# Competitiveness, Diversification and Pakistan's Export Performance of Leather and Leather Products; A Constant Market Share Analysis

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#### **Abstract**

The present study focuses on measuring the competitiveness, diversifications and export performance of Pakistan's selected leather and leather products in the global economy from 2003-2014. The study employs Constant Market Share Analysis to measure the competitiveness and suggests some policy measures that might be helpful to enhance the export volume which leads to a considerable increase in the foreign exchange that is indispensible for achieving desired economy. The findings of the study of the product group (4202) illustrate that average total effect, structural effect, specific competitive effect were positive, whereas average competitive effect, commodity effect, general competitive effect and market effect were negative from 2003-08. Furthermore, the results indicate that the average total effect, structural effect, commodity effect, competitive effect and specific competitive effect were positive, while market effect and general competitive effect were negative from 2009-14. Moreover, the analysis of the product group (4203) highlights that average total effect, structural effect, competitive effect, specific competitive effect, commodity effect were positive, whereas average general competitive effect and market effect were negative from 2003-08. In addition, the findings indicate that the average total effect, structural effect, competitive effect and specific competitive effect were positive, while average commodity effect, market effect, general competitive effect were negative from 2009-14. The findings of the analysis illustrate that Pakistan has the potential to enhance its exports to the world, but some diversifications are required to be competitive in the world market.

**Keywords;** Competitiveness, Constant Market Share Analysis, Decomposition, Exports, Leather and leather products

#### Introduction

Agribusiness has caused an extensive revolution in the ways in which animals are raised to produce skin and hides, meat, milk, etc. In Pakistan, the farmers have started to specialize in the production of sheep, goats, cows, buffalos and other pet animals to meet the constant demand for leather (Ghafoor, et al. 2012). This boom in the leather business has attracted the attention of mass-producers who have introduced a host of revolutionary changes in the livestock sector. This sector being the second most important sector (Amin, et al. 2010) of agriculture plays a key role in the so-cio-economic uplift of Pakistan as its share to value added is 56% and to GDP is 11.8 % (GOP, 2014). Along with low wage cost, it also ensures the massive availability of raw material for leather industry which enables Pakistan to attain competitiveness in the world market. Leather industry of Pakistan contains six sub-sectors i.e. leather gloves, leather footwear, leather garments, tanning, leather shoe uppers and leather goods, is based on more than 2500 tanneries and footwear manufac-

turing units, mainly located in Lahore, Karachi, Hyderabad, Multan, Kasur, Gujranwala, Faisalabad, Sialkot, Sheikhupura, Sahiwal and Peshawar (Mehmood, 2008 and UNIDO, 2006).

Exports are indispensable to the growth and development of any economy as it is hardly possible for every country to possess the whole range of skills and resources needed for the production of certain services and goods (Isham, et al. 2005). However, all the countries impose a number of barriers in the form of import quotas and tariffs to ensure the protection of their local industries (Stiglitz and Charlton, 2005). The development of an economy is directly linked to its exports (Gylfason, 2001). If there is a rampant increase in the exports of an economy as compared to its imports, nothing can create any obstacle in the growth of an economy. On the contrary, the instability of the export sector undoubtedly hampers the economic development process. However, with fluctuations in export earnings, the economy will suffer from uncertainties which adversely affect the level of investment which in return causes negative impact on the economic growth of the economy. The justification of this study can be found in the truth that today's economies are interdependent due the phenomenon of globalization. Globalization is the integration of political, global economic and cultural (Hamdi, 2013). The world has become a global village; the borders of the economies have been transcended down among different economies of the world. "The history of globalization goes back to the second half of the twentieth century, the development of transport and communication technology led to situation where national borders appeared to be too limiting for economic activity" (Economic Globalization in developing Countries, 2002). The globalization has many advantages that can be seen in the world such as technological developments, economic processes, health systems, political influences, social and natural environment factors (Hamdi, 2013). Globalization has formed a new opportunity for Pakistan such as better opportunities to access developed markets, promise of technology transfer, growth and improved productivity growth and living standards of the people of Pakistan. The world exports increased from 7.46 trillion US\$ to 18.68 trillion US\$ from 2003-14. This increasing rate of exports shows that in the 20<sup>th</sup> century, the economies across the globe focused on their exports at the larger scale. The value of total exports of Pakistan was 1.193 trillion US\$ in 2003, but with the growth rate of 51.7%, it was 2.47 trillion US\$ in 2014. The exports of leather and leather products of the world increased by 63% with an average growth rate of 8.76 %, while Pakistan's leather and leather products increased by 38% from 2003 to 2014 with an average growth rate of 3.33%. This showed that the demand of leather and leather products in the world increased with the passage of time, but the export growth of Pakistan did not increase up to world demand (ITC UN COMTRADE, 2014).

The study would surely be helpful in shedding light on the significance of the leather sector in the economic growth of Pakistan. After textile, leather sector is the second most important sector in Pakistan. As this sector is export-oriented, about 90% leather, both in the form of leather products and finished leather, is exported abroad. The exports of leather products have enabled Pakistan to increase its foreign exchange earnings, along with fetching economic stability, reducing poverty and income inequality. Moreover, leather sector will increase job opportunities which are the dire need of hour to cope with the prevalent economic instability, and this study will also broaden the prospect of competitiveness of leather sector. Tyszynski (1951) was the first one who employed traditional Constant Market Shares Analysis. Some economists still utilize this technique in spite of the problems associated with the method (Richardson, 1971a,b; Oldersma and Bergeijk,1993 and Japma,1986). For example, Drysdale et al.,(1996) utilized the traditional method of Constant Market Shares Analysis to explain the Australians export performance. Brownie and Dalziel, (1993) also applied the traditional Constant Market Shares Analysis on the export performance New Zealand. Jepma, (1986) explained an alternative method, which overcome the problems that associated with traditional Constant Market Shares Analysis. Jepma (1986-1988); Hoen and Wagener (1989); Ah-

medi-Esfanani (1993, 1995) and Ahmadi Esfahani and Jensen (1994) used Jepma's revised technique to examine Australian export performance. The Jepma's technique has also same shortcomings to interpret some components of this model.

The purpose of present study is to measure the competitiveness and export performance of selected leather and leather products. To check the competitiveness of Pakistani leather and leather products, the time span from 2003-2014 has been divided into two time periods: 2003-2008 and 2009-2014. There are two major reasons for the division of this time period. First, from 2003-2007 Pakistan was under the military regime while from 2008-2014 the system of government was a democracy. Secondly, 2008 is regarded as a year of financial crisis in the world. Hence this study has examined the competitiveness before and after the year of financial crisis.

#### **Review of literature**

There are many reputed researchers who examined the competitiveness and export performance of different products by employing Constant Market Share Analysis in the world. Here, this analysis reviews some studies which employ CMSA in different economies.

A research was conducted by Othaman and Rashid (1993) who utilize CMSA for measuring the export performance of Associations of Southeast Asian nations from 1979 to 1987. The findings of the study illustrated that the market effect and commodity effect were negative. Another researcher, Simonis (2000) used CMSA to investigate the patterns of trade of Belgium with its trading partners from 1991 to 1997 and its findings indicated that the Belgium export market share constantly decreased. Akbar et al (2001) also applied CMSA to examine the competitiveness and export performance of Pakistan and investigated the determinants of trade performance, too. The results of the study showed that the export performance changed with the external market conditions and the ability to compete in the world markets. The method of CMSA was also employed by Chen and Duan (2001) to analyse the competitiveness of Canadian exports in agri-food against other competitors in Asia from 1980-1997. The results of the study highlighted that all of the exporting countries increased their agri-food exports to Asia, and this increase in exports was the very result of structural effect. Hasan and Raturi (2003) examined the export performance and technological investment of Indian firms by employing the Probit Model and concluded that the technological investment created opportunities to enhance exports, while the volume of exports was limited because Indian firms employed more labor than capital. Juswanto and Mulvanti (2003) also utilized CMSA to check export performance in the manufacturing sector of Indonesia and concluded that Indonesian market share increased in the world market.

Tatarer (2004) employed CMSA to examine the export performance of the manufacturing sector of Turkey in East-Asian countries from 1992-2002. The results illustrated that the composition effect was positive in China and Malaysia, while negative in Japan, South Korea and Singapore. The opposite was true for market adoption effect, since it was founded negative in Malaysia and China, whereas positive in the remaining countries. Cheptea et al (2005) applied CMSA to measure the export performance during 1995-2009 and concluded that European countries had less market share in high-technology products in the developing countries as compared to the developed countries. Esfahani (2006) investigated the trade performance in Australia and concluded that CMSA assumption is better than the other methods. The competitiveness of Turkey's exports examined by Barbaros et al (2007) who utilized CMSA and findings of the study indicated that the export demand for the Turkish organic products grew and was sensitive to income and price changes in the target countries. Nilsson et al (2007) also utilized CMSA to assess the export performance of Mediterranean countries in vegetables and fresh fruits from 1993 to 2003 and the results showed that the com-

petitiveness effect gradually decreased. Amador and Cobral (2008) investigated the evolution of market share of Portugal in the world market from 1968-2006 and findings illustrated that the market share effect was negative due to low-technology in the exports of Portugal. Skriner (2009) measured the competitiveness and specialization of the export sector of Austrian economy by employing CMSA from 1990-2006. The study observed a high structural change in the foreign trade of the emerging countries. Kalendiene (2014) applied CMSA to examine the competitiveness of Lithuanian export in the EU market and concluded that the competitiveness of its export was low. Moreover, Kalendiene and Miliauskas (2011) also employed CMSA to measure Lithuanian export competitiveness before the economic recession. Bonanno (2015) conducted a study to explain the application, significance and limitations of CMSA and also employed this method on Italian economy in different time periods. Chien and Lee used CMSA to evaluate the performance of Taiwan's exports from 1997 to 2007. The findings of the analysis indicated that Taiwan's exports complied with the booming market orientations, but it was also observed that exported products did not follow the demands for growth of commodities trade in the four well-established markets such as Hong Kong, China, Japan and the US. Similarly, Tadessen and Brar (2016) applied CMSA to determine the factors of export growth of Ethiopia and its results illustrated that the growth in world trade and improvements in the competitiveness were the two major determinants of Ethiopian export growth. The CMSA method also employed by Fontoura and Serodio (2017) to measure the export performance of the 2004 European Union (EU) enlargement economies to the EU15 from 1990 to 2013. The findings of the analysis provided information on the export performance of ten countries individually considered, including the significance of each EU15 destination market.

As far as Pakistan is concerned, Mehmood and Akhtar (1996) employed CMSA to examine the export performance and competitiveness of Pakistan for the time periods; 1984-85 to 1988-89 and 1988-89 to 1992-93 and concluded that Pakistan maintained its market share in the world market. Wizarat and Ahmad (2015) examined the decomposition of the Pakistan's export growth of the APEC economies from 2003 to 2012 by employing CMSA. The findings of the analysis indicated that the competitiveness effect and the world trade effect had a positive impact on the exports of Pakistan economy. Moreover, the results highlighted that the market distribution effect and the commodity composition effect remained negative for the exports of Pakistan. Ahmad and Wizarat (2015) also employed CMSA to measure the competitiveness and export performance of Pakistan from 2003-2012 by using HS-4 digits panel data. The findings of the study described that the economy of Pakistan had the potential to enhance its exports to the developed market economies, but the diversification in the products was required to compete in the developed market economies. Ahmad and Shahida (2016) also utilized CMSA to evaluate the performance of exports of Pakistan in the European economies (EU27) with respect to worldwide economic conditions. The results of the analysis indicated that the world trade effect had a high positive impact on the export growth of Pakistan, while the market distribution effect, commodity composition effect caused problems for the export growth of Pakistan.

The present study discussed some studies which were working to measure the competitiveness and export performance of different economies in different sectors. The CMSA has never been applied in the leather sector of Pakistan. In this respect, it is a new arena in the application of CMSA in the leather sector to measure the export competitiveness of Pakistan.

#### **Material and Methods**

To measure the competitiveness of leather and leather products, the study has employed the Constant Market Share Analysis proposed by Chen and Duan, (2001). The decomposition of the first and second level of CMSA has applied in this analysis. The change in exports is divided into

three major particular effects: competitiveness effect, structural effect and second order effect. The decomposition of second level divides the three main effects into further eight effects. The data were taken from the International Trade Center (ITC) UN-COMTRADE statistics for Pakistan 2003-14 providing detailed annual nominal exports and import commodities data for Pakistan and other countries of the world by commodity and associate country in terms of values expressed in US dollars. Two product groups, 4202 and 4203, of leather and leather products have been selected to measure the competitiveness and export performance.

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The first level decomposition is explained as follows:
                                                         \Delta L = \sum_{i} \sum_{i} S_{ii}^{0} \Delta X_{ii} + \sum_{i} \sum_{i} X_{ii}^{0} \Delta S_{ii} + \sum_{i} \sum_{i} \Delta S_{ii} \Delta X_{ii}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Source: (Chen and Duan,
  2001)
                                                           Where,
                                                                                                                                             = Total effect (TE)
                                                       \begin{array}{rcl} \sum_{i} \sum_{j} S_{ij}^{0} \Delta X_{ij} & = & Structural \ Effect \ (SE) \\ \sum_{i} \sum_{j} X_{ij}^{0} \Delta S_{ij} & = & Competitiveness \ Effect \ (CE) \\ \sum_{i} \sum_{j} \Delta S_{ij} \Delta X_{ij} & = & Second-Order \ Effect \ (SOE) \end{array}
                                                         The first level decomposition can be further decomposed into the subsequent components:
                                                        \Delta L = s^0 \Delta X + \left(\sum_i \sum_j S_{ij}^0 \Delta X_{ij} - \sum_i S_i^0 \Delta X_i\right) + \left(\sum_i \sum_j S_{ij}^0 \Delta X_{ij} - \sum_j S_i^0 \Delta X_j\right) + \left[\left(\sum_i S_i^0 \Delta X_i - \sum_j S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left[\left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta X_i\right)\right] + \left(\sum_i S_i^0 \Delta X_i\right) + \left(\sum_i S_i^0 \Delta 
S^{0}\Delta X) - \left(\sum_{i}\sum_{j}S_{ij}^{0}\Delta X_{ij} - \sum_{j}S_{j}^{0}\Delta X_{j}\right)\right] + \Delta sX^{0} + \left(\sum_{i}\sum_{j}\Delta S_{ij}X_{ij}^{0} - \Delta sX^{0}\right) + \left(X^{1}/X^{0} - X^{0}\right) + \left(X^{1}/X^{0}\right) + \left(
 1) \sum_{i} \sum_{j} \Delta S_{ij} X_{ij}^{0} + \left[ \sum_{i} \sum_{j} \Delta S_{ij} \Delta X_{ij} - (X^{1}/X^{0} - 1) \sum_{i} \sum_{j} \Delta S_{ij} X_{ij}^{0} \right] Source: (Chen and Duan, 2001)
                                                                               s^0 \Delta X = Growth Effect(GE)
                                                         \left(\sum_{i}\sum_{i}S_{ii}^{0}\Delta X_{ij}-\sum_{i}S_{i}^{0}\Delta X_{i}\right) =Market Effect (ME)
                                                         \left(\sum_{i}\sum_{j}S_{ij}^{0}\Delta X_{ij}-\sum_{j}S_{j}^{0}\Delta X_{j}\right)=Commodity\ Effect\ (COME)
                                                         \left[\left(\sum_{i} S_{i}^{0} \Delta X_{i} - S^{0} \Delta X\right) - \left(\sum_{i} \sum_{j} S_{ij}^{0} \Delta X_{ij} - \sum_{j} S_{i}^{0} \Delta X_{j}\right)\right] =
 Structural Interaction Effect(SIC)
  \Delta s X^0 = General\ Competitive\ Effect(GCE)
                                                        \left(\sum_{i}\sum_{j}\Delta S_{ij}X_{ij}^{0}-\Delta sX^{0}\right)=Specific\ Competitive\ Effect\ (SCE)
                                                                       (X^{1}/X^{0}-1)\sum_{i}\sum_{j}\Delta S_{ij}X_{ij}^{0} = Pure Second Order Effect (PSOE)
  \left[\sum_{i}\sum_{i}\Delta S_{ij}\Delta X_{ij}-(X^{1}/X^{o}-1)\sum_{i}\sum_{j}\Delta S_{ij}X_{ij}^{0}\right]=Dynamic\ Structural\ Residual(DSR)
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Here L represents the total exports of leather products of Pakistan to the world, s explains the market share of the exports of leather products of Pakistan in the total world market,  $s_j$  represents an exporting region's market share of leather products exports in the destination j,  $s_i$  explains an exporting region's market share of product i in total world market,  $s_{ij}$  represents an exporting region's market share of commodity i in the destination j, X is showing the total world imports of leather products,  $X_j$  is explain the total leather products imports in the destination j,  $X_i$  is the total imports from world of commodity i,  $X_{ij}$  is explaining the total imports of product i in the destination j,  $\Delta$  showing the change in the two time periods, superscript 0 is the initial year, 1 is the terminal year and subscript i represents export products in the above mentioned model.

## Results and discussion Results of product group 4202

Table 1 Constant market share Analysis of Pakistan leather exports in world market (product group 4202) from 2003-2008 (US millions dollars)

group 4202) from 2003-2000 ( CS minions donars)												
Years	TE	SE	CE	SOE	GE	ME	COME	SIE	GCE	SCE	PSOE	DSR
2003												
2004	0.046	2.336	-1.936	-0.354	2595.210	-2592.874	-0.061	0.061	-941.469	939.533	-0.421	0.067
2005	1.049	1.387	-0.339	0.001	1848.758	-1847.371	0.014	-0.014	722.579	-722.918	-0.047	0.047
2006	-1.436	1.646	-2.752	-0.331	2498.403	-2496.757	-0.028	0.028	-1398.100	1395.349	-0.428	0.098
2007	1.152	1.714	-0.448	-0.114	2578.940	-2577.226	-0.035	0.035	-1452.226	1451.778	-0.068	-0.045
2008	3.544	1.044	2.342	0.157	2848.818	-2847.774	0.032	-0.032	-351.969	354.312	0.374	-0.217
AVE-												
RA	0.871	1.626	-0.627	-0.128	2474.026	-2472.400	-0.015	0.015	-684.237	683.611	-0.118	-0.010
GE												

(Source UN COMTRADE Database, Authors own calculations)

In this section, the present study measures the competitiveness by applying decomposition of the first and second level of constant market share analysis on selected leather and leather products. Table 1 describes the results of CMSA for the product group (4202) during the time span from 2003 to 2008. The findings show that the total effect remained positive throughout the time span except the year 2006. The positive total effect indicates that the exports of these leather products of Pakistan increased, whereas the negative value in the year 2006 show the decreasing tendency in these exports (Shahab and Mahmood, 2013 and Liagat, et al. 2017). Moreover, it was observed that the average total effect and structural effect had positive value 0.871 and 1.62 respectively. The exports of Pakistan to the international market are mainly affected by structural effect (Mahmood, 2017). The positive structural effect illustrates that apart from the increasing demand of these products in the world markets, Pakistan succeeded in gaining specialization in these products. The competitiveness effect, that was negative, shows that the share of these products declined in the world markets (Wizarat and Ahmad, 2015). High cost of doing business caused by unhealthy socio-economic environment is believed to be one of key factors hampering the competitiveness of Pakistani exports in the world market. Some of the major factors responsible for high cost are cost of raw material, utilities and cost of finance, infrastructure, human resource (mainly unskilled labour), technology and supporting institutions. Pakistan was ranked on 60th position in "ease of doing business" in 2006 which further deteriorated to 76 in the year 2008 (GOP, 2015). Furthermore, it was seen that the residual effect was also negative in that time span, illustrating a decrease in the exports on account of political condition of the economy, crimes, law and order situation, energy crises and other factors. The market effect that was negative during the time period from 2003-2008 indicates that Pakistan did not concentrate on fast growing markets.

The commodity effect that was positive in the years of 2005 and 2008 illustrates that Pakistan concentrated on these exports of leather products to the rest of the world of fast growing commodities. On the contrary, this effect that was negative in the years 2004, 2006 and 2007 shows that Pakistan did not pay due attention to the exports of these products. Furthermore, the findings show that the average commodity effect was negative during the above mentioned time period. The findings of the general competitive effect and the specific competitive effect indicate that Pakistan was competitive in terms of specific competitive effect from 2003-2008 except the year 2005, but Pakis-

tan failed to achieve competitiveness in terms of the general competitive effect during 2003-2008 except the year 2005. The negative general competitive effect implies that Pakistan has enough capacity and capability to enhance the competitiveness of exports of specific products in specific destinations. The decrease in general competitive effect was mainly a result of the decline in the market share of the leather products in the world market. Moreover, it can be seen that the average general competitive effect was negative, while the specific competitive effect was positive.

Table 2 Constant market share Analysis of Pakistan leather exports in the world market

(product group 4202) from 2009-2014 ( US millions dollars)

(Prouc	5 S	տթ :-∵	<i>_,</i>		2011(0)	0 1111110110	<b>CF 0 22 00 2</b> 10	,				
Years	TE	SE	CE	SOE	GE	ME	COME	SIE	GCE	SCE	PSOE	DSR
2009												
2010	2.192	2.180	0.104	-0.092	3909.325	-3907.144	-0.009	0.009	-41.646	41.749	0.023	-0.115
2011	4.558	2.833	1.374	0.352	4279.759	-4276.927	0.409	-0.409	-290.943	292.317	0.275	0.077
2012	4.538	0.184	4.490	-0.135	190.492	-190.308	-0.673	0.673	-913.717	918.207	0.034	-0.169
2013	6.025	1.966	3.771	0.288	651.987	-650.021	0.419	-0.419	-141.044	144.815	0.100	0.188
2014	6.647	2.511	3.862	0.275	2.157	0.354	0.456	-0.456	-400.823	404.685	0.000	0.274
AVE- RA GE	4.792	1.935	2.720	0.137	1806.744	-1804.809	0.120	-0.120	-357.635	360.355	0.086	0.051

(Source UN COMTRADE Database, Authors own calculations)

Table 2 illustrates the results of CMSA of this product group (4202) during time span 2009-14 shows that the total effect was positive from 2010-14 indicating the increase in the exports of these products (Shahab and Mahmood, 2013 and Liaqat et al., 2017). The findings indicate that both structural effect and competitiveness effect were positive during the time span ranging from 2010-14 and the latter shows that the market share of these products was high in world markets which in return confirmed that Pakistan successfully gained competitive position in these leather products (Wizarat and Ahmad, 2015). On the contrary, the study can be noted that the residual effect was positive during the years of selected time span except the years of 2010 and 2012 in which its value remained negative.

Results of product group 4203

Table 3 Constant market share Analysis of Pakistan leather exports in world market (product

group 4203) from 2003-2008 (US millions dollars)

Sroup	51 oup 4203) 11 om 2003 2000 (CS minions donats)											
Years	TE	SE	CE	SOE	GE	ME	COME	SIE	GCE	SCE	PSOE	DSR
2003												
2004	5.017	8.869	-3.525	-0.327	2595.210	-2586.341	10.058	-10.058	-941.469	937.943	-0.767	0.440
2005	11.166	17.267	-6.527	0.426	1848.758	-1831.491	7.064	-7.064	722.579	-729.107	-0.902	1.328
2006	1.176	11.387	-10.422	0.211	2498.403	-2487.017	0.625	-0.625	-1398.100	1387.679	-1.622	1.834
2007	43.270	28.034	13.877	1.359	2578.940	-2550.906	12.798	-12.798	-1452.226	1466.103	2.114	-0.755
			63.872	3.472	2848.818	-2824.158	13.787	-13.787	-351.969	415.841	10.200	-6.728
AVERA GE	30.527	18.043	11.455	1.028	2474.026	-2455.983	8.866	-8.866	-684.237	695.692	1.805	-0.776

(Source UN COMTRADE Database, Authors own calculations)

The results illustrate that the market effect that was negative from 2010-2013 indicates that Pakistan did not focus on the fast growing markets, while the positive value of this effect in 2014 shows that Pakistan did concentrate on fast growing markets. The commodity effect that was positive in the years 2011, 2013 and 2014 illustrates that Pakistan laid emphasis on the exports of leather products to the world of fast growing commodities, whereas its negative values in 2010 and 2012 shows Pakistan did not pay due attention to the exports of these products. The results of the general competitive effect and the specific competitive effect indicate that Pakistan was competitive in terms of specific competitive effect from 2010-2014, but failed to achieve competitiveness in terms of general competitive effect from 2010-2014. The negative general competitive effect implies that Pakistan is able to enhance the competitiveness of exports of specific products in specific destinations. The decrease in general competitive effect was mainly a result of the decline in the market shares of the leather products in the world markets. Furthermore, it was observed that the average general competitive effect was negative, while the specific competitive effect was positive.

Table 3 describes the results of the constant market share analysis of the product group (4203) during the time period from 2003-08. The findings of positive total effect show that the exports of these products expanded faster during 2003-08 (Shahab and Mahmood, 2013 and Liaqat, et al. 2017). The structural effect that was positive indicates that Pakistan gained specialization in these products and the demand of these products was high in the world markets and the contribution of structural effect was higher as compared to other effects (Mahmood, 2017). The competitiveness effect having negative values in the years 2004, 2005 and 2006 describes that the market share of these products declined in the world markets, whereas the positive competitive effect in the years 2007 and 2008 shows the opposite (Wizarat and Ahmad, 2015). Furthermore, the positive residual effect indicates that the exports increased due to the other determinants of exports from Pakistan.

The market effect that was negative during the time period ranging from 2003-2008 indicates that Pakistan did not make any serious effort to concentrate on fast growing markets. The commodity effect that was positive from 2003-2008 illustrates that Pakistan did concentrate on the exports of these leather products to the world of fast growing commodities. Furthermore, it was seen that the average market effect was negative, while the average commodity effect was positive during the selected time span.

Table 4 Constant market share Analysis of Pakistan leather exports in the world market (product group 4203) from 2009-2014 (US millions dollars)

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Years	TE	SE	CE	SOE	GE	ME	COM E	SIE	GCE	SCE	PSOE	DSR
2009												
2010	16.517	16.193	0.260	0.064	3909.325	-3893.132	-3.942	3.942	-41.646	41.906	0.058	0.006
2011	45.161	52.472	-7.242	-0.069	4279.759	-4227.287	5.852	-5.852	-290.943	283.701	-1.448	1.379
2012	-40.599	-52.603	12.913	-0.909	190.492	-243.095	-12.312	12.312	-913.717	926.630	0.097	-1.006
2013	59.058	25.846	33.330	-0.118	651.987	-626.141	-2.176	2.176	-141.044	174.374	0.883	-1.001
2014	37.218	25.898	10.714	0.606	2.157	23.742	5.792	-5.792	-400.823	411.537	0.001	0.605
AVERA GE	23.471	13.561	9.995	-0.085	1806.744	-1793.183	-1.357	1.357	-357.635	367.630	-0.082	-0.003

(Source UN COMTRADE Database, Authors own calculations)

The findings of the general competitive effect and the specific competitive effect show that Pakistan was competitive in terms of specific competitive effect, while did not succeed in attaining competitiveness in terms of general competitive effect from 2003-2008 except the year 2005. The

negative general competitive effect implies that Pakistan is able to enhance the competitiveness of the exports of specific products in specific destinations. The decrease in general competitive effect was mainly a result of the decline in the market shares of these leather products in the world markets. Moreover, it was observed that the average general competitive effect was negative, whereas the specific competitive effect was positive.

Table 4 indicating the findings of CMSA of the product group (4203) during the time span from 2009-14 illustrates that the total effect was negative in the year 2012 showing the exports of these products did not increase in world markets. On the contrary, the total effect that was positive in the years 2010, 2011, 2013 and 2014 highlights that the Pakistan's exports of these products increased in world economies (Shahab and Mahmood, 2013 and Liaqat. et al. 2017). The structural effect that was positive from 2009-2014 except the year 2012 shows that Pakistan gained specialization in these products and the demand of these products was high in rest of the world (Mahmood, 2017). The competitiveness effect that was positive from 2009-2014 except the year 2011 indicates that the market share of these products increased in selected time span (Wizarat and Ahmad, 2015). The residual effect that was negative throughout the whole time period except the year 2012 describes that the exports decreased due to the other effects such as structural and competitive effect.

The market effect that was negative during the time period from 2010-2013 indicates that Pakistan did not focus on fast growing markets, while this effect that was positive only in the year 2014 illustrates the opposite. The commodity effect that was positive in the years 2011 and 2014 illustrates Pakistan did concentrate on the exports of these leather products to world of fast growing commodities, while it was negative in the years 2010, 2012 and 2013 shows Pakistan did not give attention to the exports of these leather products to world on fast growing commodities. The findings of general competitive effect and the specific competitive effect indicate that Pakistan was competitive in terms of specific competitive effect from 2009-2014, whereas Pakistan was not competitive in terms of the general competitive effect. The negative general competitive effect implies that Pakistan has enough capability to enhance the competitiveness of exports of particular products in specific destinations. The decrease in general competitive effect was mainly a result of the decline in the market shares of the leather products in the world market. Moreover, it was observed that the average general competitive effect was negative, while the specific competitive effect remained positive.

#### **Conclusion**

The purpose of the present study is to measure the competitiveness and export performance of selected leather and leather products by employing Constant Market Share Analysis. The data were taken from the International Trade Center (ITC) UN-COMTRADE statistics for Pakistan during the time period from 2003-14. The findings of product group (4202) show that the total effect remained positive throughout the time span except the year 2006. The positive structural effect illustrates that apart from the increasing demand of these products in the world markets, Pakistan succeeded in gaining specialization in these products. The competitiveness effect, that was negative, shows that the share of these products declined in the world markets. In addition, the findings of the product group (4203) indicates that the total effect was positive during 2003-14 and except in the year 2012 showing the exports of these products did not increase in world markets. The structural effect that was positive from 2009-2014 except the year 2012 shows that Pakistan gained specialization in these products and the demand of these products was high in rest of the world. The competitiveness effect that was positive from 2009-2014 except the year 2011 indicates that the market share of these products increased in selected time span. The government of Pakistan should focus on

these leather products to enhance the exports and foreign earnings. Moreover, it is the need of the hour to develop productive international marketing policy so that the leather products can make a significant contribution to diminish the overall negative trade balance of Pakistan.

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