

Analysis of Major Factors Impacting the Footwear Export of Pakistan

Usman Rafiq

University of Management and Technology (UMT), Pakistan

Author Note

Usman Rafiq, Department of Management, School of Business and Economics,
University of Management and Technology (UMT). Email: usman.raffiq@gmail.com

Abstract

As Asian footwear export progresses and major regional export players skimming economic benefits, it is ever more important for the policy makers and business practitioners to understand major factors affecting footwear export of Pakistan. In this way, the objective of this research paper is to evaluate factors that have a significant impact on footwear export of Pakistan. We took Punjab province as our sampling frame because 90 percent of the footwear export manufacturing organizations are situated in this province. We took a sample of 44 manufacturers purposively from the cities of Lahore, Sialkot and Sheikhopura. Primary data was collected through a questionnaire which was emailed to export directors and managers. Footwear exported to the rest of the world was measured for the year 2015 whereas impact of significant variables was determined through regression analysis. Prerequisites of regression analysis assumption; normality, multicollinearity and autocorrelation were applied to the sample data. The value of R^2 was 0.899 suggested that it was strong and reliable model. We found that years of qualification, export experience, ISO certifications, average raw material price, international trade exhibitions were highly significant for footwear export of Pakistan whereas average marketing cost was insignificant factors for footwear export.

Keywords: footwear export, international trade exhibitions, focusing personal design collections.

Analysis of Major Factors Impacting the Footwear Export of Pakistan

Export of goods and services has always been a source of foreign exchange earnings. It boosts employment opportunities and can reduce balance of payment issues (Jordaan and Eita ,2007). Trade theory suggests that countries will produce those goods which use their abundant factor intensively (Amakom, 2006). In most of the Asian countries, economic growth and development is dependent on exports (Tsen, 2006). The leather and leather goods are the most widely traded commodities in global exports. The leather and leather products industry plays a prominent role in the world's economy, with an estimated global trade value of approximately US\$100 billion per year (UNIDO, 2010).

The leather industry of Pakistan has a significant economic importance for export earnings after textile sector. Its contribution in GDP is around 5% whereas its share in total export earnings is around 7%. This sector is providing employment to more than 200,000 people both in urban and rural areas of the country (Economic Survey of Pakistan, 2011). The leather industry is more inclined toward export that is why 90 % of the produced leather is exported either in the form of finished hides and skins or manufactured goods. The leather footwear manufacturing sector is a sub sector of leather industry (Mehmood, 2008). It can further be divided into cottage and organized footwear manufacturing industry. The cottage industry fulfills the domestic footwear demands whereas organized industry has the potential to target the international market. With an estimated guess both cottage and organized industry manufacture one million pair of footwear daily but its annual share in world footwear export is less than 1%. Footwear manufacturing sector is one of those Pakistan's economic sector which has shown an increase in its exports since 2003 (Source: ITC Trade Map). This sector has proved its importance in the economy by providing jobs, foreign exchange earnings and fulfilling the domestic demand of footwear. It is believed that footwear industry has potential and can perform far ahead of its existing capacity.

Pakistan is globally recognized for its fine leather products. Germany, Italy, United Arab Emirates, Saudi Arabia and UK are the major exporting markets for Pakistani footwear industry. As a matter of fact Pakistan's share in the total international footwear export is very scanty. Footwear export of Pakistan was \$131.2 million for the year 2014-15 whereas the quantity was 13.9 million pairs with an increase in value by 11.9%. An increase in average export price was reported that had come up to \$9.43 per pair. (Source: Federal Bureau of Statistics, Government of Pakistan, 2015).

Footwear factories are highly equipped and import of latest machinery is no more an issue for the manufacturers. Skilled manpower is capable enough to meet the international quality specifications. Availability of best leathers and other raw materials is sufficiently available for the industry furthermore Pakistan Footwear Manufacturing Association (PFMA) is an effective platform for the footwear exporters.

Leather, rubber, plastic and textile are most common materials used in manufacturing of footwear exported from Pakistan. As far as leather is concerned, there are some tanneries in Pakistan which are providing best leathers to the footwear manufacturers. Pakistan tanning industry imports raw leather hides and skins from Kenya, China, Tanzania and Saudi Arabia (Haidri, 2010).

Consistent growth in footwear export of Pakistan shows that it is a profitable business for the industrialists. The exporters are fetching best prices for their products in the international market. There are several challenges for the industry as well. The European importers are more interested in those footwear products which materials are no more a threat to the environment and can be recycled. The availability of such type of material supply, training and development of manpower who can implement international quality standards are major issue for the industry.

Objective and Scope

In this way, the objective of this study is to measure the footwear export of Pakistan for the year 2015. A survey instrument would measure the variables of interest. The empirical analysis of this study would highlight the most significant determinant of footwear export of Pakistan. The findings of this study would not only be beneficial for the industrialists but also for the concerned public sector policy and strategy makers.

The remaining part of this research paper is arranged as follows: Section 3 elaborates the literature review; section 4 presents the research methods. Section 5 explains regression results; section 6 describes the discussion and limitation conclusion. Conclusion and recommendations sections are elaborated in section 7 and 8 respectively.

Literature Review

The scholarly literature specifically written on footwear export of Pakistan is very scanty. Very few studies have been conducted in this area. Most of the available work is descriptive in nature which is not sufficient to find out most relevant variables for the footwear export. However it would be beneficial to review some of the relevant literature dealing with leather and leather products exported by different countries.

The production of leather products is shifting from developed countries to developing countries just because of cost competitiveness of the developing countries which will ultimately provide more trade opportunities (Sharif and Mainuddin, 2003). Most of the developing countries are striving to improve their production capacity and leather goods export. Business opportunities have been improved tremendously in Turkey through efforts in technology, marketing and leather production (Yamamoto, 2005). Jordaan and Eita (2007) evaluated the factors of South African exports of leathers. They were of the view that importing country's regional trade agreements, infrastructure, GDP and population were the major determinants of leather export. Likewise, it is found that in the long run Ethiopian

leather exports were influenced by the local real exchange rate and market unit price/value of world export (Asgedom, 2008).

The international export of leather is not working in a vacuum; it does affected by the global economic environment. The globalization has supported value chain and competitiveness for the international business whereas individual efficiencies are less important (Bekele and Ayele, 2008). The experience of exporter, purchase price of raw materials and energy crisis were the significant determinants of leather jacket export from Pakistan (Gafoor *et al.*, 2012). Roy (2012) found that Indian leather industry is facing challenges to meet the requirements of international export market regarding environmental standards whereas Indian government took right initiatives to cope up with these issues which proves very supportive for the industry. Priya and Anthuvan (2012) found similar results for the Indian leather industry.

Participation of Pakistan leather industry in the international trade would bring a definite change in its performance level through foreign earnings (Siddiqui, 2001). Though there are a number of opportunities for this sector yet there is a need to address the challenges seriously. Bashar (2003) found interesting phenomena in the leather industry of Pakistan that best quality leather can be produced in the industry but why best quality products are not manufactured. Pakistani leather goods are made from low grade and low quality leather. These leather goods are encountered with tough competition in the international market especially compared with Indian and Chinese leather products. Massood (2009) found that establishment of modern manufacturing facilities, promotion of leather exports in the international market and sustainable supply of raw material would bring a revival to the Pakistan leather industry.

Concluding the whole debate, we may come up with the argument that Pakistan footwear manufacturing sector is one of the most important sub sectors of leather industry. Its

contribution in foreign exchange earnings is remarkable. It is performing far below its actual potential and to explore it serious efforts are required both in research and strategy implantation. The research work in footwear sector is of qualitative nature and unfortunately there are no empirical studies in this area.

Research Methods

The share of Punjab in footwear export is almost 90 percent, so we purposively limit the scope of our study to this province. The timely approach and convenience of data collection are the major factors in deciding Punjab as our sampling frame. It is found that major footwear export factories are situated in Lahore, Sialkot and Sheikhopura districts of Punjab. These cities were taken as a representative sample of the whole population. We found a list of footwear exporters from Pakistan Footwear Manufacturers Association (PFMA) and applied proportionate stratified sampling technique. A sample of 50 footwear exporters were selected whom we sent a questionnaire through e mail. The response rate was calculated as 88 per cent and questionnaire data for 44 footwear exporters were analyzed for statistical results.

Our respondents were directly involved in the footwear export and they were highly aware with the export issues. The response on the questionnaire was taken from the export directors and managers for the year 2015.

Regression Analysis

A multiple regression analysis is applied to measure our dependent variable footwear export for the year 2015. The independent variables are years of qualification, years of export experience, energy crisis, ISO certification, and average raw material cost per pair, participation in international trade exhibitions, and average marketing cost per pair, technical manufacturing expertise and focusing personal design collections. The relationship between dependent and independent variable is given in a model as;

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_1D_1 + \beta_2D_2 + \mu$$

Where;

Y = Export value of footwear for the year 2015

X1= Years of qualification

X2= Years of export experience

X3= Average raw material cost per pair

X4= Participation in international trade exhibitions

X5= Average marketing cost per pair

X6= Technical manufacturing expertise

X7= Focusing personal design collections

D1 = ISO certifications, Where 1 is indicating that exporters were ISO certified and 0 is indicating absence of ISO certification.

D2 = Energy crises, Where 1 is indicating that exporters were affected by energy crisis and 0 is indicating that exporters were not affected by energy crisis.

Where;

β_0 is the intercept, β_s are the slope of coefficients

Variables selection and justification

Most of the literature concerning footwear export of Pakistan was of qualitative in nature. The empirical literature was scanty; secondly finding variables relevant to footwear export of Pakistan were a very difficult task even we were unable to find relevant variables in other contexts/ countries. Some of the variables were identified by Abdul Gafoor and his co-authors in 2012 that were years of schooling, years of export experience, ISO certifications, average marketing cost of raw materials, etc were significant for leather jacket export of Pakistan. We took these variables and add some more variables after having a detailed

discussion with the corporate members of Pakistan Footwear Manufacturing Association (PFMA). The variables of participation in international trade exhibitions, technical manufacturing expertise and focusing personal design collections are added into the regression model. The justification of participation in international trade was rationalized with the argument that international presence does have an impact on manufacturing businesses. The technical manufacturing expertise considered being important for the footwear exporters of Pakistan and it would be regarded as strength to the manufacturers. It is also believed that attention should be paid on personal design collections that are developed under the designing capacity of the factory.

Results

To measure the footwear export of Pakistan for the year 2015 and to evaluate the impact of major factors on footwear export a regression analysis were applied for the quantification of the results. Data were collected through a questionnaire in which some dummy variables were questioned i.e. energy crisis and ISO certifications. There were some questions asked by employing Likert scale to capture the most appropriate situation of the footwear export of Pakistan.

Determinants of Footwear Export of Pakistan

Before applying multiple regressions to the data set some major prerequisites of regression analysis were performed in SPSS to check the normality and multicollinearity of the data collected through an instrument.

Table 1

Test of Normality

Shapiro Wilk		
Statistics	df	Sig
0.987	45	0.899

The sig value of Shapiro Wilk test is 0.899 which assures that the data set is normal and the studied characteristics are normally distributed among the whole population.

Table 2

Multicollinearity Statistics of Variables

Variables	Tolerance	Variance Inflation factor (VIF)
Years of qualifications	0.801	1.249
Years of export experience	0.819	1.221
Energy Crisis	0.703	1.423
ISO Certifications	0.653	1.531
Average raw material cost per pair	0.768	1.302
Participation in international trade exhibitions	0.735	1.360
Average marketing cost per pair	0.932	1.073
Technical manufacturing expertise	0.786	1.272
Focusing personal design collections	0.917	1.091

Multicollinearity is considered undesirable in any regression analysis. We calculated variance inflation factor (VIF) to test the multicollinearity of our data set whereas tolerance statistic is used to analyze the extent that how much independent variables are linearly related to one another. The absolute value of VIF for no multicollinearity is 0. Gujarati (2003) was of the view that multicollinearity exist in the independent variables when the value of VIF is more than 10. Thus the value of VIF below 10 is ignorable. Applying this criterion to our results in table 2 we found that there is no multicollinearity exists in our data set.

Table 3

Summary of Regression Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.948	0.899	0.873	0.490

The value of R square 0.899 is suggesting that this is a reliable model. The expansibility power of the model is very strong and this model is explaining almost 90

percent to the dependent variable. The sig value of ANOVA is 0.000 it means that this is a significant model.

Table 4

Summary of Regression Results

Variables	Coefficients	Standard Error	t-value	Significance
(Constant)	1.588	.570	2.784	.009
Years of Qualification	.345	.111	3.118	.004*
Years of export experience	.418	.067	6.229	.000*
Energy Crisis	1.090	.185	5.890	.000*
ISO Certifications	.601	.181	3.313	.002*
Average raw material cost per pair	.280	.117	2.392	.022*
Participation in international trade exhibitions	.326	.092	3.543	.001*
Average marketing cost per pair	.130	.087	1.496	.144 ^{NS}
Technical manufacturing expertise	.175	.073	2.391	.022*
Focusing personal design collections	.152	.072	2.107	.042*

* = Significant at 5% level

NS = Non Significant

The multiple regression results are presented in table 4. The significance column is depicting statistical significance and generalizability of the variables whereas the coefficient column is presenting the strength and relevant importance of the independent variables. The results in table 4 confirms that years of qualification, years of export experience, energy crisis, ISO certifications, average raw material cost per pair, participation is international trade exhibitions, technical manufacturing expertise and focusing personal design collections are significant variables that really have an impact on the footwear export of Pakistan. We

find that average marketing cost per pair is not a significant variable. These results are consistent with the findings of previous study conducted by Gafoor, *et al.*, (2012). The results show that for every one percent increase in years of qualification there may be an increase of 0.345 percent in value of footwear export. The results show that for every one percent increase in years of export experience there may be an increase of 0.418 percent in value of footwear export. The dependence of footwear export on average raw material cost per pair has a negative relation which means for every one percent increase in average raw material cost per pair decreases the footwear export in value by 0.280 percent. The relevant importance of energy crisis is very high because results depict that for every one percent increase in energy the export of footwear would be decreased by 1.090 percent in value of footwear export. The participation in international trade exhibitions is also a significant variable which shows that for every one percent increase in international trade participation there would be an increase of footwear export by 0.326 percent in export value. The focus on personal design collections has a negative impact on footwear export. It is depicted that for every one percent increase in focusing personal design collections decreases the footwear export by 0.152 percent in value of export.

Discussion and Limitations

The findings of this study are consistent with the previous works (Gafoor *et al.*, 2012). One of the major factors affecting footwear export of Pakistan is energy crisis (Atif, 2011). The years of export experience has positive relationship with footwear export. The more a firm has export experience the higher the chances of getting more reactive to get more orders from international market (Lawlwss, 2013). It is also found that ISO certifications have an impact on exports (Bellesi et al, 2005). The global trade has been more regularized than ever before. Only those manufactures qualify for export whose products meet required specification and conform to international standards. The other variables appear significant

except average marketing cost. We found that one percent increase in average raw material cost per pair and focus on personal design collections decrease footwear export in value by 0.280 and 0.152 percent respectively. It was also found that one percent increase in technical manufacturing expertise would increase footwear export by 0.175 percent.

The variable of focusing personal design collections shows a negative relationship with footwear export and it came out to be -0.152. The reason is that almost all the footwear manufacturers get their export orders provided with complete design and specification instructions from the foreign buyers. The manufacturers need to manufacture as per buyers demand. So just relying on personal design collections and expecting that it is enough to get export orders is not significant for footwear export

We had a sample of 50 footwear manufacturing organizations out of which 44 valid responses were collected. We sent them a questionnaire and through follow up calls requested them to respond on our questionnaire. The time limitation of this assignment was very obvious. The physical approach to the respondents was not possible within the permitted time span.

Conclusion

Using a multiple regression model this study investigated major factors affecting the footwear export of Pakistan for the year 2015. This study also identified the non significant factor that was average marketing cost. The results of the collected data indicate that which areas to be focused more by the policy and strategy makers for the improvement of footwear export in Pakistan. The energy crisis has been a national issue for last few decades not only for a specific sector but to the whole country. The export experience and qualification, technical knowledge, rapid access to international markets, exhibition and raw material cost have direct impact on footwear exports.

Recommendation

It is recommended to conduct research in the same sector for digging out more potential factors for footwear export of Pakistan. This sector can contribute far ahead of its existing capacity in foreign earnings. The gap is very vast for researchers specially working in strategy and policy making. This industrial sector really needs research based support because there are no empirical researches conducted in this area.

References

- Amakom, U. (2006). Export constraints of the Kano leather industry: a study of industrial clusters in Nigeria. *International Journal of Development Studies*, 2(6), 43-59.
- Atif, L. A. (2011, July 07). Energy Crisis Leaves Pakistan Textiles in Tatters. The Muslim Times. Retrieved from <http://www.dawn.com/2011/07/03/energy-crisis-leaves-pakistan-textiles-in-tatters.html>
- Asgedom, G. (2008). The Performance and Determinants of the Ethiopian Determinants of Leather Goods Exports: A Case of Pakistan.
- Bellesi, F., Lehrer, D., & Tal, A. (2005). Comparative advantage: the impact of ISO 14001 environmental certification on exports. *Environmental Science & Technology*, 39(7), 1943-1953.
- Bekele, M. and G. Ayele. (2008). The Leather Sector: Growth Strategies through Integrated Value Chain. *Ethiopian Development Research Institute (EDRI), Addis Abeba, Ethiopia*.
- Bashar, A. (2003). Leather Industry, Difficult Times: Enormous Potential to Give a Boost to the Economy. Available: [http:// www. Pakistaneconomist.com](http://www.Pakistaneconomist.com).
- Federal Bureau Of Statistics, Government of Pakistan, 2015. <http://www.pbs.gov.pk/> (accessed on 10.02.2015).
- Ghafoor, A., Aslam, M., & Rasool, S. (2012). Determinants of leather goods export: A case of Pakistan, *Journal of Business and Economics*, 4(2), 56-269.
- Government of Pakistan (GOP). (2011). Economic Survey of Pakistan (2010-11). Pakistan, Islamabad: Economic Advisor's Wing, Finance Division.
- Gujrati, D. N. (2003). Basic Econometrics (4th ed.). USA, NY: McGraw- Hill.
- Haidri, I. (2010). Leather and Leather Goods Industry in Pakistan: Economic Review. *Economic and Industrial Publication*.

ITC. 2015. ITC Comtrade, Trademap, International Trade Centre, <http://www.intracen.org> (accessed on 15.02.2015).

Jordaan, A.C., and Eita, J.H. (2007). Determinants of South Africa's Exports of Leather Products (Working Paper Series: 2007-21). South Africa, Pretoria: Department of Economics, University of Pretoria.

Lawless, M. (2013). Marginal Distance: Does Export Experience Reduce Firm Trade Costs? *Open Economies Review*, 24(5), 819-841.

Mehmood, K. (2008). Leather Sector Crisis in Pakistan. *Journal of Agricultural Research*, 44(3), 229-236.

Massood, A. (2009). Leather Exports Need to Find New Markets. *Business and Finance Review*.

Priya, D. M., & Anthuvan, M. V. L. (2012). Impact of certification as moderator on export marketing strategy with reference to Tamil Nadu leather industry. *International Journal of Research in Economics and Social Sciences*, 2(3), 24-37.

Roy, C. (2012). A Study on Environmental Compliance of Indian Leather Industry & its Far-reaching Impact on Leather Exports. *Foreign Trade Review*, 47(2), 3-36.

Sharif, D.M.I., and Mainuddin, K. (2003). Draft Study on Environmental Requirements, Market Access and Export Competitiveness for Leather and Footwear in Bangladesh. *Sub-regional Workshop on Environmental Requirements, Market Access/ Penetration and Export Competitiveness for Leather and Footwear Bangkok*.

Siddiqui, S. (2001). An Overview of Leather Industry of Pakistan. *Pakistan Leather Trades Journal*, 41, 19.

Tsen, W.H. (2006). Granger Causality Tests Among Openness to International Trade, Human Capital Accumulation and Economic Growth in China: 1952-1999, *International Economic Journal*, 20(3), 285-302.

United nations industrial development organization, Vienna, (2010). Future Trends in the World Leather and Leather Products Industry and Trade.

Yamamoto, G.T. (2005). Analyzing Japanese General Trade Companies ‘Sogho Shosha’s as a System (Master’s thesis, Marmara University, Social Sciences Institute).