

# Price Inefficiency and Hegemony in Textile Manufacturing Industry of Punjab: A Data Envelopment Analysis.

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## Abstract

Textile is the most important manufacturing sector and major contributor in national export earnings. In today's global world, textile industry needs be prepared to accept the challenge to remain competitive. Performance measurement of textile industry is very important in this regard. Keeping in view this fact, current study is an effort to measure the performance of textile industry of Punjab by using CMI data. Price efficiency of the 584 textile manufacturing industries of Punjab has been estimated by using DEA method. Value added of the firms have been used as output and number of employees, fixed assets, energy, and raw material have been used as inputs, while salaries have been used as input cost to measure the price efficiency. The structure of the industry is also determined by using Gini coefficient. The results revealed that price efficiency is only around 36% which means 64% percent price inefficiency in the textile firms of the Punjab. Managerial inefficiency around 76 percent and overall inefficiency around 91 percent have been found the main reasons for this high price inefficiency in textile sector. So there is dire need to improve Managerial and Overall Efficiency to boost up Price Efficiency in textile sector of Punjab. The value of Gini coefficient is 0.86, which indicates the very high degree of inequality among firm sizes which indicates that there is very low level of competition in textile sector of Punjab.

**Keywords:** Textile Industry, Punjab, Price inefficiency; managerial inefficiency; overall inefficiency; Gini coefficient; competition.

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## **I. INTRODUCTION**

The textile sector is the biggest manufacturing sector of national and provincial (Punjab) economy. Since independence it is considered to be the life blood of the economy as it is absorbing major share of labor force and main source of export earnings. In the total exports of national economy the contribution from textile sector is around 60% (Pakistan Economic Survey, 2017-18). The textiles sector contains more than three million spindles, around three million rotors, three hundred and fifty thousand power looms, about eighteen thousand stitching machines. Furthermore this sector has very solid, fibre base of more than thirteen million bales of cotton and 0.6 million tons of man-made fibre which also contain polyester fibre. There are twenty one filament yarn units which have capacity of hundred thousand tons. The filament and yarn industry is assisted by production process for purified terephthalic acid (PTA) plant that has capacity of five hundred thousand tons (Ministry of textile industry, 2015). We may say that in Pakistan, a complete textile value chain exists which starts from cotton to finished products of latest fashion. Every subsector in this chain contributes to value addition and creates employment opportunities. Worldwide such kind of textile value chain is very rare and most of our competitors have only primary or finished base.

Pakistan has natural advantage of being one of the leading producer of cotton in the world and still it has colossal potential to increase it further. Worldwide Pakistan is the 4<sup>th</sup> major producer and 3<sup>rd</sup> biggest consumer of cotton and has huge comparative advantage which needs to be transformed in the sustainable competitive advantage. For this purpose better management practices (Managerial efficiency) can help a lot. Unfortunately existing management practices are out dated with slight use of information technology and weak inventory management systems which leads to low level of productivity (Ministry of Textile Industry, 2015). In today's global world of the borderless economy, textile industry should be prepared to accept the challenge to remain competitive, it must be efficient if it wants to stay in businesses. It is essential for textile industry to reach the optimal level to compete in international market. Keeping in view this fact, the performance measurement of textile industry is necessary, the efficiency is the major criteria for this purpose. Due to data constraints this study will measure the efficiency of textile industry of Punjab only.

Farrell (1957) familiarized the concept of relative efficiency, in this concept we can compare the efficiency of a decision making unit (DMU) with another of similar type. Farrell introduced the price efficiency, which is the ratio of overall efficiency and managerial efficiency. Price efficiency (PE) measures the ability of a DMU to use inputs in proportions that minimize production costs given input prices. Managerial efficiency (ME) measures the ability of a DMU to produce the maximum feasible output from a given bundle of inputs (output oriented) or produce a given level of output using the minimum possible amounts of inputs (input oriented). Overall efficiency (OE), also known as productive efficiency, is estimated as the ratio of the minimum possible costs and the actual costs of a DMU. The efficiency estimates suggested by Farrell take up a known production function for the fully efficient DMU. The production function of a DMU is usually unknown in practice, and relative efficiencies needs to be measured from the available sample data.

Two methods are used to assess the relative efficiency indices: the parametric or stochastic frontier production approach (SFA) and the nonparametric or DEA approach (Coelli, 1995). The SFA presume a functional relationship between outputs and inputs and uses statistical methods to guess parameters for the function. It includes an error consisted of two additive components: a symmetric factor that accounts for statistical noise connected with data measurement errors and a nonnegative constituent that measures inefficiency in production (Coelli, 1995). The stochastic model specification of SFA also allows for hypothesis testing. The shortcoming of SFA is that it inflicts specific assumptions on both the functional form of the frontier and the distribution of the error term. On the other hand, DEA uses linear programming techniques to make a piecewise frontier of the data. As it is nonparametric, DEA does not need any assumptions to be considered about functional form or distribution type. It is therefore less sensitive to misspecification relative to SFA. However, the deterministic nature of DEA means all deviations from the frontier are attributed to inefficiency. It is therefore subject to statistical noises resulting from data measurement errors (Coelli, 1995).

The selection of which technique to use is indeterminate (Olesen and Petersen, 1996). A trivial number of readings make side-by-side comparisons of the two approaches (Sharma, Leung, and Zaleski, 1997, 1999; Theodoridis and Anwar, 2011; Theodoridis and Psychoudakis, 2008; Wadud, 2003; Wadud and White, 2000), but not any of these studies make any deductions about which method is better. These studies usually discover quantitative dissimilarities in efficiency scores between the two approaches, but the ordinal efficiency rankings among DMUs tend to be very similar for both approaches. Therefore, the choice of which method to use seems to be arbitrary, as suggested by Dhungana, Nuthall, and Nartea (2004). In current study the DEA method

has been used due to the reason that it does not impose any priori parametric restriction on the underlying technology (Chavas and Aliber, 1993; Fletschner and Zepeda, 2002; Lansink, Pietola, and Backman, 2002; Wu and Prato, 2006). For the measurement of industry concentration, Gini coefficient is considered to be the relative measure as compared to absolute measures such as the Herfindahl and Rosenbluth indices (Fedderke & Szalontai, 2005). Gini coefficient is based on Lorenz curves and sheds light on the degree of inequality of firm sizes. Current study uses relative measure of efficiency and similarly relative measure of industry concentration is used based upon Gini coefficient. The rest of the study is organized as, section II is related to literature review, section III is about model specification, section IV provides results and discussion and section V concludes the study.

## **II. LITERATURE REVIEW**

In recent past availability of micro data has been increased substantially so empirical research has become more common. Various studies have been conducted regarding managerial efficiency measurement. Pitt & Lee, (1981) by utilizing panel data measured the managerial efficiency of the Indonesian weaving firms. There are majority of studies that have used cross sectional data by using SFA technique for the estimation of efficiency scores of manufacturing companies (Chen & Tang, 1987; Hill & Kalirajan, 1993).

Le & Harvie, (2010) applied SFA and evaluated the efficiency of the small and medium enterprise (SME) of Vietnam for various years and found that managerial efficiency ranges from almost 84% to 92%. Large firms and primitive SME's were found to be inefficient, however innovations were found to be increasing efficiency. Chang & Robin, (2012) conducted the study in Taiwan for manufacturing firms and tried to figure out the impact of R&D and technology imports on efficiency. Panel data was used and it was found that both R&D and technology imports enhances the efficiency. Alao & Kuje, (2010) investigated the efficiency of furniture industries and applied the Cobb-Douglas function. They found that plywood, timber and labor were the important variables while nail variable was having negative impact on production level.

Saputra, (2011) estimated the managerial efficiency of manufacturing industries from Indonesia for the time period 1990-2001. They found that the Iron, tobacco, transport equipment, industrial chemicals and non-ferrous metal industries were more efficient. Amornkitvikai & Harvie, (2011) used SFA technique to estimate the efficiency of 178 manufacturing firms in

Thailand for the time period 2002 to 2008. This study concluded that ownership pattern, size of firm and managerial payment have positive and significant impact on Managerial efficiency.

Mini & Rodriguez (2000) found that Managerial efficiency of manufacturing industry of Philippine's was dependent of size of firms. Baten et al, (2006) examined the Managerial efficiency of manufacturing industries of Bangladesh. SFA was used with Cobb-Douglas production function to measure the efficiency. This study found that output level of half normal distribution was almost 55%. Binam et al. (2008) estimated the performance in terms of Managerial efficiency. Dimitriu & Savu, (2010) estimated the managerial efficiency of Indian manufacturing industries and various determinants were found. Haron & Chellakumar (2012) estimated the managerial efficiency of manufacturing firms of Kenya. This study found that the performance of smaller firms was better than the larger and medium size firms.

Renuka & Kalirajan (2000) found that manufacturing industry of Singapore was not operating at its optimal level and it has possibility to improve efficiency level. They concluded that quality of Labour and capital intensity can improve Managerial efficiency. Wu (2007) investigated the performance of manufacturing firms of china. Performance was measured by Managerial efficiency. They found that rewards to labor and benefits from taxes were more significant for the improvement in performance level of manufacturing industries of China. Roboli & Michaelides (2010) estimated the Managerial efficiency and its determinants of Greek Power industry by using SFA. They found that average efficiency was 94% and scale of operations and country's incorporation were vital macroeconomic elements. Castiglione, (2012) used translog production function and concluded that investment in information and telecommunication sector has significant impact on performance of manufacturing industry of Italy.

Mare (2005) used relative locational Gini coefficient along with EG and MS indices to various firms of New Zealand in order to investigate the problems of concentration, specialization and agglomeration. The study found that New Zealand has a more dispersed distribution of concentration across industries, with a higher proportion of employment in industries with very high or very low levels of concentration. An additional noticeable dissimilarity was that employment in New Zealand industries was more likely to be concentrated in a relatively small number of plants, as shown by the high Herfindahl index. Fedderke and Szalontai (2005) also used Gini coefficient and the Rosenbluth index to examine the manufacturing industry concentration in South Africa over the period 1972 to 1996.

### III. Model Specification.

Consider that in time period  $t$ , producers are using non negative inputs  $x^t$  to produce non negative outputs  $y^t$ . Define now the production technology of period  $t$  in terms of the input requirement set, which is

$$L^t(y^t) = \{ x^t : x^t \text{ can produce } y^t \} \text{-----} (1)$$

Assume that  $L^t(y^t)$  is non-empty, closed, convex, bounded and satisfies strong disposability of inputs and outputs.  $L^t(y^t)$  is bounded from below by the input isoquant. The input requirement set, define the technology of production in terms of the input distance function

$$D_i^t(y^t, x^t) = \sup_{\theta} \{ \theta : (x^t / \theta) \in L^t(y^t) \}, \theta > 0 \text{-----} (2)$$

Where the subscript  $i$  denotes input orientation.  $D_i^t(y^t, x^t)$  in (2) is the largest factor by which the input levels in  $x^t$  can be divided while  $x^t$  remains in  $L^t(y^t)$ .  $D_i^t(y^t, x^t)$  is reciprocal to Farrell (1957) input oriented measure of managerial efficiency, which is

$$ME_i^t(y^t, x^t) = \min_{\theta} \{ \theta : (\theta x^t) \in L^t(y^t), \theta > 0 \} \text{-----}(3)$$

When non negative input prices,  $w^t$ , are available one may define technology in terms of the cost function, which is

$$C^t(y^t, w^t) = \min_{x^t} \{ w^t x^t : x^t \in L^t(y^t), w^t > 0 \} \text{-----}(4)$$

$C^t(y^t, w^t)$  defines the minimum cost of producing a given output vector  $y^t$  given the input prices  $w^t$  and the technology of period  $t$ . now the input oriented measure of overall efficiency for  $(y^t, x^t)$  under input prices  $w^t$  as

$$OE_i^t(y^t, x^t, w^t) = C^t(y^t, w^t) / w^t x^t \text{-----}(5)$$

Now price efficiency can be measured as

$$PE_i^t(y^t, x^t, w^t) = C^t(y^t, w^t) * D_i^t(y^t, x^t) / w^t x^t \text{-----}(6)$$

The cost function and distance function as shown in equation 6 are measured by using BCC input oriented DEA model. Data Envelopment Analysis (DEA) has been extensively applied in evaluating the production efficiency at the micro and macro level such as business firms, schools, hospitals, banks and industries etc. Output and input oriented measures are generally used. Output-

oriented measures of efficiency determine the extent to which output could be increased given inputs. On the other hand, input-oriented measures of efficiency identify the extent which inputs could be proportionally reduced to produce a given quantity of output. We follow the Fare tradition and focus on input-oriented measures of efficiency. The most widely used DEA models are CCR and BCC. The CCR model, developed by Charnes, Cooper and Rhodes (1978) based on the pioneer work of Farrell and his efficiency measures (Farrell, 1957), had an input orientation and assumed that production is subjected to constant return to scale (CRS). The BCC model, elaborated by Banker, Charnes and Cooper (1984), assumes that production is subjected to variable return to scale (VRS).

### **Measurements of Industrial Structure**

The structure of the textile industry of Pakistan has been determined by estimating Gini coefficient from market share (expressed as share in overall value added by the firm). The Gini coefficient, invented by the Italian statistician Corado Gini, is a number between zero and one that measures the degree of inequality in distribution (market power) in a given society (an industry). The coefficient will be having zero (0.0 = minimum inequality) for an industry in which each firm received exactly the same market share (i.e. perfect competition) and it will be having a coefficient of one (1.0 = maximum inequality) if only one firm got all the market share (i.e. monopoly). Gini coefficient is calculated by using following formula.

$$G = g/2S, 0 \leq G \leq 1 \text{ ----- (7)}$$

$$g = 2/n(n-1) \left[ (n+1) \sum Si - 2 \sum (n-i+1)Si \right]$$

S = Arithmetic average of market share in all firms

#### IV. Results and Discussion

In this study data of Census of Manufacturing Industries (CMI) 2011 has been used as it is the only latest available data. In this study we used value added of the 589 textile firms as a measure of output, and four input variables namely: value added, number of employees, Raw material and assets possessed by firms, wages and salaries paid by the firm has been used as input cost.

Table 2: Input, Outputs and Explanatory Variables

Output	Value Added of the firms
Inputs	Total Number of Employees
	Raw Material of firms
	Assets of firms
	Energy use
Input price	Salaries of the Staff

Summary statistics of the inputs, outputs and input cost variables is given in Table given below. Values in table reveal that there is higher level of variation in all variables as shown by: mean, maximum, minimum values and standard deviation.

Table: 3 Summary Statistics of Inputs Outputs

	VALUE ADDED	RAW MATERIAL	ENERGY	EMPLOYEES	ASSETS	SALARY
Mean	276373.00	652550.40	61354.18	283.69	323548.50	44986.67
Median	17650.00	48085.00	12412.00	48.00	16150.00	6402.00
Maximum	32382307.00	12814484.00	1621941.00	6078.00	8883902.00	1324957.00
Minimum	36.00	80.00	22.00	3.00	38.00	140.00
Std. Dev.	1506620.00	1496429.00	129547.60	639.43	859009.20	115238.20

The results<sup>2</sup> indicate that the average value of price efficiency (PE) is around 36% which indicates quite high level of inefficiency, which is around 64% in textile firms of Punjab. The 64%

<sup>2</sup> The detailed results are given in appendix, the interested reader may consult it for detailed insight.



Price inefficiency is determined by the 76% managerial inefficiency and 91% overall inefficiency in the textile firms.

Table: 4 Summary Statistics of Inefficiency Scores

	MANAGERIAL EFFICIENCY	OVERALL EFFICIENCY	PRICE EFFICIENCY
Mean	0.246	0.092	0.360
Median	0.149	0.044	0.341
Maximum	1	1	1
Minimum	0.004	0.001	0.022
Std. Dev.	0.258	0.150	0.183
Skewness	1.775	4.030	0.893
Kurtosis	5.375	21.854	4.282
Jarque-Bera	443.821	10230.487	117.649
Probability	0.000	0.000	0.000
Observations	584	584	584

The results further indicate that there are only: 1.19 percent (7 out of 584) firms fully price efficient, 5.99% (35 out of 584) have full managerial efficiency and 1.19 percent (7 out of 584) firms have complete overall efficiency. The top ten most price efficient firms are: Mian Embroidery, Ismail Fabrics II, A.B. Exports (Pvt.) Ltd, Sarfraz Yaqub Textile Mills (Pvt) Ltd, Suphira Fibre Ltd., Kohinoor Textile Mills Ltd., Masood Spinning Mills Ltd., Shahzad Industries, Reliance Weaving Mills Ltd., and Sargodha Jute Mills Ltd. In these firms, allocation of resources is according to their prices (Marginal Productivity of Input = Inputs Prices).

While the ten most price inefficient firms are: Chaudhary Sardar Industries Pakistan (Pvt.) Ltd., Rai Textile Mills Ltd., Muhammad Bukhsh Sons And Company, A. A. Fabrics, Alhamd Corporation (Pvt) Ltd., Euro Pak Textile Ind., Cri International, Madni Export, Arham Enterprises, Waqas Woollen Mills (Pvt.) Ltd. In these firms, marginal productivity of the inputs is less than their prices paid by the firms. It means the removal or mobilization of surplus resources will have no effect on firms' output. Through this not only producer will get advantages but there will also be the low prices of the product of these firms and consumer will get these product at cheap prices. As result the export of the countries will further increase and country will earn more foreign reserves.

Table. 5 Given below represents the frequency distribution of efficiency (Managerial, overall and Price) scores. It reveal that out of 584: there are 205 firms that have Managerial efficiency score from zero to ten percent, indeed this is huge number at the bottom line of

managerial efficiency. It indicates that majority of firms are wasting their resources. There are 444 firms that have overall efficiency score from zero to 10%. It is even larger number as compared to managerial efficiency. It indicates that cost of production is very high in majority of firms. There are 35 firms that have Price efficiency score from zero to 10%. It indicates that the allocation of inputs is much better.

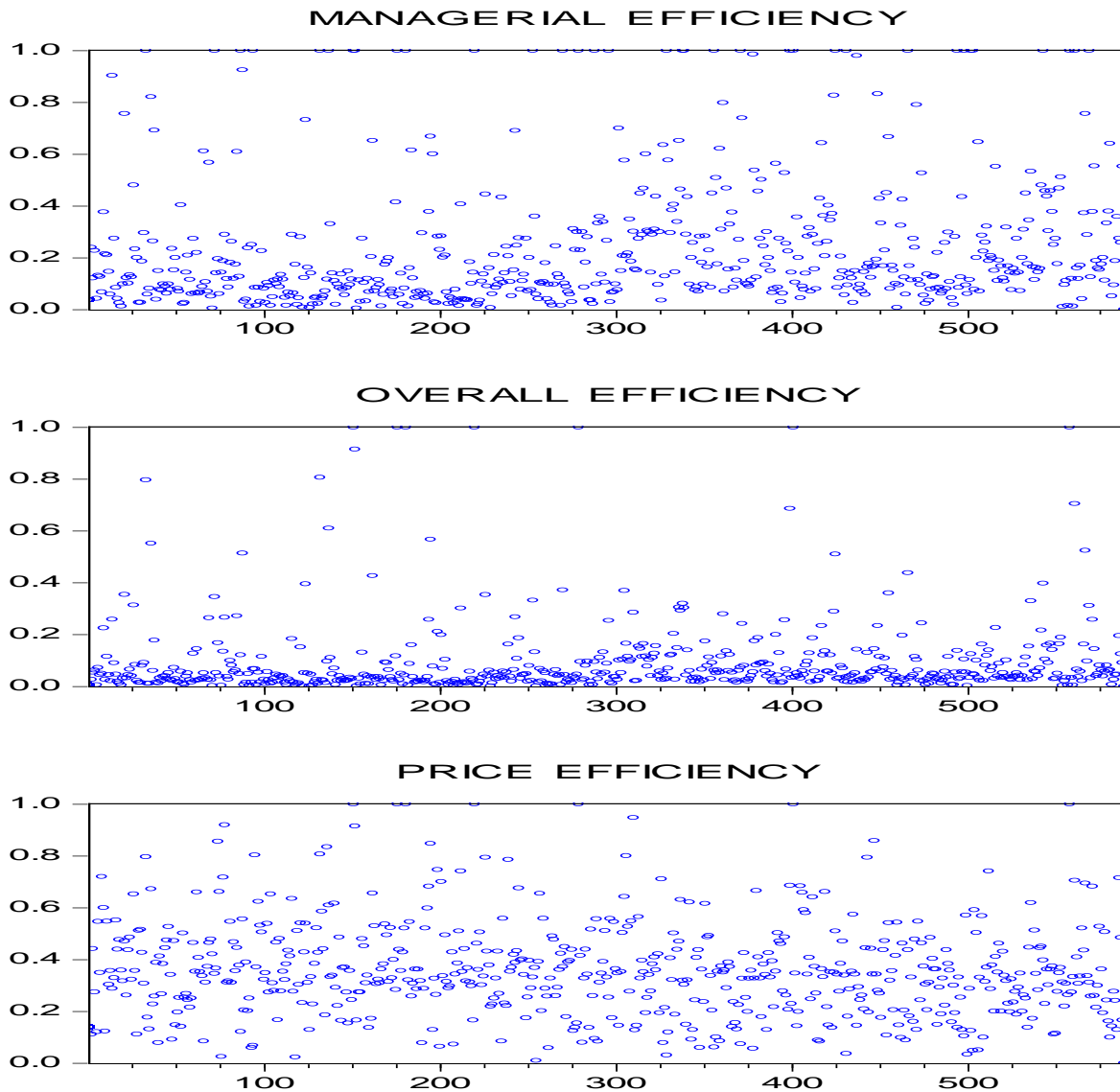
Table: 5 Frequency distribution of efficiency Scores

Efficiency Score	Managerial Efficiency	Overall Efficiency	Price Efficiency
0.0=>.<=0.1	205	444	35
0.1>.<=0.2	156	82	75
0.2>.<=0.3	82	22	106
0.3>.<=0.4	35	16	172
0.4>.<=0.5	27	2	85
0.5>.<=0.6	16	5	55
0.6>.<=0.7	15	2	27
0.7>.<=0.8	6	2	13
0.8>.<=0.9	3	1	6
0.9>.<=1	39	8	10

Similarly it is evident from the table that there are 156 firms which have managerial efficiency score from 10 to 20% , there are 82 firms that have overall efficiency score from 10 to 20% and there are 75 firms that have price efficiency score from 10 to 20% . Likewise it is further evident that there are 27 out of 584 firms that are half way as the managerial efficiency score of these firms is from 40 to 50%. In case of overall inefficiency there are 2 out of 584 firms from 40 to 50%. As for as Price efficiency is concerned there are 85 out of 584 firms that have price efficiency score from 40 to 50%. This table further reveals that there are only 39 firms that have managerial efficiency score from 0.9 to 1, there are merely 8 firms that have overall efficiency score from 0.9 to 1, this is very alarming situation as such a large number of firms are in the highest bracket of managerial and overall inefficiency and there are only 10 firms that have price efficiency score from 0.9 to 1, which is again very alarming.

Figure1 given below is the graphical representation of efficiency scores via dot plots.

**Figure.1 Dot Plots of Efficiency Scores.**



In this figure, on X axis no of firms are given and on Y axis efficiency scores are given. The first graph is related to Managerial Efficiency, it indicates that majority of firms lie below 40% of managerial efficiency. The second graph is related to overall efficiency it is clear from this graph that the majority of firms lie below mere 20% of overall efficiency, it indicates that the cost of production is very high for large number of firms. The last graph is related to price efficiency, it indicates that majority of firms lie between 20 to 60% of efficiency.

The structure of the textile industry of Punjab is also determined by using Gini coefficient. The Gini coefficient, is a number between zero and one that measures the degree of inequality in distribution (market power in present case) in a given society (an industry). The coefficient would lie from zero to one, the zero would represent (0.0 = minimum inequality) for an industry in which each firm received exactly the same market share (i.e. perfect competition) and the coefficient of one (1.0 = maximum inequality) if one firm got all the market share and the rest got nothing (i.e. monopoly). The value of Gini coefficient under present case is = 0.86, it indicates that this value is closer one. The more near to one is the value, more inequality in competition it represents and under present case we may conclude that there is very low level of competition among textile firms. It was further found that one largest firm (Fazal Cloth Mills) was having more than 20% of the market share. Four largest firms have more than 32% of the market share, ten largest firms have more than 44% of market share, 14 largest firms have 50% of the market share. On the other hand 489 small firms have only 10% of the market share.

## **V. Conclusion**

Price efficient textile firms are very useful for the society. Because these have both internal externalities and external externalities. Internally, most efficient firm will be the most profitable for the administrators while externally most efficient firms will provide least price output for the consumer. Keeping in view this fact current study tries to find the price efficiency of textile industry of Punjab and reconnoiters the market competition as well by estimating the Gini coefficient. In first stage price inefficiency has been estimated by using value added as output and number of employees, value of raw material used, Asset value and energy used as inputs and cost of salaries are as input price. The result suggested that there is high level of inefficiency, on average there is 76% managerial inefficiency, 91% overall inefficiency and 64% price inefficiency. The 64% price inefficiency is determined by 76% managerial inefficiency, 91% overall inefficiency. It means that: managerial efficiency is only 24% and overall inefficiency is mere 9%, due to this reason price efficiency is only around 36%. The results further indicate that there are only: 1.19 percent (7 out of 584) firms fully price efficient, 5.99% (35 out of 584) have full managerial efficiency and only 1.19 percent (7 out of 584) firms have complete overall efficiency. The structure of the textile industry of Punjab is also determined by using Gini coefficient. The value of Gini coefficient has been 0.86, it indicates that this value is closer one. The more near to one is

the value, more inequality in competition it represents and under present case we may conclude that there is very low level of competition among textile firms. It was further found that one largest firm was having more than 20% of the market share, 14 largest firms have 50% of the market share. On the other hand 489 small firms have only 10% of the market share.

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## Appendix (Firm wise List of Efficiency Scores)

Name	Managerial	Overall	Price
ZEENAT PRINTING & DYEING MILLS (PVT.) LTD.	0.068	0.009	0.136
PRINT GALLERY,	0.468	0.136	0.29
N.W INDUSTRY	0.246	0.022	0.091
MAQSOOD AHMED WEAVING FACTORY - II	0.356	0.051	0.143
TAUSEEF SILK FACTORY	0.282	0.096	0.342
PARADISE ENTERPRISES	0.429	0.036	0.083
GOLDEN INDUSTRIES	0.333	0.028	0.083
TAHIR BLEACHING PLANT	1	0.437	0.437
SHOUKAT WEAVING FACTORY	0.172	0.059	0.341
ABDUL REHMAN TRADERS ; -175, EAST CANAL ROAD, GULSHEN E HAYAT, FAISALABAD	0.345	0.154	0.446
CHOHAN SILK FACTORY	0.6	0.116	0.193
USWAH WOOLLEN INDUSTRIES	0.6	0.077	0.128
A.D. TEXTILE INDUSTRIES	0.372	0.162	0.435
AL UMER DYING	0.214	0.026	0.122
RUSTAM WEAVING FACTORY	0.449	0.091	0.203
SONA TEXTILE CORPORATION	0.552	0.091	0.165
CRI INTERNATIONAL	1	0.049	0.049
MIAN EMBROIDERY	1	1	1
RANA CLASSIC ELASTIC	0.643	0.233	0.363
AL-AZIZ WEAVING	0.375	0.053	0.14
AL-ABBAS DYEING ART CO.,	0.553	0.144	0.26
M.M. WEAVING FACTORY - II	0.104	0.036	0.346
FARAN ENTERPRISES	0.309	0.116	0.374
HAMEED TRADERS.	1	0.125	0.125
MOON ZARI INDUSTIES	0.832	0.233	0.28
MOON THREAD INDUSTRIES	1	0.319	0.319
RAHAT SILK FACTORY	0.309	0.127	0.409
SAEED BARARGI WORKS INDUSTRY	0.457	0.104	0.229
SUBHAN ULLAH PROCESSING IND.	0.187	0.04	0.214
BISMILLAH SILK FACTORY	0.435	0.139	0.32

QASIM WEAVING FACTORY	0.73	0.241	0.33
GHULAM MUHAMMAD WEAVING FACTORY	0.273	0.089	0.327
ARSLAN HOSIERY	0.551	0.226	0.41
AAZ ZED & COMPANY	0.239	0.026	0.111
MUHAMMAD BUKHSH SONS AND COMPANY	1	0.03	0.03
R.H ROPE INDUSTRY	1	0.509	0.509
AL-NOOR FABRICS	0.902	0.258	0.287
G.M INDUSTRIES	0.2	0.018	0.091
SEVEN STAR INTERNATIONAL - II	0.798	0.279	0.35
H S EMBROIDERS SIALKOT	0.575	0.369	0.642
SHAFQAT SILK FACTORY	0.3	0.046	0.154
AL HILAL WASHING PLANT, STREET NO.1, MUJAHID ABAD, FAISALABAD.	0.533	0.329	0.618
ELAHI SIZING	0.296	0.091	0.307
ZUFLAH INTERNATIONAL COMPANY	0.576	0.069	0.119
CHAUDHARY PROCESSING INDUSTRIES (PVT.) LTD.	0.044	0.013	0.302
A U B SILK FACTORY	0.288	0.114	0.396
ABDULLAH DYING	0.227	0.062	0.274
SHAHZAD INDUSTRIES	0.301	0.285	0.947
BADAR DYEING	0.231	0.032	0.137
ZUBAIR SILK FACTORY	0.436	0.156	0.359
SHAHID WOOLEN MILL	0.425	0.196	0.462
ALI DOTT BUCKRAM FACTORY	0.274	0.09	0.329
ALI SIZING (LEASEE OF ALI SIZING)	1	0.073	0.073
EURO PAK TEXTILE IND.	1	0.048	0.048
MEHRAN SILK FACTORY	0.3	0.102	0.341
INAM PLASTIC ROPE INDUSTRY	0.826	0.289	0.35
ASLAM SILK FACTORY	0.274	0.129	0.47
BILAL SIZING INDUSTRIES	0.125	0.04	0.322
HABIB EMBROIDERY,	0.274	0.195	0.714
INAYAT SIZING INDUSTRY	0.317	0.101	0.317
FAZAL IBRAHIM SILK MILLS (PVT.) LTD.	0.263	0.06	0.227
KHALID HAMEED & COMPANY	0.351	0.111	0.317

MOON STAR INDUSTRIES	0.37	0.05	0.136
RIAZ CALICO PRINTING WORKS	0.666	0.36	0.541
WAQAS SIZING INDUSTRIES (PVT.) LTD.	0.136	0.028	0.205
UMAR INDUSTRY	0.315	0.128	0.407
HARIS DYES AND CHEMICALS	0.311	0.039	0.125
ASIM SILK FACTORY	0.467	0.164	0.351
USMAN SIZING INDUSTRIES	0.113	0.037	0.331
FAROOQ SILK MILLS	0.305	0.077	0.252
EMPIRE TEXTILE INDUSTRIES	0.537	0.175	0.327
NEW PAK SPINNING INDUSTRY	0.333	0.058	0.175
MASTER DYING	0.321	0.118	0.369
IZHAR WOOLLEN MILLS	0.2	0.029	0.147
SARDAR SIZING INDUSTRY	0.15	0.031	0.205
TOP LINK INTRENATIONAL	0.273	0.154	0.564
ANSARI SIZING INDUSTRIES	0.273	0.051	0.187
FARAN PROCESSING INDUSTRIES (PVT.) LTD.	0.635	0.05	0.078
NEW QADRI DYING.	1	0.397	0.397
NEW HEERA CALLENDER	0.286	0.162	0.568
NATIONAL DYEING INDUSTRIES.	0.333	0.081	0.242
AL KARAM EYEING (PVT.) LTD.	0.101	0.045	0.449
RAHAT INDUSTRIES (PVT.) LTD.	0.136	0.022	0.164
AL-FARID SIZING INDUSTRY	0.146	0.044	0.303
HILAL TEXTILE CORPORATION (PVT.) LTD.	0.02	0.005	0.227
AHMED WEAVING FACTORY	0.27	0.061	0.225
AHMED DYEING AND BLEACHING MILLS	0.205	0.079	0.384
BARI SIZING INDUSTRY	0.158	0.024	0.155
BEST EMBROIDERY - II	0.207	0.104	0.503
AL REHMAN WOOLLEN MILLS	0.3	0.024	0.079
HAZAF A DYEING	0.198	0.075	0.378
S.A INDISTRY	0.303	0.091	0.301
ZAIGHAM MIAN SIZING	0.097	0.019	0.198
H SIDDIQUE TEXTILE	0.201	0.068	0.336
HAJRA EMBROIDERY MASHALLAH SIZING INDUSTRY	0.258	0.125	0.484
DILAWAR SIZING INDUSTRIES	0.2	0.04	0.199
AL MUSAWAR EMBROIDERY	0.2	0.1	0.503

HAJI SH. NAWABDIN AND SONS PVT LTD.	0.144	0.027	0.187
OSAMA SILK FACTORY	0.29	0.111	0.382
MATCHING THREAD WORKS	0.651	0.305	0.469
GUJRANWALA CARPET YARN IND (PVT) LTD	0.732	0.395	0.539
MASOOD COTTON PROCESSING UNIT	0.3	0.058	0.193
MADNI SIZING INDUSTRIES	0.143	0.038	0.267
SANA SILK FACTORY	0.244	0.093	0.381
WORLD TEX	0.456	0.187	0.409
CHAMAN PROCESSING INDUSTRIES (PVT.) LTD.	0.2	0.022	0.111
H.M. ISHAQ (PVT.) LTD.	0.112	0.015	0.131
ALLIED NAWAR FACTORY	0.345	0.121	0.351
LUCKY LABEL EMBROIDERY INDUSTRY	0.348	0.096	0.276
NAWAB SIZING INDUSTRIES (PVT.) LTD.	0.106	0.033	0.311
BASHIR SIZING INDUSTRIES	0.121	0.043	0.353
BAHOO DYING	0.289	0.183	0.634
EJAZ DESIGNING & EMBROIDERY CENTRE	0.405	0.203	0.501
NAEEM TEXTILE INDUSTRIES	0.428	0.115	0.269
SUNDAR SIZING INDUSTRIES	0.1	0.025	0.252
DATA HOSIERY FINISHING & DYEING	0.175	0.063	0.362
RIAZ INDUSTRIES	0.257	0.033	0.128
SANTA WOHBING WEAVING FACTORY	0.449	0.112	0.25
AYSHA SIZING	0.086	0.02	0.236
MADNI INDUSTRIES	0.168	0.144	0.858
NOOR SIZING INDUSTRIES	0.158	0.037	0.235
RANA ELASTIC	0.361	0.12	0.332
AMMAR SIZING ISDUSTRIES	0.1	0.03	0.298
BAHA R SIZING INDUSTRIES	0.167	0.038	0.23
MASTER FABERS	0.115	0.025	0.215
SATTAR ANSARI SIZING INDUSTRIES	0.143	0.042	0.292
GHAFFAR SIZING INDUSTRIES (PVT.) LTD.	0.122	0.052	0.428
SABAR SIZING INDUSTRIES	0.169	0.06	0.355
SHAHEEN DYING	0.094	0.014	0.146
TAJ SILK FACTORY	0.176	0.049	0.275
ALI HAJWERI SIZING INDUSTRY	0.113	0.04	0.357
LAYTEX	0.124	0.082	0.665
ALEEM WEAVING INDUSTRIES.	0.563	0.199	0.354



M.B SIZING INDUSTRY	0.108	0.036	0.338
IQBAL EMBROIDERY WORKS	0.163	0.13	0.793
IQBAL DYEING	0.207	0.059	0.286
HUSSAINIA SIZING INDUSTRIES	0.089	0.029	0.326
Z.N. EXPORTS (PVT.) LTD.	0.288	0.186	0.644
HAQ BAHOO SIZING INDUSTRIES,	0.188	0.045	0.241
KASHMIR SIZING INDUSTRIES (PVT.) LTD.	0.1	0.02	0.201
NEW JALLANDER SIZING INDUSTRIES	0.167	0.033	0.2
EHSAN DYEING	0.097	0.024	0.244
MAHMOOD INDUSTRIES	0.206	0.136	0.661
SAKHI PROCESSING MILLS	0.262	0.081	0.31
B.W TEXTILES INDUSTRY	0.079	0.021	0.269
MUZAMMAL DYEING	0.19	0.088	0.461
VKY EXPORT (PVT.) LTD	0.114	0.033	0.287
AL KISSAN SIZING INDUSTRIES	0.148	0.07	0.47
ASGHAR SIZING INDUSTRY	0.098	0.031	0.316
ZAHOOR EMBROIDERY (PVT.) LTD.	0.257	0.057	0.222
SHAKOOR DYING	0.383	0.123	0.321
YASAR IKRAM TEXTILE INDUSTRIES	0.069	0.017	0.247
KHALIL AKBAR EMBROIDERY	0.178	0.035	0.196
MUBASHAR FABRICS	0.186	0.102	0.548
ALI AKBAR HAYAT TEXTILE INDUSTRIE (PVT.) LTD.	0.077	0.026	0.343
SHARIF AND COMPANY	0.156	0.058	0.372
AL-NOOR PROCESSING & TEXTILE MILLS (PVT.) LTD.	0.067	0.049	0.719
HASSAN ENTERPRISES - II	0.401	0.058	0.146
RAI TEXTILE MILLS LTD.	0.143	0.003	0.024
ALI HAIDER TEXTILE INDUSTRIES	1	0.094	0.094
SADIQ TEXTILE	0.259	0.081	0.314
GONDAL KNITTING	0.096	0.04	0.421
AZIZ SPINTEX	0.16	0.065	0.409
SHAFI INDUSTRIES (PVT.) LTD.	0.604	0.271	0.449
MADINA LABEL INDUSTRIES (PVT.) LTD.	0.152	0.064	0.419
JUST ONE THREAD	0.464	0.292	0.63
UNIQUE EMBROIDERY	0.448	0.146	0.327
TARIQ WOOLLEN MILLS (PVT.) LTD.	0.094	0.054	0.57

WAQAS WOOLLEN MILLS (PVT.) LTD.	0.097	0.006	0.058
ASAAD SILK FACTORY	0.199	0.085	0.425
ZIA-UL-QAMAR SPINNING MILLS PVT. LTD.	0.026	0.009	0.348
MUHAMMAD SADIQ MIRAJ DIN ENTERPRISES	0.182	0.08	0.439
SALEEM WEAVING FACTORY	0.457	0.165	0.361
QAMAR COTTON INDUSTRIES	0.45	0.048	0.107
HAYAT TRADING AND INDUSTRIAL INTERNATIONAL ENTERPRISES (PVT.) LTD.	0.14	0.046	0.332
SILVER EMBERODERY	0.156	0.02	0.127
PEHLWAN SIZING INDUSTRIES	0.076	0.025	0.324
BISMILLAH SIZING INDUSTRIES	0.143	0.028	0.197
BISMILLAH ARIFA EMBROIDERY	0.153	0.081	0.527
SAEED SPORTS	0.266	0.088	0.331
AL-HAMD WEAVING MILLS	0.08	0.017	0.216
MADINA WEAVING FACTORY	0.25	0.028	0.111
GULSHAN SIZING INDUSTRIES	0.111	0.039	0.35
TOPI SHOES INDUSTRIES	0.084	0.067	0.802
WATEX PAKISTAN (PVT.) LTD.	0.226	0.114	0.505
ALI RAZA TEXTILE MILLS PVT, LIMITED	0.119	0.033	0.273
FEROZE DIN TEXTILES	0.254	0.066	0.261
BASHIR WOOL SPINNER	0.133	0.065	0.485
RAHMANIA TEXTILE MILLS (PVT) LTD.	0.219	0.032	0.148
MADINA SIZING INDUSTRY	0.121	0.052	0.43
NASRULLAH SIZING INDUSTRY	0.273	0.031	0.114
M/S CHUDHARY SILK FACTORY	0.377	0.141	0.374
HIRRA TENTAGE INDUSTRIES,	0.235	0.022	0.091
SHAHZAD IMRAN DYEING INDUSTRIES	0.124	0.025	0.203
FAISAL SIZING INDUSTRIES	0.134	0.037	0.277
M. A. TEXTILE (PVT.) LTD., (OLD NAME SAEED TEXTILE INDUSTRIES (PVT.) LTD.)	0.095	0.034	0.356
FURQAN TEXTILE	0.225	0.046	0.206
FAYYAZ WOOLLEN INDUSTRIES (PVT.) LTD.	0.081	0.011	0.131
AL-FATEH WOOLLEN INDUSTRIES	0.075	0.018	0.243

MUJAHAD TEXTILE INDUSTRIES (PVT.) LTD.	0.114	0.037	0.323
GONDAL DYEING MILLS	0.098	0.038	0.383
I. G. WOOLLEN MILLS	0.145	0.03	0.208
AL-GHAFOOR INDUSTRIES (PVT.) LTD.	0.179	0.052	0.288
SALAMAT INDUSTRY	0.437	0.158	0.361
MIAN AND COMPANY	0.273	0.127	0.464
AZEEM HOSIERY FINISHING PLANT	0.138	0.039	0.285
M/S AL BARKAT SIZING INDUSTRIES	0.21	0.115	0.547
HUMAYUN WOOLLEN MILLS	0.152	0.072	0.472
ABID WEAVING ( PVT.) LTD.	0.2	0.079	0.396
MUSTNEER BROTHERS PVT.LTD.	0.067	0.024	0.352
ALPHA FABRICS	0.085	0.043	0.502
NAVEED & HAMZA SILK FACTORY	0.143	0.04	0.277
SHAMSI SIZING INDUSTRIES	0.072	0.025	0.346
REHMAN DYEING (PVT.) LTD.	0.084	0.023	0.273
NAEED MUNEER DYEING	0.143	0.024	0.165
FINE STAR PROCESSING MILLS (PVT.) LTD.	1	0.137	0.137
ABID KALEEM SPINNING MILLS (PVT.) LTD.	0.071	0.018	0.254
AMIN POWER LOOMS	0.501	0.089	0.178
AL HASSAN SIZING INDUSTRIES	0.139	0.038	0.275
ZAMZAM TEXTILE INDUSTRIES (PVT.) LTD.	0.082	0.027	0.322
NORPAK INTERNATIONAL	0.414	0.117	0.283
ABUBAKAR TEXTILE	0.159	0.048	0.299
HAFIZ EMBROIDERY	0.206	0.165	0.8
AL-RIZVAN DYEING INDUSTRIES,	0.376	0.225	0.599
SIDDIQUE DYEING INDUSTRIES	0.283	0.198	0.7
A. A. FABRICS	0.06	0.002	0.033
HAROON TEXTILE INDUSTRIES	0.069	0.018	0.261
AL-NADIR INDUSTRIES	0.097	0.06	0.621
MASTER DYEING INDUSTRIES	0.208	0.051	0.244
RYOZO INTERNATIONAL (PVT.) LTD.	0.621	0.053	0.085
N.N.EXPORT INTERNATIONAL (PVT.) LTD.	0.508	0.051	0.1
AL REHMAN TEXTILE PROCESSING	0.056	0.019	0.339
SUAK ENTERPRISES (PVT) LTD	0.308	0.081	0.262

ALI RAZA ENTERPRISES PVT. LTD.	0.084	0.046	0.551
SONY INDUSTRIES.	0.2	0.039	0.193
BRIGHTWAY ENTERPRISES	0.181	0.065	0.361
JAMAL EMBROIDERY	0.187	0.139	0.741
MADNI EXPORT	0.647	0.032	0.05
AYESHA TEXTILE INDUSTRIES PROCESSING	0.122	0.032	0.261
BRIGHT INDUSTRIES (PVT.) LTD	0.125	0.032	0.257
SAEED FABRICS (PVT.) LTD.	0.086	0.027	0.316
CHOUDHARY BROTHERS	0.065	0.011	0.174
EMBRODIRY PVT LTD	0.151	0.022	0.145
DATA HAJWARI SIZING INDUSTRIES	0.08	0.023	0.294
UMER ABU BAKKAR SILK FACTORY	0.468	0.163	0.348
SADIQ WOOLLEN MILLS (PVT.) LTD.	0.078	0.025	0.328
ADIL HASSAN TEXTILES	0.149	0.049	0.331
RIAZ SIZING INDUSTRIES	0.188	0.08	0.425
TALIB MUDASSAR TEXTILE INDUSTRIES	1	0.061	0.061
ARY SPINNING MILLS	0.118	0.036	0.306
AL-HILAL WEAVING MILLS	0.143	0.033	0.229
AHMAD TEXTILE PROCESSING INDUSTIES	0.121	0.033	0.276
NEW MASTER INDUSTRIES	0.162	0.056	0.345
KHAWAJA WOOLEN MILLS (PVT.) LTD.	0.071	0.013	0.185
ASFYYA SONS (PVT.) LTD.	0.149	0.052	0.352
KARACHI DYEING (PVT.) LTD.	0.069	0.017	0.252
EVERFINE TEXTILE INDUSTRIES(PVT.) LTD.	0.141	0.033	0.231
GOLDEN FACILITY TEXTILES (PVT.) LTD.	0.074	0.02	0.266
AMANA TEXTILES	0.231	0.014	0.063
MASTER TEXTILE PROCESSING INDUSTRIES	0.06	0.015	0.25
AHMED ZUBAIR TEXTILE	0.064	0.025	0.394
AL JILLANI TEXTILE INDUSTRIES (PVT.) LTD.	0.095	0.029	0.309
TARIQ SPINNING	0.25	0.015	0.059
SONY INDUSTRIES	0.237	0.048	0.201
DATA SIZING	0.15	0.03	0.2
REHAN TEX INTERNATIONAL	0.262	0.057	0.216
ZIS TEXTILES (PVT.) LTD.	0.044	0.007	0.158
BIN BASHIR TEXTILE MILLS (PVT.) LTD.	0.125	0.032	0.253

CITY EMBROIDERS (PVT) LTD.,	0.099	0.046	0.465
NISHITEX ENTERPRISES.	0.2	0.04	0.198
MEHBOOB AMIN (PVT.) LTD.	0.098	0.036	0.363
YOUSAF TEXTILE INDUSTRY	0.511	0.188	0.368
A.T. FABRICS	0.037	0.005	0.139
MUHAMMAD RAFIQ DHULAI WORKS	0.296	0.12	0.405
SALEEM ENTERPRISES (PVT.) LTD.	0.088	0.016	0.178
RIAZ FABRICS (PVT.) LTD.	0.118	0.037	0.311
COMMERCIAL TEXTILE DYEING AN PRINTING INDUSTRIES	0.149	0.051	0.343
S.S.P WEAVING	0.089	0.059	0.658
A.H JET DYING	0.239	0.114	0.478
ZARA TEXTILE (PVT)LTD.	0.224	0.022	0.099
ADEEL CLOTH	0.176	0.024	0.137
RAFIQUE FABRICS (PVT.) LTD.	0.098	0.022	0.221
HILAL ENTERPRISES (PVT.) LTD.	0.114	0.062	0.547
HOME STYLES (PVT.) LTD.	0.298	0.114	0.383
GHULAM MURTAZA TEXTILE MILLS (PVT.) LTD.	0.038	0.015	0.388
HABIB HASEEB SPINNING MILLS (PVT.) LTD.	0.007	0.001	0.128
HAIDER WEAVING FACTORY	1	0.685	0.685
ESCORTS INTERNATIONAL	0.111	0.034	0.306
UNIVERSAL TRADING CORPORATION	0.168	0.03	0.181
HUSSAN BROTHERS	0.077	0.026	0.341
RAJPUT ENTERPRISES (PVT.) LTD.	0.078	0.029	0.368
SILVER FIBRE SPINNING MILL	0.031	0.006	0.204
BUTT CARPETS INDUSTRIES (PVT) LTD.	0.063	0.017	0.276
M. A. S. TEXTILES (PVT.) LTD.	0.107	0.038	0.353
MILLI TEXTILES (PVT.) LTD.	0.063	0.022	0.353
CHAUDHARY SARDAR INDUSTRIES PAKISTAN (PVT.) LTD.	0.173	0.004	0.022
RANA HOSIERY & TEXTILE MILLS (PVT.) LTD.	0.187	0.134	0.717
HAFIZ DYING (PVT) LIMITED,	0.199	0.063	0.314
M/S SHADMAN DYEING.	0.157	0.07	0.444
FATIMA ENTERPRISES LTD. - III	0.008	0.002	0.232

ORIENTAL WOOLLEN MILLS (PVT.) LTD. - II	0.087	0.035	0.407
SHERCO TEX	0.058	0.005	0.088
JAMAL TEXTILE INDUSTRIES (PVT.) LTD.	0.043	0.025	0.585
SHAHID TEXTILE INDS (PVT.) LTD.	0.324	0.032	0.098
PAKISTAN INTERLINING PROCESSING & INDUSTRIES (PVT.) LTD.	0.084	0.028	0.331
ARAIN TEXTILE MILLS LTD.	0.012	0.004	0.358
SITARA FABRIC LTD.	0.014	0.007	0.509
VARIETY DYEING PVT. LTD	0.17	0.057	0.335
ALI & SAMEER INTERNATIONAL.	0.112	0.057	0.506
AL-BARKA FABRICS (PVT.) LTD.	0.024	0.002	0.072
ITTEHAD TEXTILE INDUSTRIES (PVT.) LTD.	0.023	0.01	0.426
ALI AND SAMEER INTERNATIONAL	0.114	0.058	0.512
MUBARIK PROCESSING MILLS (PVT.) LTD.	0.111	0.069	0.616
RM FABRICS	0.044	0.03	0.683
RAHAT WOOLLEN MILLS (PVT.) LTD.	0.06	0.039	0.661
COTTON YARN (PVT.) LTD. - II	0.078	0.038	0.484
AL-KARAM PROCESSING MILLS (PVT.) LTD.	0.066	0.028	0.434
A-ONE ORIENTAL RUGS CORPORATION	0.358	0.046	0.128
AL-HAMRA FABRICS (PVT.) LTD.	0.041	0.011	0.257
OLYMPIA BLENDED FIBRE MILLS LTD.	0.004	0.002	0.42
WANHAR TEXTILES (PVT.) LTD.	0.11	0.044	0.401
NATIONAL FABCON	0.104	0.068	0.654
FARHAT INDUSTRY	0.068	0.037	0.545
THE CARPET HOUSE	0.29	0.043	0.149
KHYBER TEXTILE INDUSTRIES	0.123	0.054	0.442
NEW AL-RIAZ FABRICS	0.104	0.053	0.51
USMAN CLOTH MILLS (PVT.) LTD.	0.077	0.031	0.397
FATEH TEXTILE INDUSTRIES (PVT.) LTD.	0.058	0.01	0.176
SUFI TEXTILE MILLS (PVT.) LTD.	0.032	0.01	0.309
CANARIA TEX. (PVT.) LTD.	0.211	0.053	0.25
PIONEER JUTE MILLS (PVT) LTD	0.039	0.017	0.441
JUBILEE TEXTILE INDUSTRIES (PVT.) LTD	0.052	0.023	0.44
QAMAR FABRICS	0.141	0.052	0.365
AKBAR FABRICS (PVT.) LTD.	0.131	0.072	0.546

AL-BARAKAH INDUSTRIES (PVT.) LTD.	0.076	0.022	0.289
ELAHI COTTON MILLS LIMITED.	0.042	0.022	0.52
IQRA WOOLLEN MILLS(PVT.) LTD.	0.045	0.017	0.384
AL AZHAR TEXTILE MILL LTD.	0.013	0.005	0.362
BASHIR PRINTING INDUSTRIES (PVT.) LTD.	0.101	0.044	0.436
EHSAN ILAHI INDUSTRIES (PVT.) LTD.	0.027	0.014	0.515
NADEEM SOHAIL DYEING.	0.48	0.216	0.45
MUMTAZ MAHAL TEXTILE PROCESSING MILLS (PVT.) LTD.	0.062	0.025	0.406
AL MUMTAZ TEXTILE INDUSTRIES	0.127	0.044	0.349
AL-KARIM INDUSTRIES (PVT.) LTD.	0.058	0.021	0.356
SIDDIQUE PROCESSING MILLS (PVT.) LTD.	0.103	0.046	0.451
D.S.TEXTILE LIMITED.	0.014	0.004	0.263
SKY INDUSTRIES	0.077	0.045	0.591
M/S SKY INDUSTRES	0.077	0.045	0.591
S.M NAZIR AND COMPANY	0.08	0.026	0.319
N.B THREAD WORKS	0.088	0.03	0.336
HAFEEZI KNIT WEAR (PVT.) LTD.	0.062	0.029	0.474
MOTI FABRICS (PVT.) LTD.	0.14	0.047	0.338
AALA PROCESSING INDUSTRIES (PVT.) LTD.	0.046	0.015	0.321
COMZONE SPINNING (PVT.) LTD.	0.086	0.028	0.327
KHAWAJA NASIRUDDIN & SONS (PVT.) LTD.	0.128	0.027	0.213
ANMOL TEXTILE MILLS LTD.	0.042	0.018	0.428
NEKA PAK INDUSTRIES	0.175	0.062	0.354
MEHRBAN FABRICS (PVT) LTD.	0.135	0.047	0.346
AL-HARAM TEXTILE INDUSTRIES (PVT.) LTD.	0.08	0.035	0.437
BEST EXPORTS (PVT.) LTD.	0.006	0.001	0.219
EHSAN WOOLLEN SPINNING MILLS	0.186	0.08	0.426
BUTT SILK MILLS (PVT) LTD.	0.233	0.083	0.356
AFINO TEXTILE MILLS (PVT.) LTD.	0.136	0.046	0.335
YASIN AZIZ TEXTILES (PVT.) LTD.	0.526	0.244	0.463
SHAHAB DYING PRINTING MILLS (PVT.) LTD.	0.127	0.048	0.377
MANZOOR MAJID (PVT.) LTD.	1	0.609	0.609
HILAL FABRICS (PVT.) LTD.	0.276	0.186	0.675
KHURSHID SPINNING MILLS LTD.	0.022	0.011	0.501

DAWOOD TEXTILE PRINT INDUSTRY (PVT.) LTD.	0.027	0.014	0.511
MASTER WOOL SPINNERS	0.193	0.066	0.343
RAFIQUE PROCESSING TEXTILE INDUSTRIES (PVT.) LTD.	0.084	0.041	0.485
RASHID TEXTILE PRINTING INDUSTRIES (PVT.) LTD.	0.041	0.016	0.391
SA SAMAD AND COMPANY	0.071	0.037	0.529
NOOR TEXTILE MILLS	0.155	0.06	0.389
ALI HAQ SPINNING (PVT.) LTD.	0.015	0.006	0.37
MADNI DYING AND PRINTING MILLS	0.163	0.056	0.343
AHSAN ENTERPRISES	0.164	0.028	0.171
TRITAX COTTON MILLS	0.01	0.003	0.312
HILAL FASHION GARMENTS (PVT.) LTD.	0.206	0.162	0.785
SLEMAN SPINNING MILLS LTD.	0.015	0.007	0.461
ASHAR INTERNATIONAL (PVT.) LTD.	0.054	0.02	0.373
A. Q. TEXTILES (PVT.) LTD.	0.274	0.048	0.174
GOLDEN FIBRES(PVT) LTD,	0.082	0.029	0.362
ITTEHAD FABRICS (PVT.) LTD.	0.049	0.026	0.521
FARDOS TEXTILE INDUSTRIES	0.097	0.023	0.236
SAYA COTTON MILLS (PVT.) LTD.	0.16	0.061	0.378
THE NATIONAL SILK AND RAYON MILLS LIMITED	0.029	0.013	0.438
H A INDUSTRIES (PVT.) LTD.	0.089	0.04	0.444
SHALIMAR INDUSTRIES	1	0.121	0.121
PRIDE SPINNING MILLS (PVT.) LTD. - II	0.041	0.015	0.352
PRIME DYING INDUSTRIES,	0.228	0.108	0.471
CHOTI TEXTILE MILLS LTD.	0.015	0.01	0.652
ABU BAKAR TEXTILE MILLS (PVT.) LTD.	0.015	0.006	0.382
STAR TEXTILE MILLS	0.139	0.081	0.579
YASIR AFZAL TEXTILE (PVT.) LTD.	0.107	0.038	0.358
MAKKI DATA SIZING INDUSTRIES	0.338	0.148	0.438
FAISAL ASAD TEDTILE MILLS LTD	0.013	0.004	0.32
MUHAMMAD ANWAR AND BROTHERS	0.07	0.023	0.33
PARAGON FASHIONS	0.228	0.112	0.492
RAHIM BAKSH TEXTILE MILLS LIMITED,	0.045	0.016	0.362

SHARIF TEXTILE INDUSTRIES (PVT.) LTD.	0.095	0.041	0.431
ARHAM ENTERPRISES	0.985	0.055	0.056
M. D. TEXTILE SPINNING MILLS( PVT) LTD.	0.023	0.007	0.304
MKB SPINNING MILLS (PVT.) LTD.	0.019	0.006	0.3
MOGHAL TEXTILE INDUSTRIES (PVT) LTD.	0.33	0.11	0.332
SITARA LABELS (PVT.) LTD.	0.103	0.058	0.558
MIAN GHOUS BUX (PVT.) LTD.	0.069	0.036	0.522
NOOR INDUSTRIES	0.168	0.074	0.437
NAGRA SPINNING MILLS (PVT.) LTD.	0.019	0.006	0.291
NOOR FATIMA TEXTILE PROCESSING INDUSTRIES (PVT.) LTD.	0.05	0.024	0.478
NIMRAY INTERNATIONAL(PVT) LTD.	0.144	0.041	0.282
ADIL TAHIR SIZING	0.329	0.122	0.371
FIRDOUS CLOTH MILLS (PVT.) LTD.	0.052	0.019	0.369
BHATTI FABRICS	0.098	0.054	0.556
ALLAWASAYA SPINNING MILLS (PVT.) LTD.	0.016	0.008	0.49
U.T.S EXPORT TRADING COMPANY.	0.288	0.097	0.336
SOHNY DHARTI WEAVING IND. PVT. LTD.	0.116	0.041	0.353
WORTH TEN INTERNATIONAL	0.379	0.061	0.161
KHALID NAZIR SPINNINGS LTD.	0.022	0.008	0.36
NOOR HABIB INDUSTRIES (PVT.) LTD.	0.614	0.159	0.258
ASLAM TEXTILE MILLS LTD.	0.029	0.013	0.46
ORIENT COATING & FINISHING MILLS (PVT.) LTD.	0.038	0.012	0.316
HALA ENTERPRISES LIMITED.	0.035	0.025	0.71
ASHER IMRAN SPINNING MILLS (PVT.) LTD.	0.025	0.007	0.264
AL-FAJR ENGINEERS (PVT.) LTD.	0.281	0.054	0.193
SHAHBAZ GARMENTS (PVT.) LTD. SPINNING UNIT	0.007	0.004	0.543
AL-REHMAN CLOTH EXPORT (PVT.) LTD.	0.282	0.017	0.059
HASHIM TEXTILE AND KNITWEARS (PVT.) LTD.	0.247	0.107	0.433
AKRAM COTTON MILLS LTD.	0.015	0.006	0.423
Z.R ENTERPRISES	1	0.311	0.311
BISMA TEXTILE MILLS LTD.	0.022	0.009	0.428

ARAIN MILLS LTD.	0.025	0.012	0.476
NISAR HAMEED TEXTILES (PVT.) LTD.	0.097	0.046	0.477
DAWOOD EXPORTS (PVT.) LTD. - II	0.034	0.011	0.311
SHAMI TEXTILES	0.085	0.029	0.337
MAJEED FABRICS (PVT.)LTD	0.076	0.026	0.347
SARGODHA CLOTH PROCESSING INDUSTRIES (PVT.) LTD.	0.119	0.055	0.467
SARFRAZ TEXTILE MILLS (PVT.) LTD.	0.022	0.006	0.259
SAJJAD TEXTILE MILLS LTD. - II	0.036	0.005	0.136
CHENAB LTD. SPINNING UNIT	0.026	0.015	0.573
CHAKWAL TEXTILE MILLS LTD.	0.018	0.009	0.51
JSL INTERNATIONAL	0.283	0.174	0.615
J. A. TEXTILE MILLS LTD.	0.08	0.016	0.196
WINTEX EXPORTS (PVT.) LTD.	0.135	0.046	0.341
FAIRDEAL WEAVING MILLS (PVT.) LIMITE	0.069	0.03	0.437
AHMAD DIN TEXTILE MILLS (PVT) LTD.	0.035	0.018	0.505
IONA ENTERPRISES (NEW NAME A.G. TEXTILE MILLS)	0.084	0.029	0.342
SUNRAYS TEXTILE MILLS LTD.	0.012	0.003	0.25
SAHIB TEXTILES (PVT.) LTD.	0.181	0.099	0.546
INDUS DYEING & MANUFACTURING CO. LTD.	0.012	0.004	0.333
SIDDIQSONS DYEING AND PRINTING INDUSTRIES (PVT.) LTD.	0.107	0.059	0.558
OLYMPIA SYNTHETCS LTD.	0.121	0.037	0.307
KHDKHAR TEXTILE MILLS LTD.	0.022	0.006	0.29
BARKAT TEXTILE MILLS LTD.	0.057	0.025	0.438
UNITED TEXTILE PRINTING INDUSTRIES (PVT.) LTD.	0.112	0.031	0.279
ASHFAQ TEXTILE MILLS LTD.	0.048	0.015	0.309
SHARIF FABRICS	0.924	0.513	0.555
MAGNA TEXTILE INDUSTRIES (PVT.) LTD.	0.084	0.025	0.305
SARDAR PUR TEXTILE MILLS LTD.	0.036	0.019	0.516
ALI AKBAR SPINNING MILLS LTD.	0.027	0.009	0.327
KHALID SIRAJ TEXTILE MILLS , LIMITED	0.048	0.014	0.297
BILAL TEXTILES (PVT.) LTD. - II	0.029	0.016	0.557
ASIM TEXTILE MILLS LTD.	0.03	0.016	0.531

BASHIR COTTON MILLS (PVT.) LTD.	0.028	0.009	0.326
TAXILA COTTON MILLS LIMITED.	0.295	0.023	0.077
SARDAR PUR TEXTILE MILLS LTD.	0.041	0.021	0.52
IMPERIAL TEXTILE MILLS LTD.	0.037	0.013	0.367
LATIF ENTERPRISES.	0.64	0.063	0.099
ARSHAD TEXTILE MILLS (PVT.) LTD.	0.034	0.013	0.385
H. A. HAQ SPINNING MILLS (PVT.) LTD.	0.071	0.023	0.327
ARAIN FIBRES LTD.	0.042	0.018	0.439
ABDULLAH FBIREES (PVT)LTD.	0.085	0.025	0.292
BHIMRA TEXTILE MILLS (PVT.) LTD.	0.059	0.013	0.227
JAMAL RUG WEAVERS (PVT.) LTD.	1	0.303	0.303
KOHINOOR MILLS LTD.	0.026	0.007	0.253
SITARA CHEMICAL INDUSTRIES LTD.	0.039	0.015	0.389
JEEA AHSEN TEXTILES (PVT.) LTD.	0.435	0.056	0.129
GLAMOUR TEXTILE MILLS LTD.	0.149	0.012	0.078
ANJUM TEXTILE MILLS (PVT.) LTD.	0.052	0.021	0.413
AHMAD HASSAN TEXTILE MILLS LTD.	0.042	0.005	0.12
H. A. R. TEXTILE MILLS (PVT.) LTD.	0.095	0.023	0.243
DAWOOD LAWRENCEPUR LTD.	0.28	0.151	0.54
HAMID TEXTILE MILLS LTD.	0.098	0.052	0.526
KAMAL INDUSTRY	0.048	0.019	0.399
SHAMA EXPORTS (PVT.) LTD.	0.113	0.031	0.274
SILVER LINE SPINNING MILLS (PVT.) LTD.	0.433	0.036	0.084
SHAMS TEXTILE MILLS LTD.	0.03	0.008	0.274
FAISAL SPINNING MILLS LTD.,	0.051	0.007	0.142
SOHAIL TEXTILE MILLS LTD.,	0.068	0.019	0.286
ISMAIL FABRICS - II	1	1	1
THAL LTD. (JUTE DIVISION)	0.059	0.017	0.287
HUSSAIN SPINNING MILLS (PVT.) LTD	0.062	0.012	0.189
RELIANCE COTTON SPINNING MILLS LTD.	0.049	0.018	0.361
ALLAWASAYA TEXTILE & FININSHING MILLS LTD.	0.057	0.022	0.382
REDCO TEXTILES LTD.	0.056	0.021	0.37
TAHIR RAFIQUE TETILE MILLS (PVT) LTD	0.095	0.021	0.219
CHINIOT TEXTILE MILLS LTD.	0.092	0.025	0.273
BHARARA TEXTILES	1	0.253	0.253

FASHION & TRENDS (PVT.) LTD.	0.243	0.054	0.221
IDEAL SPINNING MILLS LTD.	0.058	0.023	0.395
KHALID SHAFIQUE SPINNING MILLS LTD.	0.084	0.028	0.327
NIMRA TEXTILE (PVT.) LTD.	0.069	0.026	0.372
IHSAN COTTON PRODUCTS (PVT.) LTD. - II	0.057	0.025	0.444
MAHROZ TEXTILE INDUSTRIES	0.755	0.524	0.694
NAVEED BROTHERS	0.611	0.051	0.084
AMIN TEXTILE MILLS (PVT.) LTD	0.094	0.017	0.18
MONNOO INDUSTRIES LTD.	0.068	0.027	0.39
ASKARI WOOLLEN MILLS	0.755	0.354	0.47
IHSAN RAIWIND MILLS PVT. LTD.	0.094	0.026	0.276
ISHAQ TEXTILE MILLS LTD.	0.067	0.021	0.314
FIVE STAR TEXTILE INDUSTRIES (PVT) LTD	0.691	0.177	0.257
RIAZ ENTERPRISES (PVT.) LTD.	0.699	0.101	0.145
ASHIANA COTTON PRODUCTS LTD.	0.085	0.053	0.623
RESHAM TEXTILE INDUSTRIES LTD.	0.148	0.023	0.153
SHAFI TEXTILE LTD.	0.1	0.041	0.414
SUHAIL JUTE MILLS LTD. - III	1	0.104	0.104
ISHAQ ENGINEERING WORKS	0.07	0.025	0.358
SAMIN TEXTILE LTD.	0.117	0.029	0.244
KAY & EMMS (PVT.) LTD.	0.163	0.079	0.486
TAYYAB TEXTILE MILLS LTD.	0.183	0.057	0.312
IMAGE TEXTILE MILLS (PVT.) LTD.	0.651	0.426	0.655
DECENT TEXTILE INDUSTRIERS (PVT.) LTD.	0.79	0.102	0.129
KAUSAR PROCESSING INDS. (PVT.) LTD.	0.403	0.057	0.141
GOHAR TEXTILE MILLS (PVT) LTD.	0.077	0.032	0.412
QADRI TEXTILE MILLS LTD. BAHAWALNAGAR	1	0.345	0.345
SALLY TEXTILE MILLS LTD.	0.062	0.037	0.598
GULISTAN SPINNING MILLS LTD.	0.162	0.05	0.31
AYESHA SPINNING MILLS LTD,	0.103	0.056	0.538
SARITOW SPINNING MILLS LTD.	0.174	0.062	0.355
RUPAFIL LTD.	0.072	0.023	0.317
EASTERN SPINNING MILLS LTD.	0.116	0.031	0.268
ZEPHYR TEXTILES LTD.	0.203	0.035	0.171

CRESENT JUTE PRODUCTS LTD. JARANWALA	0.979	0.142	0.145
MAYFAIR LTD.	0.136	0.04	0.291
CHAKWAL SPINNING MILLS LTD	0.121	0.053	0.441
HIRA TEXTILE MILLS LTD.	0.122	0.044	0.36
AL-NASR TEXTILES LTD.	0.125	0.05	0.403
COLONY MILLS LIMITED	0.117	0.019	0.166
ACRO TEXTILE MILLS LTD.	0.108	0.033	0.301
IHSAN SONS (PVT) LTD	0.245	0.063	0.259
COLONY INDUSTRIES PVT. LTD	0.062	0.017	0.278
ELLCOT SPINNING MILLS LTD.	0.087	0.042	0.48
THE LAHORE TEXTILE AND GENERAL MILLS LTD.	1	0.067	0.067
ZAFAR FABRICS (PVT.) LTD.	0.185	0.091	0.494
PAK KUWAIT TEXTILES LTD.	0.139	0.049	0.356
ZAHIDJEE TEXTILE MILLS LTD.	0.119	0.04	0.339
NISAR SPINNING MILLS (PVT.) LTD.	0.28	0.096	0.342
ALHAMD CORPORATION (PVT) LTD.	1	0.036	0.036
RUSTAM TOWEL (PVT.) LTD.	0.359	0.132	0.368
A.B. EXPORTS (PVT.) LTD.	1	1	1
SWEETY TEXTILE (PVT.) LTD	0.69	0.267	0.388
INDUS HOME LIMITED,	0.09	0.039	0.431
CRESCENT SUGAR MILLS & DISTILLERY LIMITED	0.173	0.093	0.536
SITARA TEXTILE INDUSTRIES LTD.	0.274	0.131	0.479
MASOOD FABICS LTD.	0.209	0.103	0.494
GULSHAN SPINNING MILLS LTD.	0.16	0.087	0.545
NIAGARA MILLS (PVT) LTD.	0.338	0.132	0.391

RAFIQ SPINNING MILLS PVT LTD	0.195	0.167	0.855
M.K.SONS(PVT) LTD,	0.219	0.144	0.659
KOHINOOR SPINNING MILLS LIMITED,	0.116	0.096	0.834
AMER COTTON MILLS (PVT) LTD	0.282	0.211	0.746
AHMED FINE TEXTILE MILLS LTD.	0.229	0.095	0.414
DIAMOND FABRICS LTD. - II	0.527	0.256	0.486
NOOR FATIMA FABRICS (PVT.) LTD.	0.567	0.264	0.464
SARFRAZ YAQUB TEXTILE MILLS (PVT.) LTD.	1	1	1
TATA TEXTILE MILL LTD.	0.406	0.301	0.741
SADAQAT LTD.	0.445	0.353	0.793
BISMILLAH TEXTILES LTD.	0.48	0.313	0.652
SARGODHA JUTE MILLS LTD.	1	0.914	0.914
FAISAL FABRICS LTD.	1	0.796	0.796
SAPPHIRE FINISHING MILLS LTD.	0.377	0.257	0.682
SAPPHIRE FINISHING MILLS LTD.,	0.377	0.257	0.682
RIAZ TEXTILE MILLS (PVT.) LTD.	1	0.331	0.331
SHUJABAD WEAVING MILLS LTD.	1	0.371	0.371
RELIANCE WEAVING MILLS LTD.	0.289	0.266	0.919
FATIMA ENTERPRISES LIMITED	1	0.704	0.704
SUPHIRE FIBRE LTD.	1	1	1
MASOOD SPINNING MILLS LTD.	1	1	1
QUETTA TEXTILE MILLS LTD.	0.668	0.566	0.847
J. K. SPINNING MILLS LTD.	1	0.806	0.806
KOHINOOR TEXTILE MILLS LTD.	1	1	1
CRESCENT BAHUMAN LTD.	0.082	0.043	0.52
FAZAL CLOTH MILLS LIMITED,	0.82	0.551	0.672