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Impact of Exchange Rate Volatility on Pakistan's Trade

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ABSTRACT This study investigates the effects of exchange rate volatility on trade between Pakistan and its major trading partners on the basis of imports and exports. The import and export models are estimated by using the fixed effects econometric technique to assess the impact of exchange rate volatility on trade. The empirical findings indicate that the exchange rate volatility has a significant impact on exports to UK, Netherland and USA. Moreover, the exchange rate volatility has a significant impact on Pakistan's imports from UK, USA and China. However, with other countries, this study reveals an insignificant impact of exchange rate volatility on trade. The positive impact of exchange rate on imports is disadvantageous for Pakistan, however this can be inverted if the domestic market provides suitable substitutes that can compete with the essential imports. Also, higher import duties have to be imposed on non-essential products. In regard to the exchange rate volatility impact on trade, it can be concluded that the least or no impact of exchange rate volatility is possibly related to the rising availability of financial instruments that hedge against the exchange rate risk, besides the increasing share of intra-industry trade.

KEYWORDS: Exchange rate; Trade balance; Fixed effects**;** Financial-instruments; Pakistan

INTRODUCTION

Exchange rate volatility is the size of changes in currency value, which further refers to the amount of risk and uncertainty. High exchange rate volatility means that the currency price is changing severely over a short time period, while low exchange rate volatility means that the currency value is changing infrequently and it behaves as a stable currency. Economists and policy-makers believe that when the exchange rate volatility increases, it reduces the international trade. That is because of the uncertainty of the future profits that a firm gain from international trading. Based on this proposition, a plethora of studies have been conducted to analyze the impact of exchange rate volatility on trade. Several empirical studies have failed to establish a significant link between exchange rate volatility and international trade; whether it is on bilateral or on an aggregate basis (Daly, 1998; De Vita and Abbott, 2004; Rey, 2006). However, some studies have found a significant relationship between the exchange rate volatility and trade (Vergil, 2002; Doganlor, 2002; Kemal, 2005; Mustafa and Nishat, 2005; Chit et al., 2010; Nuroglu and Kunst, 2012; Lubinga and Kiiza, 2013; Srinivasan and Kalaivanib, 2013).

In the case of Pakistan, Kemal (2005) found a positive impact of exchange rate volatility on exports and a negative impact on imports. Whereas Alam and Ahmad (2011) have shown no impact of exchange rate volatility on imports of Pakistan. Oskooee and Hegerty (2007) concluded that the impact of exchange rate on trade is undetermined. Mustafa and Nishat (2004) analyzed the effect of exchange rate on export growth and find that volatility has a significant negative effect with respect to major trading

partners. However, in a study conducted by Fofanah (2020) the results are insignificant between exchange rate volatility and trade, which fail to support the position that excessive volatility has a pronounced effect.

Although several studies were conducted to analyze the impact of exchange rate volatility on trade, they have not proved fruitful in reaching a unique conclusion. This could be related to the fact that the previous empirical findings are country and time specific. Several studies have analyzed the impact of exchange rate volatility on trade in developed countries, but few have been conducted in developing countries like Pakistan. Taking this into consideration, along with the fluctuations in Pakistan's exchange rate in recent years, this study contributes to the empirical debate in literature on the relationship between exchange rate volatility and trade of Pakistan with its top five trading partners. The modelling approach of this study considers the demand side of trade, which has never been addressed in the literature in the context of Pakistan. The objective of this paper is to find the impact of bilateral exchange rate volatility on Pakistan's trade with its major trading partners, with respect to exports and imports.
The paper is organized as follows; Section II begins with details related to data and research methodology, Section III presents the results and analysis, and concluding statements are provided in the last Section IV.

RESEARCH METHODOLOGY

Theoretical Model
Mundell Fleming Model

This paper is following the concepts of Robert Mundell and J. Marcus Fleming (1962). They extend the IS-LM macroeconomic concepts in international trade. They have noticed that monetary and fiscal policies are two main arms of demand management and have different relative impacts on internal and external balance. Their condition of the modelling is for a small open economy and the prices are fixed for the home country, as well as abroad. Mundell-Fleming model portrays the relationship between an economy, exchange rate, interest rate, GDP and the trade balance.

If we notice on the IS equation:

$$Y = C(y-t) + I(r) + G + NX(e) \quad \ldots(1)$$

where,

C= consumption
y-t = income minus tax
I = interest rate
G = government spending
$NX(e)$ = Net export

Now we explain further the NX, then we come to know that:

$$NX = NX(e, Y, Y*) \quad \ldots(2)$$

This shows that net export is the function of exchange rate (e), GDP (y) and GDP of foreign countries (Y*). This study will implement this conceptual modelling for the case of Pakistan.

In the case of floating exchange rate, Mundell-Fleming model explains that in a small open economy, the expansionary monitory policy shifts the LM curve to the right. This LM curve shift lowers the exchange rate and increases net exports. However, in contractionary monitory policy, the appreciation of exchange rate lowers exports and further complete crowding out, via exports. According to the Mundell-Fleming model, an appreciation of the exchange rate would increase import demand and decrease export demand, and vice-versa.

In the expansionary fiscal policy, aggregate spending and national income would be raised by higher government spending and lower tax rates, hence rising imports and worsening the trade balance, and vice-versa for the fiscal contraction. In expansionary monetary policy, rise in money supply and banks' lending would drop the interest rate, which increases spending and national income, as well as worsening the trade balance, the opposite case applies to the monetary contraction.

The volatility of the exchange rate is considered important variable in the economy. De Grauwe (1988) mentioned that exporters have become unhappy universally by the volatility of the exchange rates, but some may decide that they would be better off

exporting more. That particular case reveals the dominance of income effects over substitution effects, resulting in a positive relationship between exchange rate volatility and the volume of trade.

Empirical Model

The data used in this study have both the cross-sectional and time-series characteristics. Therefore, the Panel or Pooled Least Square (with fixed effects) technique seems to be appropriate to study the impact of exchange rate volatility on Pakistan's trade. If the random effect model is estimated, then the cross-sectional effects are combined with error, but if these effects correlated with some explanatory variables, then the estimations and coefficients will be biased. However, this type of bias does not exist in fixed effect model due to unobservable error component, which is constant and does not vary with time (Greene, 2005).

The conventional fixed effect models provide the intercept terms for each panel only, however the pooled least square method allows you to identify the country effects separately in the panel for all variables of interest. According to the above theoretical backgrounds, the following empirical models are estimated by the Pooled Least Square with fixed effect.

Export equation

$$EX_{it} = \alpha_0 + \alpha_{1i} GDP^*_{it} + \alpha_{2i} ER_{it} + \alpha_{3i} Vol_{it} + u_{it} \quad \ldots(3)$$

Import equation

$$IMP_{it} = \beta_0 + \beta_{1i} GDP_{it} + \alpha_{2i} ER_{it} + \alpha_{3i} Vol_{it} + \varepsilon_{it} \quad \ldots (4)$$

where,
EX = Exports of Pakistan
IMP = Imports of Pakistan
*GDP** = Foreign GDP Growth in
GDP = GDP Growth of Pakistan in

ER = Bilateral Real Exchange Rate

Vol= Bilateral Exchange Rate Volatility

i= It shows the cross-section units (*i = 1, 2, 3, 4, 5).*

t= Time

This modelling was brought to cover the demand side of trade. This approach was chosen since there are no previous study conducted in Pakistan. Under this approach, the demand function is identified by assuming that the demand for exports in the trading partners' economies depends on the level of their economic activity. Likewise, in the import model, where Pakistan's economic activity depends on the import demand. This will support a policy suggestion of increasing the demand for exports and decreasing demand for imports.

RESULTS AND DISSCUSSION

Unit Root Test

By using Levin et al. (2002), Breitung (2005) and Im et al. (2003), the results of the pool unit root test show that GDP growth and volatility of exchange rate in both export and import models are stationary at level, whereas export, import and exchange rate are stationary at first difference in both models.

Ho: There is unit root
Ha: There is no unit root

Table 1: Unit Root Test

Unit Root Test (Levin, Lin & Chu) For Export Model		
Variables	**Level**	**First Difference**
Export	-1.35 (0.08)	-5.34 (0.00)
GDP Growth	-7.32 (0.00)	-
Exchange Rate	0.07 (0.52)	-4.16 (0.02)
Exchange Rate Volatility	-4.48 (0.00)	-

Unit Root Test (Levin, Lin & Chu) For Import Model		
Variables	**Level**	**First Difference**
Import	0.63 (0.73)	-6.59 (0.00)
GDP Growth	-6.28 (0.00)	-
Exchange Rate	0.07 (0.52)	-5.98 (0.00)
Exchange Rate Volatility	-5.88 (0.00)	-

P-values are given in parenthesis

Pooled Least Square Results

This study, as mentioned earlier, calls in the 'Pooled Least Square' technique to estimate the parameters of equation (5) & (6).

Export Model Interpretation & Discussion

The exchange rate volatility has insignificant impact on exports of Pakistan in the case of Afghanistan, Italy, China, Spain, Bangladesh and UAE. Our results are in line with Mukhtar and Malik (2010) and Kemal and Qadir (2005). However, the volatility in the case of USA, Netherland, Belgium and UK is significant and negative. This finding is in line with Mustafa and Nishat (2004). For every 1 unit increase in Pakistan's exchange rate volatility, it implies 0.11 and 0.13 unit decrease in exports of Pakistan towards USA and UK respectively. Similarly, if 1 unit increases in Pakistan's exchange rate volatility with Belgium and Netherland, it decreases 0.53 and 0.29 units in Pakistan's exports to Belgium and Netherland, respectively.

Pakistan's exports to USA, UK, Belgium and Netherland include cloth, leather and their articles. The results reveal that Pakistan's textile producers and exporters are risk averse as they prefer to sell their products in the local market rather than the foreign markets if the exchange rate volatility increases. Pakistan's exports to China, Italy and UAE include mainly stones, pearls, cereals and cotton. These products are not affected from the exchange rate volatility as Pakistan's export of stones and precious pearls is significantly increasing since the last decade, moreover, Pakistan has a large number of skilled jewelry craftsmen and cheap men power, which made Pakistan one of the top leading gem producing country in the world. The Pakistan Gems and Jewelry Development Company (PGJDC) was established by the Ministry of Industries & Production and under this umbrella, numerous private-sector stakeholders are also playing an essential role in the pursuit of making Pakistan a central hub for stones, pearls and jewelry trading. Therefore, it can be concluded that Pakistan's major export of these products are not affected by exchange rate volatility.

When a firm engages in trading business, it observes the long-term profitability prospects in its business., considering that when the exchange rate is volatile, the firm would be unable to get the precise estimations of the domestic value of its foreign sales. Also, when an exporting firm is risk averse, an increase in exchange rate volatility will reduce the volume of its trade. As a result, the negative impact of exchange rate volatility can be associated with that discussed channel. If the volatility

increases, risk averse exporters will choose to export less, and allocate fewer resources to the exporting sector (Gonzaga and Terra, 1997).

With the increase in foreigner's income, Pakistan's exports increase in the case of Afghanistan, Belgium, Netherland, UK, Spain, Bangladesh and USA, but not in the case of Italy, China and UAE. If China's GDP increases by 1 unit, Pakistan's exports to China decrease by 0.49 unit. If there is 1 unit increase in GDP growth of UAE, there is 0.52 unit decrease in Pakistan's export to UAE. Also, 1 unit increase in GDP growth of Italy decreases Pakistan's exports by 0.27 units. This implies that if the GDP of these particular countries grows, their demand for imports from Pakistan becomes less. Once consumers have already owned most of the luxuries of life such as televisions, cars and computers, an increase in their income tend to be spent more on services and healthcare rather than products.[1] This situation can be illustrated in China, UAE and Italy as our results show.

Moreover, a rise in income might encourage some countries to spend proportionately more on physical goods. In this case, when income increases, the demand of imports also decreases. Oskooee and Hegerty (2007) clarified that the negative impact that occurs when output (GDP) rises is due to producing substitutes for imports. When a country's GDP increases, it means that more production is taking place locally, and consumers demand less of the foreign goods as their necessities are being fulfilled by the local producers, thus, imports of foreign goods would be reduced. The other explanation is that the Pakistani goods might be considered as inferior goods in China and UAE. Pakistan exports cotton, cereals, raw hides, skins, leather, ores, slag, ash and vegetable saps to China, while Pakistan exports cereals, textile articles, stones and pearls to the UAE. Since consumers in China and UAE are demanding these products less when their income is increasing, then these goods are considered inferior in China and UAE.

In actual fact, Pakistan's exports to China and many other countries are limited in range for many decades. Accordingly, it is recommended that Pakistan expands its exports and emphasize on research and development to improve its range of products. Besides, Pakistan should shift from exporting primary commodities and simple manufacturer to high value-added products. China's demand is significant for rice, jewelry, copper waste and articles of leather, but Pakistan contributes by less than 1% to China's imports of these product lines.

On the other hand, our results show a different situation in countries like USA, UK, Bangladesh, Spain, Netherland, Belgium, and Afghanistan. Regarding Pakistan's export to USA, 1 unit increase in USA GDP growth implies 0.32 unit increase in Pakistan's export to USA. In the case of Pakistan's export to UK, 1 unit increase in GDP growth of UK, increases exports by 0.17 unit. Also, 1 unit increase in GDP growth of Bangladesh, increases Pakistan's export by 0.34 units. Pakistan's export increases by 0.19 unit per 1 unit increase in GDP of Spain. A 1 unit increase in Netherland GDP increases Pakistan's export by 0.20 units. For every 1 unit increase in GDP of Belgium increases Pakistan's exports by 0.06 unit but it is insignificant. Furthermore, Pakistan's export increases by 0.89 units per 1 unit increase in GDP of Afghanistan.

The results demonstrate the positive relationship between the GDP of these countries and Pakistan's export, so the raise in their income increases the demand of Pakistan's export, hence an expansion of exports in the current account of Pakistan would occur. Regarding Srinivasan and Kalaivani (2013), foreign country's GDP has a significant negative impact on exports in the short run but a positive impact in the long run. Pakistan's exports to USA, Afghanistan, Spain, Netherland and UK include leather, textile and their articles. These exports are gaining importance and facing high demand in the mentioned countries. The number of Pakistani who have settled in the UK has been increasing. As a result, consumer goods such as ethnic furniture, Muslim's special textile, goods and other luxurious items are highly demanded by Pakistani diaspora in higher income brackets, and by other communities. In fact, clothing is considered one of the highest demanding products that is growing rapidly every year in the world trade (World Trade Statistical Review, 2019).

Accordingly, an argument can be made about the different effects of the foreign economic growth on Pakistan. On one side, the growth in these foreign countries could be advantageous for Pakistan's economy as it means that the market for its exports is growing. On the other side, growth in other countries could be disadvantageous for Pakistan when it starts to compete with its exports.

The results of the bilateral exchange rates and the bilateral exports show that if there is 1 unit increase in Pakistan's exchange rate with the Chinese currency, there is 0.58 unit increase in Pakistan's export to China. In the case of Pakistan's export to USA; if there is 1 unit increase in Pakistan's exchange rate with the USA's currency, there is 0.61 percent increase in export. The

[1] An Economist Intelligence Unit briefing paper commissioned by DHL Asia Pacific

results of Pakistan's export to UAE show that 1 unit increase in Pakistan's currency with the UAE's currency, increases export by 0.10 units. For every 1 unit increase in Pakistan's currency with the UK's currency, there is 0.32 units increase in export. Also, 1 unit increase in the exchange rate of Pakistan with Bangladesh, increases Pakistan's exports by 0.25 units. Pakistan's exports to Spain increase by 0.14 units for every 1 unit increase in exchange rate of Pakistan with Spain. Moreover, 1 unit increase in Pakistan's exchange rate with Netherland, increases exports by 0.02 units. One unit increase in Pakistan's exchange rate with Italy will also increase exports of Pakistan by 0.14. There is an increase of 0.44 units of Pakistan's exports to Belgium per 1 unit increase in Pakistan's exchange rate with Belgium. The results of Pakistan's export to Afghanistan show that 1 unit increase in Pakistan's currency with the Afghanistan currency, increases export by 0.15 units.

Table 2: Pooled Least Square Results

	Export Model									
Variables/ Countries	Afghanistan	Belgium	China	Italy	Netherland	UAE	UK	USA	Spain	Bangladesh
Constant	2.23* (10.7) [0.00]	2.23* (10.7) [0.00]	2.23* (10.7) [0.00]	2.23* (10.7) [0.00]	2.23* (10.7) [0.00]	2.23* (10.7) [0.00]	2.23* (10.7) [0.00]	2.23* (10.7) [0.00]	2.23* (10.7) [0.00]	2.23* (10.7) [0.00]
ER Vol	1.15 (0.29) [0.77]	-0.53* (-2.75) [0.04]	-2.91 (-0.14) [0.88]	-0.18 (-0.015) [0.98]	-0.029* (-11.5) [0.00]	1.73 (0.62) [0.53]	-0.013* (-7.23) [0.00]	-0.11* (-12.1) [0.00]	-1.67 (-0.33) [0.73]	-2.41 (-1.89) [0.05]
Exchange Rate	0.015* (7.76) [0.04]	0.044* (2.37) [0.01]	0.058* (2.07) [0.02]	0.014* (1.89) [-0.00]	0.002* (1.87) [0.00]	0.10* (4.38) [0.00]	0.032* (1.18) [0.00]	0.061* (2.26) [0.00]	0.14* (3.21) [0.00]	0.25* (3.36) [0.00]
GDP Growth	0.089* (3.31) [0.00]	0.006 (0.03) [0.97]	-0.049* (-3.90) [0.00]	-0.27* (-3.59) [0.00]	0.020 (0.11) [0.90]	-0.52* (-3.29) [0.00]	0.017* (8.80) [0.00]	0.032* (3.05) [0.00]	0.019* (12.1) [0.00]	0.034* (2.73) [0.01]

	Import Model									
Variables/ Countries	China	Iran	Japan	Malaysia	Saudi Arabia	Singapore	UAE	USA	Kuwait	India
Constant	4.76* (26.1) [0.00]	4.76* (26.1) [0.00]	4.76* (26.1) [0.00]	4.76* (26.1) [0.00]	4.76* (26.1) [0.00]	4.76* (26.1) [0.00]	4.76* (26.1) [0.00]	4.76* (26.1) [0.00]	4.76* (26.1) [0.00]	4.76* (26.1) [0.00]
ER Vol	0.33* (4.61) [0.00]	0.049 (0.80) [0.42]	0.06 (0.39) [0.69]	0.024 (0.57) [0.56]	0.022 (0.75) [0.45]	2.00 (1.97) [0.05]	0.54* (2.11) [0.03]	0.38* (5.25) [0.00]	-0.016 (-0.04) [0.96]	0.84 (0.02) [0.98]
Exchange Rate	1.57* (10.1) [0.00]	0.082* (2.42) [0.01]	0.13* (2.12) [0.03]	-0.29* (-2.76) [-0.01]	0.23* (4.20) [0.00]	0.77* (9.01) [0.00]	0.62* (6.85) [0.00]	1.92* (4.14) [0.00]	0.52* (5.38) [0.00]	1.56* (3.07) [0.00]
GDP Growth	-0.62* (-4.68) [0.00]	0.015* (7.76) [0.04]	1.09* (2.17) [0.03]	0.13* (7.41) [0.00]	0.61* (11.7) [0.00]	-0.15* (-4.85) [0.00]	0.36* (6.86) [0.00]	1.94* (11.7) [0.00]	0.46* (4.73) [0.00]	-0.16* (-10.3) [0.00]

T-Stats are given in parenthesis ( )

P-Values are given in parenthesis [ ]

Accordingly, Pakistan's exchange rate showed that it has a significant positive impact on export. Since the Pakistani currency is depreciating with its major bilateral trading country's currency, the exported products are becoming cheaper for foreign buyers so the export of the country increases when the currency loses its value. If the exchange rate rises for the home country; as a real depreciation; the households in the domestic country can get less foreign products and services in exchange for a unit of domestic products and services. Thus, a unit of foreign products would give more of domestic product, resulting in domestic households buying less foreign products while foreign households buying relatively more domestic products.

Import Model Interpretation & Discussion

Exchange rate volatility has a positive but insignificant relationship with Pakistan's imports from Iran, Japan, Malaysia, Saudi Arabia, Singapore, Kuwait and India. Similarly, Alam and Ahmad (2011) found insignificant impact of exchange rate volatility on Pakistan's imports. The reason is that, Pakistan's economy is dollar economy and its exports and imports depend upon dollar value. So that bilateral exchange rate may indicate no effect on trade (Mustafa and Nishat, 2004). Exchange rate volatility has also insignificant impact on Pakistan's imports because Pakistan import mostly included essential products. These goods are in crucial needs of Pakistan that should have import in every condition as no alternative of these imported products are producing in Pakistan. Koray and Lastrapes (1989), and Gagnon (1993) also find insignificant effects. Graphical analysis from statistical data showed that Pakistan has faced a sharp exchange rate volatility after 2007. As a result, our study couldn't capture any significant impact before 2007, as our study covers the period from 1984 when the currency was slightly stable. But in the case of USA, UAE and China, exchange rate volatility shows significant positive relationship. Hence, 1 unit increase in Pakistan's exchange rate volatility with China, increases Pakistan's imports by 0.33 units. Also, 1 unit increase in Pakistan's exchange rate with UAE, increases Pakistan's imports by 0.54 units. Then, there is 0.54 units increase in Pakistan's imports per 1 unit increase in Pakistan's exchange rate with USA. The results reveal that their importers besides the exporters of these countries are risk-seeker.

The results show a negative relationship between the GDP growth of Pakistan and imports from China, Singapore, and India. Regarding the imports from China, 1 unit increase in GDP growth of Pakistan reduces imports from China by 0.62 units. Imports from Singapore is reduced by 0.15 units for every 1 unit increase in GDP growth of Pakistan. Then, 1 unit increase in GDP growth of Pakistan reduces imports from India by 0.16. These results indicate that the goods that are being imported from China, Singapore and India are inferior goods. These results support a study conducted by Taghaviet al., (2012) in Iran.

However, the GDP growth of Pakistan shows a positive impact on imports from the rest of the countries. The UAE results declare that 1 unit increase in Pakistan's GDP causes 0.36 units increase in imports from UAE. Similarly, 1 unit increase in GDP increases 0.61 units of Pakistan's imports from Saudi Arabia. In the case of Pakistan's imports from USA; 1 unit increase in GDP causes 1.94 units increase in imports. Also, there is 0.46 unit increase in imports from Kuwait for every 1 unit increase in Pakistan's GDP. The imports from Malaysia increase by 0.13 units per 1 unit increase in GDP. There is 1.09 units increase in imports from Japan, and 0.15 units increase in imports from Iran for every 1 unit increase in GDP. Thus, Pakistan's GDP growth shows a positive impact on imports from Saudi Arabia, Kuwait, UAE, USA, Japan, Iran, and Malaysia. Pakistan is mainly importing mineral fuels, oils, and distillation products from UAE, Kuwait, and Saudi Arabia. Besides, Pakistan is importing heavy machinery from Japan and USA. Since these products are considered the basic necessity of the country, the rise in income would increase the demand of such products. Our results are supported by Mishra (2012) and Mehta (2015) who also found a positive impact of GDP on country's imports.

The results of bilateral imports and bilateral exchange rate are as follow, for every 1 unit increase in exchange rate; there is 1.57 units increase in Pakistan's imports from China. Another 1.92 units increase in Pakistan's imports from USA per 1 unit increase in exchange rate. In the case of UAE, 1 unit increase in exchange rate causes 0.62 units increase in Pakistan's imports from UAE. Also, 1 unit increase in exchange rate causes 0.23 units increase in imports from Saudi Arabia and 1.56 units increase in imports from India. Then, imports from Kuwait increase by 0.52 units per 1 unit increase in exchange rate. One unit increase in Pakistan's exchange rate causes 0.77 units increase in imports from Singapore, 0.82 units increase in imports from Iran and 0.13 unit**s** increase in imports from Japan.

Since our results show that exchange rate has a positive significant impact on Pakistan's import, it confirms the Marshall-Lerner condition, which states that currency devaluation improves the balance of trade when the demand of the long run exports and imports is elastic (Bahmani et al., 2013). In reality, Pakistan's imports are inelastic, which explains the positive impact of exchange rate on imports in our results. Furthermore, this positive impact of exchange rate on imports can be linked to the fact that when exchange rate increases; i.e. currency depreciates; exports would increase. Since the increase in export means an

increase in production, there is a need to increase imports of capital and raw materials that are required in the production process. In fact, the depreciation of the national currency hadn't affect the amount of imports in Pakistan. Accordingly, Pakistan's imports are found to be necessary goods that cannot be stopped or substituted by the local products. The disadvantageous of imports are not always certain as imports have many advantageous. Imports play a crucial role in the investment environment and the industrial development, which enhance economic growth.

Moreover, the **positive relationship between the exchange rate and imports implies that imports help in enhancing exports, because when the existing stock of exports is** insufficient**, more production is needed, which mainly requires imported capital** from the other countries (Kemal and Qadir, 2005).

CONCLUSION

The main contribution of this study is to provide an empirical debate on the relationship between exchange rate and its volatility on export and import. Pakistan has its major exports to Afghanistan, Belgium, Italy, Netherland, United States of America, United Kingdom, Bangladesh, Spain, United Arab Emirates and China. Whereas the major imports of Pakistan are from China, Iran, Japan, Malaysia, Saudi Arabia, Singapore, UAE, USA, Kuwait and India. The study was conducted on these major countries by using a statistical technique known as the "Pool Least Square" with fixed effects. The yearly data was taken from the period 1984 to 2015, whereas the exchange rate volatility was calculated on monthly basis with standard deviation.

The results were found from the two models; one with export as a dependent variable and the other with import as a dependent variable. In the export model, the GDP growth of every trading partner and the exchange rate has a significant impact on Pakistan's exports to its major trading partners. However, the exchange rate volatility has insignificant impact on exports except in the case of USA, Netherland and UK, which indicates that the exported products to Netherland, USA and UK have price elasticity factor. Our results are in line with the findings of Gotur (1985), Solakoglu (2005), De Vita and Abbott (2004), Mustafa and Nishat (2004), Hondroyiannis et al. (2008), Boug and Fagereng (2010) and Rey (2006). These results are insignificant, which is more comprehensible when compared to other studies, as Pakistan's exchange rate remained stable (with few exception points) during the study period (1984-2015).

In the import model, GDP growth has a significant negative impact on Pakistan's import from China, India and Singapore. However, it is significant positive with the rest of the selected countries. Since Pakistan imports large amount of mineral fuels and oils from Saudi Arabia, Kuwait, UAE and Iran, which rises with the increase in growth. The exchange rate has a significant impact, but the exchange rate volatility has an insignificant impact on Pakistan's imports from its major trading partners, except the USA, China and the UK.

The positive impact of exchange rate on imports is unfavorable for Pakistan. This impact could be changed if the domestic market provides suitable substitutes that can compete with the essential imports. Pakistan's high imports are due to high machinery imports and this might eventually be transformed into building exports. Nevertheless, there should be certain policies to discourage the luxurious imports until Pakistan expands its exports base. As a result, higher import duties have to be imposed on non-essential products.

In regard to the exchange rate volatility impact on trade, it can be concluded that the least or no impact of exchange rate volatility is possibly related to the increasing availability of financial instruments that hedge against the exchange rate risk, besides the increasing share of intra-industry trade.

To conclude, the present study shows different results for different countries, hence it is suggested that policy-makers should create and implement different policies for different trading partners according to their trade relationships with Pakistan, as well as taking the present analysis into consideration.

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