

# **Evaluating Industrial Subsidy Mechanism in the Textile Sector of Pakistan**



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**CERTIFICATE**

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## AUTHOR'S DECLARATION

I Talha Ghafoor hereby state that my MPhil thesis titled "Evaluating Industrial Subsidy Mechanism in the Textile Sector of Pakistan" is my own work and has not been previously submitted by me for taking any degree from Pakistan Institute of Development Economics or anywhere in the country/world.

At any time if my statement is found to be incorrect even after my graduation, the university has the right to withdraw my MPhil degree.

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## ***DEDICATION***

***Dedicated To my family***

***I dedicate this dissertation to my family who has always supported me in my academic journey and taught me to stand firm on my principles of determination, confidence and hard work. It is their good wishes and prayers that helped me complete this work.***

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## **Abstract**

As an industrial policy instrument, dispensation and allocation of subsidy is a part of the core business of governments. It is widely believed that government should intervene and provide those goods and services which are important to society in case market fails to deliver. Industrial subsidies are provided to achieve some economic objectives such as promoting market competition and economic growth, promoting exports, protecting or increasing employment, encouraging investment, and enhancing access to basic infrastructures. The objective of this study is to evaluate the existing mechanism used to determine the subsidies in the textile sector as well as to investigate the impact of subsidies on the growth of textile exports. The study has utilized time series data from 1990 to 2020 to explore the effect of subsidies in promoting textile exports using Autoregressive Distributed Lag Model (ARDL) Bounds Testing Procedure. In this study textile subsidies are sub-divided into fiscal incentive and financial incentive. The results of the empirical investigation reveal that financial incentive has a statistically significant positive impact on the growth of textile exports in the long run while fiscal incentive has no impact in promoting textile exports either in the short run or long run.

Furthermore, the study has qualitatively evaluated the process and mechanism through which subsidies are determined in the textile sector with the help of in-depth interviews from relevant stakeholders. The study has found no proper criteria for subsidy determination and allocation in the textile sector. Besides, public-private coordination exists in determining subsidies, while government has now formed Sectoral Councils to ensure participation of private sector in the implementation process. Post subsidy evaluation has been currently initiated by the Textile Division which is a positive step towards improving the effectiveness of subsidy schemes. The study recommends a mechanism for determining subsidies based on promoting new activities which could have the potential to create spillover and demonstration effects. Based on study results, it is proposed that financial incentive should be made more attractive by decreasing rate of return on refinance from 7% to 5% per annum for long term financing and fiscal incentive should be further evaluated in order to be improved or replaced by alternative policy instruments.

**Key Words:** Subsidy, Industrial Policy, Textile Exports, ARDL Model

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## **List of Abbreviations**

|         |  |
|---------|--|
| APTMA   | All Pakistan Textile Mills Association                   |
| ASEAN   | Association of Southeast Asian Nations                   |
| BVS     | Bonus Voucher Scheme                                     |
| CBR/FBR | Central/Federal Board of Revenue                         |
| DDT     | Duty Drawback of Taxes                                   |
| DLTL    | Drawback of Local Taxes and Levis                        |
| ECC     | Economic Coordination Committee                          |
| EDF     | Export Development Fund                                  |
| EFS     | Export Finance Scheme                                    |
| EPZs    | Export Processing Zones                                  |
| FDI     | Foreign Direct Investment                                |
| FPCCI   | Federation of Pakistan Chambers of Commerce and Industry |
| IMF     | International Monetary Fund                              |
| L/C     | Letters of credit  |
| MITI    | Ministry of International Trade and Industry             |
| NEDB    | National Export Development Board                        |
| PBS     | Pakistan Bureau of Statistics                            |
| PTA     | Pure Terephthalic Acid                                   |
| RMG     | Ready-made garments                                      |
| SBP     | State Bank of Pakistan                                   |
| SBRs    | State-business relations                                 |

TRIMS Trade-Related Investment Measures

# Chapter 1

## Introduction

### 1.1. Background

Textile industry in Pakistan is a critical driver of economic growth and industrial exports. Among few other developing economies, Pakistan has a full-fledged textile value chain from fiber to fabric to garment exports and low import intensity. This sector contributes around one-fourth of industrial value-added and shares 60% in national exports. Textile sector accounts for about 8.5% of economy's GDP and constitutes 40% of the industrial labor force. Notwithstanding its potent effect on manufacturing value-added, textile sector has struggled to expand and diversify in a sustained manner.

On the other hand, textile industry has served a "lead-sector" in helping the structural transformation of many strong economies such as Britain, Japan, South Korea, and China. Besides, this sector has proved to be a source of introducing new technology, improving formal sector employment, and reducing poverty in these countries.

Pakistan has been a big supplier of raw cotton since independence: in 2018, the share of country's cotton production accounted for about 8% of global cotton output, making Pakistan the fourth largest producer. It is, therefore, conceivable that Pakistan has adopted a cotton based textile-led industrialization policy. Textile production value chain in Pakistan spans cotton ginning, spinning, weaving, dyeing and finishing, made-ups and garments (woven and knitted apparel).

With the help of industrial policy instruments, synthetic fiber industry was also developed during 1960s and 1970s. On the one hand the process of industrialization helped develop a secure base for textile sector, on the other the concentration and skewed policy tools towards spinning and weaving firms further slowed down the process of value addition in textile industry.

Historically, industrial policy instruments have been actively used in the disbursement of productive resources through various institutional arrangements in Pakistan like other countries in East Asia and Latin America. Initially, industrial strategy in Pakistan used public sector for accumulating capital and investment and later transferred productive assets to the private sector (Papanek, 1967). Early industrial policy identified jute and cotton as basic exportable items along with the establishment of consumer commodity sector in the absence of extensive industries.

Interestingly, without having a single jute mill Pakistan was producing 75% of global jute output and producing 1.5 million bales of cotton with hardly any textile mills (Nadvi and Sayyed, 2004). The policy of Import Substitution Industrialization (ISI) pursued during the first decade of Pakistan proved effective and large scale manufacturing achieved significant growth. Investment decisions were influenced by policy instruments like overvalued exchange rates and licensing system which helped distribute rents in favor of prioritized sectors.

Government introduced Bonus Voucher Scheme (BVS) in 1959 that managed to keep separate exchange rates to curtail imports and promote exports which proved very effective within three years of its introduction. However, this state policy is said to be responsible for the stagnation of long term industrialization process in Pakistan (Zaidi, 2005). Industrial policy was revived in

1980s after it was abandoned during most of 1970s, but the economic growth that followed was not accompanied by any increase in employment generation.

Unlike East Asian countries industrial policy during this period failed to produce the desired objectives of industrial development. An important aspect of East Asian industrialization strategy (Chang, 1996) has been the coordination between government and the private sector which remained elusive in case of Pakistan. During sixth five year plan (1983-88) government initiated the process of deregulation and liberalization. In this period the policy of export-led growth was pursued which was accompanied by an increase in the level and expansion of export subsidies (zaidi, 2005).

However, the initiative of Export Processing Zones (EPZs) did not materialize in Pakistan. On the other hand, EPZs contributed substantially to boost manufactured exports in Mauritius. It is because the state of Mauritius created a meta-institution of participatory democracy which developed the country like a 'supercivil society'. Such institutional arrangement enabled EPZs to act as institutional innovations which assisted in balancing protection-based ISI objectives and free-trade systems (Rodrik, 2008, p. 28). In Pakistan EPZs failed due to lack of internal cooperation between the ministries of commerce, finance, and industries (Hasan, 1998).

During 1980s, textile and clothing sector were prioritized on the basis of instant profit generating potential and low gestation. Nevertheless, the incentive scheme was unable to create demand for value addition and cotton yarn, which also received heavy subsidies, remained a major export item (Hasan, 1998). Technological failure has remained a major cause for concern in textile sector of Pakistan. Growth in total factor productivity in manufacturing industry declined since 1990s onwards (Ara, 2004).



Textile sector in Pakistan has performed relatively poor in post-MFA era unlike the economies of China, Bangladesh, and Vietnam which registered substantial growth in their export performance. Despite rapid increase in world textile markets in the 2000s, Pakistan's contribution has remained at two percent or less in world market, the sector experienced an expansion of less than one percent per year in 2010/2011, 2011/2012, and 2012/2013.

## **1.2. Introduction**

As an industrial policy instrument, dispensation and allocation of subsidy is a part of the core business of governments. It is widely believed that government should intervene and provide those goods and services which are important to society in case market fails to deliver. Economic and social objectives usually motivate state intervention. Economic objectives comprise of mainly promoting market competition and economic growth, protecting or increasing employment, encouraging investment, and enhancing access to basic infrastructures. Disbursement of Public subsidies for social objectives commonly include poverty reduction, and providing access to basic necessities of life to the economically disadvantaged segments of the society.

There is substantial equivocacy in the concept of subsidy. A subsidy in its basic nature is a negative indirect tax — an inverse transfer from the state to the public — or an income supplement for people. Like indirect taxes, subsidies may thus be lump-sum, proportional or progressive. The subsidy changes relative prices and/or puts extra resource entitlements with the beneficiary.

Conceptually, subsidy refers to three different terms. The first one is applied in consumer jargon, the explicit budgetary subsidies. The second refers to the term used in National Accounts and it

implies the opposite of indirect taxes. The third is the concept applied to refer to unrecovered costs of supplying non-public goods. This concept was initially used in the study by Mundle and Rao (1991). This subsidy definition refers to the most comprehensive estimate and also includes both subsidies to consumers (in the shape of income supplement and below cost supply) as well as producers (involving those to offset production inefficiencies).

An industrial subsidy can be defined as direct or indirect, input or output and general or sector-specific. A direct industrial subsidy is that which is directly received by the firm for an activity. It may be in the form of a unit of output or a unit of input of an activity or could be per unit output input value. An indirect subsidy is the one received indirectly by the firm on an activity through higher market price for its output and/or lower market price for its input. Industrial subsidies may also result from policies which are general and applicable to all sectors of an economy and may result from policies only targeting a specific sector in which case they are referred to as sector-specific subsidies.

In case of textile sector in Pakistan, sector-specific industrial subsidies, particularly export subsidies, are prevalent and have been operational since long. It is important to note that industrial subsidies are an essential part/instrument of industrial policies. Industrial Policies have been widely used in the developing world during 1960s, 1970s and 1980s. However, due to the extensive drive for liberalization and deregulation in the late 1980s and early 1990s the practice of industrial policy decreased.

Perhaps the resurgence of current debate on industrial policy in development literature as a key component of restructuring developing economies has increased its role in policymaking. Industrial policy refers to the government policies aimed at altering the economic composition of

the economy. Industrial policy is known to complement market forces in that market failures impede free markets to produce some of the important socially desirable outcomes. There exists a widespread consensus for industrial policy among economists on its theoretical basis.

But with the evolution of macroeconomics, two broad groups (neo-classical and neo-keynesian) have emerged and provide different rationales for industrial policy. Neo-classical theory justifies public intervention only in case of market failure. The sources of market failure arise from positive externalities, Marshallian externalities, coordination issues, information asymmetries and incomplete markets. Other theorists stress the role of government in promoting innovation and technological change which is essential in the growth process.

The global financial crisis of 2008 has reshaped the role of governments in the economy. It has increased the challenge for industrial policy that is supposed to guide the design of effective government-supported initiatives wherein public private coordination leads to develop new industries and technologies.

Rodrik (2008) believes that the industrial policy can only become effective if its analysis focuses not only on policy outcomes, but also on getting the policy process right. This implies that industrial policy needs to be thought of as a discovery process whose design framework should try to address informational and coordination externalities. This approach to industrial policy requires a coordinated attempt between government and private sector to uncover significant externalities and specify what interventions are most likely to address them.

During 1960s and 1970s, many developing countries witnessed interventionist government policies in promoting economic development. Such policies were motivated mainly by a lack of private entrepreneurs, absence of financial markets' willingness to finance new enterprises, and

the inability of local investors to bear the risks of large-scale investment. This notion of intervention led to the establishment of state-owned enterprises in order to close the resource gap and reduce the technological gap with developed economies. Interestingly, this was the period in which economic theory realized well the sort of externalities that inhibit the ability of profit-maximizing firms to promote economic efficiency or societal welfare.

Most often the practice of industrial policy, largely in developing economies, has failed. In the 1950s and 1960s, many governments throughout the developing world adopted industrial policies to modernize and strengthen the process of nation-building accompanied by nationalist sentiments. This approach towards development led many political leaders to prioritize and develop large heavy industries for which those economies were short of requisite resources.

Although the motivation behind development of capital-intensive industries was well-intentioned, but the mechanism to initiate such programs was not based on the analysis of economic fundamentals of those economies. The development plans of low-income countries mainly relied on the establishment of state-owned enterprises in heavy industries which had neither the competitive cost structure nor the technical capacity or the financing means to obtain their objectives.

The account of early industrial policy is uncertain. East Asian economies witnessed high levels of economic growth and achieved structural transformation. While most other economies in Latin America were unable to catch up, rather the results were disappointing: many low-income economies where industrial policies were executed experienced divergence of their income levels with developed countries. Although governance failure and macroeconomic policies were

mostly responsible for these outcomes, industrial policies were often criticized for discouraging performance of the economy.

It is believed that industrial policy that failed in some countries not because government intervened per se, but the design and the process of industrial policy was flawed. Critics of industrial policies in developing countries signalize that they have brought in significant distortions: scarce state resources were utilized to promote unsustainable import-substitution policies.

Administrative measures were adopted to lessen the burden of public subsidies — granting the ailing firms in specific industries a market monopoly, controlling prices for raw materials, suppressing interest rates, and overvaluation of local currency. Often such interventions created shortages in raw materials and foreign exchange. Opportunity cost of credit was raised by means of preferential access to credit to certain enterprises or sectors (Lin and Monga, 2013).

The success of industrial policy in East Asian countries diverted the perspective of economic theory from the question of why to how industrial policy should be adopted and implemented. The success of industrial policy is conditional on getting the interventions right. Taiwanese and South Korean governments intervened in their economies by coordinating and motivating private (and public) investments involving a greater degree of linkages within the modern sector. These policies had a potential of enormous reward since they were able to abolish coordination failures in countries where the latent return to investment was already considerable (Rodrik, 1995).

With the right set of policy instruments, government in Bangladesh helped establish and develop an export-oriented garment sector from scratch. Government facilitated the transfer of technology from South Korea, introduced Special Bonded Warehouse system to promote

production of garment export, and permitted domestic banks to open back-to-back usance import letters of credit (L/Cs) based on garment exporters' export LCs to substitute import financing needs of local producers (Rhee, 1990).

Textile sector in Pakistan has been a key recipient of sector-specific industrial subsidies. Since textile sector is an export-oriented sector and is the largest contributor in the overall exports of the country, the subsidies it has received are mainly export subsidies. The primary objective of these export subsidies is to increase the level of textile exports and boost value-addition. Therefore, this study is designed to evaluate the existing framework and the process of subsidy determination in the textile sector. Apart from that the study also attempts to check whether the subsidies granted to textile sector have any impact on the growth of textile exports.

### **1.3. Problem Statement**

Pakistan has extensively used industrial policy to promote diversification and value-addition in the economy and textile sector has remained one of the most prioritized sectors in this respect. However, the objectives of industrial policies have mostly remained futile and the performance of textile sector in Pakistan has been poor compared to its comparators. In recent decade ministry of textile announced two five-year textile policies— Textile Policy (2009-14) and Textile Policy (2014-19) — which failed to achieve their targets and could not be properly executed. Another five-year textile policy, Textile Policy (2020-2025), has been prepared and has now become operational.

It is believed that the process of determining subsidy/incentive schemes in the textile sector does not follow a proper framework in Pakistan. Development economists have presented some principles for modern industrial policy and they argue that subsidies should only be provided to

new activities. Those activities should have the potential to create spillover and demonstration effects.

However, in our case the subsidy/incentive schemes are designed to promote existing export activities irrespective of their potential to boost value-addition and diversification. As a result government intervention seems to have either a little or no impact on the growth of textile exports. Besides, the absence of post subsidy evaluation mechanism in the textile sector has led to an increase in financing subsidies and hence fiscal burden of the government.

Unfortunately, as per my understanding, no academic study is conducted to evaluate the mechanism through which subsidies in the textile sector are determined. Also no study is found to have evaluated the impact of subsidies on the growth of textile exports in Pakistan. It is necessary to know how subsidies in the textile sector are determined along with their impact on the growth of textile exports. Therefore, this study attempts to investigate the mechanism used to determine subsidies in the textile sector and the role played by private sector in this process. And the impact of textile subsidies in promoting textile exports will be analyzed.

#### **1.4. Research Problem**

Based on the narrative of problem statement mentioned above, I am narrowing my research problem into “**Evaluating Industrial Subsidy Mechanism in the Textile Sector of Pakistan**” and have operationalized my topic into following research questions and objectives.

#### **1.5. Research Questions**

This research study aims to answer the following questions:

- How are subsidies determined in the textile industry of Pakistan?
- What is the role of private sector in determining subsidies in the textile sector?

- What is the impact of subsidies on the growth of textile exports?

### **1.6. Research Objectives**

The purpose of the present research is to study the criteria and the mechanism which leads to the determination of subsidies in the textile sector. The other objective is to test the impact of subsidies in promoting the value of textile exports. Unless the criteria and the process of selecting subsidies corrected, the objective of subsidy provision to enhance textile exports would fail and the impact remains insignificant. Therefore, the specific objectives of the study are highlighted as:

- To investigate the mechanism through which subsidies are determined in the textile sector.
- To explore the contribution of private sector in coordinating the process of determining subsidies in the textile sector.
- To analyze the impact of subsidies in promoting the growth of textile exports.

### **1.7. Significance of the Study**

In the past industrial policies were advocated by economists because it was believed that markets in low-income countries were incomplete and full of market failures and the only way to escape poverty in those economies was forceful state interventions. Later, economists perceived government failure as a bigger evil and believed that the best thing government could do was to stay away from regulating the economy and let the free market do its job. Reality has failed both accounts of expectations. Industrial policies prevailed in some countries and went wrong in others, while same has been the case for market liberalization policies.



In recent decades, economists have come to know after having studied the successful industrial policies of some East Asian economies that it is the process and design of industrial policies that matter not the interventions per se. Now it is increasingly realized that developing countries should embed private initiative in a framework of public action that supports diversification, restructuring, and technological dynamism beyond what market forces would generate on their own (Rodrik, 2008). According to Rodrik (2008) the analysis of industrial policy needs to stress not on the policy outcomes, but on getting the policy process correct.

Export subsidies are one of the main instruments used to increase value-addition and the level of textile exports in Pakistan. Being the largest exporting sector and the largest recipient of export subsidies in Pakistan, textile sector needs to greatly enhance its exporting capacity. This study is important in the sense that it tries to explore the impact of financial incentive and fiscal incentive schemes separately on the growth of textile exports in the long run as well as in the short run. Further, the study will help to identify issues related to implementation of textile industrial policy and its instruments especially incentive schemes.

Unfortunately, there is no proper industrial policy framework in Pakistan that is specifically designed to guide the process of choosing right industrial subsidies, especially export incentives, in the textile sector. Although specific textile sector policies have been made in the country but those policies failed to reflect the particular constraints facing the industry in terms of subsidy schemes. Therefore, this study attempts to evaluate the existing subsidy framework in the textile sector and investigates the effect of textile subsidies in promoting textile exports. This study will add value to the process of designing industrial policy instrument specifically the export subsidy schemes in the textile sector of Pakistan. Moreover, the study also provides an insight on the role of fiscal and financial incentive schemes in the growth of textile exports in Pakistan.

## **1.8. Organization of the Study**

This study is organized into eight chapters. The first chapter starts with the background and the introduction of the study. Literature review of the study is presented in the second chapter. An overview of textile subsidy schemes is presented in chapter three. Chapter four comprises of methodology and theoretical framework of the study. And chapter five and six each discusses the result estimates and interpretation and qualitative analysis of the study respectively. Finally chapter eight includes the conclusion as well as the policy implications of the study.

## **Chapter 2**

### **Literature Review and Theoretical Framework**

#### **2.1. Literature Review**

##### **2.1.1 The Economic Justification for Subsidies**

The presence of market imperfections is often cited as a valid justification for the use of subsidies as a fiscal or industrial policy tool. Subsidy is used as a corrective measure to rectify mainly three market anomalies: externalities, particularly the ones emanating from research and development operations, information asymmetries and increasing returns to scale. According to Ford and Suyker (1990) externality is generated when producers become unable to appropriate all the marginal benefits implying an insufficient incentive to produce. An example in this respect is the subsidization of high-tech industries where externality is the knowledge generated through R&D.

Knowledge once utilized cannot be kept secret and thereby enables the competitors to get a “free ride” which discourages the expenditure on R&D. Therefore, subsidies could solve the issue by underwriting research while permitting free dissemination of the results. High returns to scale cause oligopolistic market behavior which creates rents to producers. In a closed economy these are paid by consumers while if, the good is exported, some rents can be collected from foreign consumers. Hence, there may be an economic case for subsidizing local producers, if the required subsidy is small and if it does not promote excessive rent dissipating entry.

Imperfections also arise from information asymmetries between lenders and borrowers. Stiglitz and Weiss (1981) have developed an imperfect capital market where they assume that borrowers know how risky their projects are, but lenders do not.

This asymmetry results in an adverse selection problem and interest rates that are too high from a social point of view. An interest-rate subsidy is a possible solution that is expected to distinctively attract projects if the interest rates are set at socially optimal level. The policies proposed by these models usually do not require the government to have higher information than the private sector. That is, interest-rate subsidies (or taxes, depending on the nature of market failure) can improve welfare even if provided to all firms.

Yet Ford and Snyker (1990) emphasize that much of the industrial policy has been designed to “pick winners”, commonly based on the reason that capital markets overlook potential undertakings. Unfortunately, it has been difficult to pick winners in practice, and government decision-making has mostly been hijacked by social and political over economic considerations. Finally, it has often become hard for governments to abandon projects that have proved to be economically unsound.

In a study on industrial policy Hausmann et al. (2008) critique the conventional practice of industrial policy and argue that market failures are a rampant feature of the landscape of a developing country. The market failures that require industrial policy take three shapes in particular: self-discovery externalities, coordination externalities, and missing public inputs. Self-discovery externalities imply that learning how and what new products can be profitably produced in an economy. The social value of this activity greatly exceeds its private value.

Self-discovery searches of entrepreneurs and enterprises are prone to distortions and coordination problems of their own. The process of search is costly with its returns uncertain. Private sector will under-invest in self-discovery that render public benefits and will demand to prevent competitive entry. Often the process of self-discovery is accelerated in cases where the externalities are internalized to a certain extent.

It is found that cooperation among private firms is not self-enforcing. Government is believed to have a comparative advantage at enforcement, but it needs to get engaged in the law-making process if it is to utilize its enforcement powers effectively. The private sector requires government support to internalize the externalities that are part of the self-discovery process and to supply many of the public inputs that only government can provide.

On the other hand government needs the cooperation of private sector to get the required information about the hurdles and opportunities it faces in order to be able to shape its behavior in the desired direction. Therefore, cooperation is a necessity between the two sectors to uncover distortions and find their solutions.

### **2.1.2 The Role of State in Structural Change**

Many studies have argued that the role of industrial policy has been the facilitation of the process of structural change and development of feasible coordination mechanisms during different phases of industrialization in East Asia (Chang, 2002; Nixon, 2007b; Amsden, 1989). However, since the early 1980s, the role of the state shifted from economic interventionism towards liberalization and privatization. Whereas, since late 1980s, there has been a revival of the debate on the role of state and designs of industrial policy which negate the basic assumptions of free market economy.

The latest debate on industrial policy not only focuses on the effectiveness of interventions in industrial development but also on expanding the technological capabilities of the economy (Lall, 2000). Since a large number of researchers has argued that direct state intervention in the past has proved successful in enhancing the technological capability of USA and many Western European economies (Chang, 2003a; Shafaeddin, 1998).

There is widespread recognition that market failures, on which theoretical foundation for industrial policies depend, are common in developing countries. And government interventions that are properly targeted and well-designed can overcome the constraints and contribute to improved economic outcomes.

There is also great consensus on the role of private sector in formulating and implementing industrial policy. As crucial information relevant to policy-making is held by firms, some form of strategic coordination between private and public sectors is required to aid in the design of appropriate public policy as well as to provide constructive feedback on its implementation. Unfortunately, there is less agreement in academic literature on how public-private coordination should be structured, how its goals should be defined, and how mechanism of success should be measured.

### **2.1.3 Benchmarking Industrial Strategies**

One of the crucial problems faced by developing economies in producing effective industrial strategies and concrete plan of action has mainly emerged from the structural deficiencies in policy making. In a study on Vietnam's industrial policy formulation Ohno (2009) concluded that industrial policy in well performing countries of East Asia has mostly remained goal-

oriented. A long-term national vision was launched by the top state leader that provided a general direction without particular details.

To this end, state institutions were chosen or established afresh to devise strategies and enforce concrete action plans. Proposed strategies might be in the form of readable documents or might carry on as a process without documentation. Plan of action might be amended as per the conditions, but the long-term vision remains intact.

For instance, Japan had an objective of doubling its income within the decade of 1960 and effectively competing with Western multinationals after removal of trade barriers. A coordination mechanism was developed between the Ministry of International Trade and Industry (MITI) and Japan Development Bank for the sake of assisting private efforts in increasing productivity.

Thailand launched the industrial vision under Prime Minister Thaksin Shinawatra (2001-2006) which was ambitious, such as becoming the “Kitchen of the World”, while assigning the duty to relevant ministries, experts, and private businesses to prepare plan of action. Industry-specific institutes and committees were created to implement the proposed strategies along with providing direct access to private sector to the prime minister whenever required (Ohno, 2006).

Industrial policy formulation process in East Asian countries followed a backward approach starting from common objectives to phased strategies and concrete plan of action. The design was flexible to make necessary adjustments and gather experience and trust along the way. This mechanism referred to as ‘dynamic capacity development’ (Ohno, 2009) enables to steadily develop policy capability as real issues and challenges are confronted over time.

Most of the East Asian economies improved their administrative capacity through trials and errors as well as learning by doing. For example, in 1959, Thailand was less preferred as an investment hub due to lack of investment planning and scarcity of skilled personnel (World Bank, 1960). Similarly, in 1960, Korean civil service was highly regarded as a corrupt and incompetent institution (World Bank, 1993).

#### **2.1.4 Designing Incentive Structure through Public-Private Coordination**

The dominant argument against industrial policy in the past forty years has been based on two main points of reasoning. First, government is short of necessary information to ‘pick winners’. Second, even though government could overcome the information issue, rent-seeking behavior by private agents would undermine the public efforts. For this reason it has been emphasized that policy makers should keep private sector at arm’s length because they lobby for those interventions that serve their interests (Krueger, 1974).

However, the conventional wisdom has been challenged in the last two decades. Many studies have made a different theoretical case on the basis of information, learning, and geography to justify public intervention (Rodrik, 2008; Stiglitz, 1996, 2001). Coordination failures mostly occur from incomplete markets. Financial markets experience low investment due to collateral constraints accompanied by information asymmetries. Also large spillovers are associated with learning not only among firms but also among institutions (Stiglitz, 2001). Economies of agglomeration have amplified the significance of new economic geography (UNIDO, 2009).

Gebreeyesus (2014) argued that a strong coordination between public and private sector in Ethiopia enabled the state to pick the floriculture as a priority sector as well as helped her in designing appropriate policy instruments by addressing emerging bottlenecks. In his study on



post-reform Viet Nam Vu-Thanh (2015) showed how actively government engaged private sector and sought input from them on economic reforms, and at the same time private firms lobbied for responsive government. Although the collaboration between businesses and government was not through a formal mechanism, but their coordination was useful in policy reforms.

In addition to qualitative study, the empirical study on public-private coordination mechanism also provides encouraging results. Lemma and te Velde (2017) investigated the state-business relations (SBRs) in Ghana on firm-level performance and concluded that higher firm-level total factor productivity is positively correlated with effective public-private cooperation. Same authors provided another case study of fifteen Indian states where stronger SBRs increased productivity growth of formal and informal manufacturing firms.

Incentive mechanism designed to address constraints facing the private investors may end up, also a key argument against industrial policy, serving as a means to transfer rents to corrupt bureaucrats or businessmen. One of the important challenges to practically implement industry policy is to cope with the tension between capture and coordination. In his prominent work on South Korea Peter Evans (1995) introduced the term ‘embedded autonomy’ to provide a mechanism in achieving a balance between coordination and capture. He argued that Korean model succeeded because public institutions which were supposed to design and implement industrial policy were both embedded and autonomous in private sector networks.

The organizational structures to achieve embedded autonomy differ substantially, incorporating formal, regular cooperation mechanism and informal ad-hoc relations. South Korean model had a formal arrangement while the structure in Viet Nam was informal. The type of arrangement may

be defined by institutional structure of each individual country, but the purpose is to actively engage public-private sectors and enable the forum to respond selectively, through policy measures, to economic resources identified by those engagements.

Successful implementation of industrial policy calls for a strong coordinated set-up that should be able to devise policies that are relevant to the country-specific circumstances. Page and Tarp (2017) have identified four key areas of action for African economies to develop a public-private coordination set-up which includes: leaders (state prime minister or president) must lead, institutional and policy objectives should be framed locally as opposed to directed by international donors or others, rules should be clarified as to how measure the success and failure of outcome, and incentives should be limited to their social returns under the proposed framework.

The benefit of having a high-level champion is that it becomes recognizable who explains the policy agenda and who could be held politically accountable for policy outcomes (Rodrik, 2008).

### **2.1.5 Industrial Policy and the Textile Sector of Pakistan**

In a detailed study conducted on structural transformation of Pakistan economy by Asian Development Bank, Hausmann and Klinger (2008) proposed that government of Pakistan required a set-up that could increase its dialogue with the private sector so as to identify the sector-specific inputs that are missing. While the meetings between the prime minister and the head of the chamber of commerce who represents all sectors would not serve this purpose: such high level of aggregation would probably overlook the specific needs of each individual sector.

For instance, an overall tax reduction might be proposed, while telecom upgrading required by the call center industry and the intellectual property regulatory reform needed by pharmaceutical

industry would get lost in aggregation because of their small size or non-existence. In order to learn sector-specific constraints, the coordination must happen at a more disaggregated level, and therefore must possess the essential bandwidth to manage that complexity (Hausmann, 2008).

The textile industry in Pakistan has remained unable to accomplish its “historical mission.” The sector has failed to lead the economy to a sustained economic growth, to provide empowering jobs to young women, to reduce poverty, and to serve as a source of introducing technology into the country. McCartney (2014) argued a strong case for a specific and targeted sort of industrial policy in Pakistan to enhance learning and upgrading in the textiles industry. He maintained that some issues impeding industrial policy —the China effect, the global rules of globalization, global supply chains, and the issues of energy and education— do require attentive deliberation but are surmountable hurdles to technological upgrading.

The paper made another case for key market failure: about the risk and uncertainty related to acquiring and learning to use new technology. Important policy options are explored after having reviewed the lessons that could be learnt from Bangladesh and could not be taken from South Korea and India. Because the former showed that rapid export growth is possible in an economy with corrupt, weak, and unstable governance.

Nabi and Hamid (2013) surveyed 234 firms and an additional more detailed study of 33 garment manufacturing firms in Pakistan and concluded that garment sector was well suited to Pakistan’s comparative advantage, being the least energy intensive, most labor intensive, and highest value-added segment of textile sector.

In their second study Nabi and Hamid (2017) tracked the progress of proposals put forth in their first study and found that little progress has been made in trade policies and custom procedures

which has greatly impeded the growth of garment sector. Import strategies and customs procedures that discourage the import of items such as technical textiles, MMF yarn and fabric, and specialized trimmings and accessories required by exports to move up the value chain, have badly affected the exports of garments sector (Hamid et al., 2014).

### **2.1.6 Export Subsidies and Export Growth**

The importance of exports in economic development and growth is well documented in the literature. The idea that exports stimulate economic growth is central to any debate concerning industrial policies and development strategies. Jung and Marshall (1985) highlighted that exports contribute to higher real GNP and also result in increased efficiency which may lead to enhance overall output. Since exports are an element of aggregate output, it is expected that there exists a positive association in terms of correlation coefficient (Kravis, 1970). It is also confirmed by Vohra (2001) who finds a strong association between exports and economic growth based on data from India, Malaysia, Philippines, Pakistan, and Thailand from 1973-1993.

It is observed that growth in exports results in a number of beneficial aspects including economies of scale, incentives to improved technology and efficient management, greater capacity utilization, and allowing countries to trade along their lines of comparative advantages (Balassa, 1978; Krueger, 1980). Therefore, in the initial stage of their development East Asian economies designed specific industrial policies to promote the level of exports and achieve a sustained growth in the aggregate output (Weiss, 2005).

Public support in the form of export incentives is often granted to local suppliers in order to keep the domestic goods competitive in international market. The provision of export subsidies mainly

rests on the idea of enhancing manufactured exports and achieving export diversification that may ultimately lead to economic development of a country (Hibbert, 1990).

Enterprises are regularly engaged in finding the market opportunities coming from dynamic social needs and systems of economic cooperation and to utilize them by making products that include unique production and social technologies. Self-discovery is progressively collaborative because firms that seek to innovate with the help of potential customers need public support/input to achieve the required capacities for this sort of collaboration (Hausmann et al., 2008).

There exists an extensive literature on the positive role of export subsidies in promoting export growth. According to Husaini et al., (2019) subsidy program for exporters in ASEAN-5 economies led the domestic producers to attain cost advantage and eventually increase the sale of their export products abroad. Whereas a reduction in subsidy is supposed to lower the cost of production advantage which was initially provided prior to implementation of subsidy reform by assuming that no compensating policy was devised by the government.

In a study by World Bank on Turkish manufactured exports Melanovic (1986) showed that higher export incentives proved instrumental in prompting export growth from 1980-84. The incentives comprised of constant depreciation of exchange rate, excess to subsidized export credits, export tax rebates, and the duty-free imports of essential inputs for exporters. Similarly, another study by Fanta and Teshale (2014) on export incentives in Ethiopia revealed that fiscal and financial incentives show a statistically significant impact on export expansion both in the short run and long run.

It is observed that countries apply mainly three types of incentives — financial incentive, fiscal incentive, and non-monetary incentive — to promote the growth of their exports. Fiscal incentives like duty drawback, exemptions, and manufacturing under bonded warehouse are regarded ‘compensatory’ which are aimed at removing disincentives caused by economy’s investment, trade, and exchange regimes by ensuring equal footing with foreign competition (Oyejide, 2007).

Financial incentives such as direct/indirect cash subsidies, export credit facilities, and special foreign exchange remission are meant to compensate for price disadvantage arising from internal restrictions biased against exports (Hibbert, 1990). Moreover, Banerjee and Newman (2004) argued that financial subsidies help eliminate allocative distortions caused by credit markets which can boost export growth.

On the other hand, many researchers have established either a negative or an insignificant relationship between various export subsidies and export growth. According to Haque and Kemal (2007) the empirical investigation on export incentives in Pakistan reveals that both subsidy schemes — export financing and refunds/rebates — have an insignificant impact on export growth in the long run. However, the refunds/rebates scheme tends to have a small positive impact in the short run.

Fiscal incentives to promote exports are designed to eliminate the bias against exports because of tariffs on imported inputs; nonetheless they fail to completely remove the bias (Fanta & Teshale, 2014). It is argued that export subsidies especially export credit and insurance incentives are cost-effective means of promoting export manufactures.

However, Panagariya (2000) concluded that export subsidies are a more expensive tool of gaining export expansion than alternative policy options. He argues that India had applied various export-subsidy instruments for a long time but huge export expansion was only achieved after the introduction of trade liberalization and real exchange rate depreciation in the 1990s. This claim is reinforced by Nogues (1989) who contended that export incentives do not result in higher export performance and diversification when they are not complemented by more liberal import policies.

The national and international literature supports the role of subsidy in promoting the growth of textile exports. Khan and Khan (2010) identifies several issues hurting the growth of textile exports in Pakistan including high cost of financing and increased cost of imported inputs due to depreciation of Pakistani rupee. They propose that government should provide subsidy to the textile sector and assist the industry in purchasing new equipment or improving the quality of technology through higher expenditures on research and development (R&D).

A study on the value of export incentives in the textile sector by Ahmed (2015) for India, Pakistan and Bangladesh indicates that of the three countries, Bangladesh operates a highly export-oriented regime with the highest value of export incentives. The study recommends that Pakistan should raise the value of its export incentives especially in the value-added textile sector in order to maintain its competitiveness in the textile exports.

Further, it is observed that targeted industrial policy towards the textile sector helps in promoting the economic growth of developing economies. Tchoffo et al. (2022) argue that by subsidizing the textile sector in Cameroon, the government participates not only to raise the capacity of firms but also the policy is conducive to enhancing the economic growth of low-income countries.

## **2.2. Theoretical Framework**

### **2.2.1 New Structural Economics**

The intellectual foundation of development thinking has greatly evolved from Keynesianism to rational expectation theorists in the late 20<sup>th</sup> century. The early wave of development thinking advocated a significant role of public intervention in structural change and saw the structural differences as a means of market failures. Policy prescriptions of structural theorists were implemented in several countries from Latin America to Europe, Africa, and Asia; nonetheless, the outcomes were disappointing.

The policy failures generated a second-wave of development economists who believed in free market approach that emphasized the role of pricing mechanism, strong institutions, market stability, and building human capital to expedite the development process. International institutions and development agencies became the determined champions of this approach and based the conditionality and policy advice of their financial programs on stabilization and structural adjustment in developing countries. The results of these structural policies for employment generation and growth were at best contentious.

The second half of the 20th century also saw some developing countries' levels of income converge to the developed economies incomes. Most interestingly, it was observed that these countries did not follow the dominant views of development thinking of the first and second wave (Lin & Ren, 2007). This puzzling scenario led the development economists to revisit some of the important assumptions of contemporary theories of economic development. Drawing lessons from the earlier experiences, a new wave of development thinkers have emerged who



advocate a new structural economic design to support the development process of developing economies.

These economists agree on the important roles of market and the state in promoting the process of economic development. It is argued that market role should be preserved as a basic mechanism for resource allocation, but that government must actively play its role in coordinating investments for industrial upgrading and diversification and in reimbursing for externalities produced by first movers in the dynamic growth process (Lin & Chang, 2009; Rodrik, 2008, Hausmann, 2008; Aghion & Howitt, 1990; Lin & Monga, 2010; Lin & Monga, 2011).

In a study Nabi and Hamid (2013) identified that garment sector was well suited to Pakistan's comparative advantage, being the least energy intensive, most labor intensive, and highest value-added segment of textile sector. New structural economic theories assume that the economic structure of a country is endogenous to its factor endowment structure and that economic development can only sustain if it is followed by changes in factor endowments and uninterrupted technological innovation. The factor endowment of a country is specified at any particular time and mutable over time.

According to the new structural economics the effective way to upgrade an economy's endowment structure is to promote its industries at a certain time as per the comparative advantages ascertained by its given endowment structure at that time. In this endeavor government has to play a key role in coordinating investments that are required for upgrading and compensating for externalities generated by first movers which cannot be internalized by private enterprises (Lin, 2011).

### **2.2.2 Theory of Developmental State**

The term developmental state received considerable attention after the work of Chalmers Johnson on Japan's Weberian ideal kind of an interventionist state which combined state guidance with private ownership. The concept of developmental state is mainly centered on the government's important role of harnessing state resources and targeting incentives using a definite policy making process.

The use of market mechanism for developmental purposes by South Korea, Singapore, Taiwan, and Hong Kong in achieving economic boom is a reflection of successful emulation of Japan's developmental model. The experience of East Asian region reveals that the success of developmental state originates from a blend of 'embedded autonomy,' through which public sector is closely associated with private sector but keeps enough space for renegotiation of policies and objectives whenever capital interests become incompatible with national development interests.

Johnson (1982) argues that state control of finance was the mainstay of developmental state, followed by independence of economic bureaucracy, labor relations, the amalgam of incentives and command structures, and the presence of the zaibatsu in Japan or chaebol in Korea. Government controlled interest rates in Korea and Japan while bank loans were the basic source of industrial finance instead of equity capital.

The Ministry of International Trade and Industry (MITI) in Japan had the power to approve investment loans from Japan Development Bank, to reserve foreign currency for industrial goals, and to provide tax incentives among others, Therefore, the MITI apart from acting as a think tank was in a distinct position to optimize induced decision-making (Evans, 1995).

In most of the literature Pakistan is regarded as a premier example of the unsuccessful developmental state, with poor ability to discipline private interests leading to misallocation of resources and rent seeking behavior within public sector enterprises (Clark & Chan, 1994). Pakistan is one of those developing economies which ardently implemented neoliberal reforms, practicing interventionist strategies prior to 1990s, to have one of the most liberalized economies by the 2000s, in an utter turnaround of development policy (Zaidi, 2015).

The financial reforms in Pakistan were considered to be among the most successful in the developing economies by IMF and World Bank (Munir & Naqvi, 2017). However, Naqvi (2018) challenges this narrative and concludes that in case of Pakistan the abolition of state control over the financial sector resulted in a worsening of outcomes. Deregulation led to allocation of financial resources away from productive sectors such as industry and agriculture towards unproductive sectors, for speculative reasons; while corruption and non-performing loans remaining an issue, banks becoming a larger burden on government finances.

### **2.3. Conceptual Framework**

In this section of the chapter we explain the medium through which export subsidies and other variables affect textile exports.

#### **2.3.1 Export Subsidies**

Exports are considered an integral part in the process of industrialization and economic development. For decades developing countries have adopted export-led growth policies to achieve rapid development and bring structural change through diversification and technological up-gradation. As a result government intervenes in the economy and provides subsidies to

export-oriented sectors in order to obtain the objectives of export promotion strategies. These subsidies can be categorized as fiscal, financial, and nonmonetary incentives.

The instruments of these subsidies consist of cash grants, tax rebates in the form of duty drawback schemes, manufacturing under bonded warehouse, long and short term financing facilities to exporters, and relief through export processing zones. Such type of export promotion schemes help exporters reduce their cost of production and attain a level playing field to compete globally in terms of commodity prices. Theoretically, there exists a positive relationship between export subsidies and export growth.

Export subsidies are considered to have played a key role in export diversification and technological improvement in the process of industrialization in East Asian economies. These countries applied a combination of policy package that included adequate price incentives, access to imported inputs for exports at world prices which includes measures like drawback system, establishment of a sound base for physical and social infrastructures, and adequate facilities for export trade financing to encourage the growth of their exports (Weiss, 2005).

In their study on export incentives Fanta and Teshale (2014) pointed out that both fiscal and financial incentives have a statistically significant long run effect on export value in Ethiopia. Textile sector in China has been a critical sector in the export growth over the years. With the help of state support textile and apparel sector in China experienced a massive restructuring program which included the encouragement of private entry and expending millions of dollars by the government into the sector to upgrade the old infrastructure (Pepermans, 2019).

On the other hand, many economists are against the use of archaic subsidy schemes such as tax rebates and subsidized export credits since they are open to rent-seeking, not well-targeted, and

not easy to administer. According to Haque and Kemal (2007) export subsidy schemes — export rebates/refunds and export financing — in Pakistan have an insignificant effect on export growth in the long run. And they have a marginal positive impact in the short run.

However, another study by Abbasi et al., (2019) showed that export subsidies are positively related to the export growth in Pakistan. This later study has used latest data and come up with a different outcome than the former study on export incentives and export growth.

Moreover, studies on subsidy programs in Pakistan demonstrate that the subsidy schemes have mostly become ineffective due to political interference and other administrative issues. Zia (2008) has used a unique loan-level panel data from Pakistan to examine the allocation of subsidized credit and the effect of firm-level real output. He finds that reduction of a six percentage point subsidy from a market loan base of 14 percent brings a 29% decrease in firm exports. Although the result varies across different types of firms where exports of publicly listed, large, and group network firms are not affected by the subsidy removal, only those of privately-owned companies are highly affected. About 44% of all subsidized loans prior to the policy shift are allocated to publicly listed enterprises implying a substantial credit misallocation.

### **2.3.2 GDP Growth Rate**

It is believed that promoting exports is an essential recipe for sustained economic growth because net export is a component of GDP. Historically development economists have advocated two main industrial policies — import-substitution and export promotion — to attain industrial development and hence economic growth. Development literature suggests that it is the export promoting policies which contributed to high growth spurts in East Asian economies during 1960s through 1970s and 1980s.

Neoclassical economists argue that exports play a large part in economic growth. They suggest that exports contribute to a) stimulating specialization which helps to benefit from comparative advantages; b) benefitting from economies of scale through large market; c) exploiting the full capacity of production due to foreign demand and d) enhancing the rate of technological change and investment (Krueger, 1978; Ram, 1987). The composition of exports may decide the effect on economic growth; anyhow theoretically there exists a positive association between export and economic growth.

Many researchers have investigated the relationship between export and economic growth and found that both variables are positively related. According to Ronit and Divya (2014) the theory of export-led growth holds true in case of India and their study found that growth of exports depends positively on GDP growth with a year lag. Based on the data of 28 less developed countries (LDCs) of Africa Fosu (1990) used the usual augmented production function specification which includes capital formation, exports and labor and found that export growth is seen to exert a positive and substantial impact on the growth rate of GDP. Whereas the export effect is somehow lower than that for non-African LDCs but the difference is statistically insignificant.

Another recent study by Islam (2021) attempted to investigate the co-integration among GDP growth rate, ready-made garments (RMG) exports earning and FDI inflow in Bangladesh by using yearly time-series data for the period 1986-2018. The study uses ARDL bound testing to confirm co-integration among variables, and applies pairwise Granger causality test to find the direction of causality. The outcome of ARDL bound testing shows the existence of short run and long run relationships among the variables. Similarly, the RMG exports earning contributes substantially to the GDP growth rate both in the long run and short run. Besides, the pairwise

Granger causality test verifies a positive causality running from ready-made garments exports earning to GDP growth rate.

### **2.3.3 Real Effective Exchange Rate**

The exchange rate is an essential determinant of real economy, external competitiveness and financial markets. The relation between export performance and exchange rate policy has been extensively debated among policy makers, practitioners and academics, especially in developing countries. It is widely accepted that currency devaluation paves the way for improving export performance given the nature of export composition of the exporting nation.

Vo et al. (2019) analyzed the relation between exchange rate devaluation and export performance for manufacturing and ten of its export-oriented subsectors in Vietnam during the period 2000-2015. The study findings affirm that the policy of currency depreciation in the country seems to increase manufacturing exports in the short run while the consequent exchange rate volatility evidently reveals negative effects in the long run. Exchange rate policy is considered as a neutral incentive to export promoting sectors.

According to a study conducted on Pakistan economy, Kemal and Qadir (2005) concluded that a long run relation exists between real exchange rates, imports and exports; also real exchange rate is negatively linked with the exports and positively related with the imports. It is observed that exports and imports adjust towards equilibrium when there is disequilibrium in the short run. Moreover, the exports do not react to a sudden shock in the real exchange rate.

Many economists including Rodrik (2009) contend that strategy of real undervaluation boosts GDP growth, raises profitability of the tradables sector, and contributes to expand the share of tradables in the domestic value added. He asserts that market failure and institutional weaknesses

affect the tradables sector more than the non-tradables because they are small in developing countries. Therefore, undervaluation strategy works as a second-best policy to compensate for negative externalities by increasing profitability of the sector. Increased profitability fosters investment in the tradable sector followed by the expansion and enhancing economic growth.

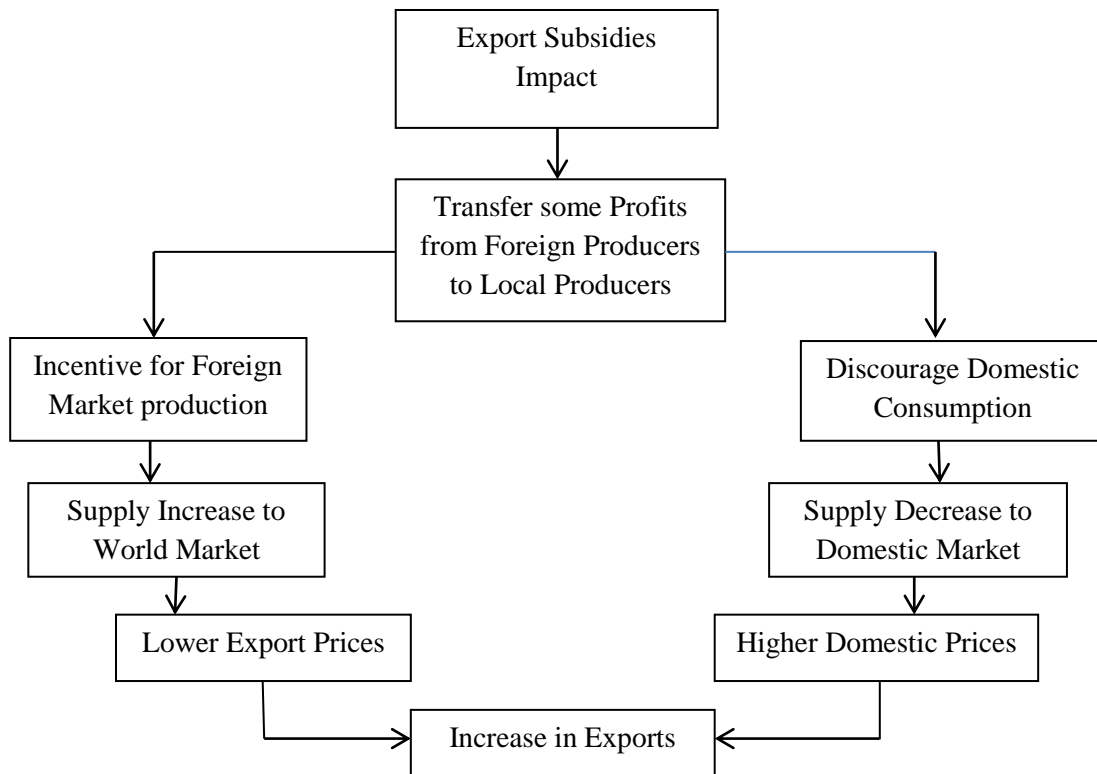
On the other hand, some researchers demonstrated alternative means for undervaluation policy to increase growth. According to Levy-Yeyati and Sturzenegger (2007) an undervalued exchange rate improves productivity and output through promoting savings and capital accumulation, not through increasing the tradables sector. Whereas undervaluation of real exchange rate boosts growth with the help of learning-by-doing externalities in the tradables sector (Korinek & Servén, 2016). Rodrik (2009) believes that undervaluation policy is effective in raising economic growth and exports only for economies with low per capita income. However, in the long run, the impact of undervaluation on GDP growth is negative; and on exports, it is insignificant.

#### **2.3.4 Transmission Mechanism of Export Subsidies for Export Growth**

Export subsidies are mainly provided to achieve export growth. Export subsidies generate an incentive for local suppliers to produce for foreign markets through the transfer of some profits from foreign producers to local producers. This mechanism creates an incentive for increased foreign production and discourages domestic consumption through lower export prices and higher domestic prices respectively. As a result, this economic channel of export subsidies results in the growth of exports. The diagram below shows the economic channel on how export subsidies effect export growth.



Figure 2.1: Transmission Mechanism of Export Subsidies



Source: Author's Construction

## Chapter 3

### Subsidy Schemes in Textile Sector

#### 3.1. Brief Description of the Sector

According to Economic Survey of Pakistan textile and garment sector is the largest single industrial sector in Pakistan with the largest production chain. In FY 2020-21, it accounted for 8.5% share of country's GDP and around \$18.7 billion or 60% of total export earnings. It also provides the single largest share of industrial employment, accounting for almost 40% of the overall industrial labor force and contributes one-fourth of industrial value-added in the country. This industry is the 5<sup>th</sup> largest producer and 3<sup>rd</sup> largest consumer of cotton in the world (Ministry of Finance, 2021).

In 2020, it contributed to just fewer than 8% of overall world cotton production. Cotton supplies raw material to Pakistan's 1, 221 ginning factories, 517 spinning mills, around 550 weaving units, over 571 textile processing units, and 5, 000 garment factories. By any count textile and garment sector constitutes a substantial part of Pakistan's economy (Ministry of Commerce, 2021).

The textile industry comprises of a large scale organized sector as well as a largely fragmented cottage industry or small scale sector. The organized sector is mainly the integrated textile plants and a high number of spinning units along with a small number of shuttle-less looms units. The small scale primarily consists of the downstream sector of weaving, garments, towels and hosiery.

Pakistan's textile sector is marred by inefficiencies as compared to its regional competitors. Much of the industrial growth in the 1990s and early 2000s did not translate into regular up-

grading of technology and work practices. For instance, a small number of producers have constantly upgraded their machinery and equipment. At the same time cotton sector has not benefited greatly from R&D and is of inferior quality compared to rest of Asia.

## **3.2. Financial Incentive Schemes**

### **3.2.1 Export Refinance Scheme**

The Export Finance Scheme (EFS) is operational since 1973 with the objective to promote exports of the country. This is a short-term financing facility to exporters provided through banks for manufacturing exports especially value-added goods with the exception of primary commodities mentioned in the negative list. Exporters can avail EFS financing facility for eligible commodities for a period of 180 days. The rate of return of finance/refinance has been revised from time and again.

At first the rate of return on finance was 7% p.a. while the rate on refinance was 4% with the 3% spread for commercial banks. The rate for end user reached to highest level of 13% in 1994 with a spread of 3% for banks. However, the rate was later rationalized and linked to the weighted average yields on 6 months T-bills as well as fixed on monthly basis. Currently, the banks have been given a spread of 1.5% on their financing under EFS. Under EFS the rate for end user has been fixed at 3% since August 2003. Besides, State Bank of Pakistan has placed a fine regime under the scheme for those exporters who fail to meet their commitments.

The scheme is organized in two parts namely Part-I (Transaction-based) and Part-II (Performance-based). Under part-I scheme; the commercial banks facilitate exporters with export finance on case-to-case basis at pre-shipment and/or post-shipment point against firm export

order or letter of credits. The exporter is required to show export proceeds equivalent to the loan finance as performance.

EFS part-II scheme is a performance based facility where export performance of an exporter is matched annually against total loan received during the financial year on daily product basis. Under this scheme the exporter should realize export proceeds from the export of eligible commodities.

All the textile commodities are eligible for this scheme except for raw cotton and all types of yarn. Because this scheme is designed to promote value-added exports therefore, raw materials are included in the negative list. During FY 2021, a total of Rs. 387.5 billion was disbursed under EFS scheme to the textile exporters out of a total disbursement of Rs. 992 billion to exporters. Hence, textile sector is the largest beneficiary of EFS with 39% disbursement.

### **3.2.2 Islamic Export Refinance Scheme (IERS)**

State Bank of Pakistan introduced Islamic Export Refinance Scheme in 2002 to further incentivize exporters and facilitate those who prefer Sharia based working capital finance. The operational mechanism of IERS is similar to conventional EFS except for the rate of refinance which is not fixed under IERS. However, the Islamic banks are required to ensure that the return under IER scheme should not exceed the rates prescribed by State Bank of Pakistan under the conventional EFS. All the export manufactures eligible for EFS are also eligible for IERS scheme.

### **3.2.3 Long Term Financing Facility (LTFF)**

Long Term Financing Facility for Import of Machinery and Purchase of Locally Manufactured Plants was launched by SBP in 2004 to meet the long term financing requirements of exporters.

This is a subsidized scheme aimed at supporting technology up-gradation of export-oriented projects through the financing facility for up to 10 years period.

This facility is available to those export oriented projects whose annual export value is equivalent to US \$5 million or at least 50 per cent of the sales whichever is lower. Currently, the end users' rates range from 10.30% for up-to 3 years financing period to 11.40% for up-to 10 years period of financing. Textile and garments sector is one of the core categories eligible for LTFF scheme. The data for below figure is taken from SBP.

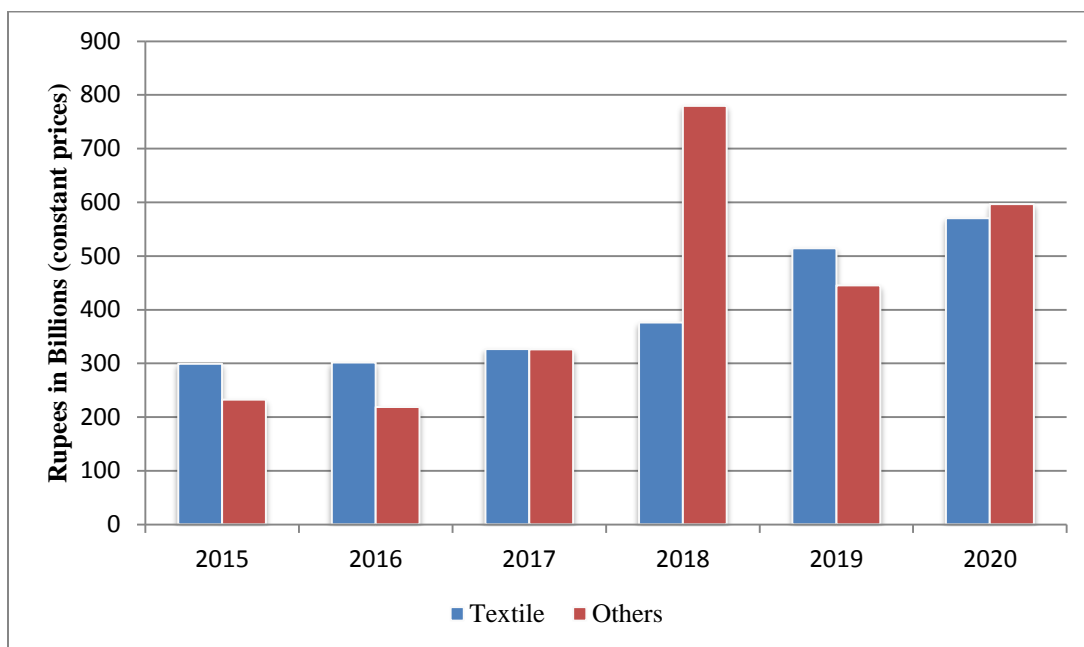


Figure 3.1: Year-wise Disbursement of Financial Incentive Scheme

### 3.3. Fiscal Incentive Schemes

#### 3.3.1 Duty Drawback of Taxes (DDT) and Drawback of Local Taxes and Levis (DLTL)

Duty Drawback of Taxes has been in operation since 1970s with the only objective of facilitating and boosting exports. This incentive package provides duty drawback of taxes to manufacturing-cum-exporting units and commercial exporters of textile sector based on exports of specific tariff

lines included in three categories namely garments, textile made-ups, and processed fabrics. The duty drawback is disbursed at determined rates that varies across the product categories and computed as percentage of realized export proceeds. The highest specified rate for garments is 4% followed by 3% for made-ups (home textile) and 2% for processed fabrics.

The payment under this scheme is processed in two ways. Initial 50% of the rate of drawback is unconditional and paid without any increment in the exports. However, the payment for remaining 50% of the rate of drawback is conditional on export performance, where an exporter is required to show an increase of 10% or more in exports during the current financial year as compared to the previous financial year. For each category of eligible products the export performance is separately analyzed.

In FY 2020, a total of Rs 54.7 billion was disbursed to exporters against various claims under DDT, DLTL and other schemes related to textile, non-textile and other categories. Out of Rs. 54.7 billion, Rs. 51 billion was only disbursed to textile exporters. Hence, textile is the largest beneficiary of DDT and DLTL schemes for exporters. The data for incentive schemes is retrieved from the State Bank of Pakistan (SBP).

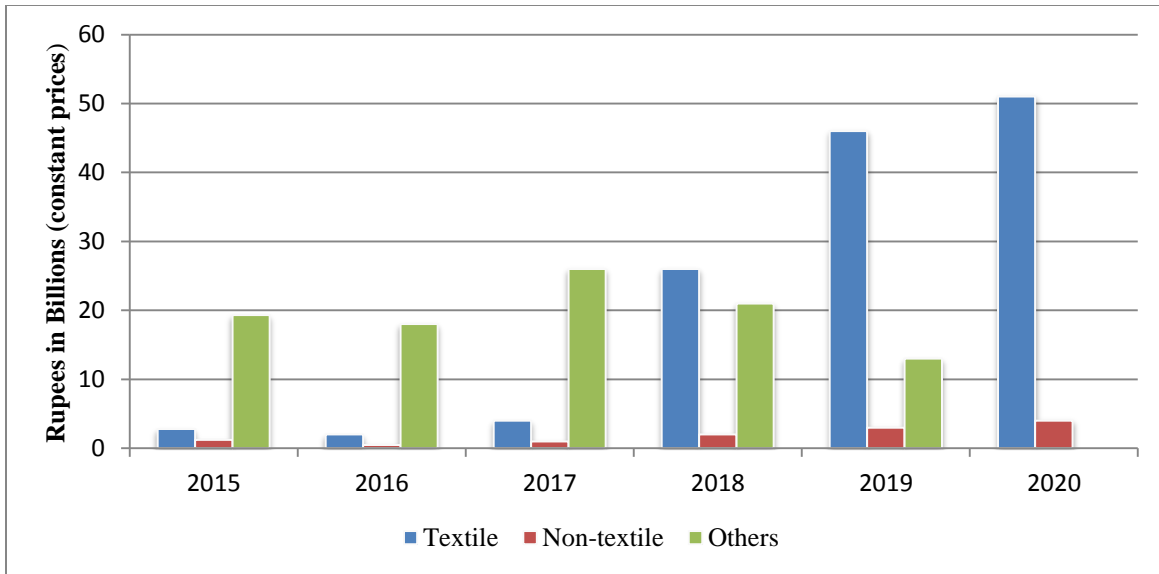


Figure 3.2: Year-wise Disbursement of Subsidy Schemes

To further facilitate exporters and improve their cash flow, the payment of conditional drawback amount is released in the first half of the current financial year subject to the submission of a bank guarantee. The facility also provides an additional incentive of 2% duty drawback to the exporters of stated category of products if they become able to export to the non-traditional markets.

The non-traditional markets consist of the 143 countries of five region including Latin America, Africa, Non-EU European countries, Oceania, and Common Wealth of Independent States. Drawback to exported products is available under 35 of the Act, read with SRO 2(1)/72, dated 30/12/1971. Rules designed under SRO 2(1)/72, are also referred as Drawback (Same State Goods) Rules, 1971.

The second important category of duty drawback under the Act is the drawback for commodities exported that are manufactured in Pakistan, totally or partly, out of imported are local duty paid on raw materials and intermediate products. In FY 2010, the government through Ministry of

Textile and Industries decided to give Drawback of Local Taxes and Levis (DLTL) received from home textile, garments and processed fabric exporters.

This facility was widely drawn in accordance with R&D scheme though the rates were revised in this case. The scheme had a much broader scope compared to R&D facility as exports to all countries were eligible for DLTL scheme contrary to R&D support facility where exports to only a small number of countries were eligible. This drawback has been widely used by the government to stimulate the exports of our industrial sector specifically the textile industry.

### **3.4. Obsolete Subsidies in the Textile Sector**

#### **3.4.1 Research and Development Support (R&DS)**

Research and Development scheme was started in 2005 by the Ministry of Commerce, Government of Pakistan. Initially R&DS scheme was given to textile garment exporters and manufacturing textile garment units at the rate of 6% of the FOB value of the exports to USA and European Union. During FY 2007, the R&DS facility was further broadened to include fabric and home textile. This scheme is currently inoperative.

#### **3.4.2 Subsidization of Pure Terephthalic Acid (PTA)**

The subsidization of Pure Terephthalic Acid scheme was introduced in 2008-09. Under this scheme 7.5% tax paid was reimbursed to polyester goods manufacturer using PTA. The main objective of this scheme was to encourage the use of PTA in textile production. This scheme was later abandoned.



### **3.5. Support Measures under Textile Policies**

#### **3.5.1 Textile Policy (2009-2014)**

In August, 2009 Government of Pakistan unveiled its first ever textile policy. The primary aim of the policy was to achieve the target of increasing textile exports to \$25 billion by the end of the policy period. The other primary objective was to increase the conversion rate of per million bale of cotton from \$1000 to \$2000 by 2014 while the average conversion rate of competitor countries was \$4000 at that time.

Support Measures related to financial and fiscal incentives included:

- Gradually reducing import duty on textile machinery and parts to 5%.
- Garment exports will be provided 6% R&D support.
- Inclusion of weaving sector in the long term financing facility for export oriented projects, (LFT-EOP) scheme vide SBP, Circular letter No 19 dated 2nd June 2005.
- Reduction of import duty on ginning presses to 5%.
- Reduction of mark-up rate for export oriented projects to 7% and 6% for 7½ year and 3 year period respectively.
- Re-financing rate was reduced to 7.5% from 9%. And further 2.5% relief was given from budgetary allocation, hence the rate reduced to 5%.
- An increase of 15% increase in exports will be given an additional 1% drawback.

This policy failed to achieve its primary objectives mainly because of non-disbursement of funds initially committed by the government for policy measures.

### **3.5.2 Textile Policy (2014-19)**

The primary objective of the second five-year textile policy was to double textile exports from \$13 billion to \$26 billion and double value-addition from \$1 billion per million bales to \$2 billion per million bales of cotton in five years. Following were the support measures:

- DLTL to exporters of textile products on FOB value at the rate of 4%, 2%, and 1% to garments, made ups, and processed fabric respectively.
- Reduction of mark-up rate for export refinance from 9.4% to 7.5%.
- Facilitation of additional investment of \$5 billion in technology and machinery.

The second policy also could not meet its basic objectives primarily due to limited fiscal space and unavailability of funds for incentive measures.

### **3.5.3 Textile Policy (2020-25)**

Current policy is focused to increase diversification and value-addition in the sector through various facilitation and support measures. Following are the incentive measures:

- Supply of energy to export units at regionally competitive rates.
- Duty Drawback scheme provided only to value-added textile products such as technical textile, apparel, made-ups, and carpets.
- Export and long term financing facilities to be provided at the rates of 3% and 5% respectively for FY 2021-22.
- Inclusion of indirect exporters for availing export financing facility.
- Launch of brand development and acquisition fund.

Textile sector has been a key sector to avail export incentives in the industrial sector of Pakistan. Since 2009 textile sector has experienced three five-year textile policies to enhance value-addition and promote the level of exports in the sector. However, these policies failed to achieve the desired results and help the textile sector in moving towards a higher ladder of comparative advantage. The primary reason has been the shortage of funds and the late disbursement of financial resources promised through the incentive schemes.

The third and the ongoing textile five-year industrial policy has been devised following a thorough evaluation of the shortcomings of the first two textile industrial policies. Although there are still issues of funds availability but the process of making industrial policy and choosing its instruments has improved by closely engaging the private sector in the process. It is expected that the policy will contribute in promoting the value-added textile exports and achieve the desired targets set in the textile policy.

## **Chapter 4**

### **Data and Methodology**

#### **4.1. Research Methodology**

This chapter discusses the research methodology including method of data collection, variable construction, and analysis techniques. The study used mixed method research design drawing from pragmatic epistemology, while the ontological position is intermediate, showing the fact that both objective and subjective views of the reality are helpful in a social science study. Pragmatism adopts the application of mixed methods and models in that it gives an efficient and practical research philosophy (Tashakkori and Teddlie, 1998). Hence, pragmatists view the objective of science beyond just exploring the reality but rather to assist human problem solving (Berwick, 2005). The purpose of using mixed method is to attain validation of quantitative results through qualitative findings. It is argued that the confirmation of results by two distinct approaches assists in better validity and generalizability of findings compared to what a single approach provides (Dewasiri et al., 2018).

##### **4.1.1 Research Design**

The study has been carried out using the convergent parallel design, a mixed method design, in order to gain an in depth understanding of the topic. This design requires that researcher concurrently conducts the qualitative and quantitative parts in the same stage of the research process, assigns equal weights to both methods, analyzes the two elements independently, and explains the results together (Creswell and Pablo-Clark, 2011). With the objective of authentication and validation, the researcher intends to triangulate the methods through direct comparison of the quantitative empirical results and qualitative findings. The research process

adopted in this study is taken from (Demir & Pismek, 2018) which is illustrated in the figure given below.

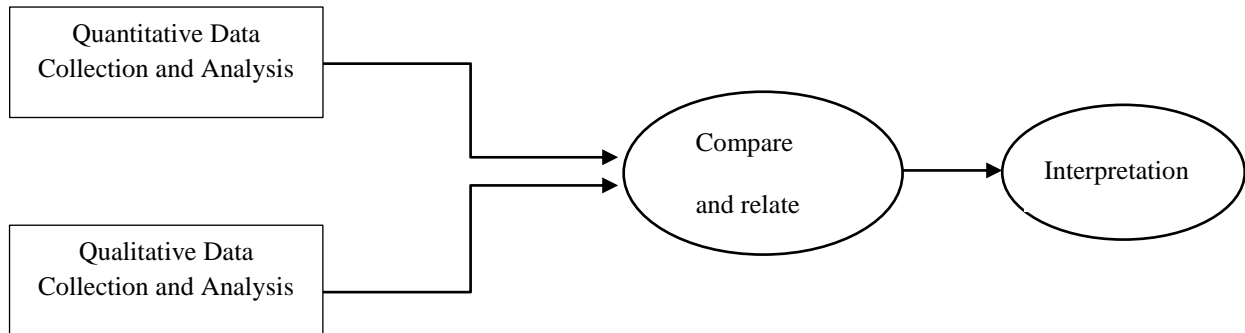


Figure 4.1: Research Process using Convergent Mixed-Parallel Design

#### 4.2. Sampling Frame

In this study purposive sampling technique is used, a type of non-probability sampling, to collect information for the qualitative analysis of the research. It is a type of sampling technique commonly used in qualitative research to identify and choose information-rich cases for the most efficient use of scarce resources (Patton, 2002). This includes the identification and selection of individuals or groups of individuals who are particularly well-informed about or experienced with a phenomenon of interest (Cresswell et al., 2011).

In this case purposive sampling technique is applied for the qualitative analysis because the sampling frame includes those individuals who are the most relevant stakeholders and have the knowledge to provide the required information.

Primary data for qualitative part of the study is collected using in-depth semi structured interviews from the most relevant stakeholders. The sample includes official members from the Ministry of Commerce Textile Wing, the Ministry of Finance, and All Pakistan Textile Mills Association (APTMA). The purpose of selecting key stakeholders in the sampling frame is to

extract most relevant information to address the research questions. Textile Division within Commerce Ministry is the responsible authority to devise and implement textile policies such as managing subsidy schemes and coordinating with the private sector to ensure their participation in this respect.

The Ministry of Finance is the financing authority responsible for allocating budgetary finances or providing unallocated funds through ad-hoc releases for subsidy schemes in the textile sector. Similarly, All Pakistan Textile Mills Association (APTMA) is the biggest textile association in Pakistan representing private sector and is actively engaged in devising and proposing policies to the government while involved in formulating subsidy schemes in the textile sector. The sampling size is determined using the criterion of saturation point. Thus, the sample size consisted of 7 individuals from these stakeholders. Although the capability of drawing inferences in qualitative research always remains a concern, it is a fact that the sample size in itself is not the prime issue: since the choice of qualitative approach is based on its strengths, the question is whether the information obtained aids in understanding the objectives of the research (Starr, 2014).

### **4.3. Data Sources**

#### **4.3.1 Primary Data**

#### **4.3.2 Interviews**

Interview is used as a useful tool in social science research to collect information. The author interviewed official members from the most relevant stakeholders to understand how subsidies/incentives are determined in the textile sector and explore the coordinated role between public and private sector in this process. The interview was conducted after analyzing contents

and then developing the interview tool. The contents were reviewed from textile policy documents and principles of modern industrial policy from the literature.

The questions comprised of economic rationale for subsidies, objectives of subsidy provision, role of public-private coordination in subsidy determination and evaluation mechanism of subsidy schemes. The questions for private sector were reduced to only address the role of private sector in dealing with subsidy schemes. The interviews were conducted in the month of May till early June.

### **4.3.3 Secondary Data**

For empirical investigation of the impact of export subsidies on the textile exports, the study used secondary data collected from different sources. The variables used in the empirical investigation are textile exports, export subsidies (i.e., fiscal incentives & financial incentives), real effective exchange rate, and real GDP growth rate.

Textile export data is collected from Pakistan Bureau of Statistics (PBS). Data for export subsidies, real effective exchange rate index and real GDP growth rate are collected from various publications of State Bank of Pakistan (SBP) annual performance review, various publications of CBR/FBR annual yearbook, and various issues of statistical supplement/economic survey of Pakistan published under the Ministry of Finance. The study applied annual data for each variable from 1990 to 2020, hence 31 observations.

## **4.4. Method of Analysis**

### **4.4.1 Qualitative Data Analysis**

The interviews were conducted face-to-face and recorded with an audio recorder. Voice recording was done in all interviews and field notes were kept regularly. Later, the voice

recordings were transcribed. Subsequently, field notes and interview transcriptions were read thoroughly to understand the topic with holistic viewpoint. Initially, common themes were identified from the transcripts followed by the process of coding and labeling those themes.

The significance of context, process-related causes, and their mutual impacts were taken into account during coding. In other words, the process followed an inductive logical pattern. The chosen codes were grouped based on similarities and difference while categories were compared. Significant and holistic categories were merged to obtain themes. The themes are presented under different sub-headings in the interpretation of qualitative data chapter.

#### **4.4.2 Quantitative Data Analysis**

Quantitative data is applied to investigate the relationship between export subsidies and textile exports. In order to explore the long run as well as the short run association among the variables of study, the researcher used Autoregressive Distributed Lag (ARDL) Model after performing unit root tests and determining the order of integration of the concerned variables. Besides, trend analysis is also employed to show the pattern of study variables. Detailed description of the ARDL technique is given below in the section of empirical model.

#### **4.5. Description of Data and Econometric Model**

##### **4.5.1 Variables Definition**

This study has estimated the association between textile exports and the export subsidies, real GDP growth, and real effective exchange rate. The main independent variable in our study is the export subsidies. Export subsidies are further sub divided into two variables: fiscal incentives and financial incentives. The dependent variable of the study is textile export which is believed



to be affected by fiscal incentive, financial incentive, real GDP growth rate, and real effective exchange rate.

Fiscal incentive is the sum of pecuniary incentive granted annually to textile exporters under drawback of local taxes and levies (DLTL), duty drawback of taxes (DDT), Export rebates/refunds, R&D support, technology up-gradation Fund (TUF), and government support to export investment support fund.

The fiscal incentive variable also includes subsidies granted to public sector textile mills to compensate for their operational losses. Subsidies under the heads of R&D support, TUF, export investment support fund, and support for operational losses are not regular payments and only added to specific years in which they are granted. Similarly, financial incentive is the aggregate financing facility to textile exporters provided under export finance scheme (EFS), long term financing facility (LTFF), and Islamic export refinance scheme (IERS).

Real effective exchange rate (REER) has been employed in the literature to show competitive position of the countries. Latif and Javed (2016) studied the determinants of Pakistan textile exports and the result reveal that policy of devaluation has a significant impact on the export performance of textile and clothing sector of Pakistan. Therefore, this study has used real effective exchange rate as a control variable to analyze the impact of export subsidies on the growth of textile exports.

#### **4.5.2 Variables Construction**

A simple production function model is estimated for our study. The log of textile exports as a percentage of GDP is used as the dependent variable while the real GDP growth rate and real effective exchange rate are taken as independent variables. Real effective exchange rate is

calculated against the basket currencies of major trading competitors. Real effective exchange rate is constructed by SBP using the weights calculated by IMF on the basis of 2013-15 trade partners in the global economy. Besides, the explanatory variables of interest are fiscal incentive and financial incentive which are taken as the sum of all incentive schemes for each category.

Textile exports as a percentage of GDP (TXY):  $\frac{\text{Textile exports}}{\text{GDP}} \times 100$

Pakistan real GDP growth rate (RGDP):  $\frac{\text{GDP}_t - \text{GDP}_{t-1}}{\text{GDP}_{t-1}} \times 100$

Real effective exchange rate (RER):  $\frac{\text{NEER} \times \text{RPI}}{100}$

Where NEER is nominal real effective exchange rate and RPI is relative price index

Fiscal incentive is the sum of all fiscal incentive schemes in textile sector (FISI):  $\sum_{n=1}^5 n$

Financial incentive is the sum of all financial incentive schemes in textile sector (FINI):  $\sum_{n=1}^3 n$

#### **4.6. The Derivation of Econometric Model**

The following model is constructed postulating that the impact of export subsidies on outcome variable is accomplished in a production function framework. Therefore,

$$EXPT = f (FISI, FINI, RGDP, RER) \quad (1)$$

Where,

EXPT is the annual value of textile export of the country expressed in local currency, FISI is the total value of fiscal incentive to textile exporters, FINI is the aggregate amount of financial

incentive to textile exporters, RGDP is real GDP growth rate, and RER is real exchange rate index.

Hence, from the above function the following econometric model is derived to evaluate the effect of export subsidies on textile exports.

$$EXPT = \alpha + \beta_1 FISI + \beta_2 FINI + \beta_3 RGDP + \beta_4 RER + \varepsilon \quad (2)$$

Where,

EXPT = is the value of textile exports in local currency (Rs)

FISI = is the sum total value of fiscal incentives in local currency (Rs)

FINI = is the aggregate amount of financial incentive in local currency (Rs)

RGDP = is the real GDP growth rate

RER = is the real effective exchange rate index.

Hence, on the basis of above model estimations the long run relationship among the study variables is empirically examined.

#### **4.6.1 Model Specification**

In this study we investigate the impact of export subsidies on the growth of textile exports along with some other explanatory variables including real effective exchange rate and real GDP growth rate. Moreover, export subsidies/incentives are divided into fiscal incentives and financial incentives in order to separately examine their effects on the textile exports. The study

has utilized the model used by Fanta and Teshale (2014). Following is the functional form of the model.

$$LTXY = \alpha + \beta_1 FISI + \beta_2 FINI + \beta_3 RGDP + \beta_4 RER + \mu \quad (3)$$

For the purpose of our empirical investigation we use autoregressive distributed lag (ARDL) model because some of the study variables are non-stationary at level and become stationary at first difference. In order to examine the long run relationship between variables, ARDL technique is utilized as an appropriate method. This model can be employed in scenarios where: either all variables are stationary at level or integrated at first difference; the order of integration is of both I(0) and I(1).

The key assumption of ARDL approach is that the order of integration of any variable should not exceed one (Pesaran et al, 2001). If the order of integration exceeds one i.e. I(2), then the regression results become spurious. To avoid this problem, it is necessary to check the order of integration of all variables using unit root tests before estimation of the ARDL model.

#### **4.6.2 Estimation Technique**

This section provides a brief discussion of the estimation procedure used in this study.

#### **4.6.3 Unit Root Test**

One of the complications that time series data encounters is the problem of non-stationarity which usually produces spurious results. It is, therefore, important to resolve the issue of non-stationarity prior to estimation procedure. Standard tests for unit root like Augmented Dickey-Fuller (ADF) and Phillips-perron (PP) tests suggested by Dickey and Fuller (1979) and Perron (1988), respectively are often applied to check the presence of stationarity. The ADF test

removes the problem of auto-correlation by introducing lag of dependent variable as independent variables in the Dickey-Fuller equation.

The null-hypothesis of ADF test assumes that the series is non-stationary or it has unit root. On the other hand, the alternative-hypothesis states that the series is stationary or it does not contain unit root. This test does not follow student's t-distribution; hence the critical values of ADF test are given by Dickey-Fuller (1979) and Mackinnon (1996). The equation for unit root is given as:

$$\Delta x_t = \alpha + \beta t + \rho x_{t-1} + \sum \Delta x_{t-i} + \mu_t \quad (4)$$

Where  $x_t$  denotes time series,  $\Delta$  represents first difference operator,  $\alpha$  indicates a constant term and  $t$  shows time trend. Similarly,  $\beta$  and  $\rho$  are the parameters of the equation to be estimated and  $\mu$  is used as a white noise error term.

In order to test the hypothesis we estimate the difference from the above equation

$H_0: \rho \geq 0$  (series is non-stationary)

$H_1: \rho < 0$  (series is stationary)

The null-hypothesis of non-stationary series is rejected if the p-value is less than 0.05 which implies series is stationary and vice versa.

#### **4.6.4 ARDL Co-integration Methodology**

One of the primary objectives of this study is to investigate the impact of subsidies on the growth of textile exports both in the short run as well as the long run. To serve the purpose of estimating this relationship, we can use ARDL model which is proposed by Pesaran and Shin (1995) and further modified by Pesaran et al. (2001). The ARDL cointegration technique has the advantage of estimating models if variables of interest are of mixed order of integration or all of them are

not non-stationary. Because all the techniques proposed by Engle and Granger (1987), Johansen (1988) and Johansen and Juselius (1990) to check the relationship among variables cannot be performed in the preceding situation (Shrestha & Bhatta, 2018).

Another benefit of using ARDL model is the ability of estimating short run and long run correlation simultaneously. ARDL approach is an ordinary least square (OLS) based technique which is appropriate for both non-stationary time series as well as for time series having mixed order of integration. This approach takes enough number of lags to capture the data generating process in a top-down modeling framework.

This model is appropriate to use in the case of a small sample and is capable of resolving the issue of endogeneity (Nkoro & Uko, 2016). As this study is using a small sample with a time period from 1990-2020. Therefore, for our study ARDL method is preferred over other cointegration techniques because it helps in solving the issue of small sample bias.

#### 4.6.5 Model Specification of ARDL Approach

We use ARDL technique to explore the impact of subsidies on the growth of textile exports along with some other regressors. The salient feature of this method is that the lags of dependent variable are treated as independent variable alongside the lags of explanatory variables. The equation of ARDL model for our study can be written as:

$$\begin{aligned} \Delta TXY_t = & \alpha_0 + \omega_{EXPT}TXY_{t-1} + \omega_{FISI}FISI_{t-1} + \omega_{FINI}FINI_{t-1} + \omega_{RGDP}RGDP_{t-1} + \\ & \omega_{RER}RER_{t-1} + \sum_{i=1}^k \gamma_{1i} \Delta TXY_{t-1} + \sum_{i=1}^k \gamma_{2i} \Delta FISI_{t-1} + \sum_{i=1}^k \gamma_{3i} \Delta FINI_{t-1} + \\ & \sum_{i=1}^k \gamma_{4i} \Delta RGDP_{t-1} + \sum_{i=1}^k \gamma_{5i} \Delta RER_{t-1} + \mu_t \end{aligned} \quad (5)$$

This model can be described as autoregressive since the response variable is predicted by the lag value of itself. It is also called distributed in that the response variable is explained by the lag

value of the independent variable. Hence, the above equation is an autoregressive distributed lag model which is specified as a combination of study variables integrated at  $I(0)$  and  $I(1)$ . In order to select the number of lags for the ARDL model the Akaike information criterion (AIC) and the Bayesian information criterion (BIC) are used to determine the appropriate fit of the model.

#### **4.6.6 Bound Testing Approach**

ARDL bound test proposed by Pesaran et al. (2001) is used to determine the long run association among the concerned variables. Initially, an ordinary least square (OLS) regression is run to estimate the parameters of the model. If the coefficients of lags are jointly significant, it establishes a long run correlation between dependent and independent variables. It implies that the dependent and independent variables are related in the long run. The null hypothesis of bound test postulates the nonexistence of relationship between variables in the long run. And the alternative hypothesis states that there exists long run association between the variables. The rejection of null hypothesis indicates the presence of long run correlation between the variables.

#### **4.6.7 Diagnostic Tests**

The estimation of time series data produces many econometric problems like auto or serial correlation, heteroscedasticity, non-normality, and instability. The problem of auto or serial correlation in time series data is common. If several consecutive values of error term and dependent variable are interrelated, it indicates the presence of auto correlation in the series. In the presence of auto correlation, the standard error becomes inconsistent and also effects the statistical decision. Breusch Godfrey LM test is used to identify and resolve the issue of auto or serial correlation.

The issue of heteroscedasticity arises when the variance of error term does not remain constant throughout the series. Breusch-Pagan-Godfrey test is used to resolve this problem. Similarly, the assumption of normality is important and, if violated, it results in weakening the power of t test and hence incorrect statistical decision. Jarque-Bera (JB) diagnostic test is applied to check if the distribution of error term is normal.

It is important to confirm the consistency and stability of coefficients in the time series analysis. CUSUM and CUSUMSQ test are employed to find the stability and consistency of coefficients. The former test draws the graph of cumulative sum of square of the recursive residuals with the critical lines that are significant at 5%. The coefficients are considered stable if the line of cumulative sum of square of the recursive residuals remains in between the two critical lines. Otherwise the coefficients are regarded as unstable.



## Chapter 5

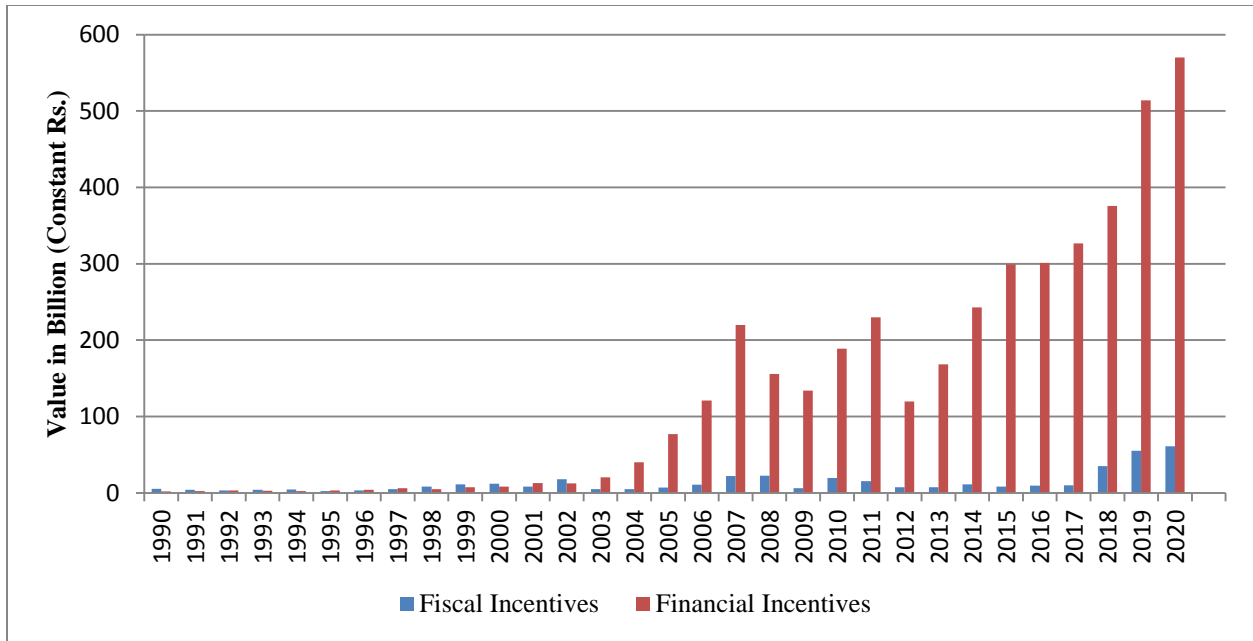
### Empirical Results

This chapter draws its analysis of estimates produced empirically from the econometric model. Before analyzing the empirical estimates, trend analysis of the study variables are presented.

#### 5.1. Export Incentives in Textile Sector

Export Incentive schemes in the textile sector of Pakistan consist of financial and fiscal incentive schemes. Financial incentives include export refinance scheme (part-I & part-II), long term financing facility (LTFF), and Islamic export refinance scheme (IERS). Fiscal incentives comprise of duty drawback of taxes (DDT), drawback of local taxes and levies (DLTL), export refunds/rebates. Other fiscal incentives which are now obsolete and were operational during first textile policy and earlier include R&D Support scheme, Technology up-gradation Fund, PTA scheme, and government contribution to export investment fund.

Financial incentive scheme has proved the most significant incentive to exporters as evidenced by the size of loan extended through this scheme, which stands out all the fiscal incentives combined. From the financial incentive scheme, on average over 50% is shared by the export refinance scheme (part-I & II) while the rest is shared by LTFF and IERS.



*Figure 5.1: Trends of Incentive Schemes*

As shown in figure 5.1 above, the trend of revenue sacrificed through fiscal incentive schemes has an increasing trend after FY 2015; however it has fluctuated over the entire period from 1990 to 2020. It was only a little over Rs. 5 billion in 1990 and reached to over Rs. 60 billion in 2020. The revenue amount forgone through fiscal incentive schemes during the entire study period is over Rs. 406 billion. The fiscal and financial incentives data are taken from the State Bank of Pakistan (SBP) and various issues of Economic Survey of Pakistan.

Within the financial incentive scheme, export refinance scheme was introduced in 1973 by State Bank of Pakistan (SBP) to provide concessionary export finance to stimulate the export of emerging and non-traditional goods. Later, the scope of the scheme was extended to include all manufactured products. Within textile sector, raw cotton has remained ineligible for concessionary export finance. The schemes experienced a further operational change in 1977 when it was split into two parts, I and II, the underlying procedures of each being quite dissimilar from one other.

Further, IERS and LTFF schemes were introduced by SBP in 2002 and 2004 respectively to facilitate exporters with concessionary finance. A total of around Rs. 4177 billion has been disbursed to exporters under financial incentive scheme over the entire study period, in which the highest loan provision is registered in 2020 with an amount of Rs. 569.9 billion.

## 5.2. Trend of Textile Export Growth by Value

As illustrated in figure 4, the trend in the growth of textile exports depicts an increasing pattern over the study period, except for the period from 2012 to 2017 during which it has fluctuated.

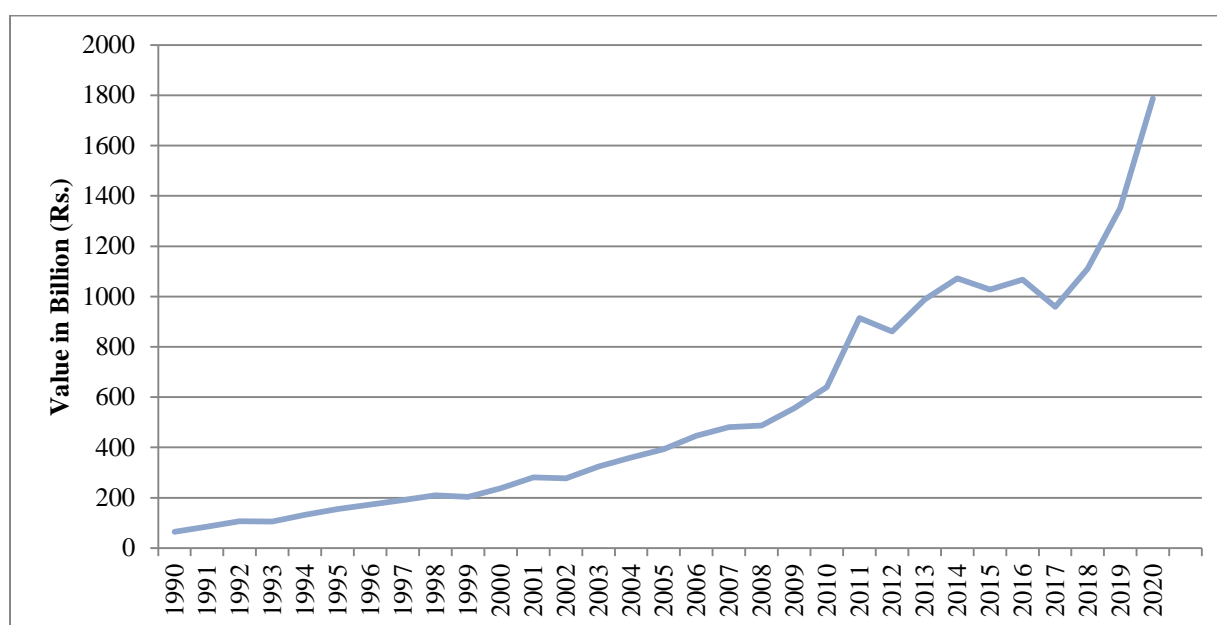


Figure 5.2: Trends of Textile Export Value in constant prices from 1990 to 2020

As shown in the above figure, the value of textile exports in the country has increased from Rs. 64.3 billion in 1990 to Rs. 1787.4 billion in 2020; it has been growing at an average rate of over 12% per annum over the study period. On the other hand, the average computed share of textile exports to the GDP of the country during the period is around 5.9%, the highest contribution is registered in 2020 accounting for 13.6% and the lowest share is recorded with 1.6% in 1990. The data for textile exports is taken from various issues of Economic Survey of Pakistan.

### 5.3. Trends of Textile Export Performance and Export Incentives

As shown in figure 5.3, unlike fiscal incentive textile exports and financial incentive follow an increasing pattern over the years. Fiscal incentive seems to have stagnated for years until 2017 and then took a jump while starting to rise. It is evident from the figure below that financial incentive is the most influential factor in contributing to the growth of textile exports. On the other hand, fiscal incentive does not seem to have played its part in promoting textile exports due to its stagnant pattern over a long period of time.

Textile exports are considered vital in increasing the overall share of exports in country's GDP and the role of support interventions in the form of incentive schemes is crucial in realizing this consideration through raising the level of textile exports. Unfortunately, the trend of fiscal incentive scheme does not show a clear pattern to have contributed in improving the value of textile exports. The data for below figure is taken from SBP and various issues of Economic Survey of Pakistan.

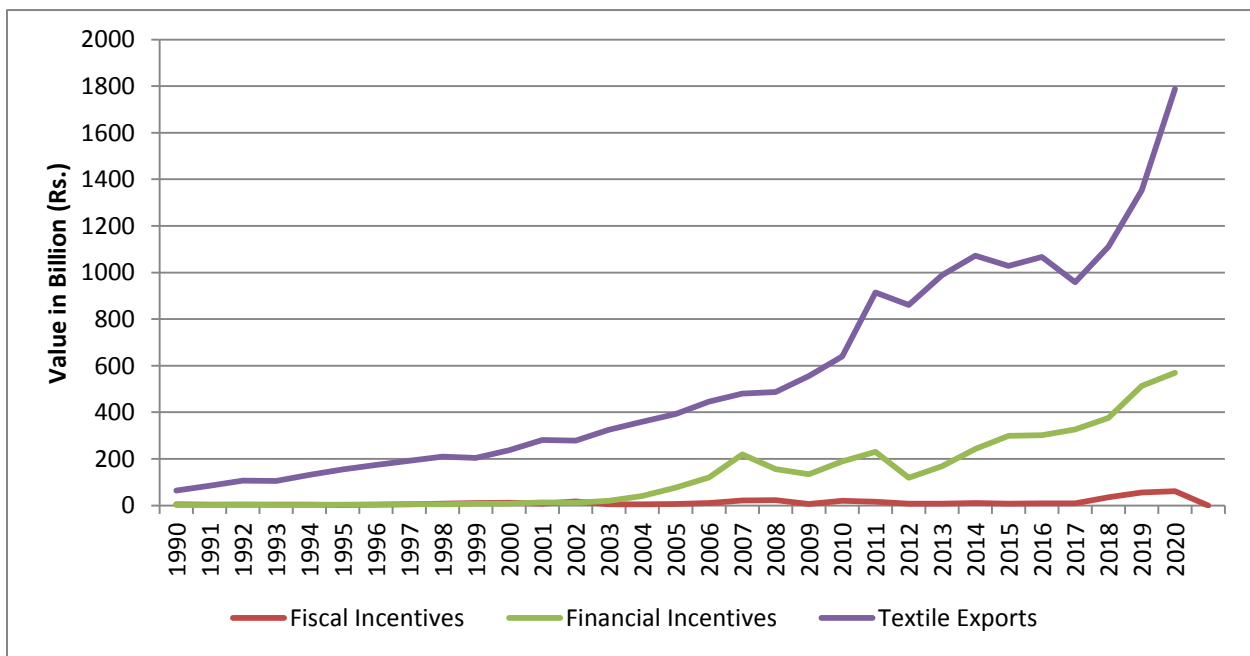


Figure 5.3: Trends of Textile Export and Textile Export Incentives in constant prices

## **5.4. Estimation and Analysis of Empirical Results**

This section of the chapter is designed to analyze the empirical results of the model which estimated the impact of export subsidies on the growth of textile exports in Pakistan. In section 5.4.1 the result for ADF unit root test is discussed in order to determine the order of integration of all variables used in the model. The next section describes the results of ARDL bounds test which is used to know if the variables are co-integrated in the long run. Section 5.5 presents the short run as well as the long run dynamics of the ARDL co-integration technique. The last section evaluates and diagnoses the issues prevalent in the time series analysis using diagnostic tests and CUSUMQ test.

### **5.4.1 Unit Root Test**

Augmented Dickey-Fuller (ADF) test is widely used to identify the stationary characteristics of the variables used in the time series analysis. All the variables used in this study such as textile exports, fiscal incentive, financial incentive, real effective exchange rate, and real GDP growth rate are confirmed to be stationary either at level or first difference. No variable is found to be integrated of order two which, if exists, invalidates the results of ARDL bounds test. Therefore, it is important to confirm the order of integration of each variable before estimating the model.

A series is said to be stationary whose key statistical properties like mean, variance, and auto-correlation are all constant over time. Whereas a series is known as non-stationary whose mean, variance and auto-correlation vary over time and do not remain constant. It is necessary to note that non-stationary series can be made stationary by taking their log or differencing the series with its consecutive values.

Most of the study variables including log of textile exports as percentage of GDP, and real GDP growth rate are found to be stationary at level. However, financial incentive, fiscal incentive and real effective exchange rate are integrated at first difference. Hence, ARDL method is the most preferred and appropriate technique to apply in case the variables are of mixed order which is also confirmed in our case. The ADF test is performed using intercept and intercept and trend both included.

**Table 1: ADF Test Results**

| Unit Root Test Results |           |                   |                            |                   |                      |
|------------------------|-----------|-------------------|----------------------------|-------------------|----------------------|
| Variables              | Level     |                   | 1 <sup>st</sup> difference |                   | Order of integration |
|                        | Intercept | Intercept & Trend | Intercept                  | Intercept & Trend |                      |
| LTXY                   | 0.6934    | -4.7585***        | -4.7702***                 | -4.5769           | I(0)                 |
| FISI                   | 0.3131    | -0.7295           | -4.7430***                 | -5.0538***        | I(1)                 |
| FINI                   | 1.77640   | -0.5453           | -4.5850***                 | -5.4202***        | I(1)                 |
| REER                   | -2.3222   | -2.5024           | -5.9677***                 | -5.8562***        | I(1)                 |
| RGDP                   | -3.1443** | -3.2721*          | -6.3131***                 | -6.2632***        | I(0)                 |

Note: Level of significance at 1%, 5% and 10% are indicated by using \*\*\* \*\* and \* respectively.

#### 5.4.2 Selection of Lag Length

It is compulsory to determine the optimum lag length to choose an appropriate model for the estimation of long run equation. The established criteria propose two lags to be included in an annual time series data. VAR lag order selection criterion is used to find the optimum number of

lag for the ARDL model. An unrestricted VAR model is run for all the variables as a group. Akaike Information Criterion (AIC) shows the smallest value among all other information criteria results. Based on the value of AIC, two lags are incorporated in the ARDL equation for this study. Besides, Schwarz (SC) and Hannan-Quinn (HQ) criteria results also indicate two maximum lag length to be used for a parsimonious model in this case.

**Table 2: VAR Lag Length Order Selection Criteria Results**

| Lag | LogL      | LR        | FPE       | AIC       | SC        | HQ        |
|-----|-----------|-----------|-----------|-----------|-----------|-----------|
| 0   | -530.4454 | NA        | 7.50e+09  | 36.92727  | 37.16301  | 37.00110  |
| 1   | -443.9904 | 137.1356* | 1.12e+08* | 32.68899  | 35.14576  | 33.36476  |
| 2   | -417.0129 | 33.48922  | 1.15e+08  | 32.55262* | 34.10343* | 33.13198* |

Note: \* indicates optimum lag order selected by each criterion

### 5.4.3 Bound Test

ARDL bound test is employed to check if there is co-integration between dependent and explanatory variables in the long run. If the value of F-statistic is greater than the upper bound value, then the null hypothesis of no co-integration is rejected and vice versa. When the long run correlation is established among the variables of interest, then the long run relationship is estimated with the help of vector error correction model (VECM).

**Table 3: Bound Test Result**

| Test statistic | Value     | Significance | I(0) | I(1) |
|----------------|-----------|--------------|------|------|
| F-statistic    | 5.915890* | 10%          | 2.2  | 3.09 |
| K              | 4         | 5%           | 2.56 | 3.49 |
|                |           | 2.5%         | 2.88 | 3.87 |
|                |           | 1%           | 3.29 | 4.37 |

Note: \* indicates significance at 5%.

The value of F-statistic is 5.92 for the model with log of textile exports as percentage of GDP as dependent variable and subsidies along with other variables as independent variables. The value of F-statistic is greater than the upper bound value of 3.49 and is significant at 5% level; hence we reject the null hypothesis of no co-integration among the variables in the long run.

According to the bounds test result there is long run co-integration among the study variables, so we proceed to estimate the coefficients for the long run using ARDL Long Run Form and Bounds Test.

### **5.5. Long run Results of ARDL Model**

The purpose of the study is to explore the long run correlation between subsidies in the textile sector and textile exports. The coefficients of the long run estimate indicate how export subsidies to textile sector impact the growth of textile exports in the long run. The size and the significance of long run estimates will be a useful indication to decide about the type and the instrument of subsidies especially in textile policies. The results will also suggest whether government should discontinue the existing incentives/subsidies or continue them. If subsidies are found to increase



the growth of textile exports in the long run, then the government should be encouraged to provide these subsidies in the future. And if they fail to enhance textile exports then it becomes mandatory to either reform or discontinue them after a thorough evaluation process.

The results of the long run estimates are presented in the table 4.

**Table 4:** Long Run Coefficient Estimates of the Model

| Variable | Coefficient  | Std. Error | t-statistic | Prob.  |
|----------|--------------|------------|-------------|--------|
| C        | 5.397135***  | 1.113547   | 4.846795    | 0.0001 |
| FINI     | 0.003183***  | 0.000880   | 3.615561    | 0.0018 |
| FISI     | -0.001702    | 0.013020   | -0.130737   | 0.8974 |
| REER     | -0.033135*** | 0.010263   | -3.228507   | 0.0044 |
| RGDP     | 0.123569**   | 0.045429   | 2.720023    | 0.0136 |

Note: 1%, 2% and 5% levels of significance are denoted by \*\*\* \*\* and \* respectively.

From the above table it is evident that financial incentive is helpful in raising the level of textile exports in the long run and is statistically significant. Financial incentive is provided to exporters in order to meet their working capital requirements and aid them in purchasing imported machineries along with other imported inputs for export-oriented projects. Firms face liquidity issues for timely accomplishment of export orders and, therefore, need financing facility to continue exporting unabated.

This result is further corroborated by Banerjee and Newman (2004) who argue that financial subsidies aid in correcting allocative distortions produced by poor financial markets, and hence have the ability to improve export growth. According to Oyejide (2007) financial incentives

serve as ‘complementary’ and ‘autonomous’ measures that are meant to provide special incentives for exporting activities which are not necessarily associated to any disincentive.

The result of the study indicates that fiscal incentives to textile sector are insignificant in promoting the growth of textile exports in the long run. The aim of the fiscal incentive is to reduce disincentives to exporting activities created by duty or other tariff charges on exports and duties on imported raw materials or inputs required for production of export goods.

However, the fiscal incentives such as duty drawback schemes that countries launch to eliminate the bias against exports because of duties on imported inputs often fail to remove the export bias completely. Yagci (2010) confirms such arguments and states that these kind of schemes are costly to administer; decreases government revenue which results in raising the distorting taxes that might themselves deter exports; and such schemes do not invert the reduction in the relative price of exports due to increased tariff.

Further, the result of this study is supported by Haque and Kemal (2007) who conclude that duty drawback scheme in Pakistan is insignificant in promoting export growth in the long run; hence the result affirms the hypothesis of irregularities and procedural time lags and the role of rent-seekers in capturing of the scheme. They further argue that mostly economists resist such type of outmoded schemes since they are difficult to administer, not well targeted and easily captured by rent-seekers.

In Pakistan subsidy schemes have failed to accomplish their purpose of boosting export growth, implying that one or all suppositions presented by economists could be in effect. Their study suggests that these schemes have been operative for about three decades with limited systematic evaluation and in the meantime the percentage of exports in GDP has remained stagnant.

Therefore, it calls for an urgent effort on the part of government to evaluate different government interventions for improving exports.

Unlike advanced economies where rates of import duty are quite low, there is much space for using duty drawback in boosting exports in developing economies whose average rate of input duty are high (Thomas & Nash, 1991). The existing Agreement on Subsidies and Countervailing Measures of the WTO lays out the illustrative list of the banned export subsidies. There are a few initiatives that can be employed to boost export, although they are not specified as export subsidies, which consist of duty drawback and export credit insurance.

Notwithstanding its anticipated impact on export promotion, Ianchovichina (2004) demonstrates that duty drawback has lots of issues such as high administration costs, leakages in tariff collection, fraud linked to its misuses, trade imbalances, and exports with low domestic value added. According to Mah (2007) the duty drawback system of China is observed to be insignificant in promoting exports. Duty drawback system is inefficiently administered wherein the prevalence of over-reporting imported inputs may be the cause for its ineffectiveness in boosting exports.

Similarly, the uncertainties in payments and delays in the disbursement of import duties are considered major problems of the duty drawback system in developing economies (Hinkle et al., 2003). This result is supported by the information provided by respondents from Textile Division and APTMA who claimed that the late reimbursement of funds never serves its true purpose rather discourages investors in expanding their business activities.

Real effective exchange rate is utilized as a proxy for advancement in external competitiveness. The negative coefficient for real effective exchange rate indicates that boost in external

competitiveness (depreciation of PKR) does not raise the level of textile exports in Pakistan in the long run. One explanation could be an increase in the cost of production due to higher value of imported materials which may offset the effect of devaluation. The other possible reason might be an “overvalued” PKR from its equilibrium value despite adjustment which negates the possible effects of devaluation (Javed et al., 2016).

Several studies on exports of Pakistan confirm this result. Depreciation has no significant role in enhancing the textile exports of Pakistan (Malik, 2000; Atique & Ahmed, 2003). Aurangzed et al. (2005) find that the policy of exchange rate adjustment negatively affects the growth of exports in Pakistan. On the other hand, it is argued that policy of devaluation remains ineffective until combined with good quality export products and increased diversification in exports market (Latif & Javed, 2016).

Moreover, Empirical evidence suggests that without value-addition devaluation of currency fails to improve the trade balance in LDCs (Lewis, 1980; Riedel, 1988). Pakistan has failed to effectively improve value-addition in the textile sector and diversify its exports market. Hence, the policy of devaluation seems to adversely affect the growth of textile exports.

The result of table 4 shows a statistically significant long run positive impact of real GDP growth on the growth of textile exports. This result is supported by the theory as well as the literature. According to Ronit and Divya (2014) the theory of export-led growth holds true in case of India and their study found that growth of exports depends positively on GDP growth with a year lag.

#### **5.6. Short Run Estimates of ARDL Error Correction Model**

The short run estimates of the model are presented in the table below. Short-run estimates show the correlation between dependent and all independent variables. The short-run results of the

model indicate how effective are export subsidies in promoting the growth of textile exports in the short run. According to the short run coefficient estimates of the model both fiscal and financial incentives do not impact textile exports in the short run. As explained in case of long run fiscal incentive may fail to raise the level of textile exports because of late disbursement of funds and other administrative issues that hinder the receipt of funds on time. Same is the case for short run effect of subsidies on exports.

**Table 5: Short Run Coefficient Estimates of the Model**

| Variable           | Coefficient | Std. Error | t-statistic | Prob.    |
|--------------------|-------------|------------|-------------|----------|
| D(LTXY(-1))        | 0.008722    | 0.162754   | 0.053587    | 0.9580   |
| D(FINI)            | 0.001173    | 0.000404   | 2.906581    | 0.0087   |
| D(FINI(-1))        | -0.000719   | 0.000580   | -1.241033   | 0.2350   |
| D(FISI)            | -0.004736   | 0.002414   | -1.961734   | 0.0639   |
| D(FISI(-1))        | 0.005791    | 0.003715   | 1.558613    | 0.1414   |
| D(REER)            | -0.004329   | 0.002339   | -1.850384   | 0.0799   |
| D(REER(-1))        | 0.007391    | 0.002984   | 2.477064    | 0.0228   |
| D(RGDP)            | -0.010251   | 0.006917   | -1.482026   | 0.1547   |
| D(RGDP(-1))        | 0.019105    | 0.007992   | 2.390567    | 0.0273   |
| CointEq(-1)        | -0.306776   | 0.045815   | -6.695985   | 0.0000   |
| R-squared          |             |            |             | 0.636070 |
| Adjusted R-squared |             |            |             | 0.575415 |

Note: \*\*\* \*\* and \* implies significance level at 1% 5% and 10% respectively.

On the other hand, a large share of financial incentive is captured by long term financing facility and whose long run impact is statistically significant in stimulating textile exports but in case of

short run they do not affect the growth of textile exports. Because the major part of financing facility is meant for long run investments, therefore, their short run impact is absent. Moreover, real GDP and real effective exchange rate have significant positive impact on textile exports in the short run with one lag each.

In order to explore short run dynamics of long run equilibrium associations, vector error correction is done following the co-integration test. The convergence term is obtained by estimating Error Correction Model (ECM). The coefficient of the error correction term indicates the speed of adjustment towards the long run. The sign of the term must be negative and statistically significant. The negative sign of the term shows the convergence to equilibrium from short run to long run and presents a causal relationship of the regressors with the dependent variable (Banerjee et al. 1998).

In our case the coefficient of the term is -0.30 with 1% level of significance. The negative sign of the coefficient indicates that the deviation from long run equilibrium is corrected at the rate of 30% each year.

The adjusted R-square value of the model shows a good fit implying that much of the variation in the dependent variable is explained by explanatory variables. Besides, the probability of F-statistic is significant at 1% meaning that all the variables are jointly significant.

### **5.7. Diagnostic and Stability Tests**

Diagnostic and stability tests are applied to determine the accuracy of the model. The results of the tests are presented below in table 6.

**Table 6:** Diagnostic Test Results

| Test                                     | Test Statistic | Prob. |
|--|----------------|-------|
| Ramsey RESET Stability Test              | 0.9623         | 0.35  |
| Serial Correlation LM                    | 2.08           | 0.35  |
| Heteroskedasticity Breusch-Pagan-Godfrey | 7.81           | 0.55  |
| Jarque-Bera Normality Test               | 0.94           | 0.62  |

In order to detect the problem of auto correlation in the residual, serial auto correlation LM test is used. The result of the LM test shows that there is no auto correlation and the null hypothesis of no serial auto correlation is accepted. The problem of heteroskedasticity is checked using the Breusch-Pagan-Godfrey test and the result in the table reveals that there is no heteroskedasticity in the error term. Similarly, the result of Jarque-Bera test confirms the normality of the model.

The figures 5.4 and 5.5 below show the results for CUSUM and CUSUMSQ. As the plotted points remain in between the critical lines at 5% level of significance, so it means that there is no significant structural variability in the coefficients.

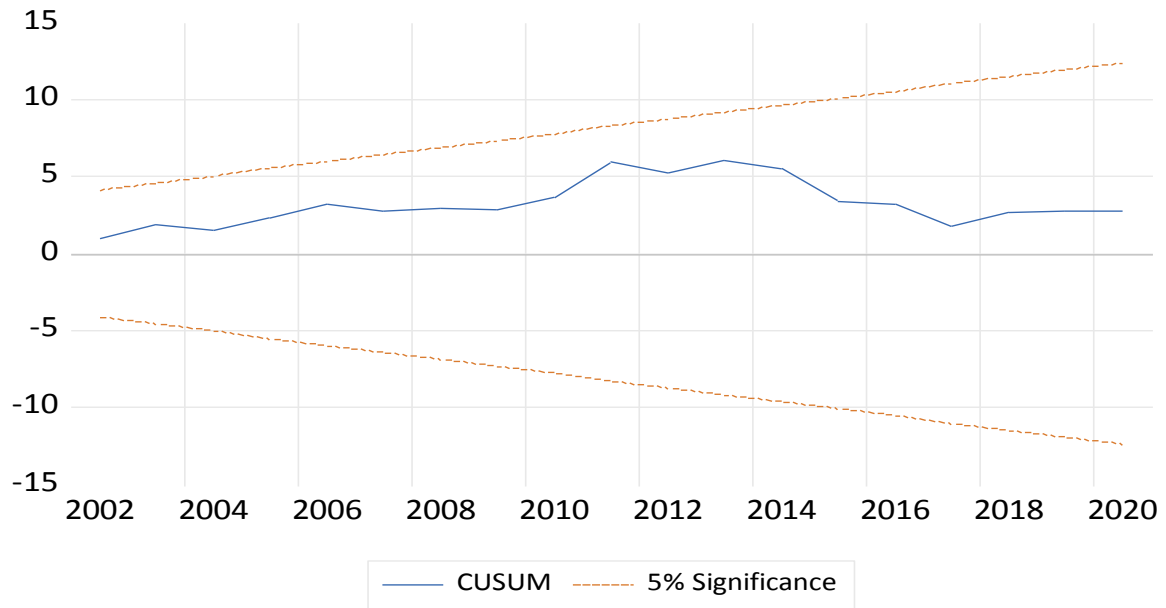


Figure 5.4: CUSUM Graph with 5% Significance Bounds



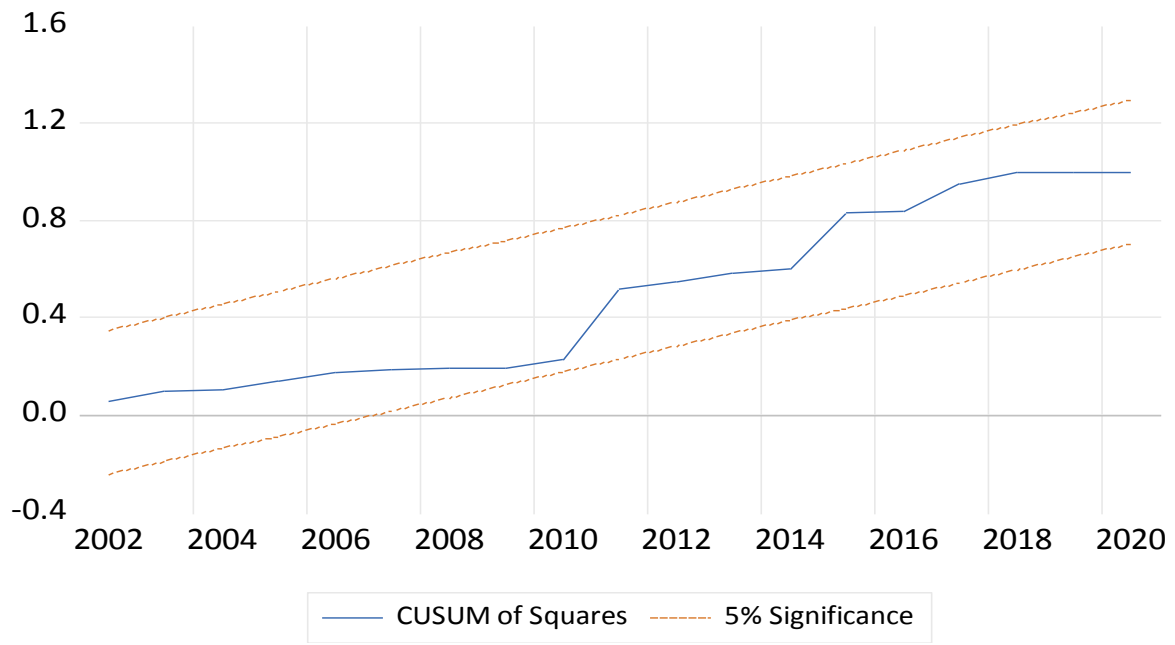


Figure 5.5: CUSUMSQ Graph with 5% Significance Bounds

## Chapter 6

### Analysis of Qualitative Data

This chapter deals with the analysis of qualitative information received through interviews from key stakeholders involved in designing subsidy schemes in the textile sector. The stakeholders include the Ministry of Commerce Textile Wing, the Ministry of Finance, and All Pakistan Textile Mills Association (APTMA). This part of the study attempts to address the primary research question of how subsidies in the textile sector are determined and what role is played by the private sector in this process. The themes developed from the interview transcripts are categorized and presented below.

#### 6.1. Determination and Objective of Subsidy Provision in the Textile Sector

To explore the primary objective of this study on the process of determining subsidies and what is the primary objective behind subsidy provision in the textile sector, the question was asked to different respondents through an in-depth interview from various stakeholders such as Ministry of Commerce Textile Division, Ministry of Finance, and All Pakistan Textile Mills Association (APTMA). Qualitative analysis is performed based on the responses received from the interview participants.

#### 6.2. Determination of Subsidies in the Textile Sector

The initial question to respondents mainly focused on who determines subsidies and which criteria are employed to decide about the time frame and the amount of subsidies provided. The respondents told that textile sector subsidies are determined by the textile division in close consultation with key stakeholders including textile associations, The Federation of Pakistan Chambers of Commerce and Industry (FPCCI), and relevant ministries.

However, there is no proper mechanism to decide about the time limit of the subsidy provision but the amount of the subsidy for a specific period is allocated after the commitment from the Ministry of Finance on the basis of fiscal space availability. Ultimately, given the fiscal space textile division determines the instruments of subsidies considering the allocated amounts which might miss out some of the proposed measures from the private sector stakeholders.

Before commenting on the question of determining subsidies, one of the senior respondents from textile division stated that we have to clarify the difference between subsidies and incentives provided to textile sector. He commenced his response by saying that *textile sector in Pakistan is not subsidized rather it is incentivized*. Subsidy is something which is granted to compensate a part/all of the cost incurred by a producer in order to provide relief to a producer or a consumer. However, incentive is given to encourage an effort or attract an economic activity for the purpose of enhancing investment or production. He told that the term incentive is misused in Pakistan and termed as subsidy even in official government documents.

According to him energy subsidy given to textile sector is not a pure subsidy, it is in fact a 'cross subsidy' in which government charges higher unit prices to industrial sector including textile in order to provide lower energy prices to domestic and commercial sectors. This practice is done to compensate for the energy losses generated by inefficiency and other line losses. As a result textile sector ends up losing its comparative advantage and competitiveness to its comparators due to higher energy/input prices. Therefore, government is bound to provide energy at a subsidized rate to textile sector in order to maintain its competitive position in the world market.

Moreover, he termed the other financial and fiscal relief measures such as DDT, DLTL, export rebates/refunds, and export refinance schemes as incentives and not subsidies. He told that WTO

has granted tariff exemptions to exporters in respect of imported inputs mentioned in different clauses in the Agreement on Trade-Related Investment Measures (TRIMS). In fact government has long pledged to provide zero-rated facility to textile exporters, but it is yet to come to fruition. Hence, textile sector is availing the facility of duty drawback and tax refunds as an incentive not a subsidy.

On the financial relief measures he was of the opinion that financial sector in Pakistan is weak and poor, and faced with market failure due to lack of competition. So, to correct for market failure it is compulsory for the state to intervene and provide subsidized financing to the largest exporting sector as an incentive. Further, he told that other subsidies such as R&D, and technology up-gradation fund are no longer effective and were only provided for first five-year textile policy (2009-14).

According to him the determination of incentives is finalized after a rigorous consultation and dialogue with the private stakeholders. However, the final decision for allocation of funds by the Ministry of Finance definitely affects the actual proposals advanced by the private sector. It was further stated that the determination mechanism is mainly directed to increase the value-added component in the textile sector. Hence, the process with higher value addition gets higher incentives and vice versa.

The other respondent from the Ministry of Finance said that Finance Ministry is only responsible for the provision of finances demanded by the textile division and that the Ministry does not have a direct role in determining subsidies. However, mostly the amount demanded by the textile division is retrenched because of the limited fiscal space which might affect the subsidy goals in

the sector. She further told that the Ministry strives hard to fully facilitate the critical sectors like textile so as to promote export growth despite having fiscal issues.

The respondent from All Pakistan Textile Mills Association (APTMA) shared similar views on provision of incentives rather than subsidies in the textile sector as the official from the textile division. According to him private sector plays a key role in determining incentive schemes. The dialogue between public and private sector makes it possible to consider various proposals by stakeholders during the policy making process.

He commented that most of the incentive schemes are operational since long and sometimes modifications are proposed by private sector through evidence-based studies on regional and international competitors receiving state support. Besides, financial incentives to export-oriented projects are prevalent throughout the world and Pakistan is no exception; exporters need working capital to finance their export orders and without subsidized interest rate they become unable to borrow and continue exporting uninterrupted.

### **6.3. Primary Objective of Textile Subsidies**

The interview participants were asked to tell the primary objective of providing subsidies to the textile industry. All of the respondents were of the view that textile subsidies are granted primarily to improve the competitiveness of the sector and enhance the growth of textile exports. It was implied that without incentives the export-oriented textile sector would lose its competitive position relative to its competitors. And it was argued that textile sector is the largest contributor to the exports of Pakistan and state intervention is pre-requisite to encourage and promote this sector for earning hard-earned foreign reserves.

One of the respondents from textile division told that the fundamental goal of the government in incentivizing the textile sector is to increase the competitiveness of the sector resulting in enhanced export earnings. Textile sector is recognized as a top priority export sector by the government and the goal is to diversify the economy through value-addition and technology up-gradation keeping the sector as a base. The response was followed by citing some instances of success stories in East Asian economies and China where textile sector proved to be a foundation for further export diversification and improving technological capacities. He admitted that Pakistan has failed to set such an example despite having a complete value chain in the textile sector.

Another respondent from the Ministry of Finance said that the basic aim of the government is to increase the share of exports to GDP and textile sector has the potential to promote exports if supported by proper policy measures. Besides, the administrative bottlenecks need to be addressed in accessing incentive schemes in order to achieve the primary objective of increasing exports.

Moreover, the interview participant from APTMA responded that the primary objective of subsidy provision to the textile sector is boosting value-added component of the sector through diversification by giving a level playing field to the exporters. It is believed that policy initiatives like incentive schemes aid in attracting large investments and promoting risky projects which could lead to achieving higher technological capabilities. However, these initiatives have helped in increasing the level of exports but failed to achieve the level of value-addition and diversification required to move up the ladder of comparative advantage.

#### **6.4. Subsidy Financing and Budgetary Allocation**

In order to evaluate the process of financing textile subsidies the respondents were asked if there exists any budgetary allocation for financing subsidy/incentive schemes in the textile sector. The information was collected from different stakeholders who participated in the interview including Ministry of Commerce textile division, Ministry of Finance, and All Pakistan Textile Mills Association (APTMA).

It was observed from all the respondents that a part of the subsidy is financed through budgetary allocation while the rest is allocated and disbursed during the ongoing fiscal year based on the fiscal health of the economy. Rarely the funds are totally allocated in the budget while most often the schemes are financed out of the budgetary allocation depending on the position of revenue collection.

A senior respondent from textile division informed that partial allocation for textile subsidies is made in the budget. He told that we have always strived to convince the Ministry of Finance for complete budgetary allocation of textile subsidies so as to ensure timely disbursement of the funds. But government has always complained that of insufficient resources which has always resulted in the late disbursement of subsidies.

According to him government made a commitment of Rs. 65 billion in the first five-year textile policy (2009-14) along with Rs. 30 billion in the second five-year textile policy (2014-19) for various schemes apart from the incentive schemes. Nevertheless both commitments made during the two policy regimes failed to be realized fully. Further he stated that we are trying our best to convince the government in realizing the importance of budgetary allocation for financing textile incentive schemes.

The respondent from Ministry of Finance acknowledged that funds for financing textile schemes are partially allocated because of the shortage of fiscal resources. According to her sometimes various ministries, especially Ministry of Commerce, issue notifications for fiscal relief measures to exporting sectors during the ongoing fiscal year which creates financing issues. And therefore, budgetary allocations fail to meet the required financing for such type of sectors.

In this regard, it is necessary that concerned ministries should increase their level of cooperation and develop a proper financing mechanism for critical exporting sectors like textile. Other interview participant from APTMA informed that complete budgetary allocation is a case of necessity for the textile sector to produce desirable outcomes which is absent in our case. He contended that one of the key reasons why textile sector has failed to achieve the required level of diversification is the lack of timely allocation of the funds to the sector.

### **6.5. Evaluation of Subsidy Proposals**

To analyze the mechanism through which subsidies/incentives in the textile sector are evaluated, we interviewed officials from the Ministry of Commerce Textile Division and Ministry of Finance. The information received through these interviews indicated that there is no proper mechanism to evaluate the proposals for subsidies/incentives from different stakeholders in the textile sector.

The official respondent from the Ministry of Commerce Textile Division responded that currently we do not have a proper procedure to evaluate all the proposals coming from textile industry. He justified the fiscal incentives in the presence of import tariffs and duties on the imported inputs used in exporting while financial incentives are required because of the presence of market failure in our financial sector.



In terms of financial and fiscal incentives he accepted that low rank companies, based on value-added production, are unable to access export financing schemes due to higher risks attached by financial institutions while cumbersome and costly procedures involved in attaining fiscal incentives. But elite and middle rank companies find it less difficult and easily access and avail these types of schemes. He insisted that energy subsidies to textile exporters suffer from leakages and require a digitized evaluation mechanism such as 'track and trace system' to distinguish real exporter from the one producing for domestic purposes.

Moreover, we were apprised of the fact from the respondent of the Ministry of Finance that there was no mechanism to evaluate subsidy proposals from various ministries in the Finance Division. Finance Division is only responsible for financing the subsidies proposed by each ministry, so it is the mandate of each individual department to conduct proper evaluation of the proposals and then forward them. The proposal for unallocated subsidy funds are presented before Economic Coordination Committee (ECC) and after a thorough deliberation process, not an evaluation process, the committee either approves or disapproves the proposals from various ministries including textile.

Recently, ECC has expressed grave concerns over the leakage of energy subsidies granted to different export-oriented sectors. It became evident that some enterprises engaged in production for domestic purposes have also been availing the subsidized energy facility meant only for export sector. Therefore, the committee demanded to make it conditional on the export proceeds or develop a proper evaluation mechanism so that non-exporters could be easily differentiated.

On this issue an official from Textile Division acknowledged the presence of the loophole and stated that without 'track and trace system' it is impossible to identify those availing the facility

for export purposes or the ones using it for the production of domestic needs. He was of the opinion that many enterprises are simultaneously involved in exporting activity as well as producing for the local market; hence identification without digitized procedure is not possible.

#### **6.6. Post Subsidy Impact Evaluation**

The question on the post subsidy impact analysis was asked to the members of all three key stakeholders namely, Ministry of Commerce Textile Division, Ministry of Finance, and APTMA. As per the information from interviews it was clear that there is no built-in procedural mechanism aimed at studying the impact of post subsidy schemes in the textile sector. Although some of the organizations including Asian Development Bank and World Bank conducted studies on the impact of policy measures in textile and other sectors but there is no proper policy direction to conduct post subsidy analysis.

One of the respondents from Textile Division asserted that the policy for post subsidy evaluation is currently missing. He told that some studies have been conducted in the textile sector through international organizations as part of our vision to bring structural changes in textile industry but they were not part of a broader policy level measure to assess the impact of incentive schemes. It was, nonetheless, claimed that the Division is developing a mechanism to evaluate such policy measures in the future. Rather he said it was initiated and it is based on an individual firm-level analysis where each firm availing the facility is evaluated on a quarterly basis. Post subsidy evaluation is necessary to improve the effectiveness of the schemes, so we have realized this policy gap and working on it.

The information received from the Ministry of Finance also pointed towards the necessity of developing a proper post subsidy mechanism which is lacking in most of our policy documents.

It was stated that post subsidy schemes should be evaluated by the concerned ministries or divisions which may lead to rationalization of subsidy expenses and reduce the burden on the resources of Finance Ministry.

Furthermore, respondent from APTMA also told that no proper mechanism exists to carry out post subsidy impact analysis studies. It was stressed that evaluation studies would be of no use if government fails to ensure the timely availability of funds. The important point was that exporters receive their funds after they incur costs, with a lag of two or more years. So, before initiating ex-post analysis it is necessary that government should expedite the reimbursement process and ensure timely payment of funds to the exporters.

#### **6.7. Textile Policies and their Failure**

The question was, “what are the main factors responsible for the failure of previous textile policies, and how does current policy address those issues?” According to respondents, inconsistent policies and unavailability of financial resources are the prime factors responsible for the failure of textile policies. A number of initiatives were introduced in both policies to enhance technical capacity and increase value-added production of the sector but the committed amounts were not disbursed resulting in the failure of achieving policy goals.

The participant from Textile Division informed that lack of availability of funds has been a serious issue throughout the textile policy regimes and became the cause for the failure of textile policies. On the other hand policy inconsistency during different political regimes has also remained a big challenge for the sectoral policies to thrive. Further, he added that in the current textile policy we have initially identified the main weaknesses in the previous policies and these are included in the policy document in order to focus them in the ongoing policies. In this regard,

we asked private sector to give their estimated target of textile exports in the previous fiscal year and their estimate was around \$20 billion.

However, we did our own estimates through econometric modeling based on three scenarios and the result produced was nearly \$17 billion. Interestingly, the revised estimates for textile exports matched our estimated modeling results. And now we are using scientific approach to set our targets which has never been in practice for previous textile policies.

The respondent from the Ministry of Finance responded that the availability of funds has remained a key issue in meeting the commitments made for policy measures. Although we have improved much from our previous condition but there still remains much to be done through better coordination among the ministries.

Another respondent from APTMA pointed out that private sector has faced mainly two issues in terms of funds. The allocated funds, as policy measures, were either not disbursed or the funds which were kept for incentive schemes were delayed for years. This problem badly affected the speed and nature of investments in the textile sector. Besides, the change in political regimes has also contributed to the failure of policies because of the addition in uncertainty and policy inconsistency in the sector.

### **6.8. Role of Public-Private Coordination in Deciding Subsidies/Incentives**

Primarily two questions were asked to explore the role of private sector in textile policies. First question was, “what is the role of private sector (associations etc.) in determining subsidies/incentives and their instruments in the textile sector?” And the second question was, “do key stakeholders play their role in the making of textile policy?” According to respondents from Textile Division and APTMA all the five-year textile policies have been worked out with

the help of private sector including textile associations and chambers of commerce. Similarly, instruments of subsidies/incentives are decided in collaboration with private stakeholders, but they are finalized keeping in view the availability of fiscal space and approval from the Ministry of Finance.

The information received through interviews from the Ministry of Commerce Textile Division indicated an intimate link between public and private sectors in the process of policy making. The process of policy making involves various stakeholders from public as well as private sectors. All the relevant ministries are taken into confidence while preparing policy proposals along with the stakeholders from private sectors especially the associations concerned with textile production. Following a rigorous dialogue between government officials and private parties, the policy measures are determined for further process.

The answer to a counter question demonstrated that private sector was only engaged at an initial stage of policy making, whereas they were not consulted during the monitoring and implementation stages of the policy process. However, currently, according to the respondent, private sector is being engaged through ‘Sectoral Councils/Committees’ at the monitoring and implementation stages of policy cycle. Sectoral Councils are especially formed for value-added sector to propose measures while taking into account the local and international trade dynamics.

Ministry of Commerce is the responsible body for implementing textile policy and has to submit biannual report to the advisor to the Prime Minister on Commerce and Investment for further processing by National Export Development Board (NEDB) presided over by the Prime Minister.

According to the interview participant from APTMA, private sector has been an integral part of the policy making process especially in the diagnosis and formulation phases. The main problem faced by the private sector has been in the implementation stage. But the constitution of Sectoral Committees in the current policy for engaging private sector in implementation process is a valuable achievement by the stakeholders. This step will ensure a proper mechanism for implementing policy measures.

### **6.9. Modern Principles of Industrial Policy and the Textile Policies**

Some of the important principles of industrial policy proposed by Rodrik (2008) in the twenty first century include:

- Provision of incentives should be made only to “new” activities.
- Policy must contain a built-in sunset clause.
- Benchmarks for success and failure should be clear.
- Subsidized activities must have the definite potential of creating spillovers and demonstration effects.
- The implementing agency must be monitored by a leader who has the highest political authority with a clear stake in the outcomes.
- Mistakes which lead to “picking the losers” will optimally occur.

Questions were asked to the respondents based on the above principles to investigate whether the textile policy includes such principles. The official from Textile Division pointed out that there is no sunset provision to control non-performing subsidy/incentive schemes in the textile sector. Only the R&D subsidy scheme had a built-in sunset clause which led to the discontinuation of scheme after a few years.

With respect to “new” activities, the question clarified that it refers to both new products as well as new technologies used for manufacturing an existing commodity. According to his response, Export Development Fund (EDF) is a platform for exporters where “new” activities are encouraged and funded however; there is no separate forum for textile exporters to present their “new” activities.

Further, it was informed that National Export Development Board (NEDB) is a public-private coordinating forum, chaired by the Prime Minister, where representatives from different stakeholders discuss the emerging issues and provide proposals to overcome them. Besides, it was revealed that there are no any benchmarks/criteria through which the success and failure of subsidy schemes are measured. Other respondents from APTMA told that NEDB is a necessary component of policy implementation framework, but it needs to be made more effective by its directions in resolving the critical issues faced by the private sector.

The qualitative analysis suggests that the process of industrial policy in the textile sector has a lot improved through a better mechanism of dialogue between the public and the private sector. The previous policies lacked essential elements of modern industrial policy which led to failure. Current policy incorporates a post-subsidy evaluation framework and a better coordination mechanism between the private and public sector through the creation of sectoral councils which indirectly comes in contact with the prime minister who heads the NEDB.

The qualitative analysis has brought some important issues to the fore concerning allocative and operational inefficiencies in subsidy/incentive schemes in the textile sector. The role of policy measures has been ineffective in transforming the textile sector into a high-tech industry that can be observed from the average low rate of growth in the level of textile exports and export

diversification over the years. The justification for export incentives comes from their contribution in supporting local enterprises to expand their commercial activities in profitable areas in foreign markets.

They are used as an attractive policy tools in that they also aid in raising the relative position of local firms in relation to international firms to enlarge their market share and earn higher profits. Eventually, there are higher chances that the domestic market oriented companies are able to scale up production and gain increased capacity utilization while reducing per unit cost and generating more economic welfare (Mohan, 1990).

Export incentives consisting of direct and indirect subsidization are usually advocated by the local producers who are likely to benefit. However, the case for initiating and continuing incentives does not solely depend on their role to enhance profits but also to introduce structural changes in the economies, bestowing them a long-term comparative advantage by that means.

It has been successfully demonstrated by the countries like, South Korea, Japan, and Taiwan that through export subsidization, rate of economic growth can be expedited to achieve additional rise in exports. The information received from the respondents also show that they support the continuation of incentives but it is also asserted that it is the policy inconsistency and administrative bottlenecks that have halted the process of bringing structural changes and moving up the ladder of comparative advantage in the textile sector.

On the other hand, results of the empirical investigation show that financial incentive has a statistically significant impact on the growth of textile exports in the long run while the short run impact is absent. Financial incentive is provided to exporters in order to meet their working



capital requirements and aid them in purchasing imported machineries along with other imported inputs for export-oriented projects. Firms face liquidity issues for timely accomplishment of export orders and, therefore, need financing facility to continue exporting unabated.

From the qualitative study the respondents also justified the use of subsidized financing to increase exports due to the presence of anomalies in the financial market of the country. According to them financing facilities to exporters should be further subsidized to achieve the objective of enhancing exports which seems also desirable as per the empirical findings of the study.

The export incentive framework in Pakistan has not experienced any structural change in recent decades. The schemes introduced in early periods have continued to operate but these facilities have been made more general and refined while procedural formalities rationalized. However, there are still institutional issues pertaining to the access of small traders to incentive schemes and other administrative matters which need to be computerized and digitized. An important negative impact of subsidy schemes in the textile sector has been their contribution in slowing down the rate of value-added production and export diversification.

**Table 7: Summary of Qualitative Analysis**

| Emergent Themes             | Similarities of opinion   | Differences of opinion  | Key Findings   |
|-----------------------------|---|---|--|
| Subsidy Framework           | There is no proper subsidy framework in the textile sector (Tex div, APTMA, Fin).   |   | No criteria for failure and success, No sunset clause for subsidies  |
| Subsidy financing           | Issue of funds allocation for incentive schemes in the sector (Tex div, APTMA). Textile sector receives only incentives not subsidies (Tex div, APTMA).   | Funds are allocated based on the request from Commerce Ministry. However, provision of funds for energy subsidies is provided on ad-hoc basis (Fin).  | Lack of horizontal coordination among ministries   |
| Subsidy Evaluation          | There is no prior and post subsidy evaluation mechanism in the sector. But currently government has initiated a drive to conduct quarterly evaluation of firms receiving incentives (Tex div).  | Most of the sectors receiving subsidies do not go through an evaluation process including the textile sector. This department is not aware of any evaluation mechanism in the sector (Fin). | Non-existence of evaluation mechanism neither in the Textile Division nor in the Ministry of Finance                     |
| Public-Private coordination | Incentives are provided based on cooperation between the public and private sector. Textile division faces issues related to funds allocation from Finance Ministry. Now government has created sectoral councils to improve public-private coordination (Tex div). | Private sector is consulted only in the initial process of subsidy determination. Later, private sector is unheard and financing issues occur (APTMA).                                      | Weak public-private coordination in implementing policies  |
| Failure of Textile Policies | Late disbursement and shortage of funds have been the prime cause of failure. Current policy has been devised keeping in view the issues of previous policies (Tex div, APTMA).   | Although current policy is made after evaluation of previous ones, but there is little chance of improvement in the supply of funds (APTMA).  | Lack of funds and delay in the disbursement are the main cause of failure<br>Again lack of coordination among ministries |

## Chapter 7

### Conclusion and Policy Implication

#### 7.1. Conclusion

Provision of subsidy is an essential fiscal and industrial policy tool to alter the direction and outcome of economic activities. Failure of market to deliver critical social and economic objectives justifies the use of subsidies to achieve those goals. Industrial subsidies take different forms and are employed to achieve economic objectives such as encouraging investment, generating and/or protecting employment, correcting market failure and providing basic infrastructures.

Disbursement of subsidies is also linked to attaining structural change in the economy through greater diversification. Moreover, state intervention through industrial policy has been widely practiced in the developing world for decades. Pakistan is no exception to this development strategy and the policy has either pursued an import-substitution industrialization or export promotion strategy to achieve the development goals.

Textile sector in Pakistan is considered a priority export sector. It is heavily incentivized through export subsidies to promote textile exports and increase value-addition. However textile exports have failed to reach the expected level of increase per annum despite receiving export incentives. Textile industry receives the highest share of financial and fiscal incentive schemes provided to exporting sectors in Pakistan. In FY 2021, textile sector received 39% of the total amount disbursed under export refinance scheme and it was the recipient of 93% of the total value of

subsidy schemes reimbursed under duty drawback of taxes (DDT) and drawback of local taxes and levies (DLTL).

Government has attempted through various initiatives to improve the performance of textile sector and achieve greater export diversification. The first ever five-year textile policy (2009-14) was formulated in 2009 followed by the second five-year policy (2014-19) to bring structural changes through technology up-gradation and greater export expansion in the sector. But the primary objectives of achieving the target of \$25 billion textile exports and increasing the conversion rate of per million bales of cotton by doubling it from \$1000 to \$2000 could not be achieved until the present.

This study evaluates the existing subsidy mechanism using qualitative data through in-depth interviews as well as investigates the impact of export subsidies namely, fiscal and financial incentives on the growth of textile exports using an empirical model. The econometric model is estimated using Autoregressive Distributed Lag Model (ARDL) approach after conducting unit root test to confirm the stationary characteristic of the series. The dependent and independent variables series happen to be of mixed order which validates the application of ARDL approach. According to the empirical investigation using ARDL bound test, there exists long run relationship between dependent and explanatory variables.

The results of the empirical investigation indicate that financial incentives, export refinance schemes, have a statistically significant impact on the growth of textile exports in the long run. This result is further corroborated by Banerjee and Newman (2004) who argue that financial subsidies aid in correcting allocative distortions produced by poor financial markets, and hence have the ability to improve export growth. Another study by Fanta and Teshale (2014)

investigates the role of financial and fiscal incentives in promoting export value in Ethiopia and conclude that both incentive schemes are statistically significant in contributing to the expansion of export value in the long run.

Furthermore, the result of the empirical model shows that fiscal incentives have a statistically insignificant impact on the textile exports in the long run. It implies that fiscal incentives have failed to achieve their objective of increasing textile exports. This indicates that such schemes are fraught with administrative and procedural delays issues.

This result is also supported by the study on the impact of export subsidies on export growth in Pakistan by Haque and Kemal (2007) who conclude that fiscal subsidies such as export rebates/refunds do not have a long run impact on the growth of overall exports and are statistically insignificant. They argue that economists are normally averse to such outmoded forms of subsidy because they are hard to administer, easily captured by rent-seekers and not well-targeted. Further, the result is corroborated by the qualitative data where respondents from Textile Division and APTMA told that payments under DDT, DLTL, and Export Refunds are not disbursed on time which results in the depreciation of the purchasing power of money and hence negatively affects the investment decision of the exporters.

The results for effective exchange rate and real GDP growth show that effective exchange rate negatively impacts the growth of textile exports in the long run and is significant. It implies that an increase in external competitiveness (depreciation of PKR) does not encourage the growth of textile exports in the long run. The depreciation of real exchange rate results in increasing the price of imported inputs used in exports and hence offsets the effect of depreciation which reduces the international competitiveness of export sector. On the other hand, real GDP growth

rate is positively related to the textile exports in the long run and is statistically significant. This result is supported by the theory as well as the literature.

According to the short run coefficient estimates of the model both fiscal and financial incentives do not impact textile exports in the short run. As explained, in case of long run fiscal incentive may fail to raise the level of textile exports because of late disbursement of funds and other administrative issues that hinder the receipt of funds on time. Moreover, real GDP and real effective exchange rate have significant positive impact on textile exports in the short run with one lag each. The coefficient value of error correction term, which represents the short run dynamics of long term model, demonstrates that the deviation from long run equilibrium is corrected at the rate of 30% each year.

The qualitative part of the study attempts to study the mechanism through which subsidies in the textile sector are determined and how private sector plays its role in this process. The qualitative study is conducted with the help of in-depth interviews from the Ministry of Commerce Textile Division, the Ministry of Finance, and All Pakistan Textile Mills Association (APTMA). According to the respondents there is no proper framework that is followed to determine how much and till when subsidies should be provided. It is revealed that government has identified textile sector as one of the priority export sectors and on that basis it was incentivized to increase the level of exports in the country.

In order to identify the instruments of subsidies, public sector coordinates with the private sector and decides about the schemes to be provided. Further, it is learnt that private sector was only consulted at the initial stage of policy and decision about the subsidies. However, following the commitment of funds from the Ministry of Finance the amount and the instruments of subsidy

schemes got affected due to lower fiscal space. But now government has formed Sectoral Councils where representation of private sector is more than 90% which is responsible to participate in the process of implementation of policy measures including subsidy schemes. This seems to be a positive step towards implementing policy measures due to which previous textile policies failed to deliver.

Development economists have proposed several principles to be incorporated in the practice of modern industrial policy especially in allocation and disbursement of subsidies. They uphold that question on industrial policy should not be based on 'why' but on 'how' to conduct the industrial policy to achieve the desired objectives. According to them subsidies should only be provided to 'new' activities and those activities should have the potential of creating spillover and demonstration effects. This element of subsidy policy, as per the respondents, is missing in our case.

Besides, there is no post subsidy evaluation framework in the textile sector which is economically detrimental to the effectiveness of subsidy schemes as well as to the financing capability of the government whose fiscal burden is increasing due to increased budget deficits. However, it is told by the respondents that government has embarked on an evaluation mechanism at the individual firm-level which is a positive measure towards enhancing the effectiveness of such schemes.

## **7.2. Policy Implications**

In this section of the study we try to discuss policy implications and suggest policy measures based on the key findings from empirical and qualitative analyses of the study. The study is

aimed at evaluating the existing subsidy mechanism in the textile sector and the impact of subsidies on the growth of textile exports. Following are the policy implications and suggestions:

- **Develop a Proper Subsidy Framework:** The subsidy/incentive schemes in the textile sector do not follow a proper framework based on an economic rationale. Therefore, the emphasis of the government should be on developing a mechanism based on promoting new activities in the current textile policy which should have the capacity of generating spillover effects. Besides, the framework should entail an evaluation mechanism for subsidy schemes with the introduction of an in-built sunset clause.

In this regard, Sectoral Councils should be able to meet directly the Prime Minister on quarterly basis to discuss the progress of policy measures. Currently, their proposals and issues are represented indirectly through National Export Development Board (NEDB).

- **Improve Horizontal Coordination among Ministries:** The Ministry of Finance does not have a role in subsidy evaluation. Currently, it is only responsible for allocation of funds demanded by the concerned department. It can either make the budgetary allocation conditional on the evaluation report by the relevant department or establish a separate cell for evaluating subsidy proposals based on economic criteria. Further, there is lack of horizontal coordination among various ministries. Hence, Coordination between Commerce Ministry and especially Finance Ministry needs to be improved.
- **Encourage Financial Incentive and Reform Fiscal Incentive:** According to our empirical results financial incentives help in promoting textile exports in the long run. So, government should encourage private sector through this incentive by decreasing the rate of return on refinance from 7% to 5% per annum which could aid in resolving the financing issues of exporters. On the other hand, results of the study show that fiscal



incentives do not impact textile exports neither in the short run nor long run; hence government needs to conduct a thorough study on these schemes and rectify the issues or adopt alternative incentive options.

### **7.3. Study Limitations**

Limitation is an inherent part of every research study. The main limitation of this study is its small sample size. Due to unavailability of disaggregated data (i.e., textile sector) on subsidy schemes for earlier periods, we could not utilize all the data from the start of subsidy schemes. Energy subsidies are also widely used in the textile sector but are not included in this study because of inaccessibility of relevant data. The other limitation is related to qualitative data which is hard to receive. Although the respondents had the relevant knowledge and information on the topic but most relevant officials/persons could not be interviewed either because of their busy schedule or other reasons.

Another important limitation is that two more equations could also be added with dependent variable as volume and concentration of textile exports but data collection for these variables needed more time as all the information from online sources was unavailable.

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## **Annexure**

This is the interview tool designed for interview to officials from the Textile Division. However, questions were somehow modified for interview to the Ministry of Finance and APTMA.

## **Questionnaire**

Participant Name:

Designation/Department:

Experience:

**Thesis Title: Evaluating Industrial Subsidy Mechanism in the Textile Sector of Pakistan**

**Question No 01:** How are subsidies determined in the textile sector and what criterion is used to decide the amount and the time frame of the subsidies to be provided?



**Question No 02:** What is the primary objective of subsidy provision in the textile sector of Pakistan?

**Question No 03:** Describe the process of setting objectives and suitable indicators for these objectives, the resources available to achieve them, and the stated expectations to attain the objectives. This process often couples with a process of setting milestones that is, setting indicators to verify that you are on the right track.

**Question No 04:** Do you find that the resources allocated for the program are in general suitable for the objectives stated/chosen?

**Question No 05:** Is there any economic rationale behind subsidy provision in this sector? For instance, market failure, Schumpeterian, evolutionist, structuralist, synthesis (SES) — SES synthesis states that state intervention creates asymmetries which ensures exploration of technological capacities.

**Question No 06:** Is there any budgetary allocation for subsidies in the textile sector?

**Question No 07:** What types of subsidies are beneficial to the textile industry of Pakistan?  
Direct, indirect, others

**Question No 08:** Is there any mechanism to conduct ex ante and ex post analysis of subsidy schemes in the textile sector? How often impact evaluation studies take place, if any?

**Question No 09:** Who is responsible for the monitoring and evaluation of subsidy schemes in the textile sector?

**Question No 10:** Who are the key beneficiaries and users of subsidy schemes in the textile sector? Elite, middle rank or low rank companies (based on production of value-addition)

**Question No 11:** Is there any sunset provision to control the continuation of subsidies?

**Question No 12:** To what extent are the subsidy schemes in the textile sector politically motivated?

**Question No 13:** Why was textile policy formulated as a separate industrial policy? Is it aligned to the objectives of the industrial policy of the country?

**Question No 14:** What are the main factors responsible for the failure of previous textile policies? What is different in the current textile policy that is able to make the new policy a success?

**Question No 15:** Do key stakeholders play their role in the making of textile policy? If yes,

| Sub Questions   |              | Supporting Questions   |
|---|--------------|--|
| a) Are stakeholders considered an important party in the policy making process? | If yes, then | i) How does government manage to incorporate distinct needs of different stakeholders within the sector? |
| b) At which stage of policy cycle are they extensively consulted?               |              | i) Are they considered equally important in the implementation and evaluation stage as in the diagnosis  |

|  |  |   |
|--|--|---|
|  |  | stage?<br><br>ii) Is there any specific forum that is responsible for cooperation between public and private sector in terms of policy decisions? |
|--|--|---|

Question No 16: Does our textile policy reflect the principles of modern industrial policy? If yes

| Sub Questions  |   | Supporting Questions   |
|--|---|--|
| a) Industrial policy should focus on providing incentives (subsidies) to only “new” activities. Does our textile policy follow this principle? | If yes, then  | i) Why our policy has failed to promote value-addition and diversification of textile commodities as required?   |
| b) Are the existing subsidy schemes in the textile sector conditional?   | If yes, then<br><br><br><br><br><br><br><br><br><br>If no, then | i) What are the clear criteria/benchmarks for the success and failure of public support programs?<br><br>ii) What should be the benchmarks for the success and failure of such programs? |

|  |                     |   |
|--|---------------------|---|
| <p>c) Which is the responsible authority/agency that carries out the textile policy?</p> |                     | <p>i) Does this authority have the demonstrated competence to discharge its responsibilities?</p> <p>ii) Is the implementing authority closely monitored by a leader with a clear stake in the outcomes and has a political authority at the highest level?</p> <p>iii) Does the authority that conducts promotion activities maintain channels of communication with the private sector?</p> |
| <p>d) Does our textile policy encourage the discovery process?</p>                       | <p>If yes, then</p> | <p>i) Is there any example that demonstrates how promotion activities had the capacity to renew themselves, so that the process of discovery continued?</p>   |