

---

## Volatility of exchange rate and its impact on export growth Of textile sector of Pakistan

---

**Dr. Hajralhsan**

Head of Economics Department, Female Campus, International Islamic  
University Islamabad, Pakistan

[hajraihsan@iiu.edu.pk](mailto:hajraihsan@iiu.edu.pk)

**Abdul Ghani**

M.Phil. Graduate of School of Economics, Quaid e Azam University Islamabad,  
Pakistan

[Abdulg.ag2020@gmail.com](mailto:Abdulg.ag2020@gmail.com)

**Faisal Iqbal**

BMRI department, University of Bedfordshire, UK

[sinjhoro@hotmail.com](mailto:sinjhoro@hotmail.com)

---

### Abstract

Exports being engine of an economy plays a vital role for the development of an economy. There are a number of factor that effect the exports of a country including exchange rate, domestic level of income, government policies of exports, production level of country, cost of raw materials and utilities. A number of studies have been done to investigate the relationship between the exchange rate and exports growth but there are no consensuses between them. According to some researcher there is positive relation between the exchange rate and export but some other disagree with them.

This study is specially done to explain the relationship of exchange rate and export growth of textile sector of Pakistan and some other factor that influence the exports of textile products. For this purpose the whole textile sector of Pakistan is taken into study and we took the exports and exchange rate of last ten years from 2011 to 2020 as a sample for this study. Quantitative approach is used to analyze the impact of exchange rate on exports.

**Key Words:** *Exchange Rates, Export Growth, Exchange Rates Volatility*

---

### Introduction:

Export plays a vital role for the development of any economy and work as engine for the growth of an economy. Trade policy also plays a vital role for an economy because it motivates the traders by providing incentives and other facilities so that more and more trader attract towards trade activities. There are number of factor that affects export including exchange rate, real income, money supply, openness and foreign direct investment etc. however, exchange rate play

a vital role on the level of export of an economy, the strength of domestic currency and position of an economy in the world is also determined on the basis of exchange rate of an economy. The volatile natures of exchange rate always remain a debatable issue for researcher to open up new avenues. After the break down of Britton wood system of fixed exchange rate after the 2<sup>nd</sup> world war in early 1970's this topic become more important issue because of volatile nature of exchange rate.

Exchange rate fluctuations are consider bad (Akhtar and Hilton, 1984) but it may not be always because some time these fluctuation cause generation in more profit (Hooper and Kohlhagan, 1978). The nature of exchange rate uncertainty may be real or nominal. Nominal exchange rate is the position of an economy's domestic currency against the foreign currency. It is believed that higher the exchange rate higher will be exports. However, final impact depends upon exchange rate over valued or undervalued. The change in real exchange rate (inflation adjusted) result in increasing or decreasing of prices of goods of particular economy. A number of earlier studies used time series or cross sectional data and the result are mix. For example Hooper and Kohlhagan (1978); Baily and Tavlas (1988); used time series data and prove that there is no negative effect exchange rate on trade. However, Cushman (1983); Arize (1993); chowdhury (1993); Akhtar and Hilton (1984) found significant negative effect.

The textile industry of Pakistan in term of exports and employment is a major contributor to the Pakistan's economy. Pakistan is the 4<sup>th</sup> largest producer of cotton and 3<sup>rd</sup> largest consumer of the world. Indeed, due to increase in cost of production it is facing tough competition in the international market which makes it less competitive than the neighbor countries China, India, and Bangladesh. The total textile trade of the world annual volume is \$ 18 trillion and growing by 2.5%. In this Pakistan share is less than 1%. With the major stress on agro-based industries the highest priority is given to the manufacturing sector of Pakistan. The growth trend of textile sector from 2001-03 grew steadily but it increased abruptly during 2004 and showed an increase from 5.20% to 20%. This major growth trend was due higher prices of inputs and high exports to US which made it 7<sup>th</sup> largest market for US cotton. In 2007 political and economic instability was occur due Benazir Bhutto's assassination that lead to unstable law and order situations. Pakistan textile sector showed record negative growth in 2008 due to financial crises in global economy and result in slowdown in the growth of economy charred by oil, food and other commodity prices, softening of external demand and turmoil in the international financial market. The terrible energy crises during this year also negatively affect the performance of the textile industry.

### **Literature Review:**

Hooper and Kohlhagen (1978) identified no significance effect of exchange rate volatility on trade volume in developed countries their study. Onafowora and Oweye (2011) investigated that increase in volatility of exchange rate increase the uncertainty about profit which have significant negative effect both in the short run and long run. They also indicate that improvement in the term of trade (represented by decrease in the real exchange rate) and real

foreign income has positive effects on export. Rose (2000) obtained result similar to Dell' Ariccia (1999). He used a panel data set of 186 countries for the five years 1970, 1975, 1980, 1985 and 1990. The impact on trade was more pronounced in case of ordinary least square as he found that reducing volatility by one standard deviation would increase bilateral trade by about 13 percent as compared to four percent in the case of random effects. Srinivasan and Kalaivani (2013) identified significantly negative effect of exchange rate volatility and export growth in India. They also found that higher exchange rate fluctuation have to reduce real export. Hassan and Tufta (1998) suggested that in long run export growth is driven by the volume of World trade, and is negatively and in elastically related to the volatility of exchange rate.

Javed and Farooq (2009) suggested that economic performance of the country is very sensitive to exchange rate in the long run period. They also check the impact of exchange rate volatility on macroeconomic variable In Pakistan. The manufacturing product and economic growth has positive relation. Aqeel and Nishat (2006) studied the effect of exchange rate volatility on Pakistan export and also consider the effects of world trade and world export price. They conclude that exchange rate volatility is negatively related with export growth. Hassan and Mahmood (2013) using time series data analyze the exchange rate's impact on economic growth as well as some other macroeconomic factors and shows that there is long run equilibrium relationship of export performance and its other factors in Pakistan. There is a positive and significant effect on export performance of trade openness, GDP and exchange rate.

Mukhtar and Malik (2005) used three South Asian countries (India, Pakistan, Sri Lanka) to investigate the impact of exchange rate volatility on export growth of these countries and indicate the presence of significant effect of real exchange rate on export growth. Serenis and Serenis (2008) investigate the impact of exchange rate volatility on export for four European countries (Norway, Poland, Hungary, Switzerland) and find no major effect on aggregated export of exchange rate for E.U countries. Danmola (2013) used macroeconomic variables and analyze the impact of volatility of exchange rate by using different methodology and found that GDP, FDI and trade openness positively influenced by exchange rate but inflation is negatively influenced by exchange rate. Hassan (2013) investigated the impact of exchange rate volatility on the fluctuation in trade with three major trading countries of Pakistan (USA, UK and UAE). She used the data of long period to observe clear findings and her findings shows that when there are more fluctuation in exchange rate volatility the export growth decrease but when there is low fluctuation in exchange rate there is more growth in export. Kiptui (2008) investigate the impact of volatility of exchange rate and export growth of Kenya's horticulture and tea export and find negative impact between exchange rate and export by using monthly data. Guloglu investigate that when there is high exchange rate volatility during that period export performance decrease and during the period when exchange rate volatility is low the result indicates the high growth of real export. He also establishes a linkage between volatility in exchange rate, exchange rate regime and export. Bristy (2013) investigate volatility of exchange rate on export of real

exchange rate for long run and short run her findings were that the exchange rate offsets export due to increasing uncertainty.

Chit, Rizov and Willenbock (2010) used the data emerging five Asian countries as well as 13 other industrial countries to determine the impact of bilateral exchange rate on real exports. Their findings indicate that there is negative and significant impact of exchange rate volatility on exports. They suggest the countries used for research should pay more focus on establishing exchange rate. Aurangzeb, Stengos and Mohammad (2005) used the data for the period 1985-2001 to empirically investigate the impact of volatility of exchange rate on exports of Pakistan's major trading partners. Their findings indicate that as exchange rate volatility increase this will negatively and significantly affect the volume of exports during short run. These results also indicate that between exchange rate, real export, relative prices and foreign income there persists a long run equilibrium relationship. They suggest the stabilizing policy of exchange rate.

Hassan (2013) investigated the fluctuations in trade of Pakistan resulting from volatility in exchange rate of three of the major trading partners including USA, UK, UAE. It covers a longer period of time from 1988 to 2011 using monthly data. The study shows the negative relationship among exchange rate and export growth. The paper shows the explaining capacity of exchange rate uncertainty of the United States, United Kingdom and United Arab Emirates with Pakistan to hit its trade growth. Different models were used to check the volatility measure. She suggests for Pakistan's economy that central bank must have strong control upon the monetary policy to avoid as much as possible the volatility in exchange rate.

Moccerro and Wingrad (2006) examined the relationship between real exchange rate volatility and export of Argentina. They conclude that volatility of exchange rate matters for exports of Argentina. Further a reduction in real exchange rate volatility generates a trade-off between intra-regional and extra-regional exports. Decreasing exchange rate volatility creates positive effects on exports to Brazil but a negative effect on sales to the rest of the world. The effect increases as the reduction in volatility falls on the intra-regional real exchange rate volatility. If Argentina is committed to strengthen commercial integration with Brazil the coordination of exchange rate policies must not be excluded. Kemal (2005) investigated the impact of exchange rate volatility on export growth in case of Pakistan and found a positive relationship between exchange rate volatility and export growth but this was insignificant and for imports there persists a negative and significant relationship. In his study he also used other market instabilities such as manufacturing and agriculture instabilities in export equation as well as GDP growth instability in import equation.

Khaliji, Jaffri, Shahzad and (2013) made a study for declining trend in textile export sector in case of Pakistan and investigated the relationship between textile export, total exports, GDP, exchange rate and consumption of raw material. Their results indicate positive and significant relationship between textile exports and total exports of Pakistan. GDP has also positive relation with total exports. Between exchange rate volatility and total exports there exists a negative

relation but was not significant. The relationship between cotton production and raw material consumption is positive and highly significant.

Kamura, Asahi and Yamaguchi (2012) did a research to investigate the impact of volatility of exchange rate on the volume of manufacturing exports in case Japan. They used different techniques to measure the volatility in Yen and the effect of appreciation and depreciation of Yen for eight different types of industries. Their findings indicate negative and significant effect between exchange rate volatility and export growth of manufacturing sector. They indicate that different manufacturing sectors influenced differently by exchange rate volatility.

Various researches have been done to explain this relationship between exchange rate and trade but all the research are done on aggregated exports of a particular country both in developed and developing countries. Theoretical consideration also provides result in this regards but there are no consensus. It is generally argued that exchange risk of exchange rate hinder as well as augment the trade flows but there is no significant research that indicate the effect of exchange rate on the export of the particular sector of the economy. So we want to check the effect of exchange rate volatility on the export of textile industry of Pakistan.

#### **Significance of the study:**

There are different views about the relationship of exchange rate volatility and export growth. Some researchers concluded that there is positive relationship between them (Hooper and Kohlhagan, 1978; Baily and Tavlas, 1988;) while the others suggested that there is negative relationship between them, (Cushman, 1983; Arize, 1993; chowdhury, 1993). Mostly the researches were conducted on aggregate export of different countries but not on the particular sectors so this research will be beneficial to understand the relationship between exchange rate and export growth of textile sector of Pakistan.

#### **Research Objectives:**

- To determine the impact of exchange rate volatility on the export of textile industry of Pakistan.
- To observe the impact of domestic level of income on export.
- To determine the impact of factors other than exchange rate on textile export of Pakistan.

#### **Hypothesis:**

H<sub>1</sub>: there is a significant relationship between exchange rate and textile exports.

#### **Methodology/Research Design:**

The research style of this study is explanatory in which the relationship between exchange rate volatility and export growth of textile sector of Pakistan was analyzed. We used Secondary/historical data of previous ten years from 2011-12 to 2020-21.

#### **Population and Sample of the study:**

The population of our study was textile sector of Pakistan. For the purpose of analyzing our study we took the data of entire textile sector of Pakistan as sample. Our sample included annually data as well as monthly data of last ten years from 2011-12 to 2020-21.

#### **Data collection:**

For the purpose of investigating the impact of exchange rate volatility on the export growth of textile sector of Pakistan, data from different sources generally including Economic Survey of Pakistan, Textile General of Pakistan, State Bank of Pakistan Statistics and World Development Indicators was considered. Exchange rates were taken from State Bank of Pakistan’s website and exports of textile sector of Pakistan are taken from Economic Survey of Pakistan and State Bank of Pakistan statistics.

**Data analysis:**

After collecting the data, data entering, editing and management was done with the help of Microsoft Excel. Results of the study were provided with the help of Regression and Correlation analysis. We directly compare the export with exchange rate and also took the percentage change of exchange rate and exports growth individually to check the relationship between them.

Months	% change in exchange rate	% change in exports
July	0.62%	-1%
August	0.88%	-6%
September	0.31%	3%
October	1.80%	6%
November	-0.15%	-11%
December	-0.65%	18%
January	-0.17%	-14%
February	-0.17%	4%
March	0.00%	14%
April	0.08%	-7%
May	0.19%	-10%
June	0.27%	17%

**Table: 1 (Year 2011-2012)**

Months	% change in exchange rate	% change in exports
July		
August	0.09%	-4%
September	0.03%	5%
October	-0.43%	2%
November	-0.40%	-25%
December	0.12%	57%
January	0.00%	-13%
February	-0.07%	-15%
March	0.16%	16%
April	0.02%	2%
May	0.38%	-9%
June	0.42%	18%

**Table:2 (Year 2012-2013)**

**(Source: State Bank of Pakistan & Economic Survey of Pakistan)**

According to Table:1 data from Year 2011-2012, in the month of august the percentage in exchange rate was 0.88% but the export of Pakistan textile decreased by 6% it shows negative impact of exchange rate on export growth.in September the exchange rate increased by 0.31% and export also increased by 3%. It shows a positive relation than previous month. The similar relationship between exchange rate and export growth can be seen in other months and we

cannot give any one statement on monthly basis in this year. In the month of December, March, April and June with the increase in exchange rate export also increase and in the rest of months it decrease with the increase in exchange rate. In the year 2012-2013 the export of Pakistan textile in first two months decrease with the increase in exchange rate and in the month of September, October, February and March the exports increase whether exchange rate increase or decrease in these months. But rate in general we can see the negative relationship of exchange rate and export growth in most month of this year.

**Table: 3 (Year 2013-2014)**

Months	% change in exchange rate	% change in exports
July	-0.08%	-12%
August	0.05%	12%
September	0.18%	1%
October	-0.08%	0%
November	0.08%	-10%
December	0.08%	13%
January	0.05%	-10%
February	0.08%	-4%
March	0.20%	20%
April	-0.03%	-9%
May	0.13%	6%
June	0.15%	10%

**Table:4 (Year 2014-2015)**

Months	% change in exchange rate	% change in exports
July	0.18%	-11%
August	0.08%	12%
September	0.30%	-1%
October	0.17%	-9%
November	0.21%	7%
December	0.26%	2%
January	-0.02%	-9%
February	-0.25%	-3%
March	-0.07%	20%
April	0.03%	-10%
May	-0.07%	6%
June	-0.07%	6%

**(Source: State Bank of Pakistan & Economic Survey of Pakistan)**

In the year 2013-2014 the exchange rate percentage goes on negative side in three month that is July, October and April. In the month of July and April the export also decrease with the decrease in exchange rate but the percentage change very in these months. In the month of January and February the exchange rate increase but the exports decrease instead of increasing and again these months shows a negative relation between two variables. During 2014-2015, most of the year there is negative relation between percentage exchange rate and export growth textile sector of Pakistan. The trend not remains same even in 3 or 4 consecutive months. At same time there is positive change and the same time there is negative change but most of the observation goes on negative sides.

**Table 5: Year 2015-2016**

Months	% change in exchange rate	% change in exports
July	-0.40%	-5%
August	0.20%	4%
September	0.21%	-6%
October	0.07%	7%
November	0.54%	-1%
December	0.28%	-12%
January	1.95%	13%
February	0.40%	-10%
March	0.21%	1%
April	1.29%	5%
May	6.37%	1%
June	-0.52%	5%

**Table.6: Year 2016-2017**

Months	% change in exchange rate	% change in exports
July	4.95%	4%
August	5.24%	-3%
September	3.88%	-3%
October	4.22%	-2%
November	-0.63%	-10%
December	-1.25%	0%
January	0.18%	-1%
February	0.49%	-6%
March	0.99%	2%
April	0.20%	-2%
May	0.16%	-1%
June	0.53%	9%

**(Source: State Bank of Pakistan & Economic Survey of Pakistan)**

In first month of the year **2015-2016** the percentage decrease in exchange rate was 0.40% and the import decreased by 5 %. Almost 13 times the exports decrease in this month than the exchange rate. In the month of September, November, February and June there is a positive relation between exchange rate and export growth of Pakistan. During the year **2016-2017** change in exchange rate remain mostly positive only in the month of November and December there is negative change in exchange rate but in exports instead of first and last months there is a negative change in export growth.



**Table 7: Year 2017-2018**

Months	% change in exchange rate	% change in exports
July	1.30%	4%
August	0.93%	-6%
September	0.10%	7%
October	0.45%	8%
November	0.28%	-19%
December	0.66%	31%
January	0.62%	-15%
February	0.46%	-6%
March	-0.66%	22%
April	-0.49%	-3%
May	0.46%	-6%
June	1.13%	13%

**Table8: Year 2018-2019**

Months	% change in exchange rate	% change in exports
July	0.26%	-8%
August	0.13%	9%
September	0.18%	-4%
October	0.21%	7%
November	-0.47%	6%
December	0.20%	4%
January	-0.04%	-7%
February	-0.43%	5%
March	0.04%	24%
April	-0.83%	-8%
May	0.69%	0%
June	0.68%	13%

**(Source: State Bank of Pakistan & Economic Survey of Pakistan)**

In the year 2017-2018 the percentage change in exchange rate is not same again as in previous years. During some months we can see that with minor change in exchange rate the exports change highly. But during some months there is no significant change in exports even there is significant change in exchange rates as compared to other months. During year 2018-2019 the exports indicating a negative relation of exchange rate and export growth. Here the role of thumb is meet for more of the month that is with the increase in exchange rate the export also increasing indicating a positive relation between exchange rate and export growth.

**Table 9: Year 2019-2020**

Months	% change in exchange rate	% change in exports
July	0.27%	-13%
August	0.70%	-4%
September	0.98%	1%
October	-0.57%	-8%
November	-0.05%	0%
December	2.77%	0%
January	0.90%	-2%
February	0.53%	2%
March	0.10%	5%
April	-0.09%	-4%
May	0.70%	9%
June	3.13%	-7%

**Table 10: Year 2020-2021**

Months	% change in exchange rate	% change in exports
July	0.28%	2%
August	0.10%	3%
September	0.13%	-9%
October	0.80%	12%
November	0.69%	-7%
December	1.23%	-9%
January	0.29%	14%
February	0.51%	-9%
March	0.09%	12%
April	0.25%	-6%
May	0.22%	7%
June	0.19%	-8%

(Source: State Bank of Pakistan & Economic Survey of Pakistan)

During the year 2019-2020 this can be said that exchange rate negatively affect export growth after analyzing table and graph of this year. During most of the month trend is negative but in this year during the month of November and December the percentage change in export remain zero with the change in exchange rate it means during these months exchange rate not affect the export growth of textile products. During the first 2 months the export is highly affected by exchange rate but in other months the change is less.

**Table 11: Percentage change in exchange rate and textile exports**

Years	Average Exchange rate	% change in exchange rate	Textile Exports (\$ million)	% change in Textile Exports
2011-12	57.57	----	8,166	----
2012-13	59.36	3.11	8,986	10.04
2013-14	59.86	0.84	9,414	4.76
2014-15	60.63	1.29	10,271	9.1
2015-16	62.55	3.17	10,594	3.14
2016-17	78.5	25.5	9,947	-6.11
2017-18	83.8	6.75	10,335	3.9

2018-19	85.5	2.03	13,230	28.01
2019-20	89.24	4.37	13,223	-0.05
2020-21	96.75	8.4	12,940	-2.14

**(Source: State Bank of Pakistan & Economic Survey of Pakistan)**

The above table shows the percentage change in exchange rate and percentage change in textile export to clear the effect of exchange rate on export of textile products of Pakistan. In year 2012-13 the percentage change in exchange rate is 3.11% and in textile exports it is 10.04 %. The percentage change in exports is four times of percent change in exchange rate. In year 2013-14 there is 0.84 percent change in exchange rate and in exports it is 4.76 percent that is four times of exchange rate as in last year there was also almost four percent change in exports as compared to exchange rate. But in 2014-15 the percent change in exports is higher to change in exchange rate as compared to last two years. With the less increase in exchange rate the exports increase with higher rate due to increase in demand of Pakistani textile products in foreign market. In 2015-16 the change in textile exports is same as change in exchange rate and exports not increase as in the last years and in the year 2016-2017 there is the highest increase in exchange rate compared to previous years but the change in exports of textile products become negative instead of increasing. In year 2017-2018 the table shows a positive change in exports with the change in exchange rate and in 2018-2019 the change in textile exports is very high as compared to all previous years and almost directly opposite to the year 2016-2017. In last two year there is again decrease in textile export to change in exchange rate because of the problem of electricity was the main factor and some other factors also contribute to this decrease in textile exports of Pakistan

**Table 12: Regression and correlation analysis:**

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	9.788680	4.3175783	2.2671	0.0639	0.77605	20.35341	-0.7760	20.35341
3.11	-0.720142	0.4312167	-1.6700	0.1459	1.77529	0.335007	-1.7752	0.335007

**Table13: Regression Statistics**

<i>Regression Statistics</i>	
Multiple R	0.563317696
R Square	0.317326826

Adjusted R Square	0.203547964
Standard Error	9.242973764
Observations	8

### **Interpretation:**

The result of correlation is -0.72 as indicated in the above table 4.14 and it shows that there is a significant negative relationship between exchange rate volatility and export growth. The value of correlation is above 0.5 and also it is negative so it is proved from this result that there is significant negative relationship between exchange rate volatility and exports of textile sector of Pakistan. The result of regression is 0.56 as shown in table 4.15 it means that when there is 1% change in independent variable (exchange rate) the dependent variable (textile export) will change by 0.56%.

### **Conclusions:**

This research is a comprehensive study covers the factors that affect the exports of textile sector of Pakistan as a whole for the period 2010-11 to 2020-21. We used different factors that affect the exports of textile products to make the study comprehensive and reliable. This research provides an extensive survey on literature on exchange rate volatility and trade, underlying both of the theories of impact of exchange rate and export growth (positive or negative). The findings of this research support the literature of most of the researcher (Cushman, 1983; Arize, 1993; chowdhury, 1993; Akhtar and Hilton, 1984) and conclude that exchange rate volatility has negative and significant impact on the exports of textile sector of Pakistan. It is also clear from the results of our Regression and Correlation analysis that the volatility of exchange rate has a significant negative impact on the textile sector of Pakistan because the correlation result is -0.73 that is the indication of significant negative relationship.

### **Limitations of the study:**

The limitation of the study is that our major focus is on the effect of exchange rate on textile exports of Pakistan and few others basic factors. But there are also a lot of factors that may affect the textile sector of Pakistan. Due to time limitations and resources we are unable to determine the entire factors that may affect the exports of textile sector of Pakistan. We recommend for future studies they should consider the entire factors that affect the textile exports of Pakistan for more clear results and understanding

### **Recommendations:**

From the results of above study researchers suggest the following measure to improve this sector so that whole economy benefits from it.

- Government should made policies to stable exchange rate, because exchange rate instability hinders the textile exports of Pakistan.
- Textile industry of Pakistan should produce competitive products with a range of variety according to the world's demand.

- Government should reduce the emerging energy crises that hamper the production of textile sector of Pakistan.
- Government should take steps to provide subsidies, tax benefits and easy credits to our exporting textile industry.

### References:

- Akhtar, M. A. & A. S. Hilton.(1984). Effects of exchange rate uncertainty on German and U.S trade.*Federal Reserve Bank of New York quarterly review*, 9, 7-16.
- Aqeel, A., &Nishat, M. (2006).The effect of exchange rate volatility on Pakistan's exports.*Pakistan economic and social review*, vol. XLIV No. 1, 81-92.
- Arize, A. C., Osang, T., &Slottje, D. J. (2000). Exchange rate volatility and foreign trade: evidence from thirteen LDCs. *Journals of business and economic statistics*, 10-17.
- Aurangzeb, A., Stengos, T., & Mohammad, A. U. (2005). Short run and long run effects of exchange rate volatility on the volume of exports: a case study for Pakistan. *International journal of business and economics*, 4, 3, 209-222.
- Billen, D., Garcia, M. M. &Khasanova, N. (2005). Is the effect of exchange rate volatility on trade more pronounced in Latin America than in Asia?.*Institute for world economics Kiel, Germany, working paper*, 434.
- Brist, H.J. (2013). Exchange rate volatility and exports of Bangladesh: impact analysis through co integration approach. *International review of business research paper*, vol.9. no.4
- Chit, M. M., Rizov, M., &Willenbockel, D. (2010). Exchange rate volatility and exports: new empirical evidence from the emerging East Asian economies. *The world economy*, 33: 239-263.
- Choudhary, A., &Hyder, K. (2012).A structural VAR analysis of Pakistan's textile exports.*Middle east journal of scientific research* 12 (04): 464-472.
- Choudhary, M. A., &Qaisarani, A. A. (2002).Trade instability, investment and economic growth in Pakistan.*Pakistan economic and social review* volume XL.
- Cushman, D. O. (1988). U.S bilateral trade flows and exchange risk during the floating period. *Journal of international economics*, 25, 317-330
- Danmola, R. A. (2013). The impact of exchange rate volatility on the macroeconomic variable in Nigeria.*European scientific journal* vol.9, vol. 7
- Dell'Ariccia, G. (1999). Exchange rate fluctuations and trade flows: evidence from European Union. *IMF staff papers*, 46, 3, 315-334.
- Guloglu, B. Exports and volatility of exchange rate under alternative exchange rate regime: the case of turkey.
- Hassan, M. (2013).Volatility of exchange rate effecting trade growth- A case of Pakistan with UK., USA and UAE.*European scientific research* vol.9, No.22.
- Hassan, M., Hassan, S. M., &Mahmood, H. (2013). An empirical inquisition of the impact of exchange ort rate and economic growth on export performance of Pakistan".*Middle East journal of scientific research* 14 (2). 288-299

- Hopper, P., & S. Kohlhaugen. (1978). The effect of exchange rate uncertainty on the prices and volume of international trade. *Journal of international economics* 8, 483-511.
- Javed, Z. H., & Froot, M. (2009). Economic growth and exchange rate volatility in case of Pakistan. *Pakistan journal of life and social sciences*, 7 (2): 112-118.
- Kemal, M. A. (2005). Exchange rate instability in trade: a case study of Pakistan. *Pakistan institute of development economics*.
- Khaliji, B. A., Jaffari, S. I. A., Shahzad, A., & Mehtab, M. (2013). Role of textile sector in domestic development. *Business management dynamics* vol.2, No.10
- Khan, R. E. A, Sattar, R. & Rehman, H. (2012). Effectiveness of exchange rate in Pakistan. *Pak. J. consumer. Soc. Sci* vol. 6(1), 83-96.
- Kiptue, M.C. Does exchange rate volatility harm exports? Empirical evidence from Kenya's tea and horticulture exports.
- Mocero, D. N., & Winograd, C. (2006). Real exchange rate volatility and exports: Argentine perspective.
- Mukhtar, T., & Malik, S. J. (2010). Exchange rate volatility and export growth: evidence from selected south Asian countries. *SPOUDAI* vol. 60 No. 3-4.
- Onafowora, O. A. & Owoye, O. (2008). Exchange rate volatility and export growth in Nigeria. *Applied economics*, 40, 1547-1556.
- Rose, A. (2000). One money, one market: the effect of common currency on trade. *Economic policy* 30, 7-33.
- Serenis, D. & Serenis, P. (2008). The impact of exchange rate volatility on exports: evidence from four European countries. *International conference on applied economics –ICOAE*.
- Yuksel, H., Kuzey, C. & Sevince, E. The impact of exchange rate volatility on exports in turkey. *European journal economic and political studies*.