean of all the factor is 4.16, therefore all the barriers are very important to be addressed for successful operationalization of SEZ in Pakistan.

Table 24: Descriptive Statistics – Barriers (GSM)

	Minimum	Maximum	Mean	Combined Mean
Zone initiatives are driven by political agenda and lack of a strong business case	4	5	4.43	
Lack of coordination between private developers and government in infrastructure provision	4	5	4.35	
Financial system backwardness discourages FDI	3	5	4.28	
System of relative prices discourages FDI	4	5	4.19	4.160
subsidized rent and other services	3	5	4.16	
Lack of institute to develop skilled labor lead to failure in backward linkages	3	5	4.06	
poor enforcement of environmental standards	2	5	4.00	
Most fertile agriculture land acquired for SEZ	2	4	3.84	

## 4.3.3 Regulatory Framework

There were three questions in the questionnaire regarding barriers in the regulatory framework as shown in table 25. In this 'reliance on Uncompetitive economic policies e.g. reliance on tax

holidays, rigid performance requirements lead to the poor performance of firms' was considered the major barrier with a mean of 4.22. Offering lucrative incentives to foreign companies is a practice among most of the SEZs around the world which include subsidized services but this practice has been banned by WTO as an illegal incentive and is considered against global trade norms (FIAS, 2008). The stakeholders also consider such practices fruitless for the success of SEZ. The second barrier 'The low technological level of labor-intensive production hinders technology transfer' had the mean of 4.19, rendering it an important barrier in success of SEZ implying that the SEZs should invest in capital intensive programs instead of labor-intensive ones. As in labor-intensive, there is little technology transfer whereas capital-intensive high-tech technology is involved which imparts skill to the workers and enables technology transfer. The guarantee of private right had a mean of 3.94 the combined mean was 4.12 for barriers of regulatory framework.

Table 25: Descriptive Statistics – Barrier (RFW)

	Minimum	Maximum	Mean	Combined Mean
Uncompetitive economic policies e.g. reliance on tax holidays, rigid performance requirements lead to the poor performance of firms	4	5	4.22	
The low technological level of labor-intensive production hinders technology transfer	3	5	4.19	4.120
the guarantee of private property rights as well as a critical number of private enterprises	3	5	3.94	

## 4.3.4 Zone Management

Table 26 shows the barriers related to zone management which according to literature are barrier in successful operationalization of SEZ. And the results have confirmed it in our local context as well, as the group mean is 4.2 which renders all the barriers important to be addressed. In the ranking order the major barriers are' Greater percentage of land assigned for residential use in an SEZ',' lack of zone management and operational know-how and' too many bodies involved in zone administration'. These three factors had mean greater than 4.5 which is close to 5 on Likert scale can be translated as extremely important. Other factors were inadequate administrative structure, maintenance, publicity and real estate activities taking inside the zones had mean between 4 and 4.19 which is close to 4 on Likert scale and can be translated as very important. The lowest mean value of 3.68 was for the barrier 'The land acquired for developing special

economic zone doesn't fully compensate its previous owners'. This question is related to social sustainability and like other question related to sustainability had a lower mean showing the importance given to sustainable measures as it doesn't directly affect the performance of SEZ but creates dissatisfaction in the society.

*Table 26: Descriptive Statistics – Barrier (Zone Management)* 

	Minimum	Maximum	Mean	Combined Mean
A greater percentage of land assigned for residential use in an SEZ	4	5	4.76	
lack of zone management and operational know-how	4	5	4.60	
too many bodies involved in zone administration	4	5	4.51	
inappropriately designed facilities	4	5	4.19	
Inadequate administrative structures	4	5	4.18	4.240
inadequate maintenance	3	5	4.13	
inadequate promotion of the zone	3	5	4.12	
Real-estate activities taking place inside the zone	2	5	4.00	
The land acquired for developing special economic zone doesn't fully compensate its previous owners	2	5	3.68	

Summarizing the discussion of barriers and their rankings, figure 5 shows the importance given by respondents for each factor. The ranked mean show linkages and zone management are among the most important factors that may hinder the successful implementation of the SEZs.

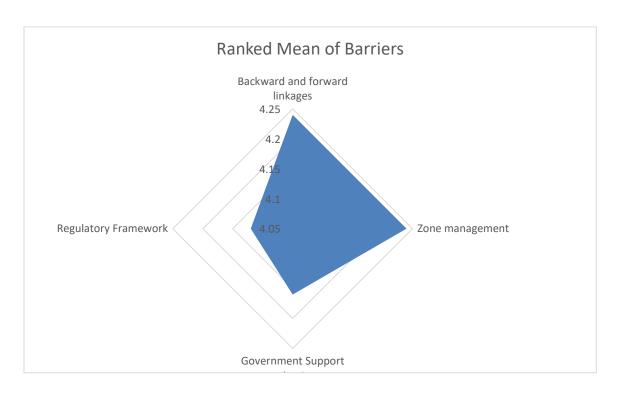


Figure 5: Ranked Mean of the Barriers for Success of SEZs

# 4.3.5 Levene statistics for barriers

The p-value or significance for barriers related to linkages, regulatory framework, and government support mechanism is 0.393, 0.234 and 0.215 respectively (Table 22). This implies that the equality of variance exists among academecians, industrialists, policy makers and zone developers for linkages, RFW, and GSM. The p-value for Barriers related to zone management is 0.01 which is below 0.05, therefore, in this case, null hypothesis is rejected (Table 27). The differences in variance between academecians, industrialists, policy makers and zone developers are statistically significant.

Table 27: Levene statistics for barriers

	Levene Statistic	df1	df2	Sig.	
Linkages	1.014		3	64	.393
Regulatory Framework	1.458	i	3	64	.234
Government Support Mechanism	1.530	1	3	64	.215
Zone Management	5.802		3	64	.001

# CHAPTER 5

# **QUALITATIVE ANALYSIS OF INTERVIEWS**

The qualitative part of the research was concerned with the in-depth understanding of drivers and barriers for the successful implementation of SEZs under CPEC. As CPEC is claimed to be economic game-changer and SEZs are the main drivers of that economic uplift it is important to understand key stakeholders' viewpoints about methods to make SEZs successful ventures for Pakistan. In this regard, in-depth interviews were conducted with experts in the field and relevant policymakers. The interviews then transcribed and thematic analysis is conducted to understand the most important aspects. The following are the themes and discussions about them.

Before proceeding to the themes and core areas identified in the interview, it is pertinent to mention that currently there is an act to guide SEZs which is called SEZ Act 2012. However, as the date mentions it was designed before the inception of Belt and Road Initiative (BRI) and CPEC and may not suffice the requirements of CPEC. Furthermore, only a few informants knew about the SEZ Act 2012 and most of them (except one or two) had not read that. Further probe exposed that most of the informants believe SEZ Act 2012 is not propagated or involved stakeholders in the process of formalizing. This reflects that stakeholders do not trust this policy and revising it might be a good option.

#### 5.1 Political Influence

First of all, the point of discussion immediately tilted to the issue of political motives and influence on policymaking. All the informants (except informant 19) said political influence is bad and shall be reduced. For instance, informant 3 said "the politicians try to gain political advantage in every opportunity hence cannot remain objective and the decisions are subject to political-bias". Another similar response from informant 14 was "Politicians do not want country to progress, but their parties and personal positions are important for them. They cannot do anything without their political motives so how can you even think that decision will be made according to merit?" Even though the statement is strong and may not reflect true position, still the desperation and lack of trust over political leaders is evident.

Conversely, informant 19 argued that in a political economy everything is politically motivated, and politics cannot be separated from policymaking. He argued that "... when there is political

democracy, there will be political economy as well hence all the policies will be and shall be politically motivated. People have voted for a certain economic, educational, health or policy reform and the government shall do that as well. Yes! You may say that these politically motivated decisions shall be incorporated with honesty, integrity, and motivation to do well for the country and people. But if you want to remove political influence then you will have to bring government of technocrats". The position is strong and justified according to literature as well.

The informants' agreement in general over the removal of political influence shall be seen with the one response mentioned in the last para. The government shall choose to make a policy involving the stakeholders and bring transparency in the procedures. It will remove the perception of politically motivated decisions.

## 5.2 Vision and objective of SEZ

The most discussed and emphasized point for SEZs successful implementation was to have a specified core Vision and objective for each SEZ. Every SEZ has its own characteristic and needs special attention accordingly, therefore every SEZ shall be looked like a separate entity and before making a policy establishing a core objective for SEZ is important. As informant 2 said "... see you cannot simply say SEZs will be game-changer for industries, government needs to understand that SEZs have to have a specified vision for proper policy-making", another such response from informant 13 was "what does government want from SEZs? Do you know? No, because there is no specified objective or vision – and even if there is, no one knows". A few informants, however, claimed that Government has set the objective that is to provide facility to industries and rest will be taken care by industrialists. For instance, informant 18 said "it is not that we do not have objective, we just don't want to specify it and bound the investors". The issue seems to be unavailability of a specified objective for each SEZ.

Another point of view was that all the objective is interrelated, and one cannot simply say that there are distinct objectives. For instance, informant 17 said, "all the objectives, let say creating job, promoting exports, increasing GDP, etc. are interrelated and none of these cannot be achieved by ignoring others — so whatever objective you may have, it serves the purpose". Such comments are not in line with the literature though, where specified objective is deemed necessary, similarly most of the informants argued that even though the objectives are interrelated there has to be a core objective that would ultimately lead your policies. For example informant 12 said "if you want to create jobs, you may look for industries such as textile, sports, leather, etc. which are

labor-oriented whereas manufacturing firms may not require these many men to work – or if you want exports to increase you may want high-tech industries with quality products and focus on innovation. Of course, for both of these you cannot have same policies".

Furthermore, all of the informants believed that the government should focus on long term vision and objectives rather than looking for objectives set for 4 or 5 years. However, all of the informants agreed that there has to be an objective but differed in whether to specify it or not. Most of the informants belonging to official set up were of the view that the government has the objective and at this early stage it is not important to specify it. Whereas people from industry and academia believed that a specified objective would not only create transparency but also provide investors with an idea regarding industries to invest in, which can support government's objective as well.

## 5.3 Leading way

The second most important aspect explored in the interviews was regarding the role of leadership; whether the government will lead the industries to a certain pattern and investment areas, or industry will lead the way and evolve over time and establish what sort of industry will establish in SEZs. The informants seem split in two groups, while policymakers, a few industrialists, and government officials believed that an open market will allow industries to grow according to the market need, rest of the academicians and industrialists claim that governments' interference will help achieve the core objective including job creation, increase in export and any other.

An important point to ponder is informants who believed that there should be a specific objective shared common standpoint here as well. Their core concern is that its government knows better and can decide in the larger interest of the country, whereas industrialists would see their interest and may neglect overall broader perspective of investing. For instance, informant 1 said "...and more importantly, government wants to establish SEZs to achieve a certain objective, therefore they should guide industry type and nature". Another such response was from informant 4 saying

"Government has to do a lot to create jobs, protect the local investor and increase competition to improve quality, attract FDI and increase GDP – but how are they going to do it? If they have clear policy guiding investment in each SEZ it will create trust in the investors. Therefore, it is important for government to guide industry through effective policymaking and speed the work, so the industrialists believe government is serious in developing SEZs".

Such responses were in numbers and except informants 11, 14, 16,17,18,19, and 21 all agreed that the government has to take a lead and play role of anchor to steer this economic game-changer for Pakistan. As informant 13 said "... you see, government can't sit and just watch what investors do and attract the same problems that they faced in EPZs. Handing over to third parties doesn't solve the problems unless coupled with strong involvement of government".

However, the informant who said the industry should be allowed to lead was of the point of view that right now Pakistan is unable to even attract FDI so limiting the options in SEZs will be playing a role to increase such situation. As informant 16 said "at this stage we cannot limit which industry should come to which SEZ, we have to let that open to ensure SEZs are populated quickly". In this interview, it was assessed that government right now is not in position or not willing to interfere in investment options and believe that over time it will automatically evolve into specialized segments. Another similar response was from informant 19 stating "providing free market environment to industrialists will ensure that government is not interfering and practices that can hurt the industries will be reduced – industries have to look for optimal locations and by doing so they will automatically converge and build a linked industrial zone within SEZs which ultimately be fruitful for the country". Similarly, informant 17 said "you will hardly find evidence where government has played an active role in guiding the investment in SEZs – it is not in favor of industries and investors know where to invest and in what to invest. So, we better allow them invest and build and over the time it will automatically be converted into specialized area".

Apparently, the government seems to adopt the approach of clustering where firms club together and join in to form a cluster of related industries such as Textile in Faisalabad, Leather in Sialkot and Surgical in Wazirabad. Whereas academicians and most of the industrialists believe that government's role is important in leading and guiding the industry type to be invited or allowed in each SEZ. According to them this will ensure local industry protection as well as contribute towards goal-oriented investment in SEZs.

## **5.4 Financial Incentives**

Incentives are the biggest attraction in any SEZ, and firms come to such places to enjoy relaxation provided by the government. There was a clear divide in the informants regarding incentives, especially financial incentives. In the quantitative part of this research incentives proved to be significantly controversial among the groups involved in the survey. Similarly, informants from

academia, policymakers and analyst shared the point of view which didn't favor incentives in great deal whereas industrialists believed that incentives are core of SEZ and must be provided for longer period.

Firstly, the informants 1, 2, 3, 4, 5, 6, 10, 16, 18, 19, 20, and 21 believed incentives are short term measures and may attract the investors and they fly away once that relaxation time is over. Explaining the situation, informant 1 said "dependence on financial investment creates footloose investment – means industries come and once the honeymoon period is over, they leave and by that time they have accumulated enough to look for other such zones where they will be provided financial incentives". Another such response was from informant 20 saying "... similarly, financial incentives attract firms who want to get benefit from it and not interested in setting up business in the country. Therefore, they are not as beneficial for the country as assumed or claimed". In the interviews it was assessed that people with exposure from internationally established SEZs believed that financial incentives are of lesser importance in comparison to the value given to them.

Furthermore, according to informants' financial incentives shall be (if given) based on specific activities rather than providing a blanket cover for the whole industry. Informant 19 said "normally what we see is incentives are provided based on industry, such incentives prove to be too large and many companies not directly falling under the policy take advantage of it. The government should give incentives based on particular practice in a value chain – for instance ginning which is a missing link in our textile value chain". Another response from informant 5 was "missing the incentives is the best practice to engage firms in constructive practices rather than just taking advantage of tax holidays – for that each activity and practice needs to be evaluated and comprehensive policy shall be made for incentives". Such responses, in numbers, persuaded that financial incentives shall not be the core of the industrialization rather other factors such as local need, connectivity, and linkages, etc shall be looked as core competency for attracting FDI.

However, investors and industrialists were of the view that financial incentives are a must to attract FDI and even local investors. For instance, informant 14 said "in the current economic conditions and FATF issues how investors come? We need to attract them and there is no better attraction than financial". Another such response form informant 11 was "why would firms come here? What would attract them? These are the questions that government needs to analyze and

understand that unless we incentivize the basic facilities it would be hard for foreign investors to come here. We need to subsidize energy resources, land, tax and imports to attract FDI".

Overall informants agreed that incentives are important but clear distinctions were between groups regarding how much is enough to attract businesses. Furthermore, most of the informants believed the incentives are not long-term measures and may be able to attract FDI, but to sustain them for long time incentives are not enough and other factors may play an important role.

# **5.5** Government Support – Facilitation

Another important aspect of the discussion related to facilitation for investors through provincial and federal government support. All the informants agreed that the government should play facilitator role and ease the ways investors may engage in SEZs. Informant 1 explained the role of government support as "currently if a foreign company wants to invest in Pakistan it would take 256 days to set up and get all the documentation and approvals done, compared to 24 hrs approval mechanism in international market – with such delayed system who would want to come to Pakistan"? Inquiring the same lines informant 8 said "with this bureaucratic system you want multinationals to come to Pakistan and start businesses; they will not because they can't afford to spend so much time and efforts in just to take approvals". The issue seemed to be too many hands dealing with the investment process, and this could be seen by the 136<sup>th</sup> position of Pakistan in the list of ease of doing business compared to international market.

Further probe revealed that a few informants including 2, 3, 4, 7, 8, 11, 17, 18, 19, and 20 believed that one window operation is the solution to create ease of doing business in Pakistan. Informant 4 said "investor has to move around from one corner to another of the country to invest in SEZs, federal to provincial all offices have their own policies and procedure, often different to each other, and investor cannot afford to run here and there – they need one place to look to and get things done". Another similar response was from informant 11 who said, "…there should be one place where people should go and submit documents – what happens behind that window is government's issue and they should speed up the work, link the departments and get the work done; otherwise current system is not built to create ease". Such responses, in numbers and detail, have explicitly mentioned the importance of one window operations.

Even though, all the informants agreed to the importance of one window operations, informants 1, 5, 6, 9, 10, 12, 13, 14, 15, 16, and 21 views one window operation as instrumental yet next to

unachievable in current system. Informant 9 said "one window operation is too lucrative and popular to be used in every conversation but is it really applicable in our scenario? Not at the moment – every department thinks they are the boss". Another such response explaining why it is not possible was from informant 21 claiming "one window is only applicable if there is single authority who has to deal with it – or at least it should be at either provincial level or federal level. Different policies and orientation of provinces lead to conflicts and hence one window operation remains a myth in Pakistan".

Such responses clearly mention the importance of one window operation yet signify the lack of support mechanism to achieve that efficient approach. To overcome this lack of coordination two important aspects were shared by the informants. First informant 16 said "there has to be single CPEC authority who could deal with all the aspects and can help to bridge the gap departments and can have single orientation towards investment. Provinces, of course, might have issues but they need to realize of SEZs get operational they will be contributing directly in provincial economy". In this regard, a step has already been taken now by the government and CPEC authority is being made through presidential orders. The second important point form informant 21 stated "every SEZ shall have their own office and investors shall be directed to them instead of going for approvals in various departments – one such example is Faisalabad Industrial State Development and Management Company (FISDM)...".

Hence, serious efforts are required to overcome the issues associated with one window operations and significant changes are required in the current setup. Documentation and process have to be reduced and merged to a single point, departments need to collaborate and be on single page.

## 5.6 Joint Ventures and PPP

The current model of investment in SEZs is to attract Chinese and other firms to come and invest, with much less participation from local industry. Informants, in general, had different ideas to attract investment and make it sustainable. A few informants argued that joint ventures between Chinese and Pakistani firms are better options which will have multiple positive effects on local market. Informant 10 argued that "... and whenever big firms have come to Pakistan, they have never transferred technology, worked in isolation and left whenever wanted to. We have to go for Joint Ventures it could be between businesses or Public-Private Partnership to increase the stake and speed up the transfer of technology". Another similar response was from informant 2, who

said "with current situation in Pakistan, joint ventures can help international firms establish here and gain some trust or sense of security as local partner will be involved". With respect to joint venture two important things that could be highlighted from aforementioned excerpts are a) transfer of technology and b) trust or sense of security for international firms.

Adding to the joint venture and its benefits informants argued that it would reduce the issue of footloose investment and they will have to be bound with local partners. Even though informant 17 claimed that such ventures hardly become successful and often cause slow progress. He said, "If international firms joint venture with local firms they are bound and cannot progress or make policies as they want, hence they tend to leave early or do not excel at the pace they normally do". Despite the fact that this concern was validated by other responses, still the informant who agreed to this statement claimed that it better to progress slowly, rather than losing investment after 5 or 10 years. Informant 13 argued for the same saying "joint venture reduces the pace of progress but ensures the transfer of technology and long-term investments, even if international firms leave local firms can get into PPP contract with government and business can be sustained".

Apparently, the informants believed that the joint venture is good to secure technology transfer and improve PPP, even though it may slow down the progress. Another option is to go for a mix where a certain level of investment has to be under joint ventures and above that limit business can come on their own and be given sole proprietorship. This may create a good mix and help multi-level businesses to enter in the SEZs.

## 5.7 Large business vs SMEs

Continuing the discussion of joint ventures another theme that emerged relates the magnitude of businesses; divided into large vs small scale businesses. A few informants argued that Small and Medium Enterprises (SMEs) shall be encouraged to invest. Such arrangement, according to them, will encourage quick investments and complete value chain of an industry can be ensured. In the same lines informant 12 said "SMEs can be good options for us to look for an invite for investments in SEZs, these industries will require local support and will try to build their employee base and other resources locally". Adding to the same informant 7 said "if we look for joint ventures, SMEs can be of great help and our SMEs can easily get in touch with them and make a good deal out of it. It will help create backward and forward linkages as well". Currently, however, the focus of the government s is on large scale self-sufficient firms who can invest at their own.

## Contradicting to the SMEs point informant 21 explained that

"SMEs cannot afford to come to SEZs, and they may not be fruitful either. SEZs' have huge investments and cost of that is too much for SMEs to bear – if the Government facilitates the SEZs it will require subsidized energy and other resources and Government may not be able to recover the cost. You can see across globe that mostly large business is attracted towards SEZs and same are helpful in increasing the export potential".

Now, the government has to decide whether to invite SMEs and will it suffice the objective of the SEZs or not. However, for such policies there has to be vision and objective of an SEZ shall be specified beforehand.

## 5.8 Miscellaneous

Though there were a lot of points which were discussed, a few notable points mentioned by informants are clubbed here. First, five informants argued that SEZs are not short-term projects so looking towards their progress only after 5 years of inception is not a good thing to do. SEZs develop over long times and evolve as successful operative units only if they are given time and continuous support mechanisms. According to informants spreading negative sentiment just on the basis of 5 years is not right and they shall be given due time to be populated and rise to their potential. Continuing the issue, informants also said that government shall speed up the development of SEZs and improve infrastructural support.

Secondly, informants also argued that launching nine or even three or four SEZs simultaneously will not be helpful in the current scenario and two important issues are associated with it. One, this might increase the competition among the SEZs and as all the SEZs are primarily under provincial authorities, the competition might shape into political rivalry as well. Second, Pakistan is struggling to attract international investors and therefore if we have one or two SEZs to invest in, the investment will concentrate on a single space and speed up the process of investment in SEZ.

Table 28: Summary of Results

Theme	Findings	Stakeholders	Previous Literature	Justification
Political Influence	1. Removal of political influence 2. Cannot be removed if there is no will to improve	All (Except one)      One analyst	Political influence should be removed, and such examples can be found in Shenzhen and Modern Indian SEZs(Aggarwal, 2005; Farole, 2011; Zeng, 2012, 2016).	One respondent did not agree that "in political democracy, one cannot remove political influence—it is the mandate of voters which we should understand."
Vision and Objectives	1. Each SEZ shall have different visions and objectives and shall be propagated. 2. Long-term objectives shall be focused on.	All, whereas Policymakers believe that having a specific objective and propagation is not very important.	Authors mostly argue for the propagation of a clear vision and objective (Ackermann et al., 2012; ADB, 2016; COMCEC, 2017a; Ge, 1999b).	Currently, the government has enabled all the potential benefits as objectives, which, according to literature, cannot help in making effective policy.
Leading the Way	<ol> <li>The government should lead the way of investment based on the type and the nature of the industry.</li> <li>Industry should lead the way and evolve into a specialized SEZ for specific industries.</li> </ol>	<ol> <li>Academicians, analysts, and industrialists</li> <li>Policymakers believe in selfgrowth—an approach normally seen in industrial clusters.</li> </ol>	It is suggested that the government shall take the lead and promote specialized activities rather than multi-activity. A cluster of similar industries proves to be a better approach with specialized locational advantage (Aggarwal, 2019; Moberg, 2015; Narula & Zhan, 2019; UNCTAD, 2019).	Currently, policymakers believe that, if they impose restrictions on industry types, it may reduce the attraction and quick development of SEZs. Therefore, they have allowed any type of industry in all SEZs. However, while this approach may attract investment, it will not prove beneficial over the long term.
Financial Incentive	1. Should not be focused on success. When given, they shall be industry- or activity-based. For instance, an activity integrating a local business in the global value chain shall be given more advantage than a standalone unit operating in the zone.  2. Shall be given on long-term bases.	Academicians, policymakers, and analysts  2. Industrialists	Lucrative financial incentives have attracted most of the early SEZs across the world. However, modern-day practices reveal that the success of SEZs is more dependent on well-established infrastructure, the streamlining of regulations, and the ease of doing business (Farole & Akinci, 2011; Zeng, 2016).	Local industrialists' approach of waiting for financial incentives leads to increases in friction in investment. Further, industrialists are not aware of the latest trends across global SEZs and equate it to previously established Free Trade Areas (FTA), which were considered tax havens.

Government Support— Facilitation	Important, especially one-window operation and SEZ authorities' establishment	All stakeholders	The government shall increase the ease of doing business and help create an investment-friendly environment through policymaking and infrastructural development (Aggarwal, 2019; Moberg, 2015).	-
Joint Venture & PPP	Joint ventures will improve the coordination at a lower level and speed up the technology transfer.	All stakeholders	Domestic firms seldom have access to international distribution channels, and MNCs are often reluctant to transfer technology to developing countries.  Therefore, promoting joint ventures is a better option for attracting investment (Ackermann et al., 2012; Aggarwal, 2019; Crane, Albrecht, Duffin, & Albrecht, 2018; Farole & Specialist, 2009; Nishitateno, 1983; Zeng, 2015).	
Large businesses vs. SMEs	1. Large international businesses should be attracted for investment. SMEs may not be able to afford the cost of operations and government will have to give subsidies on most things. 2. SMEs should be promoted to invest in SEZs that will help local firms to engage with global activity.	1. Informant 21  2. All stakeholders except one	Inviting SMEs is not a realistic approach; links shall be established between local SMEs and international firms (Aggarwal, 2019; Farole, 2010).	Most of the informants argued for SMEs because they think SEZs will affect most of the SMEs, and their response can be seen as a precautionary measure to that.

## CHAPTER 6:

### **CONCLUSION AND RECOMMENDATION**

The objective of this research was to understand how SEZs can be implemented successfully in Pakistan and to ascertain the factors that can influence successful implementation. To identify factors, a comprehensive literature review was conducted and factors that are considered critical for success in international scenarios were listed down as in drivers (which help fasten the growth) and barriers (which slow down the progress). Further, to confirm the importance of these factors in local scenarios, quantitative study was conducted and survey questionnaire was used to gather the response from industrialists, academicians, policymakers, and zone developers. This survey questionnaire helped to rank the factors and barriers. Further to validate the quantitative responses and more specifically relate it to SEZs, in-depth open-ended interviews were conducted from the key stakeholders. Following in the chapter conclusion regarding each research objective formulated at the start of the study is discussed.

Firstly, literature was reviewed and a few most important factors for success were identified. Connectivity, Linkages, Infrastructure, Government support Mechanism, Regulatory Framework, and incentives were reported among the most influential factors in literature (COMCEC, 2017b; FIAS, 2008; UNCTAD, 2019; Zeng, 2015). Further in-depth review of literature revealed that infrastructure and connectivity are the most important and key factors for the success of SEZs. Anyhow, all the factors carry significant importance for successful implementation of SEZs, labor-oriented policies are more important in developing world. Despite emphasizing the factors, literature consistently reports that each SEZ shall be looked like a separate case and policies be made accordingly.

Secondly, in order to understand barriers for the implementation literature for the failed SEZs was focused; zone management, linkages, regulatory framework, and government support mechanism were found to have played a key role in failures. For the developing countries management is considered a big issue, primarily because corrupt practices and rent-seeking are deep routed. Further, nepotism, favoritism and poor planning are among other factors that lead the way to failure of SEZs. For Pakistan, similar situation has been reported in researches (Mukhtar et al., 2013) and according to papers this very reason led EPZs to not perform up to the expectations.

To further capture the perception of key stakeholders regarding factors and barriers quantitative survey was conducted. The general tendency of responses was skewed toward the positive side that reflects that key stakeholders in Pakistan also give significant importance to factors explored internationally. Linkages were rated as the most important factor by the respondents. Though linkages have been given high importance internationally as well, the response from the stakeholders seems to be more than that. A reason for that could be the perception of local industrialists as they feel insecure with advent of CPEC and believe that they will be replaced by the Chinese companies. Therefore, their focus seems to be on creating linkage through joint ventures with these firms instead of creating healthy competition.

Further, the second and third highly scored factors were Government Support Mechanism and Regulatory Framework respectively. Stakeholders believe that government must play its role in maximum capacity and take stakeholders on board, bring transparency and create trust. Connectivity, though scored high in international context, is not considered significantly important by the stakeholders, one reason for such response could be inclusion of Airport facility in the list of subfactors. Railway and Road connectivity is rated high as they are considered cheaper mean of transport. The inauguration of the ML-1 project in this regard can be considered timely and may encourage investors to get involved in SEZs. Linkages got moderate attention from respondents with provision of skilled labor and link to raw material among the high contributors. However, a contradicting fact in the responses was relatively low importance for provision of technical and vocational training centers despite giving high importance to provision of skilled labor. The reason for such conflicting responses could be the lack of trust in the government. Provision of vocational and technical training is responsibility of government and industrialists, in general, believe that the government normally doesn't have the capability to fulfill the commitments.

Incentives are among the top priority for the industrialists and play a significant role in attracting investors. Few factors related to financial incentives, such as tax rebate, dividend rebate and exemption of tax on foreign employees were included in the survey. As expected, industrialists, academicians, and policymakers had different perspectives about them. The results showed that stakeholders significantly differ while evaluating these incentives. Where academicians and policymakers were in favor of providing smaller or shorter incentives, industrialists wanted incentives to be more and lucrative enough to attract investment. However, while validating the responses in interviews, academicians explained that such incentives attract footloose investment

which is short term approach. The policymakers believed that the government may not have enough financial muscle to provide huge incentives. Whereas, industrialists believed that if incentives are not provided there would be no attraction to come to SEZs. This one aspect, financial incentives, is proving to be key element while attracting investors so the authority shall be aware of it and work on a solution that can attract investors as well as ensure the investment is long term and is not only to enjoy honeymoon period of tax heaven.

To validate and find the explanation of the responses gathered through a quantitative survey, indepth interviews were conducted. While most of the informants had validated the responses mentioned above, a few new themes emerged from interviews as well. Most of the informants believed that currently SEZs lack the direction and specific objective. This lack of direction leads to vague or generic policies that cannot be as useful as a specific policy could be. Further the political involvement was also considered sort of barrier by many informants. A few informants provided justification that in a political democracy one cannot avoid the political influence on most of the things. However, despite being politically motivated decision they believed that nepotism can be avoided and right person for the right job may be chosen to reduce the negative political influence on the progress of CPEC and SEZs.

Another important finding was the government's lack of active participation in guiding the industry to be attracted to SEZs. The policymakers informed that government will not try influencing the nature of industry rather it would be open for all and the objective would be to populate it at earliest. Whereas this approach seems fine, industrialist believes that government shall attract specific industries in an SEZ. The natural evolution of industrial clusters cannot be replicated in SEZs hence incentives shall be policy-driven and to attract specific activity in an industry. For incentives, except policymakers, most of the informants believed that instead of providing incentive-based on the industry, it should look for the niche activity in a value chain that can create value become part of global value chain. For instance, one such case is yarn industry, where most of the textile owners want to use imported yarn and claim that locally produced yarn is not of good quality and ginning process is not up to the mark. If government can provide incentives to firms that can invest in ginning and then spinning, the whole value chain of cotton to fabric can be localized. The impact of such incentive will be two-fold, one local industry will become self-sufficient and yarn will be available at low cost, second the imports of yarn will be reduced which will reduce the trade deficit in the country.

Public-Private Partnership (PPP) was another important aspect that informants wanted to be focused by the government. They believed that involvement of government will create trust and encourage investors to be part of SEZs. PPP has been recognized as good mechanism to provide services, but academicians believed that for investment it might not prove to be very fruitful rather it may create resistance due to long operational procedures. However, a few informants claimed that SMEs can be attracted and be provided an opportunity to collaborate with local industries. This will provide a lot of business opportunities as well as it will help in technology transfer. On the other hand, counter argument of such collaboration at SME level is the operational cost of SEZ is too big and SMEs are not the right fit at that level. SEZs will tend to benefit FDI and larger domestic investors most in the short term. They are not a direct solution for local SME development. Most SEZs are designed to attract and larger businesses, with world-class infrastructure, incentives that are usually geared toward exporters, and usually high lease costs relative to what is available in the local market. As a result, attracting local SMEs into SEZs on a large scale may not be a realistic objective. Instead, the emphasis should be on developing effective links between local SMEs and the globally-competitive firms anchored in the zones.

#### **6.1 Recommendations**

The following recommendations are presented based on the data collected through quantitative and qualitative methods of inquiry. These recommendations though follow a general approach but are very specific to the local scenario and based on respondents' and informants' understanding of the scenario.

The current SEZ policy was announced in 2012 when CPEC related SEZs were not even conceived. Therefore, it would be difficult to translate those policies into practices. A new SEZ policy shall be made in consultation with stakeholders, it will help in implementing the policy in an effective manner. Further, this SEZ policy shall be an umbrella cover and each SEZ shall have its own policy as well to cater the specific needs for the investors and local population. The new policy shall also be in tandem with overall country's industrial policy to create uniformity in regulation which can ease out the burden on investors.

Each SEZ needs to have its own vision and mission, and all the policies and regulatory framework shall be based on them. Currently, it appears that SEZs have a single objective that is to populate them which is insufficient to create effective policies. Having different vision, mission and objectives in context to the local scenario will allow different SEZs to create their own comparative

advantage and they can extract maximum benefit out of the unique SEZs. The comparative advantage of each SEZ should be validated through detailed strategic planning, feasibility, and master planning process. Further, to avoid conflict or stiff competition only limited SEZs shall be focused and operationalized in short term. Not more than 3 SEZs should be set up and promoted, as by setting up a lot of SEZs at a time would create competition among SEZs to attract Chinese companies, which would increase bargaining power of Chinese companies.

For maximum utilization of SEZs, specific short term and long terms objectives shall be established, and stakeholders are made part of it so they can realize future potential and plan accordingly. In the long-term goals, there should be measures or Key Performance Indices (KPIs) for continuous up-gradation of the industries by promoting technology transfer and innovation. The progress should be monitored continuously and periodically to ensure that KPIs are met.

The exchange between SEZ and the domestic environment should be promoted through policy measures and administrative reform to promote cohesion between the two. Access to regional production should be facilitated. Regional value chains should be linked to zones. By doing so the zone would develop linkages with local economy and would promote technology transfer. Further to promote and create the capability to absorb that technology transfer and innovation links between universities and industries should be strengthened. Customized and specialized education and training programs should be started for each SEZ to upgrade the skills of the local workforce in the vicinity of zones. This training must be continuously upgraded to meet the pace of changing technology and business demands.

SEZs should be given autonomy to test different reforms at the local or provincial levels. It takes 5-10 years to kick start a zone program. Strong political commitment is needed to create a conducive environment for the zones to flourish. Transparency, accountability, institutional development should be at every level. Continued support for the industries shall be ensured. Such trust can only be built through strong institutional autonomy with very less political or bureaucratic involvement.

Another important factor would be the type of companies investing in the SEZs. It has to be ensured that the industries coming to the SEZ should complement and not substitute local industries. This is because, SEZ companies producing similar goods and benefiting from privileged incentives, will displace Pakistani firms in the international market. To create such

value chain links between local SMEs and the globally-competitive firms should be anchored in the zones. Even though, the literature suggests that SMEs are not among the preferred ones in SEZs but still considering the responses from local industrialists and academicians it is presumed that with current huge contribution of SMEs, it may prove to be fruitful initiative. SME's involvement will also help in improving technology transfer and in the case of footloose investment these SMEs would have a good chance to increase their scale and become a big firm themselves.

To further enhance the involvement of SMEs and technology transfer joint ventures between Chinese firms and Pakistani investors should be encouraged. Special incentives should be given on missing links in the existing value chains of the different industries. Such initiative to involve local firms in joint ventures with Chinese firms will help to grow local labor market as well as reduce the chances of footloose investment.

Lastly, the most talked-about issue is one window operation. There is dire need of creating one window operations for SEZs where investors can approach and are guided and their issues are taken care. It would require special arrangements between provincial and federal governments and all other departments that are involved. Automated systems shall be incorporated which play the role of one window and investors may apply for facilities and get information from a single platform. There shall be a customer/business relationship department which should take care of all the issues and play the role of buffer between investors and government departments. Adding in the ease for investors, rapid customs clearance system shall be arranged for investors involved in SEZs. An example of such system is the Green, Yellow and Red categories of importers currently implemented in WEBOC system. Importers with Green code have to go through a very small time being trusted by the Customs. Similarly, Firms in SEZ shall get a scheme that can expedite the process and help firms to wait less and reduce the lead time.

#### **6.2 Limitations**

Every study has some limitations which could have affected the overall process of research, similarly, this study also has some limitations. First, lack of time and resource-restricted the researcher to travel to various parts of country where EPZs and investors could be contacted. The sample could have been larger, and more cities could have been included which were not done, as

the researcher being student did not have many resources. Secondly, the data was collected through survey questionnaires, and personal bias might have affected the way data was filled. Another limitation could be that interviewees were approached, and the responses were audio-recorded, many interviewees hesitated to respond openly. Recording the interviews might have affected the response, however researcher tried to probe through different means to reduce such issues.

#### **6.3 Future Research**

A thorough and in-depth study is required individually on the broad themes covered in this studyi.e. how can incentives/ government support mechanism / regulatory framework/infrastructure/ connectivity/ linkages impact an SEZ. What is the current on-ground situation, and how to improve them to meet international standards?

Secondly, each SEZ proposed under CPEC should be individually studied to understand dynamics of each SEZ and then present a comprehensive plan for them. Further, each SEZ shall be looked in light of global value chain and understand the micro-level values that can be added and local industry can benefit from it.

#### REFERENCES

- Pakistan GDP distribution across economic sectors 2017 | Statista. (n.d.). Retrieved October 3, 2019, from https://www.statista.com/statistics/383256/pakistan-gdp-distribution-across-economic-sectors/
- Abrahams, D. (2008). *Introdutory social research methods*. Retrieved from https://global.oup.com/ukhe/product/social-research-methods-9780199689453?cc=gb&lang=en&
- Ackermann, M., Ajello, M., Allafort, A., Antolini, E., Baldini, L., Ballet, J., ... Zimmer, S. (2012). Gamma-ray observations of the orion molecular clouds with the fermi large area telescope. *Astrophysical Journal*, 756(1). https://doi.org/10.1088/0004-637X/756/1/4
- ADB. (2016). The Role of Special Economic Zones in Improving Effectiveness of Greater Mekong Subregion Economic Corridors, 1–45. Retrieved from www.adb.org/countries/gms/main
- Aggarwal, A. (2005). Working paper no. 155 performance of export processing zones: a comparative analysis of india, sri lanka and bangladesh, (155).
- Aggarwal, A. (2019). Transnational Corporations Investment and development. Special Issue on Special Economic Zones. Transnational Corporations (Vol. 26). Retrieved from https://unctad.org/en/PublicationsLibrary/diaeia2019d2\_en.pdf#page=37
- Ahmed, M. (1980). Import Substitution as a Strategy of Industrialization in Pakistan—A Review. *Pakistan Economic and Social Review*, *18*(1), 56–64.
- Ahrens, J., & Meyer-Baudeck, A. (1995). Special economic zones: Shortcut or roundabout way towards capitalism? *Intereconomics*. https://doi.org/10.1007/BF02926261
- Akhtar, M. H. (2004). Pakistan Institute of Development Economics, Islamabad Participatory Development Praxis: A Case Study from Pakistan's Punjab Author (s): Akmal Hussain Source: The Pakistan Development Review, Vol. 45, No. 4, Papers and Proceedings PARTS I and. *JSTOR*, 45(4), 927–940.
- Alkon, M. (2018). Do special economic zones induce developmental spillovers? Evidence from India's states. *World Development*, 107, 396–409.

- https://doi.org/10.1016/j.worlddev.2018.02.028
- Angko, W. (2016). Analysis of the Performance of Export Processing Zones in Ghana Background The poor economic performance of many African economies has been associated with low growth of exports in general and manufactured exports in particular (Sö derbom Måns and Teal F, 5(1), 1–43.
- Anwar, S. (2015). Special Economic Zones (SEZs) and CPEC: Background, Challenges and Strategies. *Journal of Pakistan Vision*, *16*,(2), p142-163.
- Armas, E. B. De, Jallab, M. S., Armas, E. B. De, Sadni, M., Review, J. A., & Export, I. (2007). A Review of the Role and Impact of Export Processing Zones in World Trade: the Case of Mexico To cite this version: HAL Id: halshs-00178444 A Review of the Role and Impact of Export Processing Zones in World Trade: the Case of Mexico Enrique BLANCO de.
- Bell, E., & Bryman, A. (2007). The ethics of management research: An exploratory content analysis. *British Journal of Management*, 18(1), 63–77. https://doi.org/10.1111/j.1467-8551.2006.00487.x
- Bräutigam, D., & Xiaoyang, T. (2011). African Shenzhen: China's special economic zones in Africa. *Journal of Modern African Studies*, 49(1), 27–54. https://doi.org/10.1017/S0022278X10000649
- Bruton, H. J. (1998). A Reconsideration of Import Substitution. *Journal of Economic Literature*, 36(2), 903–936. https://doi.org/10.2307/2565125
- Cheesman, A. (2012). Special Economic Zones & Development: Geography and Linkages in the Indian EOU Scheme. *DPU Working Paper*, (145), 1–42. Retrieved from www.bartlett.ucl.ac.uk/dpu/latest/
- Clarke, S. (1990). What in the F-'s name is Fordism. Retrieved from https://homepages.warwick.ac.uk/~syrbe/pubs/Fordism.pdf
- COMCEC. (2017a). Special Economic Zones in the OIC Region: Learning from Experience.

  Retrieved from https://vivideconomics.sharepoint.com/sites/projects/practiceareas/Shared

  Documents/Cities and Infrastructure/Resources/SEZs/OIC 2017 Special Economic Zones in
  the OIC Region.pdf

- COMCEC. (2017b). Special Economic Zones in the OIC Region: Learning from Experience.

  Retrieved from http://www.sbb.gov.tr/wp-content/uploads/2018/11/Special\_Economic\_Zones\_in\_the\_OIC-Region.pdf
- Cowaloosur, H. (2014). Land grab in new garb: Chinese special economic zones in Africa: The case of Mauritius. *African Identities*. Taylor & Francis. https://doi.org/10.1080/14725843.2013.868674
- Crane, B., Albrecht, C., Duffin, K. M., & Albrecht, C. (2018). China's special economic zones: An analysis of policy to reduce regional disparities. *Regional Studies, Regional Science*. https://doi.org/10.1080/21681376.2018.1430612
- Dietz, J. L. (2019). the Caribbean North American Free Trade, Export-led Industrialization in the Caribbean Emilio Pantojas-Garcief, *29*(1), 49–66.
- Douglas, Z. Z. (2016). Special Economic Zones: Lessons from the Global Experience. *PEDL Synthesis Paper Series*, *1*(1). Retrieved from https://assets.publishing.service.gov.uk/media/586f9727e5274a130700012d/PEDL\_Synthes is\_Paper\_Piece\_No\_1.pdf
- Edwards, S. (1993). Edwards1993 Openness and Growth.Pdf. Retrieved from http://www.jstor.org/stable/532256?origin=crossref
- F. Betts, R. (2012). Decolonization A brief history of the word. Brill. Retrieved from https://www.jstor.org/stable/pdf/10.1163/j.ctt1w8h2zm.5.pdf?refreqid=excelsior%3A7187a c5e4882de59ae7f0882d508eaf7
- Farole, T. (2010). Special Economic Zones performance, policy and practice- with a focus on Sub-Saharan Africa. *Global Economic Review*, 23, 83–92. https://doi.org/10.1080/12265089408422840
- Farole, T. (2011). Special Economic Zones in Africa: Comparing Performance and Learning from Global Experiences. World Bank. https://doi.org/10.1596/978-0-8213-8638-5
- Farole, T., & Akinci, G. (2011). Special Economic Zones. *Special Economic Zones : Performance, Lessons Learned, and Implications for Zone Development*, 1–83. https://doi.org/10.1596/978-0-8213-8763-4

- Farole, T., & Specialist, S. T. (2009). China 's Investment in African Special Economic Zones: Overview and initial lessons.
- FIAS. (2008). Special Economic Zones Performance, Lessons Learned, and Implications for Zone Development.

  Retrieved from http://documents.worldbank.org/curated/en/343901468330977533/pdf/458690WP0Box331s 0April200801PUBLIC1.pdf
- Flynn, T. (2015). Integrating Special Economic Zones into Economic Development Strategies.
- Frick, S. A., Rodríguez-Pose, A., & Wong, M. D. (2018). Toward Economically Dynamic Special Economic Zones in Emerging Countries. *Economic Geography*, 95(1), 30–64. https://doi.org/10.1080/00130095.2018.1467732
- Frick, S. A., Rodríguez-Pose, A., & Wong, M. D. (2019). Toward Economically Dynamic Special Economic Zones in Emerging Countries. *Economic Geography*, 95(1), 30–64. https://doi.org/10.1080/00130095.2018.1467732
- Ge, W. (1999a). Special economic zones and the opening of the Chinese economy: Some lessons for economic liberalization. *World Development*. https://doi.org/10.1016/S0305-750X(99)00056-X
- Ge, W. (1999b). Special economic zones and the opening of the Chinese economy: Some lessons for economic liberalization. *World Development*, 27(7), 1267–1285. https://doi.org/10.1016/S0305-750X(99)00056-X
- Hasan, M. H. (2010). Pakistan's Power Sector Challenges and the Way Forward. *Policy Perspectives*. Pluto Journals. https://doi.org/10.2307/42909278
- IFC. (2016). *Annual Report 2016*. Retrieved from https://www.ifc.org/wps/wcm/connect/corp\_ext\_content/ifc\_external\_corporate\_site/annual +report+2016/2016+online+report/printed+version/printed+version
- Landsberg, M. (1979). Export-Led Industrialization in the Third World: Manufacturing Imperialism. *Review of Radical Political Economics*, 11(4), 50–63. https://doi.org/10.1177/048661347901100405

- Lee, A. (2018). Land, State Capacity, and Colonialism: Evidence From India. *Comparative Political Studies*, 001041401875875. https://doi.org/10.1177/0010414018758759
- Levien, M. (2012). The land question: special economic zones and the political economy of dispossession in India of dispossession in India, 6150(May). https://doi.org/10.1080/03066150.2012.656268
- Maddison, A. (1983). A Comparison of Levels of GDP Per Capita in Developed and Developing Countries, 1700–1980. *Journal of Economic History*, 43(01), 27–41. https://doi.org/10.1017/S0022050700028965
- Mahmood, Z. (2018). Opportunities and Challenges of Special Economic Zones under CPEC for Pakistan. In *The International Academic Seminar on Industrial Cooperation and Construction of Industrial Zones, CPEC*.
- Masood, M. T., Farooq, M., & Hussain, S. B. (2016). PAKISTAN'S POTENTIAL AS A TRANSIT TRADE CORRIDOR AND TRANSPORTATION CHALLENGES. *PAKISTAN BUSINESS REVIEW*, 267–289.
- Moberg, L. (2015). The political economy of special economic zones. *Journal of Institutional Economics*, 11(1). https://doi.org/10.1017/S1744137414000241
- Mukhtar, U., Ain ud din, S., Zohur ul Islam, & Ramzan, S. (2013). Identification of Impediments in Export Promotion Zones of. *JISR-MSSE*, *11*(2), 101–116.
- Murphy, K. M., Shleifer, A., & Vishny, R. W. (1989). Industrialization and the Big Push. *Journal of Political Economy*, 97(5), 1003–1026. https://doi.org/10.1086/261641
- Narula, R., & Zhan, J. X. (2019). Using special economic zones to facilitate development: Policy implications. *Transnational Corporations*, 26(2), 1–26. https://doi.org/10.18356/72e19b3c-en
- Neveling, P. (2015). Free Trade Zones, Export Processing Zones, Special Economic Zones and Global Imperial Formations 200 Bce to 2015 Ce. *The Palgrave Encyclopedia of Imperialism and Anti-Imperialism*, (November 2015), 1007–1016.
- Neveling, Patrick. (2015). Chapter 3 Export Processing Zones, Special Economic Zones and the

- Long March of Capitalist Development Policies During the Cold War.
- Nishitateno, S. (1983). China 's Special Economic Zones: Experimental Units for Economic Reform. *The International and Comparative Law Quarterly*, 32(1), 175–185.
- Nordstokke, D. W., & Zumbo, B. D. (2010). (PDF) A New Nonparametric Levene Test for Equal Variances. Retrieved October 23, 2019, from https://www.researchgate.net/publication/236596812\_A\_New\_Nonparametric\_Levene\_Test\_for\_Equal\_Variances
- Nordstokke, D. W., Zumbo, B. D., Cairns, S. L., & Saklofske, D. H. (2011). The Operating Characteristics of the Nonparametric Levene Test for Equal Variances with Assessment and Evaluation Data Practical Assessment, Research & Evaluation, *16*(5).
- Ohmae, K. (1993). The Nation State is Disfunctional. *Foreign Affairs*, 72(2), 78–87. Retrieved from https://www.foreignaffairs.com/articles/1993-03-01/rise-region-state
- Pakdeenurit, P., Suthikarnnarunai, N., & Rattanawong, W. (2014). Special Economic Zone: Facts, Roles, and Opportunities of Investment. *International MultiConference of Engineers and Computer Scientists*, II, 1–5.
- Pollard, S. (1990). *Typology of industrialization processes in the nineteenth century*. Retrieved from https://content.taylorfrancis.com/books/download?dac=C2004-0-13498-3&isbn=9781136462429&format=googlePreviewPdf
- Porter, M. E. (1990). New global strategies for competitive advantage. *Planning Review*, *18*(3), 4–14. https://doi.org/10.1108/eb054287
- Rodney, W. (1972). how europe underdeveloped africa citation Google Search (6th ed.). United Kingdom: Bogle-L'Ouverture Publications. Retrieved from https://www.google.com/search?rlz=1C1CHZL\_enPK817PK817&ei=wng7XJerEcThxgPM 7qHoCQ&q=how+europe+underdeveloped+africa+citation&oq=How+Europe+underdevel oped+Africa+cite&gs\_l=psy-ab.3.0.0i22i30.4778.31601..32812...0.0...0.293.1516.2-6.....0....1..gws-wiz.....
- Sahir, M. H., & Qureshi, A. H. (2007). Specific concerns of Pakistan in the context of energy security issues and geopolitics of the region. *Energy Policy*, 35(4), 2031–2037.

- https://doi.org/10.1016/j.enpol.2006.08.010
- Saqib Irshad, M., Xin, Q., & Arshad, H. (2015). One Belt and One Road: Dose China-Pakistan Economic Corridor Benefit for Pakistan's Economy? Qi Xin & Hamza Arshad Journal of Economics and Sustainable Development (Vol. 6). Retrieved from http://ssrn.com/abstract=2710352
- Schrank, A. (2001). Export processing zones: Free market islands or bridges to structural transformation? *Development Policy Review*, 19(2), 223–242. https://doi.org/10.1111/1467-7679.00132
- Song, H. (2012). Moving Toward a New Development Model for East Asia-The Role of Domestic Policy and Regional Cooperation. Oriented Growth Model.
- Szirmai, A. (2012). Industrialisation as an engine of growth in developing countries, 1950-2005. Structural Change and Economic Dynamics, 23, 406–420. https://doi.org/10.1016/j.strueco.2011.01.005
- UNCTAD. (2019). *World Investment Report*. Retrieved from https://unctad.org/en/PublicationChapters/WIR2019\_CH4.pdf
- UNIDO. (2015). *Economic zones in the ASEAN*. Retrieved from https://www.unido.org/sites/default/files/2015-08/UCO\_Viet\_Nam\_Study\_FINAL\_0.pdf
- Wang, J. (2013). The economic impact of Special Economic Zones: Evidence from Chinese municipalities. *Journal of Development Economics*. https://doi.org/10.1016/j.jdeveco.2012.10.009
- Wen, Y. (2016). China's Rapid Rise. Retrieved from www.stlouisfed.org
- World Bank. (2007). COST OF POLLUTION IN CHINA ECONOMIC ESTIMATES OF PHYSICAL DAMAGES The State Environmental Protection Administration Rural Development, Natural Resources and Environment Management Unit, East Asia and Pacific Region, The World Bank The World Bank Office, B. Retrieved from https://siteresources.worldbank.org/INTEAPREGTOPENVIRONMENT/Resources/China\_Cost of Pollution.pdf

- Yao, S., & Yao, S. (2006). On economic growth, FDI and exports in China On economic growth, FDI and exports in China, (August 2014), 37–41. https://doi.org/10.1080/00036840500368730
- Zaidi, S. A. (2005). Issues in Pakistan's economy. Oxford University Press.
- Zeng, D. Z. (2012). China's Special Economic Zones and Industrial Clusters: Success and Challenges.
- Zeng, D. Z. (2015). Global Experiences of Special Economic Zones with Focus on China and Africa: Policy Insights. *Journal of International Commerce*, *Economics and Policy*. https://doi.org/10.1142/S1793993316500186
- Zeng, D. Z. (2016). Special Economic Zones: Lessons from the Global Experience. *PEDL Synthesis Paper SeriesSynthesis Paper Series NO 1*, 30. Retrieved from https://www.gov.uk/dfid-research-outputs/special-economic-zones-lessons-from-the-global-experience