

## Determinants of Value Added Textile Exports from Pakistan

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### **Abstract:**

*This paper intends to examine the trends, current status and major problems in value added textile exports. It will also investigate the main determinants of value added textile exports from Pakistan. Pakistan is ranked 4th in cotton production with a share of 9.5 percent and 3rd largest consumer of cotton. The textile and clothing sector is considered as a major sector of Pakistan's economy because of its 60 percent contribution in total exports, 8.5 percent in GDP and 38 percent in employment. Pakistan's value added textile products include bed linen, terry towels, knitwear, garments and other made ups. Total share of value added textile exports of Pakistan is 48.34 % in 2013-2014. The factors which are expected to affect the value added textile exports include short fall in energy supply relative to demand, shortage of gas supply, prices, income of trading countries, law and order situation, lack of research and development, double digit inflation and exchange rate etc. Primary data is collected from 40 textile firms of Faisalabad through structured questionnaire and secondary data on the made ups and garments taken from international data sources. The collected data analyzed employing Multiple Regression analytical technique.*

**Keywords:** Textile Exports, Pakistan Textile

## Introduction

Textile Industry is one of the major industries of Pakistan's economy. Its contribution towards total export earning is USD 13.8 billion (Shah et al., 2012). Pakistan is ranked 4th largest producer and 3rd largest consumer of cotton (Ahmed, 2008). The Textile industry of Pakistan contribute 64% to total exports, 38% to the total workforce, 9.5% to the total GDP and 31% of total investment and 7% of market capitalization (Attaullah et al., 2014). Increase in the cotton production and expansion of textile industry of Pakistan has significant from 1947 to 2013, cotton bales from 1.1 million to 16.4 million bales (Siddique et al., 2012). The textile sector is consisting of various sub-sectors from cotton ginning and enlarges up to made-ups and garments.

Textile Sector's value chain activities mainly include spinning, weaving, processing, printing, cutting, stitching and finally packing. The worldwide trade in value added textiles has increased from USD 706 billion in 2011 to USD 709 billion in 2012 (GoP, 2012). On the other hand, Pakistan's textile exports have decreased from USD 13.7 billion in 2011 to USD 12.9 billion in 2012 (GoP, 2013a). Average export of value added textile items of made ups, towels and garments from 1990 to 2000 remained USD 765 million. It increased during 2001-2010 to USD 1789.73 million (GoP, 2010). The pattern of world textile exports is different as associated to textile exports of Pakistan. The growth of Pakistan's textile exports is mainly determined by low value textile items. Total share of low value textile in the world is 41.63% and value added textiles 58.36 %, while Pakistan share of textile 66.10% and in value added textiles 33.05%. The USA, The EU, China, Middle East and Canada are major markets of Pakistan value added textiles with their particular shares 30.60 %, 30.61 %, 4.8 %, 5.2 % and 1.4 % respectively ( Latif & Javid 2014).

Textile sector of the Pakistan is facing a number of challenges for the last few years, which have negative influence on export performance of the textile sector despite GSP plus status from the European Union to Pakistan. It was being estimated country's exports would increase by \$1 billion annually after receiving GSP plus status. Instead overall exports have shortened by 6.86 % in July14-October14 to \$7.98 billion from \$8.56 billion of the corresponding period last year (GoP, 2015). Cotton producing countries like India and China consuming the yarn for their value-added textile products. South Korea and Japan are not cotton producing countries but are importing yarn to convert it into high value added items and getting considerable higher prices in the global market. Cotton yarn is the low value added item could hardly give a foreign exchange

capital more than USD1 billion whereas on other side value added textile items could bring more than USD10 billion in foreign exchange earnings (Arifeen, 2010).

Cotton yarn share in 2005 is 12.6 percent and in 2012 it is gone up by 18.9 percent. Delightful exports of the yarn done during the years 2012 and 2013 of value USD 2.25 billion and USD 1.99 billion (GoP, 2013b) respectively which can cause shortage of yarn supply to the domestic industry. Consequently, the domestic industry started becoming down and facing problems of competitiveness in the international market in offering valued added textile products. Textile Industry can play a vital role in the economic enhancement of the Pakistan by exporting the value added textiles items provided government take steps to remove hindrances (Siddique et al., 2012).

Keeping in the view the importance of the textile sector in the economy of Pakistan the objective of the study is to quantify the impact of factors that affect the value added exports. Trade cost and common border don't have any impact on boosting the exports with the trade partners. Factors that can affect the textiles exports are exchange rate, GDP, distance (Mohmand and Wang 2013) Labor, Capital (FDI), technology and cost & quality have positive association between said factors and the textile exports (Yoganandan et al., 2013). Income of the trading partners has significant impact on the textile exports from Pakistan (Latif & Javid 2014). Loom type, skill and competitiveness, Local freight from Faisalabad to Karachi Port, export price are the foremost causes that can affect the export of value added textile exports from Pakistan.

The specific objectives of the study are:

- To investigate the determinants of Pakistan's value added textile exports
- To identify and analyze the major problems in value added textiles exports

## Literature Review

Zhang & Dardis (1991) investigated the determinants of textile export performance by using data of major exporting countries. Cross sectional data for 1970, 1975, 1980 and 1985 were used in the analysis. Multiple regression analysis was used to check the association between the export performance and the country's resources. Gross export of textiles was taken dependent variable while independent variables based on factor proportion model and earlier empirical research, which were technological, capital and unit labor cost. Finding specified that countries having extra capital were more gross or net textile exporters however countries with higher level of human capital were less gross or net exporters.

Chan & Au (2007) examined that China was the world primary producer since 2000 due to low labor cost and abundant supply of raw material. Data from 1985 to 2004 was taken to check the country specific factor of textile exports between China and other top 10 trading countries. Data was evaluated statistically using the gravity model to identify major determinants that strengthen exports of China. Finding showed that GDP, exchange rate and population's growth of importing countries had significant impact on the textile exports of China, while geographic distance has no substantial effect.

Khan & Khan (2010) investigated the challenges faced by the textile industry of Pakistan affecting the value added textile exports. As in the recent past value added textile exports were encouraging and moving in the right direction. Some recommendations were also given to the Government for implementation of policies, so that the difficult phase on the textile sector passed away due to energy crises in the country. Qualitative technique was used in the research for data collection. The focus was on image building of Pakistan to attract the foreign investment and value added textiles items, technology up- gradation & on job training for the human resource development.

Zada et al (2011) examined the determinants of exports of Pakistan by employing a time series data over the period of 1975 to 2008. Two techniques were engaged, Generalized Methods of Moments (GMM) and Empirical Bayesian. Finding indicated that exports of Pakistan were much insignificant to the changes in world demand and prices. This recognized the demand side factor like GDP, exchange rate and the world prices to regulate the exports of Pakistan while on supply side price and income elasticities were established. Export demand was high for countries NAFTA, EU and Middle East. The study recommended more concentration on these regions for more exports.

Khattak et al (2011) explored the current challenges for textile exports of Small Medium Enterprises. Data of 25 textile firms were selected through structured interview from the export managers of the companies. Finding showed that internal problems like energy crises were more powerful than the external hurdles like economical prices. Conclusion of summary indicated that 68% of barriers were internal whereas 32% were external. Sample size in this study was too small so this was limitation in this study.

Amin (2012) suggested that Ministry of Textiles failed to implement the policies due to pending funds at planning commission for the last two years, triggering the textile industry of Pakistan serious problems. Due to gas shortage which was an important component for the

bleaching of fabric and first step in the value added textiles. It was recommended that textile industry should be given free from load shedding and exempted from gas shortfall like other industries to earn maximum foreign exchange through exports of value added textiles for better economic circumstances.

Siddiqi et al (2012) evaluated the factors of export demand of textile and clothing industry of Pakistan through Johansen co-integration approach. This method was used to check the relationship between export demand and its determinants by using the yearly time series data from the period of 1971 to 2009. Results showed that world income and trade sincerity were the main factors of export demand due to high income elasticity of export.

Shah et al. (2012) investigated the challenges faced by the textile industry of Pakistan with objective to find the core reasons through qualitative study. Many challenges like energy crises, shortage of gas supply, lack of R &D, lack of modern machinery, high cost of production were the obstacles in textile exports and development of economy. Thousands of textile workers came out on the roads due to shortage of electricity and gas to textile industry in March 2012. Qualitative technique was adopted & secondary data used in this research collected from Govt. departments and associations along with unstructured interview from the experts. Findings endorsed that if the challenges and hurdles were removed, better results could be achieved.

Shah et al. (2013) evaluated the influence of energy crises on the textile sector of Pakistan for a period of 2005 to 2010. To know the intensity study was divided into sub periods of 2005-2006 and 2007-2010. Secondary data was collected from dependable sources of State bank of Pakistan and annual reports of the textile industry. Study determined that performance of textile Industry has declined in the post energy crises period.

Sadaf et al. (2014) analyzed the significance and value of Pakistan textile and clothing exports to the European Union. A time serious data relating to the period of 1988 to 2011 has been taken on the European Union imports from Pakistan and rest of the world. The techniques tend analysis, correlation and co-integration and error correlation models used and result revealed that there is strong degree of association between the EU,s total textile and clothing imports and her imports from Pakistan.

Ataullah et al. (2014) investigated the contribution of Pakistan textile industry towards exports and manufacturing value added textiles with better labor force of the country. Pakistan textile industry had more potential but the returns were low due to law and order situation, energy crises, quality issue, power tariff etc.

Qualitative and quantitative study was conducted from 30 textile firms of different sizes and capacity. However competitors India and Bangladesh had more market share due to flexible and favorable policies of the Government. Results indicated that there is significant relationship between internal and external issues and the performance of textile industry of Pakistan. To get maximum market share, we had to convert our weakness into our strengths along with better law and order situation and control on the energy crises.

Shah et al. (2014) revealed the effects of Pakistan textile industry and their influence towards economic development. Qualitative data of 100 textile firms in the form of unstructured questionnaire were collected and main respondents were middle level management of different cities of Pakistan. Findings acknowledged the core issues affecting the textile industry of Pakistan which were high cost of production, high gas charges, and lack of training program. Government should implement the policies for the controlling of such internal issues to lift the textile exports.

### Methodology

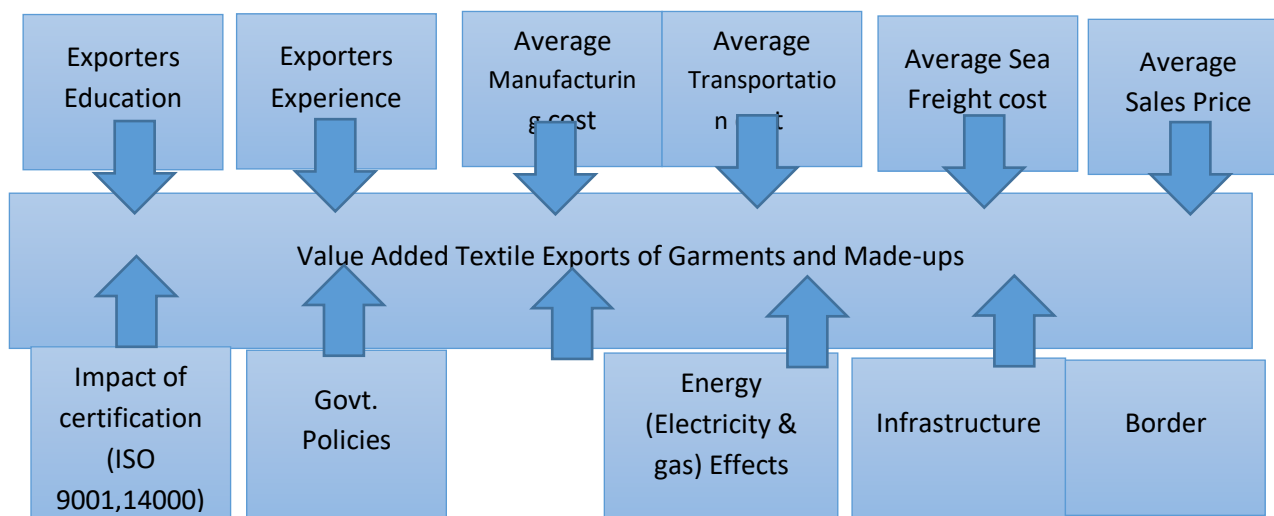
#### Sampling Design

The sample size of this research consists of forty (40) textile exports firms who were selected on random basis from the list of Pakistan textile exporters association Faisalabad District.

#### Population

Population is a particular section or a group of individuals, objects or items and their shared characteristic which can be studied and analyzed. The total population for this study was consisting of all proposed 190 textile exports firms in Faisalabad who are members of PTEA (Pakistan Textile Exporter Association). The selection of the Faisalabad textile industry is due to the fact that textile firms of Faisalabad constitute more than 70% of the textile exports and 45% share of total exports from Pakistan.

### Conceptual Frame Work Model of study



### Data Collection

The primary data were collected using a self-administrative questionnaire containing structured questions. Personal interview method was adopted to collect information from the exports. Simple random sampling technique was used for collecting data from target sample located in different locations of the city. The researcher personally visited all selected categories of textile exports firm with the aim to ensure the reliability of work and to get true and fair responses. All data (responses) were collected from respondents (textile exports manager or director), after getting permission

from the management of textile exports firms. The questionnaire were filled by respondents in the presence of researcher, in order to overcome the issues of biasness, lack of interest or any ambiguity about questions from respondent side.

To find the determinants of value added textile exports, study developed the following model.

$$Y = f(X_i, D_j)$$

Where

(1)

Y= Value added textile exports of Garments and Made ups

Xi= Quantitative Variables (i=5)  
 Dj= Qualitative Variables. (J=4)  

$$\ln Y = \beta_0 + \beta_1 \ln X_1 + \beta_2 \ln X_2 + \beta_3 \ln X_3 + \beta_4 \ln X_4 + \beta_5 \ln X_5 + \beta_1 D_1 + \beta_2 D_2 + \beta_3 D_3 + \beta_4 D_4$$
  
 Where

(2)

X1= Education of the Exporters (Number of years schooling)  
 X2= Experience of the Exporters (Number of years)  
 X3= Average Manufacturing Cost  
 X4= Average Local Transportation Cost

X5= Average Sea Freight Cost  
 D1= Dummy for Certifications, If indorsed with ISO, SA 8000, WRAP, then 1, otherwise 0  
 D2= Govt. Policy, If favorable D2=1, otherwise 0  
 D3= Variable to check the effect of Energy on the value added textile exports goods, values are taken 1,0, 1 indicated exports were affected by energy , otherwise 0.  
 D4= Border (Dummy variable (1 if sharing same border and 0 for others)  
 $\beta_0$  is the intercept,  $\beta_s$  are the slope coefficients and  $\mu$  is the random error

**Results**

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.936a	.876	.839	.63235

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	84.979	9	9.442	23.613	.000**
	Residual	11.996	30	.400		
	Total	96.975	39			

a. Dependent Variable: Export Volume

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.962	.967		2.029	.051*
	Education	.292	.141	.186	2.076	.047*
	Experiences	.233	.108	.161	2.167	.038*
	certifications	1.592	.493	.457	3.226	.003**
	How much are the exports being affected due to electricity?	-.620	.256	-.187	-2.425	.022*
	What is average manufacturing cost of your product line (made ups, garments?)	-.531	.174	-.246	-3.061	.005**
	What are the Average Local Transportation charges from Faisalabad to Karachi Port depending on 1x20ft container?	-.158	.194	-.134	-.811	.424NS
	What are the Average sea freight charges depending on 1x20ft container?	.103	.137	.054	.755	.456NS
	Distance of the Importing Country/Border	.545	.751	.146	.726	.473NS
	Export Policy	.694	.244	.222	2.849	.008**

a. Dependent Variable: Export Volume

NS = Non-significant \* = Significant \*\* = Highly significant

Above table shows that education, Experience, certifications, Electricity, and Average Manufacturing

cost has significant impact on the export volume, while, Average local transportation cost, Average sea freight



and distance of the importing country are insignificant on the export volume.

### Conclusion

The present study conducted with the aim to investigate the impact of key determinants of export performance on value added textile exports particularly made ups and garments from Pakistan. Variables taken in the present study include experience, and education of the exporters, ISO certification, and average manufacturing cost that could determine the export performance of value added textile goods. Findings of the study suggested that export performance of Pakistan's textile industry can be improved by developing sustainable supply of raw material, promoting quality & social standards as per the requirements of importing countries, reducing average manufacturing cost through achieving high level of productivity and by implementing textile policy with the focus on value addition. Textile Policy 2014-19 announced by the government should be fully implemented to give maximum benefits to the value added exporters as main focus of this policy is to increase the value added textile exports from Pakistan. Furthermore, consistent supply of electricity at subsidiary prices should also be a priority of the government. Present study also recommended that manufacturers have to invest in the new plants and machinery to increase the value added textile exports and hence to meet the International standards requirements and compete in the region. Present study investigated the key determinants of Pakistan's value added textile exports to two major markets; US and the Europe, however, future research efforts should be expanded to analyze the growth and performance of other value added textile products in other groups to more international markets

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