

**IMPORT SUBSTITUTION AND EXPORT
PROMOTION- AN EMPIRICAL EVIDENCE FROM
PAKISTAN**



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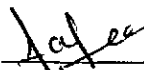


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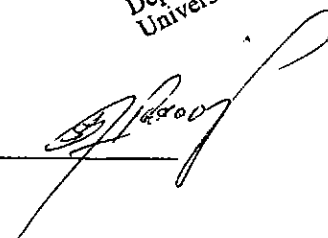
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DEDICATION

Dedicated to My Beloved Father AQEEL AHMAD who is my courage, My Mother whose hands are always raised for my success and my husband my inspiration.

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I would not be able to complete the research work without the blessings of ALLAH Almighty so special thanks, appreciation, and gratitude goes to ALLAH Almighty who is the most merciful and compassionate.

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ABSTRACT

The trading strategy of import substitution and export expansion for development and improvement has been discussed in the literature. Most of the literature favors export expansion for economic growth. According to the modern liberal view and orthodox classical economists, trade is an engine to economic growth. Pakistan's economic policy emphasized import substitution during the early years of independence, although efforts were also made to promote exports for economic growth. In this study, we are interested to find out whether import substitution and export expansion strategies in Pakistan contribute to growth or not. First, we take six industries including manufactured goods, chemicals, mineral fuel and lubricants, crude material inedible except fuels, food, and miscellaneous to analyze which sector expand its exports and which achieve import substitution from 1995 to 2015. We find out intra sectoral shares of import substitution, domestic demand expansion, and export expansion for three sub-periods i.e. 1995-2000, 2000-2005, and 2005-2015. It is found that roughly half of the growth was due to domestic demand expansion of all six industries (from 1995 to 2015) without any major difference in the shares of domestic demand expansion between these industries. The highest shares of domestic demand expansion are observed in the chemicals. Hence we can say that domestic demand expansion is an important source of growth in these industries. After comparing shares of import substitution and export expansion we find out that there is a reduction of the relative importance of import substitution over time. While export expansion increased slightly for all six industries. The high export expansion is achieved in chemicals and miscellaneous industries. To check whether export expansion and import substitution leads to economic growth or not we used cross-sectional data and find out that during the sub-period 1995-2000, there is a significant and positive impact of import substitution and export expansion on the growth rate of domestic output. In sub-sample 2000-2015, there is the negative and insignificant impact of both on growth rate. While in 2005-2015, import substitution has a significant and positive impact on the growth rate while export expansion has a positive and insignificant impact on the growth rate. As most of the literature

favors export expansion for economic growth. Hence this study also investigates the key determinants of exports that will lead to export expansion in Pakistan. From earlier methodology we will find out the industries in which export promotion strategy should be implemented for economic growth hence, this methodology may help us to expand exports in those industries. We considered all internal and external factors that are important in determining exports growth such as FDI, foreign GDP, national savings, real exchange rate, official development assistance, no of mobile phones, indirect taxes, total labor force and industry value-added. This study used the ARDL approach to co-integration to find out the long-run relationship among exports and their determinants. The study finds that during the period 1979-2019 there is a positive and significant impact of foreign direct investment and industry value added on exports of Pakistan. Indirect taxes and mobile phones have a significant and negative impact on exports of Pakistan. There is need to transform Pakistan's export base from primary commodities to higher industry value added products. Government and policymakers should promote FDI. Government should provide incentives to attract foreign investors in export oriented industries. There is a need to transform agriculture exports with industrial exports, which then in world markets allows stable and reasonable prices. In addition, imports reliance can be decreased through industrialization by using import substitution strategy.

Key Words

[import substitution, export promotion, economic growth]

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LIST OF ABBREVIATIONS

IS	Import Substitution
EP	Export Promotion
EER	Effective Exchange Rate
TPF	Trade Policy Framework
STPF	Strategic Trade Policy Framework
SMEs	Small and Medium Enterprises
GNP	Gross National Product
FDI	Foreign Direct Investment
R&D	Research and Development
EX	Exports
FGDP	Foreign Gross Domestic Product
SAV	National Savings
OD	Official Development Assistance
IT	Indirect Taxes
ER	Real Exchange Rate
MP	Mobile Phones
VAD	Industry Value Added
LF	Labor Force

ADF	Augmented Dickey Fuller Test
ARDL	Autoregressive Distributive Lag Model
LM test	Lagrange Multiplier Test
M	Imports
Y	Sales of Local Industry
D	Domestic Market
WDI	World Development Index
SBP	State Bank of Pakistan
ECM	Error Correction Model
IFS	International Financial Statistics
CPI	Consumer Price Index

Chapter 1

INTRODUCTION

1.1 Background of the study

Practically all developing nations are influenced by the deficit in the balance of payments. In Pakistan as in different nations, growth plans have contained two-pronged ways to deal with the issue: to build exports through exports for example by giving various concessions and endowments to the exporting firms or through a bonus voucher system and to decrease imports through import substitution strategy.

The trading strategy import-substitution and export expansion for the development and improvement was discussed in the literature. The vast majority of the poor or developing nations followed import substitution (IS) approaches for development in the 1960s and 1950s. The advocates of the IS strategy stress upon the requirement for lower developing nations to control their destiny and to evolve their style of development. Since the 1970s, many of the agricultural nations have used export promotion policy (EP). Export promotion strategy hypothesizes that export extension prompts better resource allocation, making economies of scale and production effective through innovation, capital development, and employment creation.

The hypothetical concurrence about export-led growth arose in the neoclassical because of the achievement of the free economy, and outward-oriented strategies of East Asian Tigers. The defenders of this theory and openness call attention to that the Latin American economies that adopted inward-oriented approaches exhibit bad economic accomplishments [Balassa (1980)]. Amsden wrote about her concern that Latin American countries emulating the United States focused too excessively on their domestic markets and did not allow public institutions to promote

export. She thought that it was harder to become competitive behind tariff walls and also argued that important learning and economies of scale were achieved through exporting (Amsden (2001)). The main idea of the export-led growth hypothesis postulates that exports are considered as an engine to growth. In support of the hypothesis, economic growth is affected by exports via the total factor productivity channel through dynamic spillover effects (G. Feder (1983)).

Exports tell us about the nation's competitiveness worldwide. Moreover, a strong export system safe a country from collapsing its current record balance. The exploitation of economies of scale facilitated through exports; further exports develop foreign exchange reserves position, permit resource allocation following comparative advantage; and assure easy imports funding; increase productivity and effectiveness by competition; employment generation and permit for knowledge spill-overs through which domestic innovation can be empowered. Weiss proved that sustainable economic development can be achieved through exports [Weiss (2005)]. It also applied to South Asian economies and Pakistan too [Khan et al. (1995), Shirazi et al. (2004)].

Growth of export is generally accepted to contribute to productivity growth through a few different channels.

- First, exports permit poor and helpless nations to utilize economies of scale with little domestic markets (Helpman and Krugman (1985)).
- Secondly, export permits expansions in imports of capital and intermediate goods by loosening up the necessary foreign exchange constraint (R. I. McKinnon (1964)).
- Thirdly, exports prompt productive and efficient allocation of assets and further better capacity usage because of serious competitive pressures in world business sectors (e.g., Krueger (1978); B. Balassa (1978)).

•Fourthly, export leads to disperse specialized and technical information from foreign client's ideas, by improving administration rehearses and by learning by doing gains (Grossman and Helpman (1991)).

Export promotions may likewise lessen controls that outcome in a domestic currency overvaluation. Hence economists and policymakers liked export promotion policies. Young (1991) has shown that increased returns to scale and learning by doing gains leads to growth of a country as both these factors are related to greater specialization in production. As indicated by León-Ledesma (1999) yield growth because of the growth of exports would energize a higher expansion in the growth of productivity. The productivity of the country increased through the deepening of the division of labor which is due to the expansion of the markets, technology, and learning by doing. Arrow (1971) utilized the idea of learning by doing in endogenous growth theory to clarify the impacts of technical change, specialization, and innovation. According to Arrow increase in per capita income cannot be simply explained by the capital to labor ratio but knowledge growing in time is also important. The acquisition of knowledge is closely related to the experience of solving problems. The role of experience can be observed in increasing productivity in economic theories.

1.2 Experience of trade liberalization in Pakistan

Pakistan's economic policy emphasized import substitution during the early years of independence, although efforts were also made to promote exports.

1.2.1 The 1950s

During the 1950s, Pakistan sought IS policy enthusiastically, consequently establishing an exceptionally secured climate for industrialization. The import limitations have permitted the nation to keep an overvalued exchange rate which, thusly, has been utilized to sponsorships the inflow of imported inputs into priority regions. The tax and other stimulus structure that developed was with the end goal that revenue relied intensely upon export taxes on agricultural items (Cotton and Jute) and import duties on imported manufactured merchandise. The policy stimulus was planned so that domestic producers of manufacturing used to purchase domestic horticultural crude materials at underneath world prices and used to sell their items locally at above world prices. This came about into enormous protection of import substitutes and a tax on exports. Hence, the most utmost type of security kept going from 1952 to 1959.

1.2.2 The 1960s

While keeping an exceptionally secure and prohibitive import system and an overvalued exchange rate to advance import substitution during the 1950s, the public authority started to advance export development by taking various steps in decreasing anti-export bias in the 1960s. First and foremost, the public authority presented a multiple exchange rate system, preferring manufactured exports so-called export bonus scheme in late 1959. Also, industries that have export capacity were given facilities like special admittance to foreign trade. Thirdly, a huge import liberalization was undertaken. The major liberalizing policy embraced in this period was the automatic renewal of import licenses for industrial raw materials and consumer products.

Albeit the manufacturing at large scale increased at an average rate of 13.4 percent by the year during the 1960s and was broadly hailed as a model of fruitful industrialization it was likewise

viewed as one of the most exceedingly awful instances of import substituting industrialization by Little et al. (1970) and Balassa (1971). 24 percent of manufactured exports expanded from 1960 to 1970 from total exports because of the export bonus scheme.

1.2.3 The 1970s

In the 1970s, important measures of exchange were adopted to reduce anti-export bias. Those steps included: currency devaluation, export bonus scheme elimination, and finish of prohibitive licensing.

An amazing expansion in manufactured exports was seen through the above-recorded exchange liberalizing measures and also endeavors of the Pakistani exporters who redirect exports from the secured markets to the world market at the start of the 1970s (manufactured exports expanded at the compound growth rate of 26 percent per annum in current rupee term). Despite the adoption of measures, the general exchange and industrial strategies stayed one-sided against exports throughout the 1970s. Currency devaluation was led by export taxes is the main principle justification of anti-export bias persistency despite enormous devaluation.

1.2.4 The 1980s

In the 1980s, to liberalize exchange and to diminish anti-export bias in the exchange system, intermittent steps were chosen. At the start of the 1980s, two significant upgrades were taken i.e. acquiring a negative import framework and a huge decrease in non-tariff barriers. Likewise, explicit import quotas on non-capital imports were eliminated and restricted imports were gradually liberalized.

Pakistan, nonetheless, kept on relying upon import boycotts and limitations for security. Two purposes served by non-tariff barriers of Pakistan which were expressed by the official position on import boycotts and limitation i.e. give to import-competing enterprises a guaranteed assurance/protection, and confinement of luxury consumer import products. By and by, in any case, non-tariff barriers produce more genuine destructions. Import boycotts break the connection among relative prices of local and worldwide. Also, by end of foreign competition in enterprises, this makes oligopolies and monopolies where economies of scale are significant. High levies and Import boycotts made smuggling and also results in different types of illicit exchange in Pakistan.

During the 1980s, a transition from fixed exchange rate system to flexible exchange rate system was by a long shot the main measure attempted to support export growth. Despite huge exchange reform presented during the 1980s, the presence of an enemy of an anti-export bias is shown by the quantitative proof. Aftereffects of EER (effective exchange rate) computations show the presence of an import substitution bias that seems to have expanded over the long haul during the 1980s. On whole, Pakistan's exchange system stayed bias in favor of import-subbing production during the 1980s.

1.2.5 1988 Onwards

The exchange reform is seen as an essential instrument of structural change due to the acknowledgment that previous import substitution strategies had protected the country from foreign competition and developed a solid anti-export bias in resource allocation and expanded shortcomings/inefficiencies. Towards this end, progressive governments since 1988 have sought a broad liberalization of the exchange system and embraced a variety of export promotion measures.

Apart from trade liberalization steps Pakistan likewise embraced export promotion measures to diminish anti-export bias in the exchange system. Continuation of flexible exchange rate strategy was generally outstanding among these. Despite the flexible exchange rate strategy a few different measures were taken to relieve the drawbacks that Pakistani exporters face because of the anti-export bias intrinsic in the nation's import protection policy. These include a refund of sales tax; export credit guarantee, temporary import, duty drawback, and export finance schemes.

In the 1990s, the presence of an import substitution bias was very apparent from quantitative examination regardless of export promotion steps and trade liberalization embraced. The proportions of two EERs (for imports and exports) are larger than one suggesting bias in favor of import substitution. Albeit proportions are larger from one but these proportions show a decreasing pattern. Policy recommendation derived from above findings that export promotion steps and trade liberalization in the exchange system were useful in anti-export bias lessening. Pakistan accomplished pretty much an impartial exchange system in the 1990s because of the trade liberalization and export promotion measures embraced during the 1990s.

Trade policy frame (TPF) repeats the need to foster rational, thorough drives to understand the targets of product and market diversification. The proposed pushes of the TPF are suitable and should be executed. The proposals and recommendations are genuinely direct, i.e., undervalued exchange rate, the exchange system's anti-export bias should be diminished with the target of encouraging export diversification and raising export competitiveness. With that in mind, steps, for example, persistently lessening the overall greatest customs duty rate, wiping out existing levy exemptions and concessions on profoundly ensured sectors, and changing the essence of duties from specific to ad valorem on specific items (like eatable oils) are essential. These are the same

old measures in these suggestions as they have been the stated premise of exchange strategy since the 1990s. The issue lies in their execution.

1.3 STRATEGIC TRADE POLICY FRAMEWORK

- Recent STPF recognized four pillars that can increase exports. This incorporates trade facilitation, institutional development, product sophistication and diversification, strengthening, and market access. Value addition, development and research, and marketing can lead to product diversification to fulfill the objective of transition to an efficient, innovative, and productive economy form factor drive economy.
- Some main empowering agents are important to build and raise competitiveness, productivity, to upgrade exports, and to foster export sectors, for example, compliance to standards, market access, competitiveness, and policy environment.
- Objectives that will be accomplished by recent STPF are to improve the competitiveness of exports, yearly exports will be increased up to 35 billion US\$, to transit to efficient, innovative and productive economy form factor drive economy and to increase territorial trade share.
- It was distinguished after meetings from stakeholders that the key restraint in chosen export sectors i.e., rice, fans, sports merchandise, and home machines is the utilization of inefficient technologies. Investment incentives will be given to companies for the importation of new machinery and apparatus and to expand and acknowledge the genuine capability of the above-listed sectors.
- Pakistan has some sectors that can lead to increase exports that have a higher potential to export such as drugs, Leather, surgical instruments, and fisheries. To motivate innovation

and to lift exports, to upgrade the design of production and to implant new machinery in these export sectors and SMEs, conditional awards will be given.

- In Pakistan, prices are lower for manufacturers because in most of the sectors i.e. sports, surgical instruments, and cutlery manufacturing is generally done underneath foreign organizations' brands. improvement of a brand must be given more consideration. Through Intellectual Property Registration and Certification, conditional awards will be given to work with the marking or branding and affirmation or documentation for greater development of the export sector.
- Duties and draw-back for local taxes will be given to exporters of their upgraded exports on free onboard upsides to lessen the expense of doing business and to increment the competition of value-added sectors.
- In Pakistan, for enhancement and sustainability of existing markets shares, export promotional activities i.e. designations and displays will keep on and extensive data spread on promising circumstances accessible under market access will be protected.
- An effort technique and policy for Latin America, Africa, and Commonwealth of the Independent States being embraced to wide export markets and will be investigated through Opening of new Trade targets, Market Research, Delegations and Exhibitions, and Linkages through Import-Export Bank.
- Recent STPF suggests that four focused items i.e. Basmati Rice, Meat and meat items, Horticulture, and Jewellery will be exported to four focused countries i.e. Iran, European Union, China, and Afghanistan.

1.4 Import duties in Pakistan

This part presents a preview of the job import duties play as a revenues source and to designate resources in Pakistan. It contends that:

- A sizable portion of total tax revenues is represented by import duties.
- Contrasted with most of the protectionist nations, average duties are for the most part high, and cascading is checked.
- Exemptions utilized by enormous firms make the import duties structure complex.
- High effective rates of protection can be achieved in most manufacturing sectors through stamped cascading.

In Pakistan, 16 percent of total tax revenues is represented by trade tax revenue in the fiscal year 2019. These revenues are collected from regulatory, customs, and additional customs duties. tariffs in Pakistan as compared to the world average are double and multiple times higher as compared with Pacific and East Asia. To secure domestic industries and to produce revenues, tariff rate differentials are utilized namely cascading or tariff escalation, dispiriting outward orientation by creating anti-export bias. In the region and the world, Pakistan has the greatest tariff rate differentials. In 2018, the tariff difference between intermediate and crude materials is 2.6 percent while between consumer and crude materials there is an 8.1 percent difference. Major weight on industry costs is comprised by import duties when combined with regulatory as well as additional customs duties. In numerous sectors of Pakistan, production costs increase with the addition of more import duties regardless of cascading which suggests that tariffs on input are lower as compared with final products. For instance, import obligations on leather, wearing attire, and textiles represent 24%, 19%, 15% represent more than expenses respectively. Raw Milk, Paddy

rice, Animal products, Machinery, Manufactures, Sugar, Textiles, Leather products, wearing apparel, Food products, Motor vehicles, Beverages, and tobacco sectors are also protected. But the custom duties on motor vehicles and beverages tobacco are higher than other sectors i.e. 25% and 30% respectively.

Export performance is affected by import duties through three different channels which are

- Export competitiveness is detrimentally affected by high import obligations on inputs and final goods because foreign inputs are installed with confined access to knowledge and expansion in production costs of exporters and thus makes the export sector less beneficial.
- In Pakistan, import duties on inputs diminish the usefulness of firms.
- There was a case of export competitiveness expansion and better distribution of assets that was done through decreasing duties: from the accessibility of more and less expensive inputs, exporters in Pakistan increased their competitiveness with the help of the China and Pakistan free trade agreement.

1.5 Research Questions

- What is the time profile of growth sources i.e. import substitution and export promotion in Pakistan
- Is import substitution followed by export expansion or is growth restricted to the extension of the domestic market after a time period of import substitution
- What is the effect of export promotion and import substitution on the speed of growth in Pakistan

1.6 Objectives of the study

- To empirically investigate which sector expand its exports and which achieve import substitution over the time.
- To empirically investigate whether export promotion and import substitution promote economic growth or not in Pakistan.
- To find out exports and economic growth nexus i.e. export-led growth in Pakistan.

1.7 Significance of the Study

There is some literature on an empirical investigation of some sectors in Pakistan that expand their exports and that achieve import substitution over the time. That study covers the years from 1955-1960 and covers five industries in Pakistan. Also, there is no existing literature on the empirical investigation of whether export promotion and import substitution promote economic growth or not in Pakistan. This study aims to fill this gap by considering data on recent years from 1995 to 2015 and will cover six industries which are manufactured goods, chemicals, mineral fuel and lubricants, food, crude material inedible except fuels and miscellaneous of Pakistan.

Findings of the existing literature on import substitution and export expansion since the 1950s have had mixed results. Some studies showed that import substitution is an engine to economic growth and some studies showed that export expansion is an engine to economic growth because through export extension there will be economies of scale exploitation, better distribution of assets, and effectiveness in production through the development of innovative and technology, capital and employment development. In the present study, we have assessed the import substitution and export expansion impact on the economic growth of six industries of Pakistan which are manufactured goods, chemicals, mineral fuel and lubricants, food, crude material inedible except

fuels and miscellaneous by considering data on recent years from 1995 to 2015. This study used cross-sectional data to investigate which sector expand its exports and which achieve import substitution over the time. As most of the existing literature is in favor of export promotion policy, this study will also investigate the factors over the period 1979-2019 which will increase exports in the selected six industries of Pakistan. This study may try to imply which kind of policies i.e. import substitution or export promotion might be made for the development and growth of the economy and will tell us the factors that might help promote exports in selected industries of Pakistan.

1.8 Policy Relevance

Enterprises probably will be wasteful and will subsequently be incapable to extend exports, which develop in protected or secured economies from import substitution. In these businesses, domestic market up gradation turns into the lone development source and growth source after the conceivable outcomes of import substitution depleted. Shifting the contention by little security enterprises ought to be adequately productive and efficient to enter into exports after import replacement occurred for quite a while, thus accordingly to support quicker growth than local market.

If we get evidence that IS through protection does not contribute to growth, then there would be no logic to protect industries by giving incentives with infant industry labeling.

1.9 Working Hypothesis

H₀₁: Export expansion and import substitution do not promote economic growth in Pakistan.

H₀₂: The determinants of exports are not significant for expanding exports in Pakistan.

1.10 Methodology

To investigate either import substitution or export promotion promote economic growth or not in Pakistan, we used cross-sectional data and used different concepts of measurement to find out inter-sectoral shares of export expansion and import substitution. These shares of export expansion and import substitution will tell us that which industry needs to adopt an export promotion strategy for economic growth. To investigate the second objective of this study i.e. to find out the main determinants of export we firstly used the ADF test to check the stationarity of the data. Secondly, to establish the long-run and short-run relationships between the variables, the Autoregressive distributive lag model (ARDL) approach to co-integration is used. Thirdly, long-run form and bound tests are applied to estimate the long-run relationship among the variables. Fourthly, the Error correction model (ECM) is used to identify the short-run relationship among variables. Lastly, to check the parsimony of the estimated model, different diagnostic tests are applied.

1.11 Organization of the Study

After having an introduction and developing a rationale for the study in chapter 1, the remaining part of the study will follow as chapter 2 has described theoretical underpinnings and empirical literature on the suitability of trade policies i.e. import substitution and export promotion. Chapter 3 describes the data and methodology for making statistical inferences. Chapter 4 describes the results of the empirical analysis and contains a discussion of the results. Chapter 5 has the policy review of the study

and qualitative survey taken from field experts and final chapter 6 describes the conclusion and policy recommendations related to the study.

Chapter 2

LITERATURE REVIEW

In this chapter, there are two sections i.e. theoretical underpinnings and empirical literature. The former gives a brief review of theoretical review of literature on the relationship among growth and exports and the impact of export expansion and import substitution on economic growth and later gives the literature concerning different empirical methods.

2.1 Theoretical underpinnings

Khan (1963) contended that the import substitution procedure in Pakistan prompts " consumption liberalization ". He called attention to that "when the production of a commodity that was once in the past imported is embraced at home, its domestic absorption surpasses what might have been demanded or absorbed if the item had kept on being imported. If the item is a consumption good, the impact of this is to liberalize consumption, and the contribution to total public saving and the development effort is thus lessened". By contrasting the actual consumption of some significant customer things with the ordinary rates so assessed, he tracked down that substantial consumption liberalization had occurred over the time of his examination (1955-56 – 1959-60).

Studies like Emery (1967), Krueger (1978), G. Feder (1983), Ram (1985), BARRO RJ (1995), and Thornton (1996) find that more export-oriented countries promotes the economy as a whole in the form of technological spillover and absorb those technological advances made in the leading countries.

Helpman and Krugman (1985) examined a criticism connection between exports and economic growth. They propose that exports may increment from the accomplishment of economies of scale because of usefulness gains. The expansion in exports may additionally lessen the expense which

may bring about additional productivity gains. Bhagwati (1988) additionally contended that regardless of the reason, expansion in trade prompts an increment income which prompts more trade, etc.

Pack (1988) proposes that there is additional potential for no causal connection among exports and growth when a third irrelevant variable ascertains the economic framework in the growth path of two factors. According to the institutional viewpoint, Ross (2003) examined that policies of inflation, overvaluation of the exchange rate, trade openness do not impact long haul development of an economy if in one case domestic institutions quality is incorporated by the regression model.

Power (1963) pointed out that the import-control system which was being developed in Pakistan was not derived from a careful analysis of the relative merits of various import-competing and export industries based on comparative advantage, economies of scale, external economies, marginal savings rate, etc. He maintained that since the import-licensing system provided greater protection to finished consumption goods, it generated allocative inefficiencies, which by cutting into investable resources, was sure to frustrate the economy's possibility of a 'take-off'.

The foreign exchange obtained from expansion in exports allow the country to increase the importation of intermediate and capital goods. The increase in the level of formation of capital leads to an increase in output growth (B. Balassa (1978), R. I. McKinnon (1964)).

Naqvi (1963) contended that the import licensing framework would loosen the speed of development or growth as well as the balance-of-payments issue. He contended that an optimum pattern of trade was resolved at the same time with an optimum allocation of domestic resources. Hence, no enduring solution to the balance of payments issue could be found without inciting a surge of domestic resources from the import substituting enterprises to the export industries which mirrored the country's comparative advantage.

Edwards (1993) featured that there are two channels through which openness positively influenced development. To begin with, there are direct or immediate impacts that work using dynamic benefits – including more productive, capacity utilization and efficient investment projects. Secondly, exports have some indirect impacts: quicker export growth can be achieved by more open economies, thusly, bring about more quickly growing GNP.

Bruton (1998) highlighted that in inward-oriented nations inflation, interest rate and exchange rate are ascertained by the government, which destroys resource allocation of the economy. He mentioned that the policies adopt an import substitution (IS) strategy nearby the economic country to the world.

Jayanthakumaran (2000) highlighted that import substitution strategy generates biases in the incentive structure and thus in the long run lowers the exports. He also mentioned those rent-seeking activities, consumer welfare loss because of the mismatched world and domestic prices and resources misallocation are costs related to protectionism. Generation of trade efficiency is expected from trade reforms in the short run, by eliminating technical and allocative inefficiency which is because of trade protection. Jayanthakumaran explained that because of huge changes in prices and technical conditions domestically as well as internationally, long-run growth productivity is ambiguous. By using dynamic and trade steps, we can capture the effects of trade reforms in the short run.

Moyo (2016) analysis the industrialization experience of three African countries which are South Africa, Mauritius, and Botswana. These countries are chosen because of their diversifying economies and successful industrial base. He emphasized that each country should adopt its industrialization strategy which is appropriate and according to their context and environment. The analysis highlights that the important role in achieving a strong industrial base is played by long-

term industrial strategic frameworks implementation and formulation, a strong developmental state, effective institutions creation, priority sectors identification based on natural resource endowments, incentives and industrial policies re-introduction, large capital investments in industrial infrastructure, private and public partnerships establishment, development of human capital.

Donges and Hiemenz (1985) examined the industrialization strategies of semi-industrial nations that followed the strategies of Singapore and Hong Kong. The shift from import substitution to export expansion in chosen nations does not give the same awards for exports as for domestic production, though there was proof of reduction in disincentives of production of exports. Thus these nations have failed in duplicating Singapore and Hong Kong. He mentioned that the reference nations are unique concerning administrative competence, zestful entrepreneurship, primary resources deficiency, and availability of infrastructure. Only Taiwan and South Korea managed to imitate their model because their cultural, political, and social environment was more suited relative to other nations.

Donges (1976) explained that the need to overcome a deficit in the balance of payments and to preserve development process momentum differed widely between developing nations. In particular, this need was greater in nations that had been pursuing export promotion strategy than the nation which was adopting import substitution strategy because outward-looking countries discover quickly the selling opportunities and take benefit from that. These nations have easy access to international capital markets due to creditworthiness and thus reduce growth restricting financial policies. He mentioned that export-oriented countries have a high import to GDP ratio and thus allow curtailment of imports without severely curbing long run economic growth.

Cuyvers et al. (1997) analyzed the export policies and strategies in Thailand. He highlights that high economic growth and outstanding economic performance in Thailand are due to its high exports in manufactures and foodstuffs. Thailand's structural transformation is due to growing export orientation. The economic growth of Thailand is not export-led. He mentioned that the promotion of exports in Thailand is largely contributed by policies and domestic conditions while external demand partly explains the exports growth of Thailand.

Cuyvers et al. (1997) explained export success in Thailand by the number of factors such as macro-economic stability benefits investment and export-oriented activities, low nominal tariffs, a moderate degree of protection, financial policies i.e. credit subsidies, small changes in tariff rates diminished some of the negative tariff effects although cascading was there and protection levels also rose gradually, investment incentives and offset of the cost-increasing effect of protection on exportable production diminished anti export bias of the trade regime and higher volume of foreign direct investment (FDI) attracted by liberalized investment strategies.

2.2 Empirical literature

Santosa (2018) utilizes five nations from ASEAN i.e. Thailand, Malaysia, Singapore, Philippines, and Indonesia. He takes secondary data from the year 1993 to the year 2015 to examine that ASEAN development economy can take benefit from export promotion strategy. 3SLS techniques are used in his examination. The outcomes propose that the import substitution strategy carried out in five ASEAN nations will in general speed up the economic development through agroindustry headway. Notwithstanding, for non-rural base nations, export promotion would accelerate industrialization towards fast economic development.

Funke and Holly (1992) study takes demand and supply-side factors utilizing quarterly information and puts in the information towards the manufacturing sector of West Germany. The discoveries of investigation recommend that demand-side variables are less significant in clarifying export presentation than supply-side elements.

Togan (1993) researches in turkey the export incentives structure progressions and takes the data from the year 1983 to the year 1990. His examination discovers that import and export contending enterprises have profited with the export incentives more than other sectors.

Riedel et al. (1984) explore the determinants of export performance determinants empirically in India. The period was from 1968-1978 and time series examination was used by him. His investigation examines the impacts of domestic benefit in export execution, relative domestic demand, and the relative price of exports. His findings showed that export conduct is affected by domestic market situations. Out of a total of 30 sectors, in 23 sectors, variable estimating domestic demand is significant in clarifying the behavior of export, and in 10 sectors, exchange rate and relative price including export incentives are significant. In general, relative prices are significant where sectors have a higher comparative advantage.

Sharma (2000) researches exports determinants in India utilizing yearly information for the year 1970 to the year 1998. The after-effects of research propose that when export price comparable to world prices falls then demand exports of India increase. Also, exports of India are badly affected by the Pakistani rupee real appreciation. The domestic relative price of exports is positively connected with the supply of exports and the supply of export decreases by higher domestic demand. Foreign investors have an insignificant effect on the performance of export even though the FDI coefficient was positive.

Hoekman and Djankov (1997) examine in East Europe and Central nations the size of export structural change. His examination researches export conduct determinants which are FDI, imports of input, and general significance in handling trade. The results of the examination suggest that in most of the nations, progressions in the export structure are driven by the export of machinery and intermediate goods.

Yoshino (2008) examines how the topographical diversification pattern of exports of seven African Sub Saharan nations is influenced by limitations of domestic supply and various attributes of manufacturing firms of Africa. The investigation utilizes information on manufacturing sectors. Outcomes showed that among market diversification and export intensity there is a positive correlation. He utilized Tobit models which demonstrate that in clarifying export performance of firms, size, foreign proprietorship and innovation are the prevailing components.

Donges and Hiemenz (1985) analyzed empirical evidence and arguments for the supremacy of an outward-oriented trade regime in accelerating economic development and in promoting industrialization. An increase in technology transfer, improvement of allocative efficiency, greater access in financial international markets, and dynamic gains from economies of scale is possible because of trade policies that do not differentiate between foreign and local sales. Beyond outward-oriented trade strategies, for successful economic development, internal liberalization of markets is necessary which increases the economy's flexibility.

Laursen (2008) investigates the export performance determinants of 1873 Danish services and manufacturing firms. From their total sales, the portion of exports was utilized as a measure of export execution. fixed resources number of workers, age used as autonomous factors in Tobit model regression. His model likewise incorporates a few factors identifying with the source of

advancements like universities, suppliers, and customers. Findings suggest innovative strategies are important in the determination of export conduct.

Wignaraja (2008) examines in Sri Lanka the export execution of clothing industries. From their total sales, the portion of exports utilized as a measure of export execution was a dependent variable. Independent factors in a Tobit model incorporate human capital, ownership, geographical location, technological capabilities, and firm size. There comes a significant and positive impact of human capital, foreign ownership, size, and technology index on export execution. Essentially a variable dummy used for geological area likewise found to be positive and significant, demonstrating that organizations have an export advantage which was near Colombo because of externalities and transportation cost is low.

Smith et al. (2002) examines how export conduct is impacted by development and research for the year 1997 in 3,500 Danish firms. The examination is worried about the association among the organizations' R&D choices and the export execution just as other impacting factors. In particular, labor cost, the financial solvency of the firm, size, and age, and human capital are export conduct determinants. Their findings suggest that age and firm size are positively dependent on R&D investment and the probability of being an exporter. The financial solvency of a firm is also positively dependent on export orientation. Wage share harms exports. The decision of R&D investment is discovered to be low in industries where entrance obstructions are high and high in concentrated industries.

Blomström et al. (2002) examined the growth experience of East Asia and discussed Europe's transition economies. He pointed out the importance of export promotion and macroeconomic policies in Asian miracle economies. These policies include investments in institutions to support export insurance and financing, public investment in infrastructure, market research, transfer of

technology, training and education in export-related skills, and dissemination of information related to foreign market opportunities. He mentioned that the Asian experience suggests fixing the nominal exchange rate during the period of high growth.

Manni and Afzal (2012) analyzed the trade liberalization's impact on the economy of Bangladesh from period 1980 to period 2010. They analyzed the economic achievements after trade liberalization about growth, export, inflation, and import. The Ordinary Least Square (OLS) technique was used by him for empirical analysis. They found out that GDP growth, imports, and exports increased consequence to liberalization or with greater openness. Economy's inflation was found to be unaffected by trade liberalization. A same result was found with quantitative analysis.

Salinas and Aksoy (2006) empirically investigate trade liberalization's impact on GDP growth. He takes thirty-six developing countries and uses cross-country regression analysis. sample developing countries that do not have conflicts depends on multiple natural resources and are not in transition from socialism have a significant increase in their GDP per capita growth. They found that the trade liberalization impact on GDP growth different in different countries. in the small countries, trade liberalization impact was found to be most significant. After the end of import substitution industrialization there is an increased growth in Latin America, Latin America examined an increase in growth. Trade liberalization has also a significant and positive impact on GDP growth in Sub-Saharan Africa.

Sarkar (2005) used the autoregressive distributive lag model (ARDL) and also trend analysis to explore the relationship among real growth rates and trade liberalization of Korea and India. After analyzing trends among variables, he examined that Korea and India opened up to trade and the trade share (import, export, and addition of imports and exports) increased significantly in the GDPs of both nations. While, when the ARDL approach is utilized to check the long run

relationship among real growth rates and trade liberalization, he found that there is no long-term relationship.

Kazungu (2009) investigated the part of trade liberalization and trade policies on agrarian sector performance in the economy of Tanzania. To examine the trade liberalization impact on the exports growth rate, economic growth, and land productivity, he utilized ordinary least square (OLS), non-parametric tests, parametric tests, and techniques of co-integration. It is found from the nonparametric tests and parametric tests that there is a weak part of trade liberalization in boosting export growth. Secondly, there were no signs of increased growth seen over time, although the food crops volume after the trade liberalization reforms was much more than before the trade liberalization reforms. The impact of traditional exports was found to be significant and negative and significant after the econometric analysis. From co-integration analysis, it was found that there is a negative correlation between trade share to GDP and economic growth.

Khadka (2019) analyzed the trade liberalization impact on the economic growth of Nepal. He used multiple linear regression analysis and took the period from 1980 to 2013. The variables used were gross domestic product, import, export, trade balance, and total trade. The trade liberalization impact is positive and significant on all variables except the trade balance. He examined the gap between imports and export of Nepal as imports increased significantly with purchasing power while only service exports increased significantly.

J. Weiss (1992) explored the major trade liberalization impact which was established in the mid-1980s in Mexico on the manufacturing sector efficiency. The study calculated different efficiency indicators and regression analysis explained the changes in these efficiency indicators in terms of many trade liberalization steps. The study concludes that trade liberalization had a positive, but had an insignificant/weak impact on manufacturing sector performance.

İşcan (1998) examined many different mechanisms by which growth rates and productivity levels are positively affected by trade liberalization. The study utilized panel data and took a sample of manufacturing industries of Mexican. The study also examined the trade liberalization strategies adopted after 1986 in Mexico. The estimates showed that among productivity growth and imports of intermediate inputs in sectoral output there is a positive correlation. Sectoral productivity levels are significantly and positively affected by the decrease in protection rates. However, long-term productivity growth rates are statistically insignificantly affected by trade liberalization.

2.3 Concluding Remarks

Findings of the existing literature on import substitution and export expansion since the 1950s have had mixed results. Some policymakers and entrepreneurs support import substitution strategy because it is simpler to secure homegrown market for non-industrial countries against foreign competition relative to convince countries that are developed to bring down trade hindrances against their essential or fabricated exports. Most of the studies have presumed that export expansion is an engine to economic growth because through export extension there will be economies of scale exploitation, better distribution of assets, and effectiveness in production through the development of innovative and technology, capital, and employment development. Pakistan's economic policy emphasized import substitution during the early years of independence, although efforts were also made to promote exports. Export led growth has been the focus of the economic debate. However, findings of the recent studies, which are conducted with reference to Pakistan, are mixed. The suitability of import substitution strategy in Pakistan have had mixed findings. Some studies have presumed that import substitution strategy in Pakistan leads to consumption liberalization, loosen the speed of

development or growth as well as the balance-of-payments issue and generates allocative inefficiencies.

This study used cross-sectional data in determining the impact of import substitution and export expansion on economic growth for six industries i.e. manufactured goods, chemicals, mineral fuel and lubricants, food, crude material inedible except fuels, and miscellaneous of Pakistan over the period 1995-2015. The objective of this study is to investigate which sector expand its exports and which achieve import substitution over the time in the above listed six industries of Pakistan. As most of the existing literature is in favor of export promotion policy, this study will also investigate the factors over the period 1979-2019 which will increase exports in the selected six industries of Pakistan.

Chapter 3

METHODOLOGY

3.1 Introduction

The central part of any research study is to choose accurate methodology and appropriate techniques. Therefore, it is important to adopt the accurate methodology and appropriate techniques to get fruitful results. The major objective of this chapter is to explain different econometric techniques and tools that are adopted in the study including data interpretation, data collection, data analysis, data description, methodology and data source related to the study.

To investigate either export promotion and import substitution promote economic growth or not in Pakistan, we used cross-sectional data and used different concepts of measurement to find out inter-sectoral shares of export expansion and import substitution. These shares of export expansion and import substitution will tell us that which industry needs to adopt an export promotion strategy for economic growth. To investigate the second objective of this study i.e. to find out the main determinants of export we firstly used the augmented dickey fuller test (ADF) to check the stationarity of the data. Secondly, the Autoregressive distributive lag model (ARDL) approach to co-integration is utilized to evaluate the short-run and the long-run relationship between the variables. Thirdly, long-run form and bound tests are applied to estimate the long-run relationship between the variables. Fourthly, the Error correction model (ECM) is used to identify the short-run relationship among variables. Lastly, to check the parsimony of the estimated model, different diagnostic tests are applied.

3.2 Methodology on impact of sources i.e. import substitution and export expansion on economic growth

The changing effect of export expansion and import substitution on growth can be tried with the cross-sectional examination which will relate the relative shares of import substitution and export expansion with growth rates. This examination will provide insight into the inquiry to what degree the growth rate an industry can accomplish is subject to import substitution and export promotion. For this, we would execute the procedure proposed by Hoffmann (1973).

The concepts of measurement are defined as:

$$D = Y + M - X \quad (3.1)$$

$$v = Y \div D \quad (3.2)$$

$$u = M \div D \quad (3.3)$$

$$x = X \div D \quad (3.4)$$

Where

X: Exports

M: Imports

Y: Sales of local industry

D: Internal market

Hence, at that point, we have the following identity

$$Y_1 - Y_0 = v_0(D_1 - D_0) + D_1(u_0 - u_1) + D_1(x_1 - x_0) \quad (3.5)$$

Or

$$1 = \frac{v_0(D_1 - D_0)}{Y_1 - Y_0} + \frac{D_1(u_0 - u_1)}{Y_1 - Y_0} + \frac{D_1(x_1 - x_0)}{Y_1 - Y_0} \quad (3.6)$$

Indices 0 and 1 signifying different points of time. Identity (3.5) will be utilized to quantify the inter-sectoral shares of export expansion and import substitution and identity (3.6) tell export expansion and import substitution inter-sectoral shares. The initial term of the right side of identity (3.5) and identity (3.6) estimates domestic demand expansion, the second term estimates import substitution and the third term estimates export expansion.

Regression analyses with three independent variables will be estimated as follows:

$$g_y = \alpha + \beta I + \gamma E + \theta D + \varepsilon \quad (3.7)$$

where g_y implies the growth rate of domestic output, E and I stand for export promotion and import substitution respectively. The significance of the variables will be tested by t-statistic or p-value. R^2 will tell us the goodness of fit of the model.

3.3 Theoretical Model on Export Determinants

As in an earlier methodology, we were interested to find out the impact of import substitution and export expansion on economic growth. As most of the literature favors export expansion for economic growth. According to the modern liberal view and orthodox classical economists, trade is an engine to economic growth. Export promotion policy is in line with the comparative advantage principle which means that a nation specializes in that product which it can produce competitively. Due to the export promotion strategy, the goods become available to the international market at lower prices, external and internal economies are achieved, markets are expanded, employment and income levels extend, and the economic development process is facilitated. To conclude export promotion permits the optimum allocation of worldwide resources. Hence in this methodology, we are interested to find out the possible external and internal factors

that will lead to export expansion in Pakistan. From earlier methodology we will find out the industries in which export promotion strategy should be implemented for economic growth hence, this methodology may help us to expand exports in those industries.

To explain the rationale behind exports in this study, we will contemplate all factors that conceivably assume a significant part in exports determination. Majeed et al. (2006) identify various determinants of exports. Exports are affected by external factors i.e. foreign direct investment (FDI) and real exchange rate (ER) and also by domestic factors i.e. indirect taxes, communication facilities, foreign gross domestic product (GDP), savings, industrialization, official development assistance, and labor force. Thus export promotion equation depends on all external and domestic factors which we will estimate in our analysis in the case of Pakistan. The specified equation for export promotion is as per the following:

$$EX_t = f(fGDP_t, OD_t, ER_t, FDI_t, SAV_t, MP_t, LF_t, IT_t, VAD_t), \dots \quad (3.8)$$

Where

EX: Exports (percentage of GDP)

fGDP: Foreign Gross domestic product (current US\$)

OD: Official development assistance (percentage of GDP)

ER: Real exchange rate

FDI: Foreign direct investment (percentage of GDP)

SAV: National savings (percentage of GDP)

MP: No of mobile phones (per 1000 people)

LF: Total labor force

VAD: Industry value added (percentage of GDP)

IT: Indirect taxes (percentage of GDP)

3.3.1 Exports Determinants Justification:

Foreign Gross Domestic Product

An increase in foreign gross domestic product results in an increase in imports and thus an increase in domestic exports. Hence the foreign gross domestic product is anticipated to have a positive effect on domestic exports.

Real Exchange Rate

Depreciation of exchange rate results in decline in the relative domestic prices which makes exports less expensive in worldwide markets bringing about expanded exports demand, hence export growth is positively affected by real exchange rate.

Communication Facilities

Communication facilities' importance has increased at this point when time is contracting. We utilize two variables for the estimation of communication facilities i.e. mobile cellular and fixed telephone subscriptions (per 100 people). We add these two variables and multiply the resultant series with 10 and named a resultant variable as the number of mobile phones per 1000 people. Kumar (1998) also empirically advocated these variables for excess and exploration to the international markets, Extension of these facilities thus have a favorable impact for excess and exploration to the international markets.

Indirect Taxes

The impact of Indirect Taxes is anticipated untoward on production. However, because of fiscal incentives by the government, there is the possibility of a positive impact on exports. In particular,

if for the extension of the exports sector, the government gives tax exclusions then a higher rate of indirect taxes harms domestic demand bringing about excess exports.

Official Development Assistance

Infrastructural growth can be facilitated by the enormous proportion of official development assistance, which thus will in turn favorably influence the climate for investment. Export growth is anticipated to be positively impacted by official development assistance.

Savings

Utilization of savings funds in developing countries is larger in nonproductive and inefficient factors, i.e. property, purchasing of jewelry, etc. Thusly enormous products of exports will be accessible due to higher savings. hence savings are anticipated to impact exports positively.

Industrialization

Due to unexpected nature changes, the agrarian output is opened to in-certainty. No nation has greater production and incomes or wages based on agrarian output. The greatest usage of a nation's natural and human resources and stability of industrial production is due to industrialization. Consequently, prominent up-gradation of national income and production of the country will be stimulated by industrialization. Industrialization boosts agrarian sectors and agriculture elevates the industrial sector. Allied sectors and related sectors will foster by industrial advancement.

The imports hindrances by developed nations, agricultural exports concentration, the increasing import bill because of expanded demand for manufactured items and oil, etc. and declining exports prices result in a balance of payments persistent deficit. Industrial production and supplanting of agriculture exports with industrial exports, which then in world markets allows stable and reasonable prices, could be done through industrialization. In addition, imports reliance can be

decreased through industrialization by using an import substitution strategy. Hence, we presume the favorable effect of industrialization on exports.

Labor Force

Usage of optimum resources relies on the workforce. The workforce positively ascertains production levels. In non-industrial nations, the huge volume of the workforce can be moved to the industrial area from agricultural industries without influencing agrarian production. We can extend the export area by using such a workforce properly in the industrial sector. Pfaffermayr (1996) identifies that the workforce has a positive effect on exports.

The skilled workforce is the lone source of lower production costs and competition in production. Simultaneously many agricultural nations have an unskilled workforce. The impact of an untalented workforce is inverse to export sector competitiveness. Thus workforce can have a positive or adverse consequence on exports.

Foreign Direct Investment

Foreign direct investment (FDI) role in exports expansion is dubious in the empirical literature. Pfaffermayr (1996) discovered that FDI has a positive impact on exports. Export-oriented MNCs are the principle logic. To attract foreign investors, the government gives prerequisites for export promotion. For catching the advantages of exports growth and FDI inflow, FDI- led export growth strategies could be embraced by the government. Hoekman and Djankov (1997) discovered an insignificant effect on exports due to FDI. In lower developing nations, export expansion due to FDI stays disputable and relies vitally upon rationale on this type of investment. Export growth will not increase if the rationale is to catch up domestic market on the back of FDI (increase tariff like investment). By exploiting the comparative advantage of a nation, if the rationale is to upgrade export markets, then, at that point FDI may lead to export enhancement.

3.3.2 Empirical Methodology on Export Determinants

The structure of the modeling strategy is explained by the following steps that are used in this study

- For model specification, all variables are transformed into natural logarithmic form to obtain more robust results.
- To find out whether series have unit root or not, we performed a test of stationarity. For this purpose, we utilized the augmented dickey fuller test (ADF) to find out the order of integration of the series.
- The autoregressive distributive lag model (ARDL) approach to co-integration is used to establish the short-run and the long-run relationship between the variables.
- Long-run form and bound tests are applied to estimate the long-run relationship between the variables.
- Error correction model is used to identify the adjustment rate to the long-run equilibrium after a short-term disturbance.
- To check the parsimony of the estimated model, different diagnostic tests are applied at the end.

3.3.2.1 Unit Root Test

Augmented Dickey-Fuller Test

Sometimes it is not easy by simply looking at the graphs, by spectral density estimates, and by autocorrelation and partial autocorrelation functions in determining the order of integration of variables at first difference or at level. Hence tests for unit root have been developed. To check the presence of unit root, ADF test is applied on a log of all variables, and lag length is chosen by

automatic selection or can be chosen by minimum AIC or other lag length criteria. The one-tailed null and alternative hypotheses are as below:

$H_0: \rho = 0$ and

$H_a: \rho < 0$

If the null hypothesis H_0 is not rejected, it will indicate the occurrence of a unit root in the variable and therefore the variable will be non-stationary. And if the null hypothesis H_0 is rejected, it will indicate that the variable does not have a unit root and therefore the variable will be stationary. First of all, we will apply the test at the level on series. If the variables come non-stationary at a level, we will take the first difference to make the variable stationary and the variable will be integrated of order I (1). If the variables come non-stationary at the first difference, we will take the second difference and so on to make the variable stationary. Differencing is connected with unit roots numbers in the series. Also augmented dickey fuller test statistic is based on t-statistic and p-value. If the critical values are greater than the augmented dickey fuller t-test statistic, then we will reject the null hypothesis and we will conclude that the series is stationary.

3.3.2.2 Autoregressive distributive lag model (ARDL)

The Autoregressive Distributed Lag Model (ARDL) approach to co-integration was introduced by Pesaran and Shin (1995), Pesaran and Shin (1998), Pesaran et al. (2001) will be used to evaluate the long-run and short-run relationships between the variables. Over the traditional Johansen and Juselius (1990), this approach has many advantages. To foresee the long-run relationships, Johansen and Juselius model uses a system of equations. While a single reduced form equation is utilized by Autoregressive Distributed Lag Model (ARDL) approach. Through the ARDL approach, the pretesting of variables is not necessary; hence, testing long-run and short-run relationships among variables are applicable, whether the independent variables are integrated of

order 0, integrated of order 1, or both. Many of the specifications made in traditional models such as the specification of the optimal number of lags and the inclusion of the number of exogenous and endogenous variables can be avoided through the ARDL approach to co-integration. Different variables can have different lag lengths through ARDL co-integration test.

We will use the Autoregressive Distributed Lag (ARDL) approach to demonstrate the evidence of short-run and long-run relationships in regard to get robust estimates. Without losing long-run information, ARDL helps to explain the evidence of a relationship or an equilibrium in terms of short-run and long-run dynamics. The estimated ARDL model will take the following form:

$$\begin{aligned} \Delta \ln(EX)_t = & \beta_0 + \sum_{i=1}^n \theta_i \Delta \ln(EX)_{t-i} + \sum_{i=0}^n \vartheta_i \Delta \ln(FDI)_{t-i} + \sum_{i=0}^n \delta_i \Delta \ln(GDP)_{t-i} + \\ & \sum_{i=0}^n \gamma_i \Delta \ln(SAV)_{t-i} + \sum_{i=0}^n \rho_i \Delta \ln(OD)_{t-i} + \sum_{i=0}^n \sigma_i \Delta \ln(IT)_{t-i} + \sum_{i=0}^n \phi_i \Delta \ln(ER)_{t-i} + \\ & \sum_{i=0}^n \tau_i \Delta \ln(MP)_{t-i} + \sum_{i=0}^n \omega_i \Delta \ln(VAD)_{t-i} + \sum_{i=0}^n \pi_i \Delta \ln(LF)_{t-i} + \alpha_1 \ln EX_{t-1} + \\ & \alpha_2 \ln FDI_{t-1} + \alpha_3 \ln GDP_{t-1} + \alpha_4 \ln SAV_{t-1} + \alpha_5 \ln OD_{t-1} + \alpha_6 \ln IT_{t-1} + \alpha_7 \ln ER_{t-1} + \\ & \alpha_8 \ln MP_{t-1} + \alpha_9 \ln VAD_{t-1} + \alpha_{10} \ln LF_{t-1} + \varepsilon_i \end{aligned} \quad (3.9)$$

Where EX represents exports, FDI is foreign direct investment, GDP is a gross domestic product, SAV is national savings, OD is official development assistance, IT is indirect taxes, ER is the real exchange rate, MP is a number of mobile phones, VAD is industry value added and LF is the total labor force. The operator Δ identifies the first difference. The parameters $\theta_i, \vartheta_i, \delta_i, \gamma_i, \rho_i, \sigma_i, \phi_i, \tau_i, \omega_i, \pi_i$ represents the model's short-run dynamics whereas $\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6, \alpha_7, \alpha_8, \alpha_9, \alpha_{10}$ represents a long-run relationship of the model.

The null and alternative hypothesis of the model is as below:

$$H_0: \alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5 = \alpha_6 = \alpha_7 = \alpha_8 = \alpha_9 = \alpha_{10} = 0$$

$$H_1: \alpha_1 \neq \alpha_2 \neq \alpha_3 \neq \alpha_4 \neq \alpha_5 \neq \alpha_6 \neq \alpha_7 \neq \alpha_8 \neq \alpha_9 \neq \alpha_{10} \neq 0$$

The null hypothesis says that there exists no long-run relationship between variables while the alternative hypothesis indicates that between variables there exists a long-run relationship.

3.3.2.3 Long-run form and bound test

The long-run relationship among the variables is conducted as explained by Pesaran et al. (2001) and Pesaran (1997) and further used by Duasa (2007). As calculated by Pesaran et al. (2001), the critical values will be compared with the F-statistic. If the F - statistic is greater than respective upper critical values, then there exists a long-run relationship. If the F - statistic is less than respective upper critical values, then a long-run relationship does not exist. However, it is inconclusive if it lies between the lower bounds and upper bounds. The model can be estimated as below when there is an evidence of co-integration or a long-run relationship:

$$\begin{aligned} \ln(EX)_t = & \beta_1 + \sum_{i=1}^n \theta_{2i} \ln(EX)_{t-i} + \sum_{i=0}^n \vartheta_{2i} \ln(FDI)_{t-i} + \sum_{i=0}^n \delta_{2i} \ln(GDP)_{t-i} \\ & + \sum_{i=0}^n \gamma_{2i} \ln(SAV)_{t-i} + \sum_{i=0}^n \rho_{2i} \ln(OD)_{t-i} + \sum_{i=0}^n \sigma_{2i} \ln(IT)_{t-i} \\ & + \sum_{i=0}^n \phi_{2i} \ln(ER)_{t-i} + \sum_{i=0}^n \tau_{2i} \ln(MP)_{t-i} + \sum_{i=0}^n \omega_{2i} \ln(VAD)_{t-i} \\ & + \sum_{i=0}^n \pi_{2i} \ln(LF)_{t-i} \\ & + \varepsilon_i \dots \end{aligned} \quad (3.10)$$

The lag lengths can be chosen by the Schwarz Bayesian Criterion (SBC) or the Akaike Information Criterion (AIC) before model estimation with OLS.

3.3.2.4 Error Correction Model (ECM)

The coefficient, μ_1 , of Error Correction Model (ECM) identifies the adjustment rate after a short-term shock or disturbance in achieving long-run equilibrium. Error correction model is utilized to estimate between variables the short run relationship. So, the short run Error Correction Model (ECM) specification equation is as follows:

$$\begin{aligned}
\Delta \ln(EX)_t = & \vartheta_1 + \mu_1(ECM)_{t-1} \sum_{i=1}^n \theta_{3i} \Delta \ln(EX)_{t-i} + \sum_{i=0}^n \vartheta_{3i} \Delta \ln(FDI)_{t-i} \\
& + \sum_{i=0}^n \delta_{3i} \Delta \ln(GDP)_{t-i} + \sum_{i=0}^n \gamma_{3i} \Delta \ln(SAV)_{t-i} + \sum_{i=0}^n \rho_{3i} \Delta \ln(OD)_{t-i} \\
& + \sum_{i=0}^n \sigma_{3i} \Delta \ln(IT)_{t-i} + \sum_{i=0}^n \phi_{3i} \Delta \ln(ER)_{t-i} + \sum_{i=0}^n \tau_{3i} \Delta \ln(MP)_{t-i} \\
& + \sum_{i=0}^n \omega_{3i} \Delta \ln(VAD)_{t-i} + \sum_{i=0}^n \pi_{3i} \Delta \ln(LF)_{t-i} + \varepsilon_i \dots \tag{3.11}
\end{aligned}$$

We can derive Error Correction Model (ECM) as below:

$$\begin{aligned}
(ECM)_t = & \ln(EX)_t - \beta_1 - \theta \ln(FDI)_t - \delta \ln(GDP)_t - \gamma \ln(SAV)_t - \rho \ln(OD)_t - \sigma \ln(IT)_t - \\
& \phi \ln(ER)_{t-i} - \tau \ln(MP)_t - \omega \ln(VAD)_t - \pi \ln(LF)_t \tag{3.12}
\end{aligned}$$

3.3.2.5 Diagnostic Tests

Different tests are applied during the model selection procedure to recognize the autocorrelation, non-normality, and heteroscedasticity problems. We applied Breusch-Godfrey Serial Correlation LM test, Jarque-Berra test (chi-square) for residuals normality, and ARCH LM White Heteroscedasticity test (F-stat) respectively to detect these problems and to build the model's goodness of fit.

3.4 Sources of Data

Yearly cross-section data will be used for determining the export expansion and import substitution impact on economic growth from the period 1995 to 2015. Yearly data on exports, imports, and production of different industries were gathered from national data sources for the subject of the study. The required data is collected from economic surveys of Pakistan and a handbook of statistics on the Pakistan economy of the State Bank of Pakistan (SBP).

Yearly time series data will be used in determining the determinants of the export from the period 1979 to 2019 and collected from international and national data sources. International data sources may include the World Bank development indicator database (WDI) and International financial statistics (IFS). Variables that are utilized in this study are Foreign Direct Investment (percentage of GDP), Exports (percentage of GDP), Gross Domestic Product (GDP), Official Development Assistance (percentage of GDP), National Savings (percentage of GDP), Total Labor Force, Indirect Taxes (percentage of GDP), Industry Value Added (percentage of GDP), Real Exchange Rate (percentage of GDP) and Number of Mobile Phones (per 1000 persons). However, by multiplying the nominal exchange rate with consumer price index(CPI) of US and dividing by

domestic consumer price index (CPI), we obtained real exchange rate. Indirect Taxes (percentage of GDP) is obtained by dividing indirect taxes (million RS) gathered from the handbook of statistics on the Pakistan economy of the State Bank of Pakistan (SBP) with nominal GDP and multiplying by 100. The number of Mobile Phones (per 1000 persons) is obtained by adding up data on mobile cellular and fixed telephone subscriptions (per 100 people) and multiplying by 10. All variables are transformed into logarithmic form because it reduces the variance in data.

Chapter 4

Results and Discussion

4.1 Introduction

This chapter will display the results and interpretations of our estimation. The results were estimated based on the methodologies that were described in the previous chapter.

4.2 Impact of Import Substitution and Export Expansion on Growth

The objective of the first methodology is to find out whether export expansion and import substitution promote economic growth or not in Pakistan. For this, we take six industries i.e. manufactured goods, chemicals, mineral fuels and lubricants, food, crude material inedible except fuels, and miscellaneous. First, we find out intra-sectoral shares of domestic demand expansion, export expansion, and import substitution. Table 4.1, 4.2 and 4.3 shows roughly that half of the growth was due to domestic demand expansion of all six industries between 1995 to 2015 without any major difference in shares of domestic demand expansion between these industries. The highest shares of domestic demand expansion are observed in the manufacturing of chemicals. Hence we can conclude that domestic demand expansion in these industries is an important growth source. If we compare Table 4.2 and 4.3 we have seen that there is a reduction of the relative importance of import substitution over time. While export expansion increased slightly as seen for all six industries. The high export expansion was achieved in chemicals and miscellaneous industries. There are some industries where export expansion does not increase as shown in table 4.3.

Table 4.1: Intra-sectoral Shares of Domestic Demand Expansion, 1995-2015 (percent)

Industry	v0(D1-D0)/Y1-Y0		
	1995-2000	2000-2005	2005-2015
Manufactured Goods	101.420	101.911	84.253
Chemicals	94.352	160.290	852.435
Mineral Fuels and Lubricants	99.548	100.502	100.591
Crude Material inedible except Fuels	98.746	98.192	104.715
Food	100	100	100
Miscellaneous	89.487	107.022	93.180

Table 4.2: Intra-sectoral Shares of Import Substitution, 1995-2015 (percent)

Industry	D1(u0-u1)/Y1-Y0		
	1995-2000	2000-2005	2005-2015
Manufactured Goods	-1.722	0.557	-15.696
Chemicals	3.799	-76.063	-757.564
Mineral Fuels and Lubricants	0.489	-0.510	-0.615
Crude Material inedible except Fuels	1.381	1.914	-4.691
Food	0	0	0
Miscellaneous	-1.763	1.035	-0.643

Table 4.3: Intra-sectoral Shares of Export Expansion, 1995-2015 (percent)

Industry	D1(x1-x0)/Y1-Y0		
	1995-2000	2000-2005	2005-2015
Manufactured Goods	0.302	-2.468	31.443
Chemicals	1.848	15.773	5.129
Mineral Fuels and Lubricants	0	0	0
Crude Material inedible except Fuels	-0.127	-0.107	-0.024
Food	0	0	0
Miscellaneous	12.276	-8.058	7.463

The changing impact of import substitution and export expansion on growth can be tested by cross-sectional analysis which relates the relative shares of IS and EP with growth rates.

1995-2000

$$g_y = -45.79 + 45.84I + 45.81E + 45.79D \quad (4.1)$$

$$(0.00) \quad (0.00) \quad (0.00)$$

$$R^2 = 0.99$$

Domestic demand expansion, export expansion, and import substitution have a significant and positive impact on the growth rate of domestic output. Values in brackets show the p-value of the equation.

2000-2005

$$g_y = -4633.76 - 46.37I - 46.47E - 46.34D \quad (4.2)$$

$$(0.82) \quad (0.82) \quad (0.82)$$

$$R^2=0.23$$

Domestic demand expansion, export expansion, and import substitution have an insignificant and negative impact on the growth rate of domestic output.

2005-2015

$$g_y = 0.005I + 0.004D - 0.005E \quad (4.3)$$

$$(0.07) \quad (0.05) \quad (0.69)$$

$$R^2=0.23$$

Domestic demand expansion and import substitution have a significant and positive impact on the growth rate of domestic output while export expansion has a negative and insignificant impact on the growth rate.

4.3 Augmented Dickey-Fuller Test of Unit Root

To analyze the results of the second methodology i.e. methodology on determinants of exports First we will discuss the results of the unit root test using the Augmented Dickey-Fuller test. We used the augmented dickey fuller test on all variables to check the order of integration. First, we transformed all data variables into a natural logarithm.

Table 4.4: Augmented Dickey-Fuller (ADF) Test of Unit Root

At Level				
Variables	Constant/Trend	P-value	ADF t statistic	Decision
LEX	C	0.490	-1.566	I(1)
LFDI	C	0.265	-2.051	I(1)
LfGDP	C, t	0.432	-2.284	I(1)
LSAV	C	0.188	-2.264	I(1)
LOD	C	0.049	-2.947	I(0)
LIT	C	0.893	-0.429	I(1)
LER	C, t	0.186	-2.859	I(1)
LMP	C	0.784	-0.881	I(1)
LVAD	C	0.225	-2.156	I(1)
LLF	C	0.997	1.075	I(1)

At First Difference				
Variables	Constant/Trend	P-value	ADF t statistic	Decision
DLEX	C	0.000	-6.187	I(0)
DLfGDP	C, t	0.002	-4.921	I(0)
DLFDI	C	0.000	-5.719	I(0)
DLSAV	C	0.000	-6.980	I(0)
DLIT	C	0.000	-5.909	I(0)
DLER	C, t	0.003	-4.634	I(0)
DLMP	No C, t	0.077	-1.741	I(0)
DLVAD	C	0.000	-7.104	I(0)
DLLF	C	0.000	-6.686	I(0)

The augmented dickey fuller test implies the non-rejection of the null hypothesis that variables are non-stationarity at a significance level of 5% because p-values of all series are greater than 0.05 at level except series of log of official development assistance phones (LOD) which is stationary at level. Series of LMP (log of the number of mobile phones) is stationary and integrated of order one I (1) at a 10% significance level. Also, the ADF t-statistics values of these series are greater than their ADF critical values. So we take the first difference of all series except for LMP to make the stationery. After taking the first difference all series are stationery. Their p-values show that the series at the first difference is stationary and thus implies the rejection of the null hypothesis that series are non-stationarity.

4.4 Autoregressive Distributed Lag Model

Before finding out the general to a specific model, there are many independent variables in the General model which may have an insignificant impact on the dependent variable. So we will exclude all those variables which have an insignificant impact on the dependent variable. We will select the highly insignificant level or lagged level variable based on p-value and t value and then we will impose joint restrictions via the F test. The working hypothesis will be:

Null hypothesis H_0 : level and lagged level variables have an insignificant impact on the dependent variable.

Alternative hypothesis H_1 : At least one of the level and lagged level variables have a significant impact on the dependent variable.

The general model is given in equation (4.4) as follows:

$$LEX = \alpha + \beta_1 LER + \beta_2 LFDI + \beta_3 LfGDP + \beta_4 LIT + \beta_5 LVAD + \beta_6 LMP + \beta_7 LSAV + \beta_8 LOD + \beta_9 LLLF + \varepsilon_t \quad (4.4)$$

After the insignificant variables exclusion, the final general to specific model is given in equation (4.5) as follows:

$$LEX = \alpha + \beta_1 LER + \beta_2 LFDI + \beta_3 LfGDP + \beta_4 LIT + \beta_5 LVAD + \beta_6 LMP + \varepsilon_t \quad (4.5)$$

4.5 ARDL Long Run Form and Bounds Test

ARDL bound test is used when the time series data have different order of integration or have zero or one order of integration i.e. I(0) and I(1) respectively. Autoregressive distributive lag approach to co-integration crashes when data has second order of integration I(2). We used this approach to examine between exports and their determinants a long-run relationship in the case of Pakistan. The appropriate lag selection of ARDL for exports determinants is ARDL (1,0,0,2,1,0,2).

Table 4.5: Long Run Test for Exports and Exports Determinants Relationship

F-statistic	Upper bound value I(1)	Significance level	Decision
7.137	2.94	10%	Do not reject null hypothesis
	3.28	5%	
	3.61	2.5%	

Long run test is applied as shown in Table (4.5) to examine the long-run relationship between exports and their determinants. The F statistic which is 7.137 is greater than the upper bound value at all significance levels as shown in table (4.5) hence we do not reject the null hypothesis of the existence of long-run relationship and may deduce that there exists a long run relationship between exports and their determinants.

Long-Run Relationship

The long-run equation for exports determinants is given in equation (4.6) as follows:

$$\begin{aligned}
 LEX = & 0.138LER + 0.099LFDI + 0.036LfGDP - 0.022LIT + 0.622LVAD - 0.120LMP \\
 & (0.456) \quad (0.023) \quad (0.904) \quad (0.061) \quad (0.050) \quad (0.06) \\
 & +2.885 \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad (4.6) \\
 & (0.978)
 \end{aligned}$$

Our estimation finds a positive and insignificant impact of real exchange rate and foreign gross domestic product (fGDP) on exports of Pakistan. Results are encouraging because real exchange rate depreciation is usually not preferable because exchange rate depreciation causes inflation. The reason for the insignificant impact of foreign gross domestic product (fGDP) on exports of Pakistan is that foreign investors do not invest their income in Pakistani exports. Foreign direct investment and industry value added to have positive and significant impact on Pakistani exports. To attract foreign investors, the government gives prerequisites for export promotion. The industrialization variable i.e. industry value added is highly significant in describing growth of exports. Industrialization boosts agrarian sectors and agriculture elevates the industrial sector. Industrial production and supplanting of agriculture exports with industrial exports, which then in world markets allows stable and reasonable prices, could be done through industrialization. In addition, imports reliance can be decreased through industrialization by using an import

substitution strategy. While indirect taxes and a number of mobile phones have negative and significant impact on Pakistani exports. Indirect taxes proportion is different for different goods. Hence it may be possible that indirect taxes are high for the goods that are exportable. Furthermore, there are no tax exemptions on exports by the government which may be the reason that this variable is adversely affecting exports of Pakistan. The number of mobile phones does not have a positive effect in exploring international markets or in raising exports of Pakistan. P-values are shown in parenthesis (.).

4.6 Error Correction Model (ECM):

Short Run Relationship

ECM captures convergence in long run after short-run disequilibrium or shock. For convergence, ECM coefficient must be significant and negative. As shown below by table (4.6), the ECM coefficient is highly significant and negative. Therefore, we may say that after the short-run disequilibrium or shock, there is a convergence in the long run. The coefficient of ECM is -0.764 and the p-value shows that it is highly significant. This means that 76% adjustment will happen in one period.

Table 4.6: Short Run Test for Exports and Exports Determinants Relationship

Variable	Coefficient	p-value
D(LfGDP)	0.051	0.904
D(LfGDP(-1))	-3.254	0.000
D(LMP)	0.061	0.239
D(LIT)	-0.031	0.000
D(LIT(-1))	-0.013	0.037
CointEq(-1)*	-0.764	0.000
R-squared	0.726	

Table (4.6) shown the short run test which is applied to check the short run relationship between exports and their determinants.

Foreign gross domestic product, number of mobile phones, and indirect taxes have a short-run relationship with exports. Foreign gross domestic product and the number of mobile phones have a positive but insignificant impact on exports in the short run. Whereas indirect taxes have a negative but significant impact on exports in the short run.

4.7 DIAGNOSTIC TESTS

Table 4.7: Diagnostic Tests

Diagnostic Tests	Probability/F-statistics	Decision
Autocorrelation Test	F-statistic 3.166	Accept null hypothesis of no autocorrelation
White Heteroscedasticity Test	F-statistic 0.501	Accept null hypothesis of no heteroscedasticity
Normality Test	P-value 0.551	Accept null hypothesis of normality

Jarque-Bera test was applied to test the residuals normality and the probability 0.551 which is greater than 0.05 as shown in table 4.7 do not reject the null hypothesis and we can say that there are normal residuals. To test the autocorrelation, we applied the Breusch Godfrey LM test on model residuals and the F-statistics 3.166 suggests the non-rejection of the null hypothesis and we can thus conclude that there is no Autocorrelation. As F statistics 0.501 is bigger than 0.05 of the White Heteroscedasticity test showing the non-rejection of the null hypothesis that there is no Heteroscedasticity.

Chapter 5

POLICY REVIEW AND QUALITATIVE SURVEY

5.1 POLICY REVIEW

Why do a few nations foster more than others?

Do their policies to international trade have a task to carry out?

In the 1960s and in the 1950s, nations that were developing encountered a decrease for their primary items in world business sectors, shortfalls in their balance of payments, and decay in terms of trade. Developing nations needed to pick between contending methods of industrialization: export promotion (EP) and import substitution (IS).

Development economics has been dependent upon huge changes in perspective concerning the role of trade in economic development. After World War II there was overall negativity as for the capability of trade to advance fast development. On the other hand, there was an overall good faith as for the capacities of the state to complete a viable development strategy. Out of these perspectives, the import-substitution strategy of economic development evolved. It's anything but an assortment of strategy tools (subsidies, tariffs and quotas) to ensure a domestic market for some kinds of produced merchandise. In this way, the motivator to produce for the domestic market was expanded comparative with the impetus to export. The entirety of this elaborates a critical job for government strategy making.

The normal wording of export promotion and import substitution can be deluding. Import substitution might be deciphered accurately as recognizing arrangements that are coordinated towards the decrease of imports (by for example levies) and their replacement by domestic

production. Export promotion in any case doesn't suggest that the approaches followed to try to expand exports, for instance, export subsidies. The Export promotion term is indeed applied to policies which are unbiased to trade. All the more as of late, 'outward oriented' is the term which economists liked to utilize to those which don't oppress imports and inward-oriented to allude to approaches that advance domestic production at the expense of imports.

These two methodologies have regularly been seen as alternate extremes or separate hypothetical classes. Yet, they are not contrary energies, but rather elective ways for animating the development in the size of markets for made merchandise. It is the last that is crucial in the process by which late-developing countries can adjust and get familiar with the new technologies important to quickly expand productivity. It will be battled that import substitution is for the most part fundamental for outward-oriented development to succeed. More significantly, the accomplishment of import substitution is connected to the advancement of efficiency in the agricultural sector. If the last neglects to develop quickly, import substitution will fizzle and fruitful export-based development won't happen. In this situation, the state will by and large act in a ruthless way regarding the economy. Then again, if productivity in the agriculture sector is quickly developing, the methodology of import-substitution industrialization will probably succeed, the state will by and large act to advance efficiency development, and outward-oriented development will probably succeed.

For the foundation of manufacturing activities of import-substituting industries, the financial reasoning set forward is either that the business can ultimately receive the rewards of lower costs and large-scale production (for tariff protection, the purported infant industry argument) or improvement of the balance of payments because of less consumer goods imports. It is trusted that

the infant industry can compete in world markets and will grow up and whenever its average cost of production will be brought down, it will then can create net foreign exchange earnings.

An IS system enjoys two significant benefits, which clarify the support from both policymakers and entrepreneurs. To start with, as proven by industrial items imports, the market for the industrial items as of now exists preceding the import substitution strategy, so that danger is diminished to supplant imports in setting up an industry. Secondly, it is simpler to secure a homegrown market for non-industrial countries against foreign competition relative to convince countries that are developed to bring down trade hindrances against their essential or fabricated exports.

In opposition to these benefits, there are accompanying drawbacks: from foreign competition, homegrown enterprises can become used to protect and thus have no more impetus to turn out to be more productive; and import replacement can prompt inefficient industries due to the littleness of the homegrown market in many agricultural nations doesn't permit industries to take scale economies advantages. Additionally, after imports of certain manufactured items are supplanted with domestic production, more import replacement of further developed items turns out to be an ever-increasing number of troublesome and costly as far as prerequisites for innovation and capital.

The advantages of the EP technique lie in its capacity to get rid of the disadvantages of IS. The principle benefits of the EP system are: it defeats the littleness of the homegrown market and permits an agricultural nation to exploit scale economies; creation of produced merchandise for trade requires and animates proficiency all through the economy; and last, the development of fabricated exports isn't restricted (as on account of import substitution) by the development of the homegrown market.

Then again, there are two intense disadvantages of this strategy: it could be hard for an agricultural nation to set up exporting enterprises given contest from the more settled and proficient developed nations; developed countries frequently give an undeniable degree of successful assurance to those industries which are producing simple labor-intensive items from which non-industrial nations as of now have or can before long get a comparative advantage.

The transition from import substitution to export-based development is a troublesome one to make. Import substitution would appear to be vital even in the foundation and development of labor-intensive industries in agricultural nations. This progression is the thing that permits entrepreneurs in such industries to import foreign innovation and innovatively adjust it to nearby conditions. The aftereffects of securing such businesses in most developing nations, in any case, have not been empowering. The businesses have neglected to quickly close the innovation gap and have subsequently neglected to turn out to be globally competitive through cost decreases and quality enhancements.

The disappointment of most non-industrial nations to make the transition to export-based development was identified with the pace of development of the domestic market. The quicker this happens, the more noteworthy the level of specialization and the bigger the investment in new equipment that will happen. Generally significant, there will be a faster dominance of innovation. The development in market size was thusly identified with the development in agricultural productivity. Although there are conditions where the agricultural area may not be the principal source of domestic demand growth, for a large portion of the present non-industrial countries this isn't probably going to be the situation. Subsequently, a powerful agricultural sector would appear to be important to give the conditions to a fruitful change.

A unique agrarian area is significant according to another point of view. I contended that it gives the establishment to compelling and skilled state action. It does as such indeed by producing a quick development in domestic demand for manufactured goods. It is this quickly growing demand that lends credibility to government dangers to pull out subsidies for firms whose presentation is poor. Furthermore, in an economy where the domestic market is quickly developing, the subsidy that should be given to infant industries is more modest. This will in general lessen the level of rent-seeking activity coordinated at the government by specific vested parties. This again fortifies the public authority's capacity to complete effective economic policy.

Export promotion and import substitution are conflicting and alternative trade policies. Such grouping depends on the unreasonable assumptions of the static two-sector model in which import-replacement supposedly involves inward-looking policies with state intervention, whereas export promotion is seen as outward-looking strategies without state intervention. This approach permits us to find singular economies along a continuum from open and liberal economies to shut and substantial state intervention economies. The inquiry then, at that point gets one of basically deciding if liberal and open economies perform better. Static allocative effectiveness gains propose that openness yields better economic performance, as far as a more significant level of output or income, if not as far as a higher long-run rate of growth. The expulsion of trade obstructions extends the production and consumption possibilities by giving more efficient innovation to change domestic assets into services and goods. Consequently, the proficiency gains from a better distribution of assets raise the degree of national output.

The entanglement emerges from the limited meaning of these systems. In a powerful existence where there are scale economies, unemployment and a third home-goods sector, the connection between export promotion and import- substitution can be corresponding. With a successive

connection between them, a precondition for export promotion can be an import substitution strategy. Instead, both and export promotion and import substitution policies can be carried out all the while. As interventionist trade policies, they are both inconsistent with free-market trade strategies. The two of them change the cost structure and results in distortion of prices. They target leaving the strategy whereby specialization is dictated by comparative advantages. They ensure and elevate explicit chose enterprises to foster competition with the expectation of achieving the benefits in the long run.

The overhead contentions infer that it is fundamental to be clear for policymakers about the nature and thorough intricacy of export promotion, import substitution, and free trade policies and adopt these approaches by considering their complementarities in a far-reaching development strategy. Since non-industrial nations have diverse structures, a uniform exchange strategy is probably not going to serve all nations similarly well or achieve the advantages that it indicates. Industrial policies overall and exchange policies specific ought to carefully be planned by a country's particular conditions. Development requires reasonable and realistic exchange arrangements in which import substitution, export promotion, and free trade are a fundamental indispensable part.

The two techniques of improvement are not idiot-proof and have possible destructive impacts on executing nations. The disappointment of the IS methodology offered a driving force to the recovery of another universality in trade liberalization with trade being envisioned as an engine to growth in the late 1970s. Most of the agricultural nations from the beginning of the 1980s that had before followed the import substitution methodology of industrialization started to embrace an outward orientation and trade liberalization. Due to the debt crisis that started in 1982, trade policy reforms were spurred and the obvious accomplishment of outward orientation nations. The debt for all developing countries as a percentage of the gross national product (GNP) taken together

was assessed at 21 percent which rose to 34 percent and then rose further up to 37 percent in 1980, 1990, and 1998 respectively. In Sub-Saharan Africa, the proportion was 24, 65 and 68 percent in 1980, 1990, and in 1998 respectively. Whereas in South Asia the proportion was 20 percent in 1980, 35 percent in 1990, and 28 percent in 1998.

In 1963-73, 1973-1985, and 1985-1998, as compared to an inward orientation, an outward orientation was, for the most part, have a higher average annual growth rate of real gross domestic product for most of the nations in Latin America, Africa and in Asia, which endeavored a few steps of trade liberalization during above listed periods.

Pahariya (2008) explained the results of a recent investigation that was attempted by CUTS International (2008) to survey the achievement/disappointment embraced by 13 Asian and African nations of their policy initiatives under different exchange regimes. Total 13 nations i.e. 5 from Africa and 8 from Asia were picked for the examination. These nations were: Cambodia, Bangladesh, China, Nepal, India, Pakistan, Vietnam, Sri Lanka, Kenya, Tanzania, South Africa, Zambia, and Uganda. After import substitution system nearly since their political freedom beginning, the development experience sought by these nations to foster domestic enterprises under a defensive mass of levy and non-duty boundaries, has been varied. The vast majority of these countries have confronted serious balance of payments crises and their development way has been amazingly lopsided. Since the mid of 1970s, most of these nations began encountering genuine economic crises brought about by both external and internal factors. Import substitution strategies as high duties, overvalued exchange rates and inescapable quantitative restrictions caused significant discrimination in favor of import-competing sectors and against export production. This strategy initiated anti export bias inhibited export growth prospects.

An IS strategy is only temporarily infant-industry supportive and it will lead to unprofitability, uncompetitiveness, and inefficiency as soon as industry or sector is revealed to competition mainly from the foreigners in the long run. Trade liberalization in Tanzania, Kenya, Sri Lanka, South Africa and Zambia in clothing and textile industry, hitherto comfortable under the boundaries of non-tariff barriers and tariff barriers and also taking advantage from beneficial international markets, mainly profited by quotas from the European Union and United States, led to an employment loss and a decrease in textiles domestic production because of domestic industries closure.

At the sectoral level, the strategy of export promotion is very effective, which alongside with decrease in integration boundaries combined with some significant steps of export promotion embraced by the government and a beneficial external environment (i.e. quota and access of duty free market given by the European Union, and some other developed nations to the exports of ready-made garments from Nepal, Cambodia, Bangladesh etc.) have improved the such sectors growth. The above-listed nations have likewise set up various significant export advancement measures, which results in diminishing the anti-export bias in these countries in their domestic trade regimes.

Export promotion steps embraced by the public authority helped the exporters of Bangladesh to expand their exports of ready-made garments and in this manner making jobs (particularly to women), creating earnings for the rural population. Foreign exchange earnings of the nation and economic conditions of the rural poor are favorably impacted by highly labor-intensive ready-made garments sector linkages in Bangladesh.

Pahariya (2008) explained the findings of Veena Jha's paper which review the studies of Trade Integration Diagnostic DTIS. After reviewing the supply side and demand side constraints she

examines different policy tools utilized by nations in seeking import substitution and export promotion policies. Albeit the DTIS have overall supported the strategy of export promotion and encouraged the end of quantitative restrictions, Jha underlines that the both policies are characteristically connected. Nations foster their food security and productive capacities behind levy dividers. As they fulfil their food security targets and their competitiveness increases, they start to liberalize their economies. This very pattern can likewise be seen in Asian economies in their industrialization cycle. Jha expresses further, for lower developed countries, tracking down the true harmony between exports of global and regional markets in different crops and import substitution in different crops is difficult. Import replacement can support filling the gap if domestic demand does not meet.

5.2 QUALITATIVE SURVEY

I took an interview from the faculty members of PIDE and from an expert of Customs and international trade. My questionnaire is as follows:

Key Thematic Questions:

- Which sector in Pakistan expand its exports and which achieve import substitution over the last period
- Whether export promotion or import substitution promote economic growth or not in Pakistan
- If import substitution or export promotion does not accelerate economic growth, what are the other factors or sources that can promote economic growth?

- Higher exports lead to higher economic growth. What are the factors i.e. external and internal though which exports are affected or what are all those factors i.e. external and internal that can play potentially a significant job in the exports determination?
- What is the effect of import duties on export performance in Pakistan?
- Why domestic markets don't work well?
- How far can we reach international markets through exports?
- Is it the Quality of exports that matter or the export strategy?
- In pursuing IS and export expansion, the cost of doing business is high or low and what is the impact of the high or low cost of doing business in IS and export expansion?
- Investments boost exports in Pakistan or not? Investment in which sector in Pakistan can boost exports performance?
- What is the effect of import tariffs on import substitution and export performance in Pakistan?
- What is the time profile of the growth sources i.e. export promotion and import substitution in Pakistan?
- Is import substitution followed by export expansion or is growth limited only to the extension of the domestic market after a period of import substitution?

Responses based on qualitative aspect:

- Tractors expanded their exports while cars achieved import substitution. Exports in the textile sector showed an encouraging trend in March due to value-added sectors and claimed 30.4 percent growth. Import substitution policy is an old approach but the current government trying to focus on it. We can either do import

substitution or export promotion. Import substitution promotes the domestic economy. Till now we haven't achieved any target under this head. (But with IT support, new technology, and knowledge economy, Pakistan can achieve some targets in the future).

- To some extent, both export promotion and import substitution do promote growth but both follow different channels. Most countries that followed export-led growth experienced rapid economic growth. Pakistan can also achieve much faster growth through export-led growth.
- Improving productivity, attracting more foreign investment, spending more on those projects which give us a better return, and spending more on technical education can promote economic growth. IT, digitization and digitalization, and suitable policy adoption can promote economic growth.
- Internal factors are domestic tariff and nontariff barriers, wrong taxation policies, and lack of proper skills. External factors are the lack of Pakistan's integration in the global and regional economy. External factors: Exchange rate, international prices, world politics. Internal factors: lack of policy, bad governance, lack of openness and investment, no facilitation for trade.
- Import duties serve as a tax on exports. Countries like Malaysia and Vietnam have over 40% imported content in their exports while in the case of Pakistan, it is about 5%. Sometimes some imports are used in manufacturing a product before exporting it. In such a case high import duty will raise the export price. Export performance is affected by import duties through three different channels which are

1. Export competitiveness is detrimentally affected by high import obligations on inputs and final goods because foreign inputs are installed with confined access to knowledge and expansion in production costs of exporters and thus makes the export sector less beneficial.
 2. In Pakistan, import duties on inputs diminish the usefulness of firms.
 3. There was a case of export competitiveness expansion and better distribution of assets that was done through decreasing duties: from the accessibility of more and less expensive inputs, exporters in Pakistan increased their competitiveness with the help of the China and Pakistan free trade agreement.
- Working in domestic markets has improved substantially after the improvement of roads and other communication networks. Further improving competition through provisions of space for commercial activities can improve the working of domestic markets. Also, policies are not suitable and the regulatory mechanism is not proper.
 - We can go very far through exports. Vietnam is exporting 10 times more than Pakistan. We can at least increase our exports four times through better policies. Country's approach matters. We can capture Asia, Europe, and some parts of Africa.
 - Both quality and export strategy matter. Having better quality is a very important factor for achieving better prices and more exports.
 - Import substitution results in the misallocation of resources. IS also distorts trade and the cost of doing business.
 - Investment can boost exports. It could be in any sector but better results can be obtained by investment in engineering and other value-added goods such as pharmaceuticals, value-added agricultural goods. Investment in IT in every sector can boost exports.

- Import tariffs promote import substitution but they hurt exports. Tariffs impact imports. More tariffs will discourage imports and can promote domestic industry.
- We could give 5 to 10 years of protection to any new industry but then it should be opened to competition.
- Import substitution does not help with export expansion. In autos, we have been following import substitution policies and have not made any exports. There has been some expansion of the domestic market especially motorcycles.

Chapter 6

Conclusion and Policy Recommendations

This study empirically investigates which sector expand its exports and which achieve import substitution over the last period in Pakistan and thus empirically investigates whether export promotion and import substitution promote economic growth or not in Pakistan. Roughly half of the growth was because of domestic demand expansion. In the chemicals manufacturing, highest shares are seen. Hence we can conclude that domestic demand expansion in these industries is a significant source of growth. After comparing shares of import substitution and export expansion we find out that there is a reduction of the relative importance of import substitution over time. While export expansion increased slightly. The high export expansion was achieved in chemicals and miscellaneous industries. There are some industries where export expansion does not increase. To check whether export expansion and import substitution lead to economic growth or not we used cross-sectional data and find out that during the sub-period 1995-2000, there is a positive and significant impact of import substitution and export expansion on the growth rate of domestic output. In sub-sample 2000-2015, there is the insignificant and negative impact of both on growth rate. Whereas in 2005-2015, import substitution has a positive and significant impact on the growth rate while export expansion has a positive but insignificant impact on the growth rate.

The study also investigates the key determinants of exports for Pakistan. We considered all internal and external factors that are important in determining exports growth such as FDI, foreign GDP, official development assistance, national savings, indirect taxes, no of mobile phones, real exchange rate, total labor force and industry value-added. The study finds that during the period 1979-2019 there is a significant and positive impact of foreign direct investment and industry value added on exports of Pakistan. Indirect taxes and a number of mobile phones have a significant and

negative impact on exports of Pakistan. While real exchange rate and foreign gross domestic product have a positive but insignificant impact on exports of Pakistan. Foreign gross domestic product, number of mobile phones, and indirect taxes have a short-run relationship with exports. Foreign gross domestic product and the number of mobile phones have a positive but insignificant impact on exports in the short run. Whereas indirect taxes have a negative but significant impact on exports in the short run.

- There is a need to transform Pakistan's export base from primary commodities to higher industry value-added products. This could be done through structural reforms such as market and product diversification, education, and research.
- The export expansion will lead to economic growth if we focus on the exports of the sectors like manufactured goods, fuels, chemicals, and miscellaneous.
- Government and policymakers should promote FDI. Government should provide incentives to attract foreign investors in export-oriented industries. There is a need to make export zones in cities that are capable to fulfil the needs of export-oriented firms and these zones should attract foreign investors by providing these zones with facilities like infrastructure etc. Some sectors have the potential to attract foreign investors to Pakistan to boost exports like pharmaceuticals, textiles, and sports goods.
- There is a need to transform agriculture exports with industrial exports, which then in world markets allows stable and reasonable prices. In addition, imports reliance can be decreased through industrialization by using an import substitution strategy.

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