Analysis for Pakistan's Export Growth to Great Seven (G7): An Application of CMSA

Arsalan Ahmed, Hassan Tahir

Abstract—In the present day scenario of reductions in tariff levels and non-tariff barriers, rising trade deficit and falling reserves are major economic issues for economies like Pakistan. This paper explores the flaws and causes of rising trade deficit by the use of the Constant Market Share (CMS) analysis for Pakistan. This study is the first contribution to analyse the Exports of Pakistan to Great Seven (G7) through the methodology of CMS. The CMS technique is being used to separate the impact emanating from the world trade effect, the commodity composition effect, the market distribution effect and the competitiveness effect. Panel data will be used for the period 2003 to 2012 (yearly). The study concluded some policy with respect to the current global economic conditions that can increase exports thus increasing foreign exchange for the economy.

Index Terms — Exports, Pakistan, Great Seven, International Trade, Competitiveness, CMSA.

----- ♦ -----

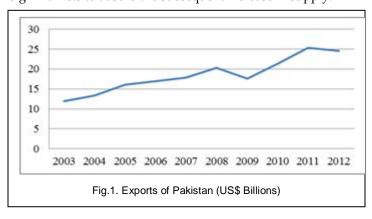
1 Introduction

1.1 Importance of Exports.

URRENTLY the world has been experiencing an export's value of 18 trillion US\$, In the last ten years (2003-2013) the world exports has been jumped from 7.4 trillion US\$ to 17.98 trillion US\$ with an increasing rate of 142%, this high increasing rate of exports shows that the in 20th century across the globe, countries are focusing on their exports at the large magnitude. In the context of the current global economic scenario it is widely known that "The level of exports of a country represents an indicator of economic development" (Bhagwati 1973). A positive and significant correlation between exports and economic growth has been observed (Dutt and Ghosh 1996) and Xu (1996). Muhammad and Saeed (2005) found a highly significant correlation between the Gross Domestic Product and exports in Pakistan for the period of 1970 to 2004, and a non-significant correlation between the growth of Gross Domestic Product and the growth of exports. They also suggested a positive Granger causal relationship from export to economic growth in the long-run. Their study rejected the hypothesis that exports and GDP are not co-integrated.

1.2 Contributions of Exports Earnings.

For a good economic stability a good Export growth is an important ingredient, Exports growth not only related to the economic stability it's also play a key role in the distribution of income and wealth in a country. If there is a Fluctuation in export earnings for a country it produces uncertainties in an economy which lead to then negative effect on the level and efficiency of investment in the country and also increases the inflation, causes the result as negative impact on economic growth. Regardless of what commodities a country exports, raw materials or finished goods, exports of the commodities provide a strong pillar to the international trade. Exporting some specific goods and services to the international markets support the country to establish a specific economic environment that increases demand and production of that commodity. Currently, due to the importance of exports at internationally, countries are integrating exports growth objectives in their foreign policy, the countries are allowing favorable trade agreements with several nations may be with them which are mutually useful to all parties. Therefore, government policies are designed to encourage expansion in exports by using various incentives such as, export subsidies, tax holidays etc. Promoting an export oriented economy has several rewards, but in literature it is also found the exports with all its positive impact, it is quite vulnerable thing. Due to numerous factors, such as a steep downfall in the demand of the entire world market, unpredictable rise and fall of the foreign exchange market, new technologies, and decreasing mounts of production. So it's necessary for the exporting countries to increase economic activity through human capital and technology improvements and diversify its products to new foreign markets to absorb the subsequent increase in supply.



1.2 Exports of Pakistan.

According to Imran and Adeela [1] globalization had a positive impact on exports from Pakistan. Currently (2012) the total value of exports are around 24 US\$ billion and imports 44US\$ billion. Figure 1 shows that since 2003 the highest growth rate in exports from Pakistan was 22% in 2009-10, while in 2008-09 Pakistan had a negative growth rate of -13% due to the global economic crises and decreased demand for Pakistani exports to Europe and the USA. Unfortunately, Pakistan has not experienced significant growth of exports as

compared with other countries. According to the Pakistan Bureau of Statistic (2012) a trade deficit of US\$ 1517 million was recorded in April of 2012. Historically, from 2003 to 2012, Pakistan's balance of trade averaged US\$ -818.6000 million (trade deficit) reaching an all-time high of 9.6000 million USD in August 2003 and a record low of US\$ -1878.0000 million in October of 2008.



Figure.2 presents the trend in Pakistan's exports and imports, reflecting that since 2003 the gap between exports and imports has become wider. Currently Pakistan is a member of several international organizations such as the ECO (Economic Cooperation Organization), SAFTA (South Asian Free Trade Area), WIPO (World Intellectual Property Organization) and WTO (World Trade Organization). Major trading partners of Pakistan are European Union, China, Kuwait, Saudi Arabia, UAE, United States and Malaysia etc.

1.3 Pakistan's Exports to Great Seven (G7)

The G7 is a group consisting of the finance ministers of seven industrialized nations: the U.S., U.K., France, Germany, Italy, Canada and Japan. They are seven of the eight (China excluded) wealthiest nations on Earth, not by GDP but by global net wealth. The G7 represents more than the 66% of net global wealth (\$223 trillion) (Wikipedia). Very few numbers of studies has been conducted to analyzed exports of Pakistan to Great Seven (G7) countries, but none study has used the methodology of Contant Market Share Analysis to analyzed Pakistan's exports to the Great Seven (G7) countries. The present study is the first contribution to analyze Pakistan's exports to the G7 by using the CMS framework. Table 1 shows bilateral trade between Pakistan and the G7. According to Table 1 during the last eleven years Pakistan's exports to G7 increased from US\$ 5.26 billion (2003) to US\$7.72 billion (2013) while imports from DMEs to Pakistan increased from US\$3.23 billion (2003) to US\$6.58 billion (2013) during the same period. Besides, % share of Exports to G7 in total Exports from Pakistan has been decresed from 44% to 30.75% and % share of

TABLE 2
BILATERAL TRADE BETWEEN PAKISTAN AND GREAT SEVEN G7

Years	Exports of Pakistan to Great Seven (billion US\$)	% share of Exports to G7 in total Exports from Pakistan	Imports of Pakistan from G7 (billion US\$)	% share of Imports from G7 in total Imports into Pakistan
2003	5.26	44.07	3.23	24.75
2004	6.01	44.89	4.74	26.41
2005	6.91	43.07	5.98	23.82
2006	7.29	43.07	7.00	23.48
2007	6.91	38.74	7.53	23.09
2008	6.95	34.26	7.94	18.75
2009	6.03	34.32	6.62	20.96
2010	7.12	33.25	6.27	16.71
2011	8.01	31.62	6.91	15.85
2012	7.17	29.13	6.59	15.04
2013	7.72	30.75	6.58	15.04

Imports from G7 in total Imports into Pakistan 24.75% to 15.04% also declined sharply.

2 LITRETURE REVEIW

2.1 International Studies

Following Tyszynski [2] Leamer and Stern [3] developed and modified this technique, which was further modified by Jepma [4]. Finicelli et al. [5] examined the evolution of export shares of industrial and emerging market economies for 1985-2003. The study quantified the contribution of the geographical and sectoral specialization through the constant market share analysis. In comparison to emerging markets with the industrial countries, the study found that emerging economies have strong export growth as compared with the industrial countries. The study also shows that among the emerging economies, China has strong export growth, increasing its market shares across sectors and destinations due to its competitiveness, while industrial countries benefited from specialization in fast-growing sectors (high-tech) or destinations (Asia). Cheptea. et al. [6] used Constant Market Share Analysis by incorporating the econometric shift-share decomposition of export growth. They broke the export growth of European countries into geographical compo-sition, sectoral composition and competitiveness. The study shows that European countries have lost less market share in hightechnology products in developing countries as compared with the developed countries. The study also revealed that during 1995 to 2009 the EU-27 survived competition from emerging countries better than the US and Japan.

Panayiotis et al. [7] investigated the performance of Greek exports by Constant Market Share Analysis, using panel data on bilateral trade by product categories and found that the degree of specialization of Greek exports is relatively high as compared to the other countries. Moreover, in commodity categories (mechanical equipment, manufactured metallurgy prod-

Arsalan Ahmed is currently pursuing doctoral degree program in economics in School of Economics, Shandong University, China, PH:+8615668387001. E-mail: arsalanbinfurqan@gmail.com

Hassan Tahir is currently pursuing masters degree program in Applied-Mathematics in School of Mathematics, Shandong University, China, PH:+8615665725235. E-mail: hassantahir039@gmail.com

ucts, paper and glass etc.) Greece can increase its exports by concentrating on non-price factors. Jiménez and Martín [8] argued that the change in the country's export market share is influenced by the actual movement in price and non-pricecompetitiveness and composition of exports (both geographic and product wise). They used CMS analysis to investigate changes in the market shares of the euro area and its member countries for the period 1994-2007. The author identified that the geographic composition neutralized the nega-tive effects due to loss of competitiveness, and euro countries were badly affected by the lower relative special-ization in hightechnology products. Also the high intra-euro trade positively supports exports of the euro area. Skriner. E [9] studied Competitiveness and Specialization of the Austrian Export Sector by using the trans-formed version of the Constant market share analysis methodology from the static approach to a dynamic system through time series modeling. According to the study, "even if a country maintains its share of every product in every market, it still can have a decrease in its aggregate market share if it exports to markets that grow more slowly than the world average and/or if it exports products for which demand is growing more slowly than average." The study also shows that for high export growth, the country should focus (to export) on most dynamic markets and products in world trade. Amador et. al [10] analyzed the evolution of Portuguese market shares in world exports over the 1968-2006 period, using the CMS methodology. The study compared Portuguese market shares with other South European countries and Ireland and explored the impact of product and geographical composition on export growth. The author argued that changes in a country (say Portuguese) market share in world exports depends on domestic and external macroeconomic developments (impact on relative price/cost competitiveness of exports), long term structural factors (productive factors, technology etc.) geography and cultural linkages with different trade partners, dynamics of international trade flows. Fredrik et. al [11] investigated the competitiveness of ten Mediterranean countries with respect to fresh fruit and vegetables by using the CMS analysis for the period 1993-2003 with two bases (world exports and European exports). The authors stated that in general there is no major difference between using the world or the European Union as the base in the Constant Market Share Analysis, but the results are affected by the choice of destination markets. The study also compared revealed comparative advantage results with CMS analysis results (world base) and concluded that high and positive RCA values do not necessarily correspond to a positive competitiveness effect. The results generally show that many of the Mediterranean countries did not perform up to their potential, while the competitiveness of the investigated countries deteriorated over the period, and the pos-itive impact of market distribution effect increases export growth.

2.2 Case of Pakistan

For Pakistan Aurangzeb [12] explored the relationship between exports and economic growth in Pakistan. Using time series data (1973-2005) the study states that in the export sector of Pakistan the marginal factor productivities are significantly higher. The study shows that export oriented, outward-

looking approach is required for better economic growth in qanPakistan.

Wizarat et. al [13] find that the rate of growth of demand for Pakistani exports has not been slower than the average growth rate of world exports. They found world trade effect in 2002-03, Market Distribution Effect positive for all the years except 1998-99-2000, due to income and trade policies in the importing countries. The Commodity Composition Effect (CCE) was positive for all the years' except 2001-2002. Naseeb Zada [14] examined the determinants of exports for Pakistan. The study used Generalized Methods of Moments (GMM) and found that exports from Pakistan are sensitive to changes in world demand and world prices on the demand side. On the supply side, price and income elasticities are low. And the demand for exports is relatively higher for countries in NAFTA, European Union and Middle East regions. Amjad et. al. [15] described the problem faced by exporters of Pakistan to utilize the full competitive potential in the international market. The study states that the main problems are the shortage of skilled labor in textiles, chemicals, and hosiery/bed linen as there is low quality of education in labor, the energy crisis i.e. non-availability of cheap fuel, especially electricity that is important for exporters to boost exports, institutional rigidities, market imperfections and weaknesses in physical infrastructure.

3 METHODOLOGY

In the model of Leaner and Stern the main assumption is that a country's export share in the world market remains unchanged over a one year period. The analysis is performed by decomposing total export growth into four categories; first, the world trade effect (WTE) which shows how much the overall world export growth affects the country's export growth. Second, the commodity composition effect (CCE) which analyses the concentration of exports. Third, the market distribution effect (MDE) which measures the concentration and diversification of exports with respect to markets. And fourth, the competitiveness effect (CE) which captures the price effect in international markets for exports.

3.1 Data Sources and Definatiom

Data was taken from the International Trade Centre (ITC). ITC has a joint mandate with the World Trade Organization (WTO) and the United Nations and focuses solely on trade development for developing and transition economies. Detailed data on countries export performance, key imports and foreign investment, grouped by product and service categories (HS and BOP) are available on the ITC website (http://www.intracen.org/country/Pakistan/). Among the various trade data classifications, the Harmonized System (HS Code) at 4 digit level will be used for this study. The HS Code is a commodity classification system introduced by the World Customs Organization (WCO) to harmonize international trade by creating a coding system that is globally acceptable. The four digit HS code is broken down into two parts. The first two digits (HS-2) identify the chapter the goods are classified into, e.g. 09 = Coffee, Tea, Maté and Spices. The next two digits (HS-4) identify groupings within that chapter,

e.g. 0902 = Tea, whether or unflavored. Also the selected Commodities have 70% share in total exports of Pakistan (see Appendix-B, Table 2)

3.2 Explanation of Variables

 E^1 = Value of Pakistan's total exports in the base year

 E^2 = Value of Pakistan's total exports in the current year

 E_i^1 = Value of Pakistan's total exports of commodity (i) in the base year

 $E_{\rm i}{}^2$ = Value of Pakistan's total exports of commodity (i) in the current year

 E_{ij}^{1} = Value of Pakistan's total exports of commodity (i) in the base year to country (j)

 E_{ij}^2 = Value of Pakistan's total exports of commodity (i) in the current year to country (j)

e: percentage increase/decrease in total world exports from the base year to the current year

e_i: percentage increase / decrease in world exports of commodity (i) from the base year to the current year

 e_{ij} : percentage increase/decrease in world exports of commodity (i) to country j from the base year to the current year

3.3 The Model

With the division of exports into ith commodities and jth markets, the equation representing the total change in exports from Pakistan can be written as:

$$\Delta E_{ij} = E_{ij}^{2} - E_{ij}^{1}$$

$$\Delta E_{ij} = e_{ij} * E_{ij}^{1} - e_{i} * E_{ij}^{1} + E_{ij}^{2} - E_{ij}^{1}$$

$$\Delta E_{ij} = e_{ij} * E_{ij}^{1} + (E_{ij}^{2} - E_{ij}^{1} - e_{ij} * E_{ij}^{1})$$

Appling Summation to the above equation for aggregating Pakistan's export growth,

$$\Delta E_{ii} = E_{ii}^2 - E_{ii}^1 = \sum \sum e_{ii} * E_{ii}^1 + \sum \sum (E_{ii}^2 - E_{ii}^1 - e_{ii} * E_{ii}^1)$$

To obtain the world export growth effect on the i^{th} commodity in the j^{th} markets for Pakistan's exports, addition and subtraction of the term r and r_i is being done in equation as A\addition and subtraction of the terms r and r at the same time does not affect the equation's equilibrium.

$$\begin{split} \Delta E &= E^2 - E^1 = \sum \sum \left(e - e - e_i - e_i + e_{ij} \right) E_{ij}{}^1 + \sum \sum \left(E_{ij}{}^2 - E_{ij}{}^1 - e_{ij} * E_{ij}{}^1 \right) \\ \Delta E &= E^2 - E^1 = \sum \sum \left(e^* E_{ij} - e^* E_{ij}{}^1 + e_i * E_{ij}{}^1 - e_i * E_{ij}{}^1 + e_{ij} * E_{ij}{}^1 \right) \\ &+ \sum \sum \left(E_{ij}{}^2 - E_{ij}{}^1 - e_{ij} * E_{ij}{}^1 \right) \\ \Delta E &= E^2 - E^1 = \sum \sum \left(e^* E_{ij}{}^1 \right) + \sum \sum \left(e_i * E_{ij} - e^* E_{ij}{}^1 \right) + \sum \sum \left(e_{ij} * E_{ij}{}^1 - e_i * E_{ij}{}^1 \right) \\ &+ \sum \sum \left(E_{ij}{}^2 - E_{ij}{}^1 - e_{ij} * E_{ij}{}^1 \right) \end{split}$$

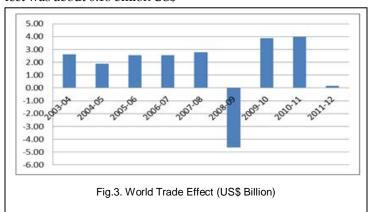
$$\begin{split} \Delta E = & E^2 - E^1 = \sum \sum \left(e^* E_{ij}^{-1} \right) + \sum \sum \left[\left(\begin{array}{c} e_i - e \right)^* E_{ij}^{-1} \right] + \sum \sum \left[\left(\begin{array}{c} e_{ij} - e_i \right)^* E_{ij}^{-1} \right] \\ & + \sum \sum \left(E_{ij}^{-2} - E_{ij}^{-1} - e_{ij}^* E_{ij}^{-1} \right) \\ \Delta E = & E^2 - E^1 = \sum \left(e^* E_i^{-1} \right) + \sum \left(\begin{array}{c} e_i - e \right)^* E_i^{-1} + \sum \sum \left[\left(\begin{array}{c} e_{ij} - e_i \right)^* E_{ij}^{-1} \right] \\ & + \sum \sum \left(E_{ij}^{-2} - E_{ij}^{-1} - e_{ij}^* E_{ij}^{-1} \right) \\ \Delta E = & E^2 - E^1 = \left. e^* E^1 + \sum \left(\begin{array}{c} e_i - e \right)^* E_i^{-1} + \sum \sum \left[\left(\begin{array}{c} e_{ij} - e_i \right)^* E_{ij}^{-1} \right] \\ & + \sum \sum \left(E_{ij}^{-2} - E_{ij}^{-1} - e_{ij}^* E_{ij}^{-1} \right) \end{split}$$

The final equation represents the three level analyses, where the growth of Pakistan's exports has been divided into four parts. The first part is shown by the term e^*E^1 explains the growth of Pakistan's export with respect to the general rise in world exports, the second part represented by the term $\sum [(e_i - e)^*E_{i^1}]$ shows the commodity composition of Pakistan's export. The third part shown by the term $\sum [(e_{ij} - e_i)^*E_{ij^1}]$ represents the market distribution of Pakistan's exports and the fourth part is the unexplained residual term, indicating the competitiveness effect. This indicates the differences between the actual export increase and the hypothetical increase if Pakistan had maintained its share of export of each commodity group to each country.

3 RESULTS AND DISCUSSIONS

4.1 World Trade Effect

According to the results (Figure 3) from 2003-2012 world trade effect has apostive impact on the exports of Pakistan manufactured except 2008-2009. In the consecutive years 2009-10 and 2010-11 Pakistan experienced a healthy world trade effect of 3.86 billion US\$ and 3.93 billion US\$ respectively. The average value of the world trade effect is around 1.8 billion US\$ for the last ten years, while in 2011-2012 the value of world trade effect was about 0.18 billion US\$

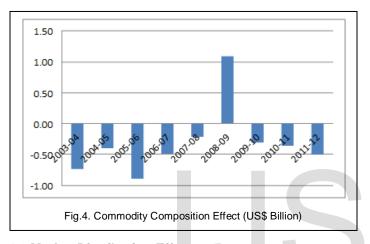


The study also show that world trade effect is the most dominant among the all four factors (World Trade Effect, Commodity Composition Effect, Market Distribution Effect and Competitiveness Effect). The average value of the world trade effect is around 1.8 billion US\$ for the last ten years. At the aggregate level Pakistan's exports are positively affected by world export growth, since 2003 the value of WTE fluctuated between -4.6 to 4 but this fluctuation mostly remained positive for Pakistan's exports. One major reason for the positive effect

of world export growth on Pakistan's exports may be because the world average growth rate was fluctuating, but was always positive throughout the period.

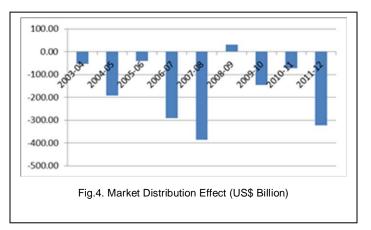
4.2 Commodity Composition Effect

Commodity Composition Effect (CCE) shows concentration in the composition of exported goods. The results of the CMS analysis show that the Commodity Compositions Effect remained negative for Pakistan's exports throughout the period except 2008-2009 (Figure 4). In that year the value of Commodity Composition Effect was 1.09 billion US\$. The most negative value (effect) of commodity composition was recorded at -0.89 billion US\$ in 2005-06. While in the year 2011-12 there was a negative affect emanating from the Commodity Composition Effect to the tune of -0.50 billion US\$.



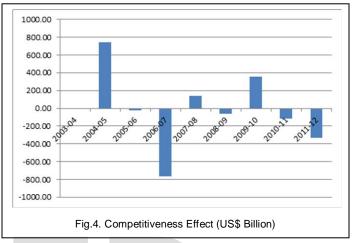
4.2 Market Distribution Effect

The results (Figure 5) illustrate that the MDE for G7 generally remained negative in 2003-12 except 2008-09 in which the MDE for G7 was 30 million US\$. Moreover, the highest negative MDEs was recorded in 2006-07, 2007-08 and 2011-12 at (-) 292 million US\$, 386 million US\$ and 322 million US\$ respectively. As the average share of G7 in Pakistani exports is 37.64%, the negative MDE of G7 significantly affects total exports from Pakistan.



4.2 Competitiveness Effect

According to the results (Figure 136) the CME for G7 for total exports from Pakistan fluctuated both negatively and positively, but the trend is mostly negative. The highest positive value of CME (of G7) was recorded at 742 million US\$ in 2004-05, while the highest negative value of CME (of G7) was recorded at (-) 764 million US\$ in 2006-07. Moreover, in 2011-12 the CME for G7 was to the tune of (-) 332 million US\$. The average share of G7 in the exports of Pakistan is 37.64%, so the CME of G7 significantly affects total exports from Pakistan.



5 DISCUSSIONS

Based on the analysis, this research concludes as follows:

- 1. Amoung the four factors the World Trade Effect (WTE) has a high positive impact on total export growth of Pakistan but except for a few years the Commodity Composition Effect (CCE), Market Distribution Effect (MDE) has negative impact on growth almost throughout the period of 2003-12. Moreover, the Competitiveness Effects (CME) has shown both positive and negative impacts.
- 2. The main factor for the negative CCE is that Pakistan's exports are mainly concentrated among eleven (4 digit disaggregated) major commodities (products), as is shown in Appendix B, Table 2. These eleven commodities (4 digit disaggregated) which contain 45% -50% share of total exports from Pakistan, while at the same time these products have low growth rate in the world as compared to other commodities, which results in a negative Commodity Composition Effect (CCE).
- 3. Market Distribution Effect (MDE) measures the concentration and diversification of Pakistan's exports with respect to the importing country. In the case of Great Seven the MDE is negative. Since the commodities which have 89.49% share in total exports from Pakistan to G7, are 8.98% in total G7 imports from the world (see Table-3), which shows that the commodities exported by Pakistan do not have great demand in these countries, especially 63 (Other made textile articles, sets, worn clothing etc), 61(Articles of apparel, accessories, knit or crochet), 62 (Articles of apparel, accessories, not knit or crochet), 52 (Cotton)and 42 (Articles of leather, animal gut, harness, travel goods), which have 81% share in total exports

from Pakistan to MDEs and 4.54% share in total imports into G7 from the world. This shows that the commodities which are exported to the DME from Pakistan do not have high growth demand in the DME markets, so Pakistan has to diversify its exports.

- 4. We find that United States of America, United Kingdom, Germany, Italy, France, have 94.8% share in total exports from Pakistan to G7 and the exchange rate among Pakistan and the G7 is very high (Table.5) due to which G7 imports to Pakistan are relatively cheap giving Pakistani exporters a major competitive advantage.
- 5. In order to stimulate exports from Pakistan, the government should diversify exports from lower world demanded products to relatively faster growing world demanded products, for that the required diversification is from the commodities (with HS 4 digits code) such as 1006, 4203, 5205, 5208, 5209, 5210, 5212, 6105, 6203, 6302and 6307 to other commodities (with HS 4 digits code) such as 1001, 1302, 2207, 2610, 6103, 6104 and 9404. It is noted that most of Pakistan's exports under these groups are outputs of agriculture based industries and the demand for these tends to be low so the government should consider the expansion of manufactured based more advanced end-products with higher value addition.
- 6. The study also showed that commodities 2710 (Petroleum oils, not crude), 6105 (men shirts, knitted or crocheted), 6116 (gloves, mittens and mitts, knitted or crocheted), 7306 (tubes, pipes and hollow profiles of iron or steel, nes) and 7404 (copper waste and scrap) have not only a good share in the exports of Pakistan but their demand in the international market is also stable. The growth of these exports can promote export growth of Pakistan at the aggregate level more significantly.
- 7. In the case of Great Seven (See Table 4), Pakistan should focus on the commodity categories 27 (Mineral fuels, oils, distillation products, etc.), 84 (Machinery, nuclear reactors, boilers, etc), 85 (Electrical, electronic equipment), 87 (Vehicles other than railway, tramway), 30 (Pharmaceutical products), 90 (Optical, photo, technical, medical, etc apparatus), 39 (Plastics and articles thereof), 29 (Organic chemicals), 71(Pearls, precious stones, metals, coins, etc), 99 (Commodities not elsewhere specified) and 72 (Iron and steel) because these commodities have 66.85% share in total G7 imports from the world, while Pakistan has only 4.73% share in exports of these to G7 (see Table 3). Government of Pakistan can achive these targest by focusing on special incentives to targeted industries (producing these commodities) in the form of tax holidays, tax reduction and tariff reduction on some specific supported imported raw materials

APPENDIXES

Appendix- A HS 4 digits code Commodity Name 6302 Bed, table, toilet and kitchen linens 1006 Rice

- 5205 Cotton yarn (not sewing thread) 85% or more cotton, not retail
- 2710 Petroleum oils, not crude
- 6203 Men's suits, jackets, trousers etc. & shorts
- 5209 Woven cotton fabrics, 85% or more cotton, weight over 200 g/m2
- 5208 Woven cotton fabrics, 85% or more cotton, weight less than 200 g/m2
- 1001 Wheat and muslin
- 4203 Articles of apparel & clothing access, of leather or composition leather
- 6105 Men's shirts, knitted or crocheted
- Women's suits, jackets, dresses skirts etc. & shorts
- '5210 Woven cotton fabrics, less than 85% cotton, mixed with manmade fibers
- 2523 Cements, Portland, aluminous, slag, super sulfate & similar hydraulic c
- 7113 Articles of jewelry & parts thereof
- Woven fabric of synthetic staple fib (< 85% of such fiber), mixed with cotton (wt.
- 6307 Made up articles nes, including dress patterns
- 5201 Cotton, not carded or combed
- 1101 Wheat or muslin flour
- 6103 Men's suits, jackets, trousers etc. & shorts, knit/crochet
- 6109 T-shirts, single and other vests, knitted or crocheted
- 9018 Electro-medical apparatus (electro-cardiographs, infra-red ray app, sy
- Panty hose, tights, stockings & other hosiery, knitted or crocheted
- 3907 Polyacetal, polyether, epoxide resin, polycarbonate, etc., in primary form
- 5212 Woven fabrics of cotton, nes
- 2207 Ethyl alcohol & other spirits (if under natured then higher than 80% by
- 9506 Articles & equip for gymnastics, athletics, or sports/outdoor games nes
- 4113 Leather further prepared after tanning or crusting ""incl. parchment-dressed leather"", of
- 4107 Leather of other animals, o/t leather of hd no 41.08/41.09
- 1516 Animal or veg. fats, oils & factose, hydrogenated
- 0303 Fish, frozen, whole
- 5211 Woven fabric of cotton, less than 85%,mxd with manmade fiber, weight >200
- 0805 Citrus fruit, fresh or dried
- 6104 Women's suits, dresses, skirt etc. & short, knit/crochet
- 5701 Carpets and other textile floor covering knotted
- 6303 Curtains, drapes & interior blinds

Appendix- B

TABLE 2
SHARE OF COMMODITIES IN THE TOTAL EXPORTS OF PAKISTAN

HS Code	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
1006	5.3	5.1	6.8	6.8	6.4	12.0	10.1	10.6	8.1	7.6
4203	3.5	3.5	3.9	3.7	3.7	3.7	3.1	2.8	2.6	2.6
Aggregate	8.8	8.6	10.7	10.5	10.2	15. 7	13.3	13.4	10.7	10.2
5205	8.0	8.1	7.6	8.4	7.8	5.9	7.3	7.6	7.7	8.5
5208	5.8	4.3	4.5	4.2	3.7	3.8	3.1	3.1	3.1	3.0
5209	0.5	0.7	0.6	1.5	2.1	2.8	3.1	3.3	3.7	4.4
5210	3.2	4.0	4.6	3.7	3.0	3.4	2.1	1.9	2.1	2.0
5212	2.4	3.7	2.8	2.4	1.7	8.0	1.0	0.9	1.0	0.9
Aggregate	19.9	20.9	20.1	20.2	18.4	16.6	16.5	16.9	17.6	18.8
6105	4.6	4.7	3.8	4.1	3.4	2.8	2.7	2.7	2.5	2.2
6203	3.5	2.9	3.7	3.7	4.0	3.9	4.0	4.0	3.7	3.7
6302	15.6	13.5	15.9	16.1	14.4	12.5	13.6	12.3	11.2	10.2
6307	1.9	1.5	1.6	1.5	1.7	1.6	1.5	1.6	1.5	1.5
Aggregate	25.7	22.6	25.1	25.4	23.5	20.8	21.8	20.6	18.9	17.7

TABLE 3

HS Code	Commodity Name	% share in total Exports of Pakistan to G7	% share in total Imports of G7 from the World	
'63	Other made textile articles, sets, worn clothing etc	30.89	0.42	
'61	Articles of apparel, accessories, knit or crochet	21.95	1.71	
'62	Articles of apparel, accessories, not knit or crochet	13.92	1.78	
'52	Cotton	9.76	0.12	
'42	Articles of leather, animal gut, harness, travel goods	4.76	0.50	
'90	Optical, photo, technical, medical, etc apparatus	2.14	2.87	
'57	Carpets and other textile floor coverings	1.97	0.12	
'10	Cereals	1.40	0.30	
'95	Toys, games, sports requisites	1.39	1.03	
'41	Raw hides and skins (other than furskins) and leather	1.32	0.12	
	Aggeregate	89.49	8.98	

TABLE 4

HS Code Commodity Name Share in total Share in total Exports of Pakistan to G7 From the W	G7
Adia and Evaluation	
Mineral fuels, oils,	
Machinery, '84 nuclear reactors, 0.43 12.04 boilers, etc	
Electrical, '85 electronic 0.26 10.97 equipment	
Vehicles other '87 than railway, 0.16 9.40 tramway	
'30 Pharmaceutical products 0.15 3.01	
Optical, photo, '90 technical, medical, 2.14 2.87 etc apparatus	
'39 Plastics and articles thereof 1.08 2.65	
'29 Organic chemicals 0.03 2.55	
Pearls, precious stones, metals, coins, etc 0.30 2.46	
'99 Commodities not elsewhere specified 0.02 2.45	
'72 Iron and steel 0.04 1.97	
Aggeregate 4.73 66.85	
Aggeregate 4.73 66.85	

TABLE 5

Country	% share in total Exports of Pakistan to G7	Exchange Rate(Current)
Canada	2.99	1.00 CAD = 102.34 PKR
Japan	2.20	1 JPY = 1.08 PKR
United States of America	52.87	1.00 USD = 107.34 PKR
Germany, Itlay, Frnace	26.52	1.00EUR = 110.4737
United Kingdom	15.41	1.00 GBP = 154.2771

REFERENCES

TABLE 4

- [1] Imran, Adeela And Aqil (2012) "Impact Of Globalization On Exports Of Pakistan", Science Series Data Report Vol 4, No. 4;Apr 2012,ssdr@sciencerecord.com.
- [2] Tyszynski, H., (1951), "World Trade in Manufactured Commodities, 1899-1950", The Manchester School of Economic and Social Studies, Vol.19, pp222-304.
- [3] Leamer, E.E. and Stern, R.M. 1970, Quantitative International Economics, Boston: Allen & Bacon.
- [4] Jepma. C.J. (1986). "Extensions and Application Possibilities of the Constant Market Shares Analysis". Rijkusiniversiteit, Groningen.
- [5] Finicelli, A., M. Sbracia and A. Zaghini, (2008), "A Disaggregated Analysis of the Export Performance of Some Industrial and Emerging Countries", MPRA Paper, No. 11000.
- [6] Chaptea A., Gaulier G., Zignago S., (2005). "World Trade Competitiveness: A Disaggregated View by Shift-Share analysis". Working Paper No 2005-23, CEPII: Paris.
- [7] Panayiotis P., Backinezos, C. and Evangelia A. (May,2010) "Export Performance, Competitiveness And Commodity Composition" ISSN 1109-6691(JEL classification codes: C22; F12; F14; O14) Working Papers, Bank of Greece, Eco-nomic Research Department Special Studies Division.
- [8] Jiménez, N. and Martín, E. (2010). "A Constant Market Share Analysis of the Euro Area in the Period 1994-2007", Economic Bulletin, January 2010.
- [9] Skriner, E., (2010), "Competitiveness and Specialization of the Austrian Export Sector", Economic Series, No. 235, Institute for Advanced Studies, Vienna.
- [10] Amador.J. and Cabral.S., (2008), "The Portuguese Export Performance In Perspective: A Constant Market Share Analysis", Economic Bulletin, Autumn,2008
- [11] Aurangzeb, (2006) "Exports, Productivity and Economic Growth in Pakistan: A Time Series Analysis", The Lahore Journal of Economics Vol 11 : 1 (Summer 2006) pp.1-18
- [12] Wizarat.S, Iftikhar.K and Kamran A. N (2009), "Major determinants of export growth", Pakistan Business Review, volume 11 number 2, July 2009
- [13] Naseeb Zada, Malik Muhammad, Khan Bahadar.(2011) "Determinants of Exports of Pakistan: A Country-wise Disaggregated Analysis.".The Pakistan Development Review, Winter 2011, Vol. 50, No.4 Part II.
- [14] Amjad, R, Ghani, E, Musleh ud Din, and Mahmood, T, (2012), "Export Barriers in Pakistan: Results of a Firm-Level Survey", The Lahore Journal of Economics 17: SE (September 2012): pp. 103–134