Destination EU and USA: Improving Export Potential of Pakistan by Trading with India

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Abstract:

This paper is the extension of popular work of Murshed and Mamoon(2010) that suggests that India Pakistan proximity to global trade can significantly mitigates conflict between these two nations. The paper analyses bilateral trade patterns between India Pakistan with its major exporting destinations in a simple OLS framework. It finds that if bilateral trade between two nations increases that will improve exports of Pakistan in US, EU and UAE. This finding has significant implications for improvement of ties between the two countries. Furthermore, trading with India also full fills Pakistani Government's emphasis on Trade not Aid. This aspect of India Pakistan trade has not been investigated before.

Keywords: Economic Integration,
JEL Classification: F15,

1.1 INTRODUCTION

Trade between India and Pakistan has been a crucial issue from inception of these countries in 1947. There have been seven wars or serious clashes in last sixty years. One of the major disputes over territory of Kashmir has remained an unresolved issue for both India and Pakistan. It has been observed over the past 60 years that Pakistani and Indian troops brazen out each other every day with fingers factually on the trigger, along the ceasefire line of control established on 1st January 1949 in Kashmir. Indian troops have also indulged collectively and unilaterally along the Pakistani borders in 1951 and 2002. Pakistan has been accused by India over involvement for fomenting, aiding and abetting the insurgency in Kashmir from 1989 (with considerable justifications). India has also accused Pakistan for being involved in wider acts of terrorism in India (with fewer justifications). There is a blame game from both sides of the borders (especially from Indian side) though most of the times it is just to portray the negative image by building up political pressures for getting national sympathies and popularity. Despite hostility issues there has been initiatives from both sides that has improved the economic activities in both sides of the boarders.

Pakistan and India account for 90 percent of trade in South Asia. The trade of South Asia with rest of the world is also influenced by bilateral trade of India and Pakistan as these two countries also account for 60 percent of South Asian GDP. Disruption and discontinuation of peaceful relationship worsen the overall scenario of economic integration in the region of South Asia. It has badly influenced the thinking that South

Asia could be emerged as one of the major trading region in the world. There have been attempts to cater the issues of regional trade by mitigating the conflicts between major countries of South Asia (Pakistan and India). SAFTA and SAARC are two major South Asian bodies that have influenced the process of trade and peaceful relationship between India Pakistan and other countries of the region.

In 1980s South Asian countries took the initiative to develop a South Asian Association of Regional Cooperation (SAARC). It was intended that SAARC will increase the regional trade and regional integration among the South Asian countries. SAARC conducted certain event and summits that certainly increased the integration in the regions but that was insignificantly low at 5% as compared to EU and NAFTA and ASEAN. On January 6 2006 SAARC members agreed on a treaty SAFTA focusing on elimination of trade barriers and improve the regional integration by allowing the free mobility of goods across the borders except some sensitive items to protect the national interests. It also focuses on lowering down of trade tariffs by majorly in two phases up to the level of 0-5 percent from January 2016.

Pakistan and India are involved on table talks as delegations from both the sides are visiting each other officially to normalize the trade relations. These are some of the vital measures being taken to enhance the regional trade. It is also assumed to improve the regional trade in order to enhance the trade with the world. Bilateral trade between India and Pakistan could double the trade of Pakistan with the world. Pakistan is looking forward to normalize the trade process with India by issuing the non-tariff barriers to rebuild the trade process. The normalized trade process with India will certainly bring

down the prices of product in Pakistan and exports of Pakistan with other countries will also be enhanced.

Now a day's Pakistan and India are involved in the good gesture at official level to enhance the level of trade between the two countries. It is strategically crucial to resolve the issue of trade as it will normalize the relationship between the two countries. The global organizations like WTO are concerned to resolve the issues between the two countries by eliminating the trade barriers and lowering down the trade tariffs. These measures will enhance the economic integration between the two countries. Political instability and uncertainty in the Indo-Pak has led the policy makers and analysts alike to consider and think over the issues for normalizing the relationship between the two countries. Eventually, trade is identified as an important measure to enhance the level of integration in the region which will certainly normalize the peace process between India and Pakistan.

Pakistan is looking forward to assign MFN status to India. Thinkers are seeking to analyze the new dimensions over the trade that how the Indo-Pak bilateral trade would benefit the economy of Pakistan. The trade between Pakistan and India could enhance the level of exports from Pakistan to different regions. There was urgent need to study the advantages of low cost and technology transfer that could benefit Pakistan to enhance the level of trade with different countries like EU, UAE and USA to gain the advantage resulting in generation of sufficient level of reserves thus leading to the economic prosperity.

In this study we are proxing the economic progress as Pakistan's capability to trade with other countries by focusing Indo-Pak bilateral trade. The objectives are attained by undergoing the following steps:

1. Explore the trade openness of both the economies i.e. Pakistan and India, to establish the fact that which economy is more open in developing the trade relation
2. To explain the "direction of trade" especially for Pakistan, in order to analyze the potential exporting areas.
3. To find out the relationship of bilateral trade between Pakistan and India on the exports of Pakistan to the major exporting countries/regions.
4. Impact of exchange rate appreciation on the exports of Pakistan with respect to major exporting countries/region.
5. Draw the policy implications by highlighting the significance of Indo-Pak bilateral trade and its impact on major exporting destinations of Pakistan.

2. LITERATURE REVIEW

2.2 PAKISTAN AND INDIA BILATERAL TRADE RELATION

The history denotes, soon after Pakistan got independence, her most important trading collaborator was India. The statistics clearly indicate that Pakistan was engaged in a no barriers trade with India. It is due to the fact that pre independence these areas were a free to move areas for trading the items through Afghanistan. Pre independence scenario clearly states that in this region (which later on known as India) got industries in

abundance whereas the region of Pakistan was involved in activities for production of raw material for accomplishing the demands of those industries. For this reason trading between these two regions was frequent and quick. This scenario was carried in the same manner right after the independence of Pakistan. The historical data clearly denotes the high rate of exports between India and Pakistan.

In literature there are two dimensions in which different strategic writers have analyzed the trade relation in Sub-continent. In the first category thinkers are of the view that there is a sufficient role of inter-state conflict which has adversely affected the trade process between the two major countries of Sub-continent. Second category is of those thinkers who analyzed the problem of trade in the context of global scenarios. Most of the Pakistani thinkers are of the view that changing global scenarios more often disturbed the process of trade among India and Pakistan. Few of these thinkers are discussed below.

Tabish and Khan (2011) analyzed the trade process of India and Pakistan in the light of disputes between the two countries. In 1948-49, the exports between India and Pakistan were 56 percent of total exports and in the same way imports from India were 32 percent of its total imports. It indicates that Pakistan was trading 56 percent of its trade to India. The trade relationship between these two countries doesn't last for long period of time. The political scenario in both the countries doesn't help for well-structured trade patterns, as the disputed region between these two countries destroyed the trade relations. In 1960s Trade policy was changed in Pakistan to facilitate the international traders.

DRI-McGraw Hill (1997) studied the free trade between India and Pakistan that doesn't last for longer period of time. In 1950s Pakistan used to have highly restrictive policies, other economists also suggests these kinds of policies are known as highly protected trade policies. In this time period domestic user of agricultural raw material were given privilege over other consumers or raw material buyers. Domestic producers were purchasing the agriculture raw material at low price as compare to international prices.

Naqvi (2009) discussed the reasons to analyze the dinted process of trade due to the unstable and troubled political/ strategic situation between Pakistan and India. The trade history of both the countries has seen an uneven pattern of the trade right from British independence. In 1948-49, majority of Pakistan exports were traded with India. It is estimated that Pakistan's 56 percent of exports were with India. Pakistan and India got involved in severe political issues that resulted into the closure of trade flows. These trade relations were at the troubled line till 1965. Later, in 1972 after a war between these countries a resumption of limited trade was produced by both the sides. After 1975 Pakistan and India engaged themselves 14 times to sign bilateral agreement on trade to facilitate the trade in the region. Trade ties between these countries were negligible and ultimately these conditions nurtured the seed of mistrust enmity further worsening the political relationship of Pakistan and India.

Economists in Pakistan see the scenario in different spheres. Few economist hints the first trade dispute back in 1949 in this time period, India devalued its currency and Pakistan clearly refused to follow the measure. Nabi I. (2010) discussed, the reprisal India imposed import duty on "jute", as jute was one of the major exported items of Pakistan. This measure of India reduced the trade between the two countries. In response

Pakistan revised its trade policy with India and imposed trade restriction on the traded items.

Hussain I. (2013), Nabi I. (2013) have shown different causes for decline in Indo-Pak trade as initially 50 percent of Pakistan's exports were with India and on the other side 40 percent of Pakistan's imports came from India. It denotes a greater ratio of Pakistan's bilateral trade with India. Both the researchers talked about pre-partition trade ties that exist in this region. Pakistan and India followed the pre-partition trade patterns right after the independence, it was due to the fact that trade was supporting both the regions equally due to distribution of raw products and industries. In this context both sides were enjoying the status of free trade flow across the borders. After partition in sub-continent, the strategic liability that effected the situation was break down of Korean War. This war changed the scenario for the whole world for that specific time period, as it resulted into the scarcity of "commodity products". Pakistani intellects and think tanks took it as an opportunity and it was opted as a new opening for developing the trade relations. Economist's review at that point of time Pakistan and India were having same value for rupee as currency for both the states were tied with British Pound.

In this time period British Pound devalued as compare to dollar. In this scenario India followed this parameter but Pakistan denied following the devaluation of rupee. It resulted in trade war between Pakistan and India. In a response both the countries developed protective measure against each other. Observation states the policy of trade restrictions were imposed by India against the Pakistani manufactures; it shows that India took it first to restrict the trade especially with Pakistan. The evidence can be obtained from the studies that Pakistan was not in a position to settle the currency

devaluation as Choudharyand Chaudhry (2007) conducted a study to analyze the effects of devaluing currency in Pakistan's economy. In this study researchers have discussed the scenario that initially Pakistan was not in a position to devalue its currency in order to retain the economic condition of the country. As Pakistan was lacking in foreign investment and distribution of assets were not equitably handed over by India. The study focuses on finding the results of devaluation on output and prices of the products. This study focuses on the aspect that in a short run devaluation of currency adversely affects the prices and output for the economy. Devaluation has been studies for 30 years of data set in which prices are increased whenever the currency of Pakistan is devalued. It showed, devaluation of currency in case of Pakistan decreases the manufacturing output whereas prices level were increase when related with devaluation of currency. Short run period showed that devaluation of currency has negative effect on output whereas; in a long run devaluation has stabilized the economy. Initially Pakistan didn't involve in currency devaluation in 1950s because economic condition of Pakistan was not suitable to absorb the short term deficit on the basis of currency devaluation. These circumstances enforces the trade restrictions on both sides of the borders (initially from India and followed by Pakistan).

The measure of trade restrictions from India turned out to be the major point to bring down the trade between India and Pakistan. In a reaction of restrictive policies from India, Pakistan as a major trade partner of also tuned up the trade policy for India and revisited her trade policy. The changes in behavior and patterns of trade policy showed several incidences of sharp trade cuts between India and Pakistan.

Hye (2011) studied the trade policy of Pakistan and India. It was the immediate effect of war broke down between these two countries right after independence and effected the whole trade cycle of India and Pakistan. The trade deteriorated with the passage of time, after the war of 1965 the trade was almost negligible and this situation prevailed till 1971. Although, there were 14 bilateral agreement signed between Pakistan and India to facilitate the trade process in 1947 to 1965. We cannot neglect the fact that nine branches of six Indian banks were operational in Pakistan till 1965 the year at which Pakistan and India went to war. In 1971 India and Pakistan was involved in another war, it resulted to severe political circumstances and the governments on sides decided not to allow trade across the borders. The situation of political gap lasted for longer period of time. Governments of both the countries were not even concerned to increase any type of economic, political or social cooperation. In this time period all the borders were closed for the trade of any type of item, even people were not allowed to cross the borders. These policies were adopted till 1975; the time period of 1965-74 was the adverse time period for trade between both the countries.

Little et al. (1970) observed that in late 1970s Pakistan took major liberalization measure including elimination of bonus scheme, devaluation, and elimination of restrictive export/import policies. These measures didn't support the trade as it remained trivial to $ 132 million. It was the time at which Bangladesh was emerged as a separate country on the world map. It caused a major loss to the socio political and economic indicators of Pakistan.

Mursheed and Mamoon (2010) noted that Pakistan and India were involved in six major conflicts out of these six conflicts the war of 1971 caused the major economic loss

especially for Pakistan. In this time period Pakistan and India has suffered with the largest time spam in which there was no significant interaction or trade across the border. Authors has observed the occurrence of major conflicts is due the Kashmir issue as

> "Indian and Pakistani troops confront each other every day with fingers literally on the trigger, along the ceasefire line or line of control established on 1st January 1949 in Kashmir"

In 1975 the relations between two neighboring countries i.e. Pakistan and India, started normalizing to some extent and an initiative was taken to develop the trade relation. It was a result of protocol signed by two countries. A protocol was signed in 1974, after a long time of confrontation, for reinstatement of trade relationship between Pakistan and India; it was signed at government level. This official document was signed to support the legal trade and to enhance the relationship between two countries; it was also aimed to end the war by settling the issues between these countries.

In 1980s major trade liberalization measures were taken to increase the flow of capital. Initially, government of Pakistan decided to eliminate the quotas specifically on non-capital goods as it was an important measure to liberalize exports and imports were also liberalized slowly.

Kemal et al. (2002) indicated that ample reforms on tariff were taken in 1987. In this time period numerous tariff rate were lowered down from 17% to 10% in a same way sales tax of 12.5% was replaced for various exporting goods. During this time period a

major ratio of lowering down tariff rate were observed i.e. from 225% to 125%. Husain (2003) observed the extreme tariff determined on importing goods and products as 25% in 2005.The trade between India and Pakistan remained insignificant till 1995. During this time period instinctive resentment effected the economic relations between two countries. At official level both the countries were not willing to take the stance for increase in economic cooperation. Interest groups on both the sides of border have subjugated the situation; it further intensified the level of anxiety and generated much coldness in relation at times. In all these circumstances Pakistan and India were keeping distances especially on government and official level. In this situation usually economic and ethnic forces generate their ways for trade through an unofficial manner. Similar trend was observed in the trade of India and Pakistan as trade was there across the border but it was through unofficial measure. Trade limitations in Indo-Pak region were breeding some poisonous economic ways like smuggling (illegal trade) resulting into loss of economic activities for both the countries. Illegal trade generated mafias on both of the sides of the border and these forces initiated some raw means of supporting and financing some underground forces, as these forces created disturbance and turbulence in both of the countries. Romer (1990) studied the results for the data of 90 developing countries concluding that the trade openness is leading the developing economies to economic growth by imitating the new dimensions of innovations by eliminating the black market and illegal trade. The trade history of both the countries denotes the negligible efforts to demolish the non trade barriers.

Hye (2011) observed three major indices of economic growth through trade openness as.

> "First the trade openness causes economic growth through efficient allocation of resources. Second, trade shifts the technology from developed to developing countries. The last learning by doing: developed countries innovate and developing countries imitates"

In these lines Hye has evolved the idea of trade openness in developing countries by describing it in three major factors. The trade openness empirically allows the economic growth as it replicates the efficient resource allocation in different sectors of the economy. In developing countries, issue of scarce resources is more severe when compared with developing countries as the growth of economy is slow where as more funds are needed to be generated by injecting extra valued revenues into the economy. Trade stream lines the resources at macro level to assess the resource allocation by reprioritizing the economic activity in the country. In case of Indo Pak trade both of these countries have developing economies and the long unified borders allows trade at a reducing cost as compared to other countries. Pakistan and India should follow the regulations for lowering the trade tariffs to allow free trade within the region.

The economic models have always suggested that whenever there are barrier of limitations of the trade or in the economic activities it has always dinted the process of economic activity within the domestic circle of the country. The South Asian countries have the lowest trade ratio among the neighboring countries. India and Pakistan are the two major contributing countries of South Asia. These countries should be focusing on

lowering the trade limitations in order to enhance the economic integration of South Asia.

Burki (2005) discussed the fact that even in the period of high trade rate doesn't last for long period of time as Pakistan enjoyed this session till 1980s. Trade patterns and relation in this region changed soon after 1980s. The major cause for cut down of trade growth rate was Pakistan's growth rate. It has been observed that growth rate of Pakistan's economy has consistently low as compared to India. In generic terms growth rate of Pakistan was low most of the times so it was difficult for business community to carry the trade with India, whereas, per capita income for Pakistan has remained above from India for most of the time. World Bank (2007) has clearly stated that per capita income of Pakistan has remained as above of India till 2006-07. In a same way cost of doing business has also been lower in Pakistan till 200-5-06 when compared with India. Now there is a huge difference as Pakistan is considerably low in per capita income.

It is important to mention the uneven trade patterns are due to political scenarios on both sides of borders. The data of trade between India and Pakistan shows a clear cut down of trade as a steep turn down of import and export for both the countries. It is a fact that political influence has disseminated trade relations between Pakistan and India. Experts states these words as "Politics of Pakistan –India trade has affected the region a lot". Further it is explained, Pakistan has lost its quintessence as a trading country due to weakening competitive essence as compared to India.

Pakistan and India are operating at negligible level of trade. Even in this modern globalized world neither country falls into the top ten category of trading partners. This

is because of their past political history. The numbers show that India has increased it trade steadily till 2000 but still stands at 31 percent in trade openness index as compare to this Pakistan stands at 38 percent. The trade openness in South Asia has remained at 65 percent and in this region both these countries have remained quite low as compared to the overall trade openness of the region. The regional analysis shows that the regional trade in Subcontinent remained at one percent as compared to Latin America and Sub Saharan Africa where the trade integration remained at 3.5 to 4 percent. Whereas, trade integration for APEC, European Union (EU), North America Free Trade Area (NAFTA) and Association of South East Asian Nation (ASEAN) stood at 73, 61, 57 and 23 respectively.

Naqvi (2008) discussed the status of trade between India and Pakistan. According to the study India assigned MFN status to Pakistan in 1996 which enhance the Indian exports to Pakistan though it was a little contribution towards the trade development as trade doesn't improve significantly. The imports and exports between India and Pakistan remained to negligible level as Kargil war worsens the situation between the countries in 1998-99.

Pakistan is now planning to assign MFN status to India by converting positive list to negative list. It was planned that MFN status will be implied till the end of 2013 but due to certain processes and procedures this assignment is delayed. Despite delay in this process both Pakistan and India are hopeful that trade between these two neighboring countries will increase. Pakistan and India are involved in different talks as diplomats from both sides are meeting and visiting to discuss the issues for improving the trade ties with each other.

Some strategic thinkers believe in the outcomes of trade benefits of Pakistan as a north-south corridor. In the region of South Asia it would be for first time that Pakistan is going to enjoy the status of as a trade beneficiary. A "north-south corridor" gives the concept of free trade right from the east side of the country to the south side and it will help the eastern and southern region, that is already popular for trade flow and trade patterns.

2.4 DERIATIONS FROM REVIEW OF LITERATURE

1. Pakistan is a developing country striving to built her industrial base for development of the economy
2. Pakistan's GDP is comprised of agricultural raw products. It would not be false saying that the economy of Pakistan still ground on the agriculture base although industrial sector has shown some sufficient growth in the last decade.
3. Trade policy of Pakistan varies within different regions of the world. Foreign Policy of Pakistan majorly determines the parameters of trade in Pakistan.
4. The trade policy of Pakistan is influenced with the political scenarios. Most of the trade flows are influenced by political priorities and these priorities.
5. Regional scenarios of South Asia have led this region to be one of the least integrated regions.
6. One of the main factors why South Asia is least integrated area is the fact that two major contributing countries India and Pakistan have negligible trade between them.

7. Pakistan and India has severe conflicts and issues. These conflicts are of such a severe nature which has resulted into the break out of war (three times) between the two countries. These conflicts had badly affected the peace process within the South Asia.
8. There have been certain attempts to confront the regional peace by the support of economic integration.
9. To increase the Economic integration of South Asia many initiative have been taken by the countries in the region. These countries have indulged into table talks and negotiation desks.
10. Some good intentions about economic integration of South Asia have led to the development of certain important bodies and initiatives like SAARC, SAFTA and SAPTA etc.
11. These initiatives have not contributed significantly to develop the peace by trade between the countries of South Asia.
12. Pakistan and India have very low level of trade though initially there was significant trade between these two countries. The proponents of peace process in South Asia clearly foresees the fact, "in order to build economic integration in this region it is important to bring peace between India and Pakistan"
13. India has granted the MFN status to Pakistan in 1995 and issued the negative list though this negative list has not been revised or exercised yet.
14. Pakistan needs to develop a bilateral trade with India in order to gain more access into different region of the world.

15. Bilateral trade between India and Pakistan is important to build the trade Hub so as to Ancash South Asia for its strategic abilities.
16. Pakistan is looking forward to grant the MFN status to India
17. Pakistan and India are now moving towards trade normalization by engaging themselves in different table talks to get it done
18. Bilateral trade of Pakistan and India may enhance the trade of Pakistan with other developed countries. This phenomena can lead to a growth in the economy of Pakistan
19. Exchange rate plays a crucial in the development of trade especially for the developing countries
20. Different studies suggest that appreciation in exchange rate definitely increases the output of the economy thus contributing towards an increase in trade.
21. Different researchers are of the view that enhanced level of bilateral trade will normalize the relation between two countries ultimately contributing to the prospects of the economy.

3. DATA AND METHDOLOGY

Trade has been a decisive indicator for nurturing the economy. There are so many researches available to that have studied the impact of trade on economic development. The review of literature suggests that trade has always been beneficial for the economy to grow. In the current economic cycle a country or economy cannot survive in isolation. To cater this issue economies spend a lot of the research and development of trade. In developing countries a new debate has emerged to flourish the trade for getting the rapid growth in economy. Pakistan and India are two developing countries of South Asia striving for getting a peaceful relationship in the region.

This research work aims to analyze the bilateral trade level of India and Pakistan and its impact on the economy of Pakistan.

The analysis in this study is conducted by two methods:

- Exploratory Data Analysis (EDA)
- Empirical Analysis

3.1 Exploratory Analysis (EDA)

The basic approach followed in this research work is exploratory Analysis. Exploratory data Analysis (EDA) is sited as approach cum philosophy used in data analysis. EDA is a technique used to summarize the characteristics of data set by visual method. EDA utilizes diverse technique to analyze data in this diversity mostly graphical approaches are utilized to examine or study the data.

EDA is used to

- Capitalizing the imminent data
- revealing primary formation
- Extraction of major variables
- Revealing outliers and anomalies
- Test core suppositions
- Develop prudent models
- Determine optimal factor setting

EDA is the technique mostly elaborated with graphical method. The assumption about EDA as a statistical graphics is right; reason lies in the fact that these are used interchangeably. Statistical graphs are based on a set patter and methodology whereas EDA is used in larger paradigm. EDA could possible deny the basic assumptions and follow the process in which data makes the assumptions and decide factors to reveal the formation, composition and model of data. EDA is focused as a philosophy about how we scrutinize the data for getting the true image of data pattern and its interpretation. It is clear that EDA uses the statistical graphs for getting the entire objectives of this particular technique.

In this research work exploratory data analysis EDA is used to analyze the trends and patterns of trade between Pakistan and India in different domains. In order to conduct EDA trade is divided into two categories of imports and exports. In the first step, both the economies are analyzed differently depending upon the economic condition and economic factors that directly affect the trade and trade relation. In the second step, this

analysis is used to assess the important dimension of trade and trade patterns other than bilateral trade in two major countries of South Asia (Pakistan and India).

The Assumptions followed in the EDA for the trade analysis of India Pakistan are as follows:

1. Economic overview of Pakistan to assess the nature of economy and to identify major patterns influencing the economy. It is also identified that trade is an important indictor to the economy
2. Economic overview of India to assess the status of the economy and nature of the economy. Historically identified the trading behavior of the economy by seeing different measures of economic activities.
3. Comparison of both the economies is conducted in order to see the percentage of exports imports and merchandise trade.
4. The trade openness for Pakistan and India is evaluated in two phases. In the first phase trade openness is identified by percentage of trade with developing and developed countries. In the second phase trade numbers are analyzed with inter regional and intra regional trade of both the countries.
5. Direction of trade is identified for both the countries i.e. Pakistan and India.
6. Direction of trade for both Pakistan and India has been analyzed to identify the key trading partner of both the countries. For this purpose exports and imports are analyzed individually to see the direction of trade. .
7. In the last step bilateral trade between India and Pakistan has been analyzed historically. It is analyzed that what are the prevailing situation of bilateral trade and what it was previously.

3.2 ORDINARY LEAST SQUARES REGRESSION METHOD (OLS)

Ordinary Least squares method is used to check the significance of trade. Ordinary Least Square Method is a comprehensive technique of linear modeling used to measure the single response variable. OLS is more often used to model the variables that are measured on at least interval scale. This technique is used to model one or more variables to check the significance. OLS method can be used for both numerical and categorical variables by ensuring the variables are measured appropriately.

In OLS usually two variables are considered suppose X and Y. Y is stated as continuous response variable whereas X is nominated as continuous exploratory variable. A model is developed on linear basis to associate the relationship between the two variables. The relationship of single model can be shown by graphical representation so as to find the line of best fit, which will relate the variable by telling the direction of association of these variables. If this relationship tends to be linear then it can be transformed into an equation which can be computed mathematically as straight line equation. The example of linear equation is

$$Y = \alpha + \beta X$$

The above given model equation is the simplest form of OLS regression. In OLS approach there may be more than one exploratory variable to associate the linear model by explaining two different variables and checking the impact on the one response variable. In such a model a line of best fit cannot be shown on a single scatter plot. The equation for such a model can be given as:

$$Y = \alpha_1 + \beta_1 X_1 + \gamma_1 Z_1 + ...$$

In this model 'Y' is explained as a response variable predicted by two exploratory variable 'X' and 'Z'.

The relationship given in the above equation can be said to an equation of the line of best fit. In this equation alpha α represents the value of variable 'Y' when variable X and Z are both zero at value. The value of regression coefficient α can be explained as the value 'Y' will have if all the explanatory variables are kept zero. Similarly, the β value will tell us the value or grade change in the value of 'Y' with each unit increase or decrease in the value of 'X' variable. In this equation γ will tell us the value of variable 'Y' as explained by the variable 'Z'. In other words the value of γ is the increase of decrease in the value of variable 'Y' with each unit increase or decrease in the value of explanatory variable 'Z'. We can say, for each constant beta β and Gamma γ parameter indicates the change in 'Y' with the change in variables 'X' and 'Z' respectively. In this model it is important to note that while studying the variable 'X' all the other variables are kept constant to get accurate results.

OLS model is useful with its explanations of parameters by identifying the relationship for two or more variable. Besides the parametric explanations OLS method is equally useful to identify that how well model fits the data. In order to test the model fit values of response variable 'Y' are compared. The real values of 'Y' are compared with expected values of 'Y'. In a more simplified form the real values of 'Y' are the values taken from sample data whereas the expected values are extracted from the regression model and then these values are compared to assess the model fit. The difference

between two values asses the precision of the model fit. In the model where two or more exploratory variables are used model fit is identified by deviance measure of nested models. The model fit of variable z can be measure by comparing the two equations as:

$$Y = \alpha_1 + \beta_1 X_1 + \gamma_1 Z_1 + ...$$

$$Y = \alpha_1 + \beta_1 X_1$$

By comparing the above two nested model we will be able to identify the impact created by variable Z on Y. The deviance between the two equations will tell preciously how much variable Z effect the response variable Y when effects of X_1 are accounted for. The equations can also be used to identify the impact the entire explanatory variable on the response variable by comparing the two equations as:

$$Y = \alpha_1 + \beta_1 X_1 + \gamma_1 Z_1 + ...$$

$$Y = \alpha$$

OLS regression is one the most important and frequently used technique by the economists for development of model by data analysis. It is considered one of the powerful tool as it is easy to check linearity, constant variance and effect of outliers to check the assumptions of the model.

OLS is a useful technique to assess the trading patterns of the countries. In number of researches it has been used to indicate the significance of trade with the countries. In this

research work OLS method is used to assess the significance of bilateral trade between India and Pakistan. The assumptions of OLS model are as

1. The impact of bilateral trade between India and Pakistan is checked on the exports to USA from Pakistan
2. Effect of Bilateral trade of Pakistan and India is checked on the exports to European Union from Pakistan
3. The impact of bilateral trade between India and Pakistan is checked on the exports to UAE from Pakistan.
4. All these three equations carry a third explanatory variable of Exchange rate to check whether exchange rate appreciation have positive or negative impact on the exports of Pakistan to USA, EU and UAE.

Export (USA) = Imp Exp (Pak, Ind), Exchange rate

Export (EU) = Imp Exp (Pak, Ind), Exchange rate

Export (Afghanistan) = Imp Exp (Pak, Ind), Exchange rate

In this study the ordinary least square regression is used to analyze the impact of Pakistan India bilateral trade on the exports of major trading partners of Pakistan. It has been identified through EDA that Pakistan's most important trading partners are developed nation and if we name the regions preciously it is United States, European Union and United Arab Emirates. The linear model developed for the OLS model contains the three sets of equations. The equations are as:

$$ExpUSA = \alpha_{1i} + \beta_{1i} TradePI_i + \gamma_{1i} Xchange_i + \varepsilon_{1i} \quad \ldots\ldots\ldots\ldots\ldots \quad (1)$$

$$ExpUSA = \alpha_{2i} + \beta_{2i} ExportsPI_i + \gamma_{2i} Xchange_i + \varepsilon_{2i} \quad \ldots\ldots\ldots\ldots\ldots \quad (2)$$

$$ExpUSA = \alpha_{3i} + \beta_{3i} \text{Im}\, portsPI_{3i} + \gamma_{3i} Xchange_i + \varepsilon_{3i} \quad \ldots\ldots\ldots\ldots\ldots \quad (3)$$

These three equations explain the linear model for checking the different explanatory variables variations and its impact on the response variable of Exports of Pakistan to USA.

First equation (1) explains the model for assimilating the two important variables of trade in the prospects of Pakistan. It aims to develop the reference for checking the status of Pakistan and India bilateral trade on the exports of USA. The equation tries to explain does the increase in Pakistan's bilateral trade with India increase the trade with the Unites States or vice versa.

Second explanatory variable is Exchange rate. Exchange rate of Pakistan over the period of last 22 years is regresses with exports to United States to check whether these are positively or negatively associated with each other.

Second set of linear equations is formed as:

$$ExpEU = \alpha_{4i} + \beta_{4i} TradePI_i + \gamma_{4i} Xchange_i + \varepsilon_{4i} \quad \ldots\ldots\ldots\ldots\ldots \quad (4)$$

$$ExpEU = \alpha_{5i} + \beta_{5i} ExportsPI_{5i} + \gamma_{5i} Xchange_i + \varepsilon_{5i} \quad \ldots\ldots\ldots\ldots\ldots \quad (5)$$

$$ExpEU = \alpha_{6i} + \beta_{6i} \text{ Im } portsPI_{6i} + \gamma_{6i} Xchange_i + \varepsilon_{6i} \quad \ldots\ldots\ldots\ldots\ldots \quad (6)$$

In these equations Exports with European Union are regressed with three important factors of bilateral trade of Pakistan with India. In first equation EU trade is regressed with bilateral trade with India. It is important to mention that these parameters are measured with reference to Pakistan. EU is a major trading partner of Pakistan. In exports most of the exports of Pakistan flow towards EU though it is categorized at fourth level while ranking the exporting partners of Pakistan. Secondly exports with EU are also explained by exchange rate fluctuations of Pakistan. It is expressed in each equation, for each equation holds the explanatory variable exchange rate in it. In this context exchange is regressed for all the three categories of exports to check the significance of bilateral trade

Third set of equations are formed as:

$$ExpUAE = \alpha_{7i} + \beta_{7i} TradePI_{7i} + \gamma_{7i} Xchange_i + \varepsilon_{7i} \ldots\ldots\ldots\ldots\ldots \quad (7)$$

$$ExpUAE = \alpha_{8i} + \beta_{8i} ExportsPI_{8i} + \gamma_{8i} Xchange_i + \varepsilon_{8i} \ldots\ldots\ldots\ldots\ldots \quad (8)$$

$$ExpUAE = \alpha_{9i} + \beta_{9i} \text{ Im } portsPI_{9i} + \gamma_{9i} Xchange_i + \varepsilon_{9i} \ldots\ldots\ldots\ldots\ldots \quad (9)$$

The third set of variables is formed to check the relationship with the exports to UAE from Pakistan. The first equation (1) is formed to check the relationship between bilateral trade of Pakistan and India and Exports of Pakistan with UAE. United Arab Emirates is one of the major regions where 15 percent of Pakistan's total exports are exported. Under this contribution UAE is one of the important exporting partners of Pakistan. Exchange rate fluctuations are also regressed with the exports of Pakistan to

UAE. In this equation exports to UAE is explained by two explanatory variables i.e. bilateral trade between India and Pakistan, exchange rate fluctuations in Pakistan.

Second equation explains the relationship of exports from Pakistan to UAE and exports from India to Pakistan. In other words it could be explained as it is a function of exports between India and Pakistan and Export of Pakistan to UAE. It is to analyze those fluctuations in exports with India does impact Pakistan's exports to UAE and second explanatory variable is exchange rate fluctuations.

Third equation derives a model to check the fluctuations in Imports between India and Pakistan to exports with UAE. Second explanatory variable is exchange rate. In these equation exports of Pakistan to UAE is regressed with imports of Pakistan to India and exchange rate of Pakistan.

3.3 DATA SET

Trade is a core concept related to the economies. Usually the data on trade is explored on the basis of imports and exports. In this research data used for analysis is carried out as a secondary data. The data is extracted from different official sources. Majority of data is taken from Trade Development Authority of Pakistan, World Development Indicators and Trade Map. These are the only useful and healthy resources available for the collection of data especially on world trade. The data of exports and imports of Pakistan is somehow also extracted from the State Bank of Pakistan for some time period as it was not available in US $ on the other sources. The data of India bilateral trade and India's trade with rest of the world is collected through the Ministry of Commerce, India. All these resources are available online on the websites of respective

ministry. In some of the cases data is also assessed through the statistical bureau of Pakistan as historic data was mostly available through statistical bureau of Pakistan. Data is extracted from the time period of 1990-2013. Data on exchange rate has been extracted from State Bank of Pakistan and it is for the years 1990-2013. The exchange has been calculated on the basis of indices as given by State Bank of Pakistan (A table for calculating the indices of exchange rate is attached in the annexure II). The data of trade has been extracted majorly from Trade Development of Pakistan. The trade data has been considered from 1990 to 2013. The data is taken for 23 years the reason lies in the non availability of data. Before 1990 the data of trade has not been taken because before this time period the trade between India and Pakistan has remained close to zero for few years, considering that data set can result into the elimination of OLS model result by distorting the results.

4. ANALYSIS AND DISCUSSION

4.1 EXPLORATORY ANALYSIS (EDA)

4.1.1 ECONOMIC OVERVIEW OF PAKISTAN AND INDIA

Pakistan and India are two major countries of subcontinent which prior to partition were under the same rule of British government. Pakistan, India and Bangladesh as a whole were known as sub-continent with population of 1.494 billion of population. The Sub-continent accounts for total 22 percent of the whole world population. In this region India has the greatest population and Pakistan follows it at second number as India has seven times of people count as compare to Pakistan.

Looking at the economic indicator of India and Pakistan it has been estimated that Pakistan has a per capita income of US$2688 whereas India has US$3425 according to the World Bank (2010). The difference between these countries, in per capita income has turn out to be 33 percent. When we look into the statistics of both the growing economy it tells us a story that initially Pakistan was way better than India as GDP growth rate of Pakistan was above as compare to the growth rate of India. In 1960s, 70s and 80s Pakistan used to have greater GDP growth rate. In the last two decades i.e. 1990s and 2000s Pakistan is lacking the growth rate whereas India has gained the growth rate well above as of Pakistan. India is estimated to have the GDP growth rate around 8 percent whereas Pakistan has a dwindling GDP growth rate around 5 percent. Despite the higher growth period from 2002 to 2007 Pakistan is lacking in establishing the fine GDP growth rate for the country. Table below shows the statistics of last four decades as comparison of India and Pakistan.

The numbers evaluate different economic sectors of India and Pakistan. The agriculture sector has shown a steady growth rate of 3.1 percent for both the countries. In the decade of 2000s agriculture growth is same for both the economies. Despite some important initiatives from Indian government in late 90s India has shown a stable growth rate which is almost equal to growth rate in Pakistan. Pakistan is way behind in the growth rate of services and Industrial sector. India stands at 9 percent growth rate in industrial sector and 8 percent growth rate in industrial sector whereas, Pakistan has growth rate nearly at 6.5 percent for both the sectors.

Table 4.1

Economic Overview of Pakistan and India

(% age)

PAKISTAN					INDIA			
YEAR	GDP GROWTH RATE	INDUSTRIAL GROWTH RATE	AGRI- GROWTH RATE	SERVICES GROWTH RATE	GDP GROWTH RATE	INDUSTRIAL GROWTH RATE	AGRI- GROWTH RATE	SERVICES GROWTH RATE
1980-89	6.3	7.8	4.1	6.5	5.6	6.2	3.5	6.6
1990-99	4.6	4.8	4.4	4.6	5.5	5.6	2.8	7.3
2000-10	4.6	6.8	2.7	5.1	7.7	7.9	3.1	9.3

Source: World Development Indicators, World Bank (Various)

The numbers evaluate different economic sectors of India and Pakistan. The agriculture sector has shown a steady growth rate of 3.1 percent for both the countries. In the decade of 2000s agriculture growth is same for both the economies. Despite some important initiatives from Indian government in late 90s India has shown a stable growth rate which is almost equal to growth rate in Pakistan. Pakistan is way behind in the growth rate of services and Industrial sector. India stands at 9 percent growth rate in industrial sector and 8 percent growth rate in industrial sector whereas, Pakistan has growth rate nearly at 6.5 percent for both the sectors.

4.1.2 DEGREE OF TRADE OPENNESS IN INDIA AND PAKISTAN

Trade openness is an essential indicator to check out the trade balance and economic openness of the country. This measure is used to calculate the sum of exports and imports as a percentage or share of GDP. The history of both India and Pakistan states that in earlier years Pakistan was more open to imports and exports when compared with India. It is the fact that some of the important issues and policy shifts in1980s especially led to centralization of the economy and resulted into a closed economy in Pakistan. This centralization suddenly narrowed the proportion of imports and exports in Pakistan. In India the trade parameters narrowed in 1970s whereas she recovered and opened the economy in early1990s.

Table 4.2

Trade Openness in Pakistan and India

(PERCENTAGE)

	PAKISTAN			INDIA		
YEARS	**Share of Exports in GDP**	**Share of Manufactured Exports (% of total exports)**	**Exports to Developing Countries**	**Share of Exports in GDP**	**Share of Manufactured Exports (% of total exports)**	**Exports to Developing Countries**
1990-91	14.0	78.7	16.4	5.7	70.6	9.8
2000-01	12.2	84.6	18.8	9.2	77.8	23.1
2010-11	12.1	74.2	40.1	12.7	63.8	35.4

Source: Trade Development Authority of Pakistan (TDAP) Research Cell

Historical data states that initially India was not open to trade and it stands at 7 percent of trade openness index at 1960s, whereas Pakistan stand at 12 percent for the same time period. The table below shows that trade openness followed both the economies after 1990. After 1990 Pakistan and India both opened up their economies for exporting the manufactured goods. Pakistan is ahead in trade openness index as its economy is open up to 34 percent whereas Indian economy is open to 31 percent in trade openness index. Pakistan in 2010 exports more of manufactured goods and its exports to developing countries holds more share when compared with India. The statistics clearly indicate that Pakistan economy is more open for exporting the goods and services. Pakistan has higher share of 74 percent in exports of manufactured goods whereas India stands at 63 percent. Share of exports are comparable at 12 percent approximately for both the countries and exports of manufacturing goods stand at 41 percent for Pakistan and 36 percent (approx.) for India. The data indicates Pakistan has its reliance more on exported goods and out of those manufactured goods are exported in major percentage as compare to the trade of India.

4.1.3 TRADE PATTERNS OF INDIA AND PAKISTAN WITH THE WORLD

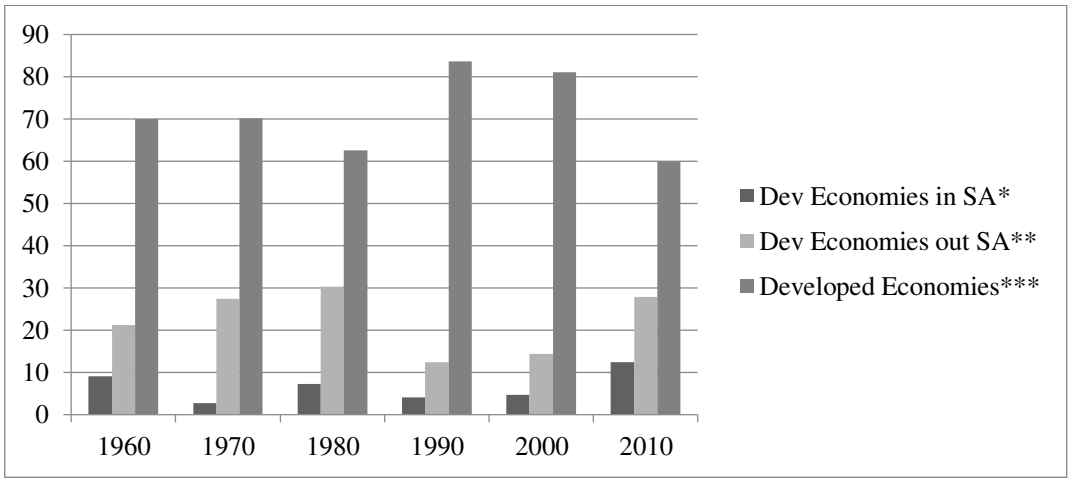
This section is focused to indentify the major trading partners of Pakistan and India. In case of Pakistan and India it has been observed that these countries nurture and maintain the existing trade with major trading partners. Being developing countries it is initially easy for both the countries to get indulge into more proportion of trade on the existing channels beside this these countries are striving for establishing the new trade channels to enhance the trade. It is projected to analyze where Pakistan and India trade within the world.

4.1.3.1 PAKISTAN- Trade Direction

In the past 60 years Pakistan has been engaged with the developed world. Statistics have denoted that Pakistan has its major trading partner in the developed world, though initially Pakistan was in direct trade with some developing countries like India and Iran though it was for very short period of time that Pakistan engaged itself with developing countries for trading goods and services. Primarily, Pakistan has been trading with developed countries like America and Europe for both imports and exports.

FIGURE 4.1

Exports of Pakistan with different regions (% Share)



*Developing economies in South Asia Source: World Development Indicators**Developing economies out of South Asia
***Developed economies rest of the world

The graph above shows the percentage share of three major segregated areas of the world in the export ranking of Pakistan. Most of the share in Pakistan's exports goes to the developed world as it can be seen from the graph above that the line of trade with developed world is way higher than other two categories which tells that more than 50

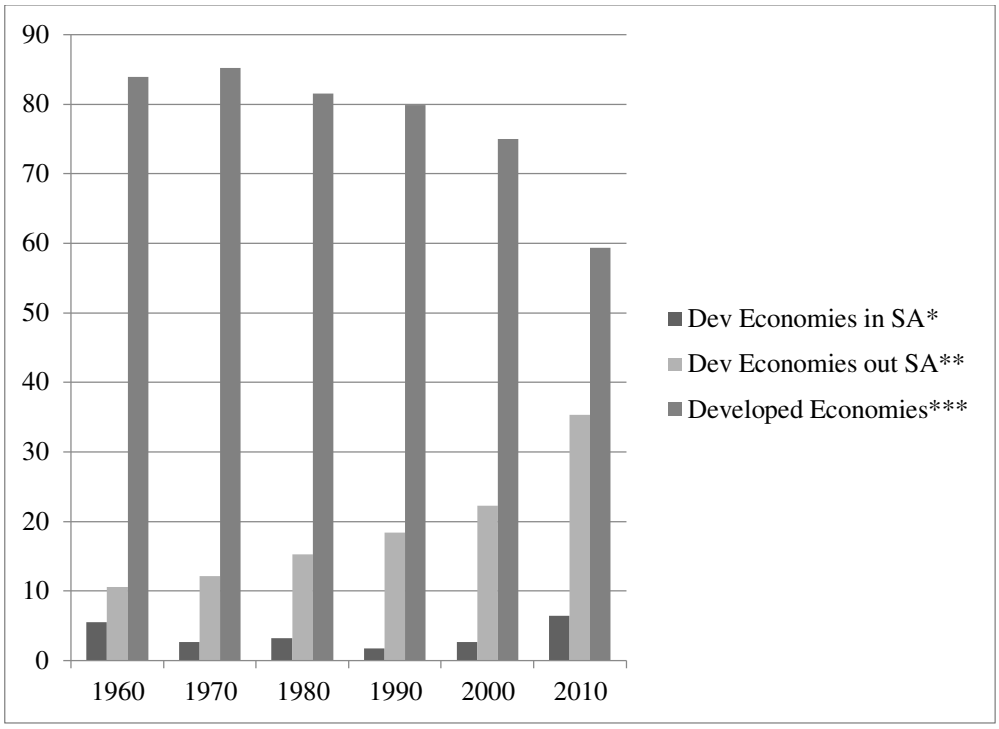
percent of exports are with the developed world. Initially we can see a certain increase in the percent share of exports with developed world till 1990s. After 80s percentage exports with developed countries has been reduced to a certain level (from 70 percent of exports to 62 percent of exports). Exports have regained with developed countries in 1990s but it didn't last for the longer period of time. These exports have again reduced over the past decade as the percentage share of developed world has reduced from 81 percent to 6o percent of total exports from Pakistan.

On the other side developing economies have rare level of exports percentage share in Pakistan. The graph displays the segmentation of developing countries with in South Asia and outside the region (South Asia). Pakistan has negligible level of trade with the developing countries of South Asia till 1990s. The level of trade within the developing countries in South Asia range to 10 percent till 1990s after 1990 there is a significant increase in the regional exports of Pakistan. Similar to regional trade the trade with other developing countries have the same trends, whereas the level of percentage is quite higher in case of the rest of the world developing countries.

Pakistan's imports have the same trends as of exports over the past 50 years of trading history. Pakistan has its major share of imports with developed world. It has more than 60 percent of share in imports that is shared with developed countries of the world. Imports have shown an increase with developing countries of the world other than South Asia countries. It is evident from the graph that imports with developing countries have improved after 1980s majorly and after that it has showed an increasing trend of enhancing imports.

FIGURE 4.2

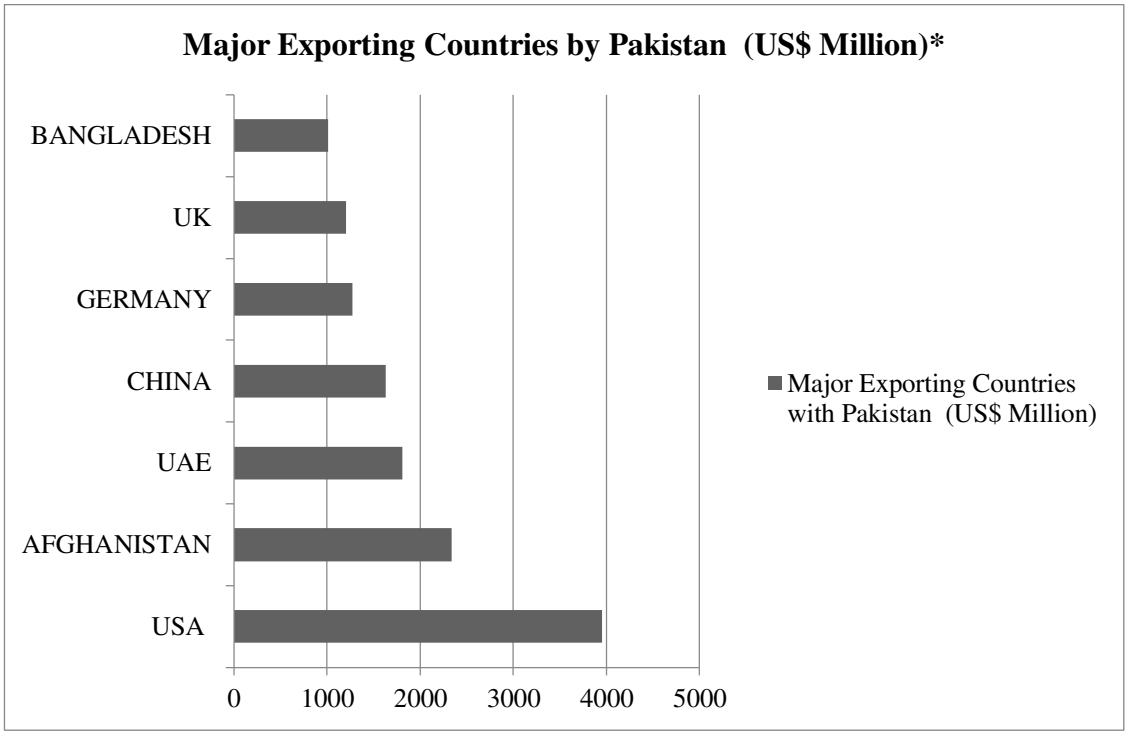
Imports of Pakistan with different region (%share)



*Developing economies in South Asia
**Developing economies out of South Asia
***Developed economies rest of the world

Source: World Development Indicators

FIGURE 4.3

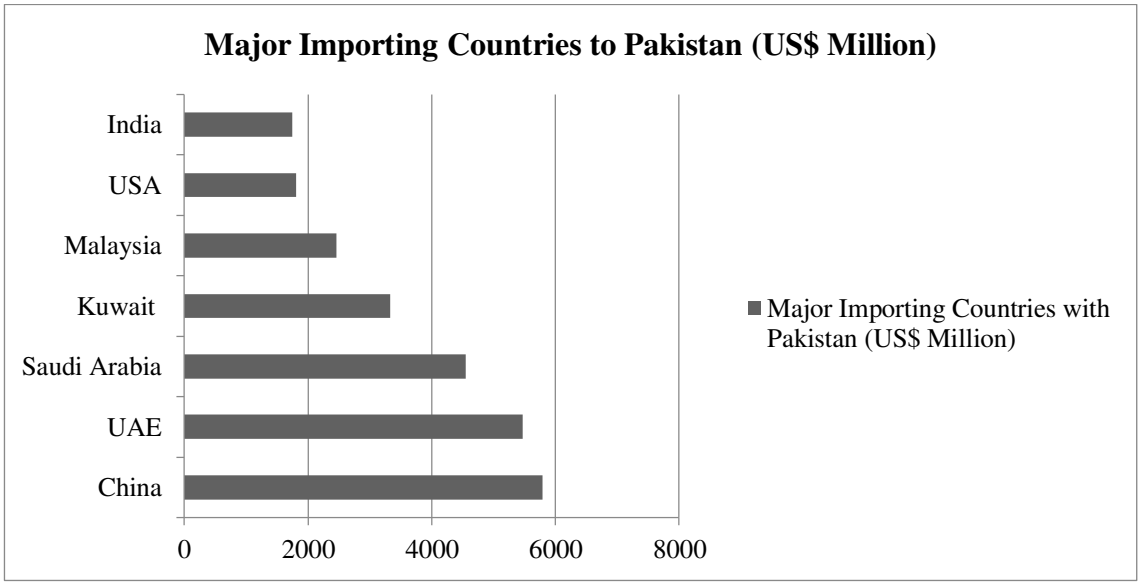


*above US$ 1 billion to a country

Source: Trade Development Authority of Pakistan

Pakistan is exporting most of its items to the developed world. In this decade shift in trading pattern has been observed in case of exports of Pakistan as few developed countries like Afghanistan has contributed in a major proportion of exports. United States remains at the top with the most exports from Pakistan. Pakistan exported the goods of worth $3957 (US Million) to United States in the fiscal year 2010. Afghanistan and UAE are at number second and third, following US, by sharing $2337, $1808 (US Million) worth share of exports from Pakistan respectively. The six contributing partners USA, Afghanistan, UAE, China, UK and Germany account for 50 percent of the total exports of Pakistan.

FIGURE 4.4



*above US$ 1 billion to a country Source: Trade Development Authority of Pakistan

Unlike exports Pakistan is importing most of the goods from China followed by UAE and Saudi Arabia. Most of the imported quantity is from these three regions for more than 30 percent of whole imported worth. Whereas, China, UAE, Saudi Arabia, Kuwait, Malaysia and USA together for more than 50 percent share in total imports of Pakistan. Exports and imports have shown different results for identifying the direction of trade. Considering the trade as a whole product of exports and imports identifies the potential contributors as USA, UAE, EU, China and Afghanistan as major trading partners of Pakistan. These six regions account for more that 55 percent of total trade of Pakistan.

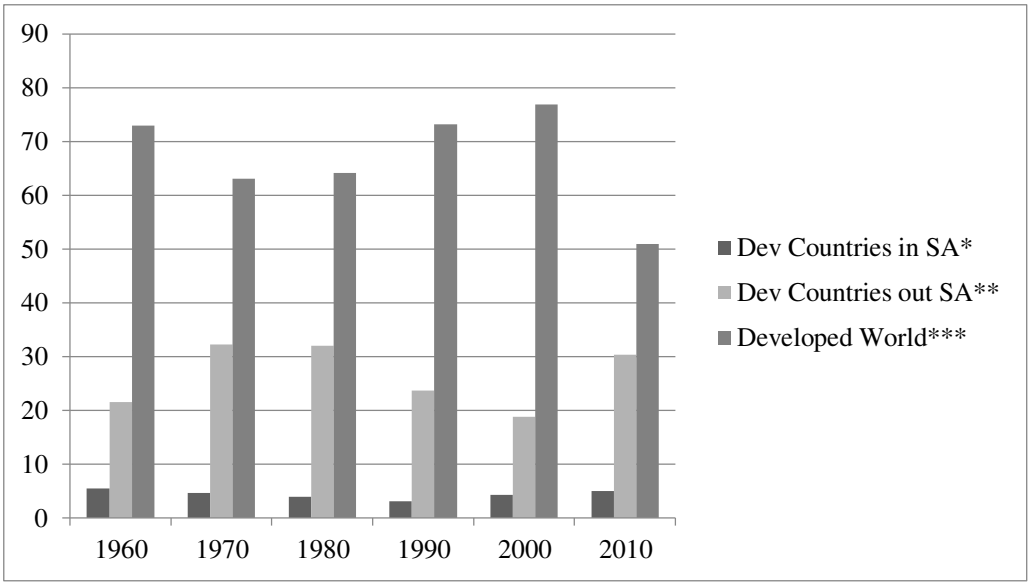
4.1.3.2 INDIA-Direction of Trade

Indian economy is said to be derived by exports. It is assumed that India has built its economy by exporting the goods and services to the developed countries. Historically, India was a closed economy as there were no significant imports and exports. By 1960 India shifted its policy towards the development of trade with the developed world and

enhanced the level of trade with specific developed countries. India shares its most of the trade balance with developed countries.

FIGURE 4.5

Exports of India with different regions (% Share)



*Developing economies in South Asia
**Developing economies out of South Asia
***Developed economies rest of the world

Source: World Development Indicators

The graph above shows the direction of exports from India. It is evident from the graph that exports flows towards developed countries whereas share of developing countries is very diminutive. The share of India's exports with other countries of South Asia is slender as well. In 1960s India revisited its policy of trade which formulated a major portion of exports to the developed world as the graph elaborates more than 70 percent of exports share is among the developed nation till 2000. In 2010 this share of developed world in Indian exports has reduced to 50 percent in Indian exports.

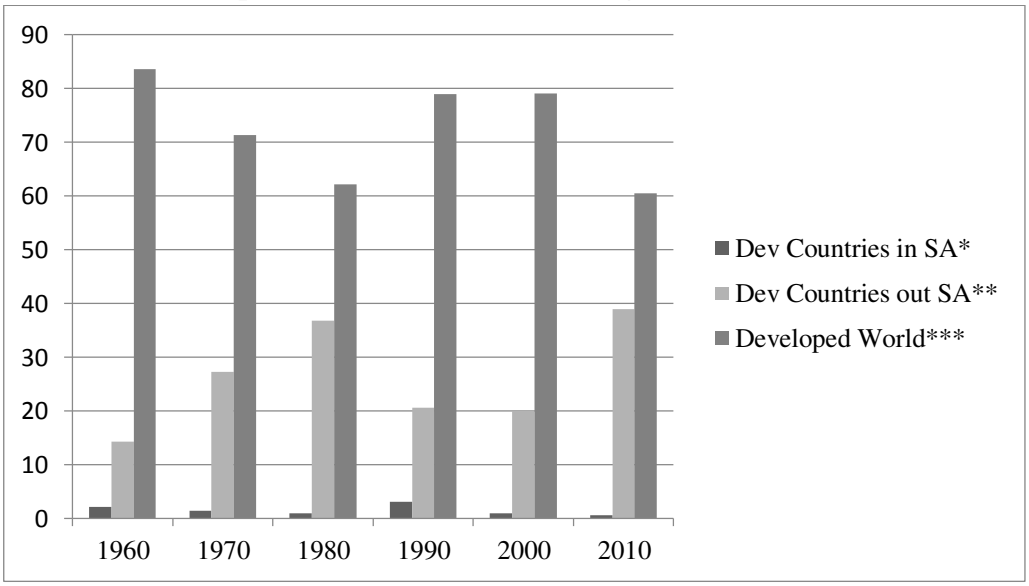
Contrary to this the share of Indian exports with developing world is quite low. Though this proportion reduced in 1990s till 2000 but we see a significant increase in exports to developing world in 2010. The developing countries in South Asia have very rare

increase in exports of India. The exports of India with developing countries of South Asia were initially at 6 percent and it deteriorated to 2 percent in 1980s. There is an increase in regional exports of India in 2010 and risen to 7 percent. If we compare the regional exports of India with other world it is negligible even though India has graded MFN status to Pakistan in 1995 and transformed it positive list into negative list.

The historical statistics of India shows that India has privileged its trade policy with USA and European countries although the share of trade with these countries has reduced in 2010.

FIGURE 4.6

Imports of India with different regions (% Share)



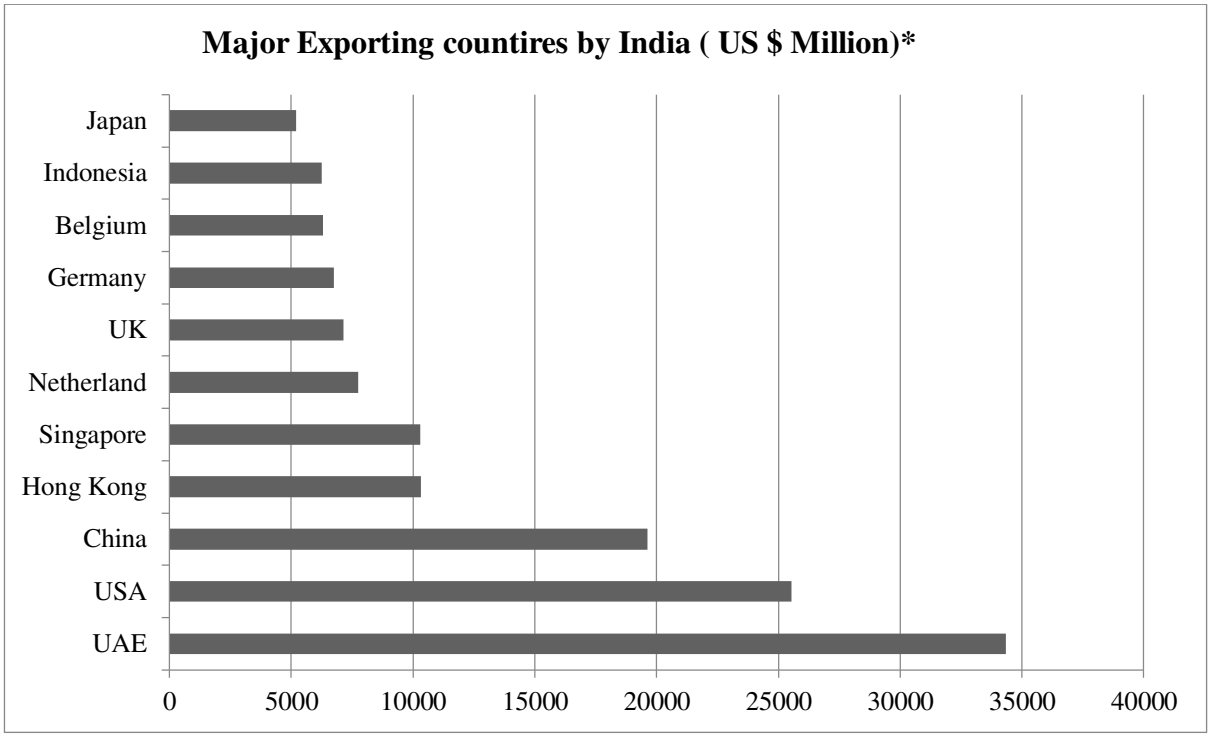
*Developing economies in South Asia
**Developing economies out of South Asia
***Developed economies rest of the world

Source: World Development Indicators

The imports of India has major share of developed world. Over the past 50 years India has experienced most of the imports from developed countries in which USA and EU are at the top. In 1960s total 80 percent of imports were from developed world. The graph above shows that the trends of imports have revealed a sufficient shift in the

imports of India. In 1990 the major share of imports are divided into developed countries of the world and developing countries except of South Asia. On the other side imports with South Asian countries is almost at no level and it has further decreased with the time. In 2010 the share of developing countries imports with India is almost 0.6 percent which is a very emaciated proportion as compared to the imports of world.

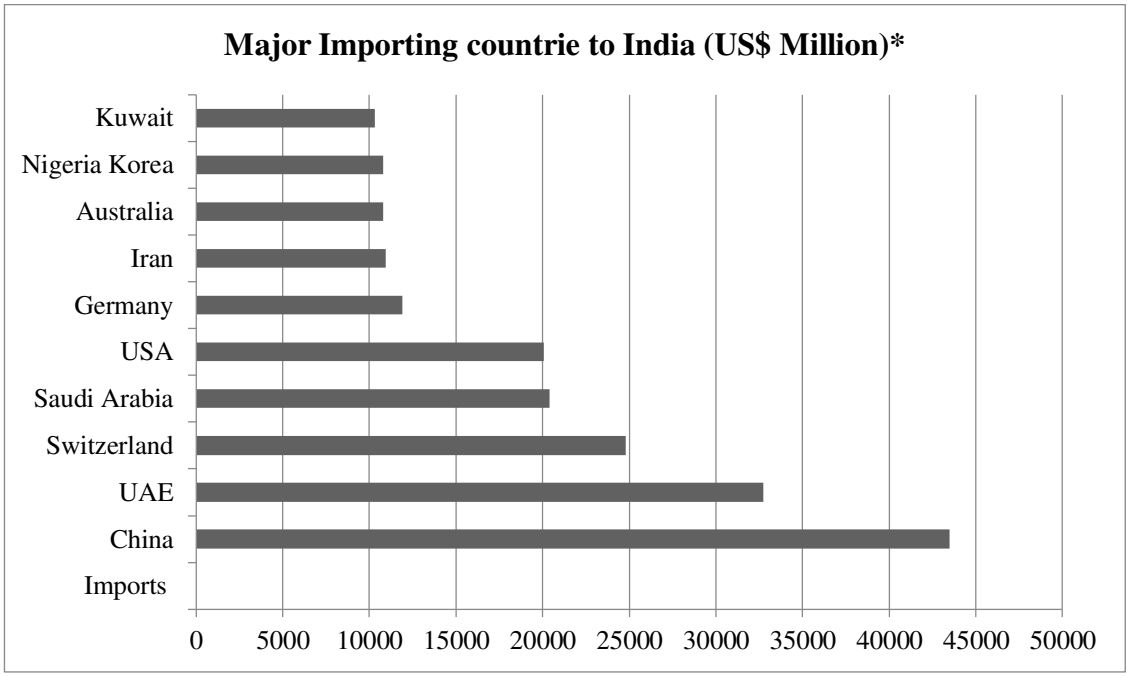
FIGURE 4.7



*above $5 billion for each country Source: MOC, GOI

India has its most exports with UAE, USA and China. It clearly shows that theses three countries get 40 percent of total exports of India whereas UAE as a region is at the top for getting higher proportion of exports from India. 30 percent out of total exports of India flow towards UAE while USA is at 15 percent of total exports. Japan has a significant increase in exports of India. Over the past decade exports of India has increase significantly with Japan up to 10 percent.

FIGURE 4.8



*above $ 10 billion for each country Source MOC, GOI

India being a consumer economy and one of the most populous countries in South Asia has its most imports from China. UAE, Switzerland and USA share almost equal share of Imports in India that is less than China individually.

The direction of trade with India has generally the same trend as of Pakistan. Major portion of trade balance is shared among two regions of USA and EU, whereas, secondary countries are Japan and China to have sufficient trade with India. Trade of India within South Asia is almost negligible while its trade with developing countries other than South Asia has increase in the last couple of years.

4.1.4 PAKISTAN'S TRADE PATTERN WITH INDIA

Pakistan and India has almost negligible level of trade (derivation from review of literature). Initially Pakistan was a major trading partner of India in 1950 after 1960s the

trade between these countries suddenly declined to zero level. The statistics of exports and imports portrays the true image of bilateral trade between India and Pakistan.

Pakistan and India has taken many initiatives to increase the bilateral trade unfortunately none of the initiative has proved to be catalyst for improving the bilateral trade. Pakistan's economic and trade relation with India was burdened with challenges due to political disputes and disparities. The conflict and clashes have always disrupted the trade relation between India and Pakistan although there have been some serious intentions from both the sides segregate the economic and trade activities from all other factor. It is a fact that establishment of good trading patterns will eventually normalize the conditions on both sides of the borders.

TABLE 4.3

Pakistan's Bilateral trade with India

YEAR	Exports (% Share)	Imports (% Share)
1951	18.9	0.0
1960	4.9	2.9
1970	0.0	0.0
1980	1.9	0.3
1990	1.0	0.5
2000	1.0	1.6
2010	1.1	1.9

Source: Pakistan Bureau of Statistics and TDAP

The above table shows the negligible level of bilateral trade between India and Pakistan. It can clearly be indentified form the numbers that whenever there is a political disruption or conflict it has worsens the trade and it has dropped to literally zero level.

In 1951 Pakistan was exporting 18.9 percent of its total exports to India the initial dispute between Pakistan and India reduced this percentage of export to 4 percent. The clash of 1965 worsen the situation of trade between and trade level between these countries came to zero as bilateral trade from both the sides were closed. In this time period Pakistan's economy started emerging as an industrial economy and emergence of new industries boos the process. Goods have to flow somewhere due to closure of borders between India and Pakistan these industrially manufactured products started flowing towards US and it developed and flourished trade link with US whereas formal trade with India remained negligible.

In 1980s both the countries decided to table talk the issues and streamline the economic activities. In this time period bilateral trade started developing. The role of some association like SAARC was important in reestablishing the relations. This smooth process of talks does not last for a long as Kargil war between India and Pakistan again disrupted the process of peace and trade with this SAARC and other initiative flopped badly to resolve the issues. Although India granted the MFN status to Pakistan in 1995 despite this initiative, trade between both the countries remain negligible and narrowed (see annexure- I).

In the decade of 2000s Pakistan and Indian relationship started smoothing again. It was the result of some good talks that the trade between two countries started flourishing

again. In 2010 Pakistan's foreign analyst started discussing the issue of granting MFN status to India. Now Pakistan is on its way to granting the MFN status to India by working on its negative list.

4.1.5 RESULTS FROM EXPLORATORY DATA ANALYSIS (EDA)

Pakistan and India has a long history of trade channels. In this exploratory analysis the data has been assessed for last 60 years. It has evaluated the process of trade between the two major countries of South Asia. Exploratory Analysis has resulted into following indications

- Pakistan and India are the two major contributing economies of the South Asia. It is estimated that 60 percent of South Asian trade is through these countries.
- Comparison of two economies (Pakistan and India) suggests that initially Pakistan was higher in growth rate whereas India lagged behind. Pakistan was having 3-4 percent higher growth rate in 1960s, this gap lower down gradually till the end of 1980s.
- In the last two decades 1990s and 2000s India's economy showed greater growth rate as compared to Pakistan. Looking into the different sectors of the economy Pakistan and India compete in the agriculture sector. In manufacturing sector initially Pakistan was ahead but now there is slight difference and Pakistan is behind India with a narrow margin. In services sector India has developed a lot and it is has 4 percent better growth in services sector as compare to Pakistan.

- Economies of Pakistan and India are compared on the basis of trade. Comparing the exports and imports of both the countries tells us the story that Pakistan is more depended on exports. GDP of Pakistan has greater percentage of exports. In the total exports of Pakistan manufacturing sector of Pakistan has a greater percentage of exports when compared with India. The exports to developing countries was initially higher in case of Pakistan and gradually it is now at the same rate for both the countries with a little difference as Pakistan is exporting 40 percent to developing countries and India is exporting 35 percent of its total export.
- Pakistan is trading most of the proportion to the developing countries both in imports and exports. In these developing countries USA, UAE and EU are the most important trading partners of Pakistan. In the last decade Pakistan has established a good trade with Afghanistan as well and it is estimated that with the stability in Afghanistan trade will be further enhanced. The regional trade of Pakistan is quite low over the past decades whereas trade with rest of the world developing countries has risen over the past few years.
- India has its greater part of trade shared with developed world. Exports are majorly with USA, China and Afghanistan whereas most of the imports are with UAE, USA China and Germany. India has negligible portion of trade with the developing countries of South Asia. It turns out to be not more than 8 percent of the total trade that is shared with the developing countries within the region. The trade of India with developing countries of rest of the world has increased over the past few years.

- The Bilateral trade of India and Pakistan was around 50 percent in 1950s it suddenly declined to zero level in 1960s especially after 1965. In 1990s trade with India started again with a very slow pace and up till now it has been to a same proportion. India has granted MFN status to Pakistan in 1995-96 whereas Pakistan is looking forward to issue the negative list for exercising the same status with India.

The exploratory data analysis concludes that Pakistan was dominant in the region as GDP growth rate was higher as compared to India. India in the late 70s switched the priorities of its economy by enhancing exporting. Enhanced level of exports in India supported the economy of the country to flourish. It is a fact that most of the traded items are from China and Japan that are eventually value added and exported to the other countries.

Pakistan on the other side has faced many laps in the development due to stagnant GDP. It is a fact that Pakistan has been involved into so many internal issues that has led the intentions of the government to revisit the inner policy issues.

Using EDA it has been explored hat over the past decade Pakistan is exporting more with EU, USA and UAE followed by other countries like Afghanistan. Afghanistan laps the data before 1990 as in this time period official trade was negligible between these two countries. It has been identified that Pakistan could enhance the exports to increase the prospects of trade ultimately contributing towards the economy of Pakistan. It is also assumed that bilateral trade between India and Pakistan could enhance the level of

exports to the countries like EU, USA and UAE as there is need to develop the better level of exports with these countries. These assumptions are testified by OLS model.

4.2. RESULTS OF ORDINARY LEAST SQUARE REGRESSION (OLS)

Ordinary least squares method is used to assess the three most contributing areas in the exports of Pakistan and Impact of bilateral trade on these exports. The results of OLS model justifies the assumptions as follows

Table 4.4 shows the result of OLS model. In the table all the values are significant and showed a positive trend with the exports of major countries/regions. All the results shows the significant increase in the values of exports with the major trading partners

In the first section i.e. equation 1, exports of Pakistan are regressed with bilateral trade of Pakistan and India. The results are significant at 0.46. This indicates that increase in bilateral trade with India certainly increases the trade with USA. USA being an important and biggest exporting partner of Pakistan gains a more importance and increase in exports with USA will definitely benefit the trade development in Pakistan.

In the second equation of first set i.e. equation 2, Exports of Pakistan to USA are studies with exports of India and these have also shown a significant results as increase in exports with India has increased the exports with USA as OLS shows significant results at 0.49. It clearly indicates that 1 percent increase in exports to India Pakistan can gain 46 percent increase in the exports to USA. Next explanatory variable is imports to Pakistan from India i.e. equation 3 of first set.

TABLE NO 4.4 OLS RESULTS TABLE

(See annexure IV-XII for result sheets)

	INDEPENDENT VARIABLES					
DEPENDENT VARIABLE		**EXP IMP(PAK and IND)**	**EXPORTS (PAK to IND)**	**IMPORTS PAK from IND**	**EXCHANGE RATE**	
PAKISTAN'S EXPORTS USA	*β -value*	0.469 (2.321)**			0.448 (2.216)**	n 23 r^2 0.78
	β-value		0.495 (3.199)**		0.461 (0.297)**	n 23 r^2 0.81
	β-value			0.469 (2.321)***	0.448 (2.216)**	n 23 r^2 0.76
PAKISTAN'S EXPORTS TO EU	*β-value*	0.753 (8.021)**			0.251 (2.672)**	n 23 r^2 0.95
	β-value		0.374 (2.712)**		0.601 (4.364)**	n 23 r^2 0.85
	β-value			0.374 (2.712)**	0.601 (4.364)**	n 23 r^2 0.85
PAKISTAN'S EXPOPTS TO UAE	*β-value*	0.651 (6.075)*			0.352 (3.284)**	n 23 r^2 0.94
	β-value		0.347 (2.683)**		0.635 (4.907)*	n 23 r^2 0.87
	β-value			0.645 (6.183)*	0.360 (3.453)*	n 23 r^2 0.93

,,*** significant at 1%, 5% and 10% respectively*

OLS results have shown significant results for this model as well. In this model the values are significant at 0.46 which shows that 1 percent increase in imports from Pakistan to India enhances Pakistan trade by 46.9 percent of exports to USA. In all the above three cases depreciation in exchange rate have also shown significant positive relationship. In all the three cases depreciation in exchange rate has increased the exports with USA as explained by three different explanatory variables.

The second set of variables (i.e. equation 4,5 and 6) is identified through OLS regression method. In the second set of equation the results have shown a positive significant relationship. It can be seen from the table that exports to EU are positive related to the bilateral trade of India and Pakistan. It is significant at 0.75 which shows that 1 percent increase in bilateral trade with India Pakistan has previously experienced a 75 percent increase in the exports to European Union and it is assumed to be the case in the future. It is a significant result at a very high percentage in increase of export to European Union. In the second equation the exports between India and Pakistan are regressed with Exports to EU. It has also shown a positive significant result at 0.34 on OLS. Similarly in imports it is the same percentage which shows that an increase in export with India Pakistan can enhance the exports to EU by 34 percent and at the same time an increase in imports will tend to increase the exports to EU at the same rate. In all the three equation of second set exchange has shown a positive significant result denoting that gradual but narrowed depreciation in exchange rate tends to increase the exports to Pakistan to EU in a long run especially.

Lastly, third set of equations are transformed into the number by running the OLS approach. In the last set, for equation 7, exports of Pakistan to UAE is analyzed with the bilateral trade of India and Pakistan (exports and Imports). The results show significant positive relationship between these two variables. Exports to UAE as a response variable tend to act positively when bilateral trade between India and Pakistan has increased. It is a significant result at 0.65. This shows an increase in bilateral trade between India and Pakistan, increases the exports of Pakistan to UAE by 65 percent which is a pretty decent amount of leverage to Pakistan while exporting to UAE. Similarly, second equation i.e. equation 8 explains the result for exports to UAE and exports of Pakistan to India. It has also shown a significant positive result at 0.34 which shows an increase in exports to India enhance the exports to UAE by 34 percent. Imports with India have also shown significant results at 0.64. These results are significant at 0.3, 0.6 and 0.3 respectively, which shows the positive impact of bilateral trade, with India to the exports with UAE. The depreciation in exchange rate has also shown a positive relationship with the Pakistan's exports to UAE.

5. CONCLUSION

The trade between India and Pakistan has been a crucial issue. Many theorists have suggested an increase in the trade. The systematic analysis has never been performed to assess the benefit of the trade on the Pakistan overall trading patterns and economy as a whole. It has been looked into that increase in trade will enhance the regional integration.

In this study the analysis has been done to check the status of bilateral trade. The trade between India and Pakistan has been viewed with a different view point. It has been identified that which are the major trading partners for both of the countries. In case of Pakistan the major exporting partner from Pakistan is USA, UAE, Afghanistan and EU. It could be generalized as major exporting countries are the developed region/countries of the world. The exports to major trading partners from Pakistan are checked with the bilateral trade between India and Pakistan. In the perspective of Pakistan it is very important to analyze whether the bilateral would benefit Pakistan in developing the good trading relation with these developed countries. It is important to analyze because Pakistan needs to develop its competitive trade the world so as to retain and regain the position in the world.

In this study the analysis have shown that increase in bilateral trade with India, certainly enhances the exports of Pakistan to other trading partners of Pakistan. In this context Pakistan can avail the dual benefit of trade with India. As different researchers have conceptualized empirically, that Pakistan will be benefitted with the trade as economic integration will bring the normalized aspects from both sides of the borders, in the same paradigm it is also important to look at the fact, enhancing ht trade, imports or either

exports benefit Pakistan to get a significant increase in the trade with other trading partners as well.

5.1. POLICY GUIDELINES

The developed world is prominent in gaining the exports from the developing countries likewise Pakistan is exporting most of its trade contribution to the developed world i.e. USA, EU and UAE. it has been explored in this study that Pakistan could gain more access to these countries by increasing the exports. The easy and quickest way to gain the exports is getting the product or by products through the very next immediate neighbor India. Pakistan's economy could take some time to settle the level of production due to severe problems like energy crisis. In these circumstances it would be beneficial to enhance the trade with India that will benefit Pakistan by getting peaceful relation ultimately contributing towards the prospects of the economy.

Pakistan is looking forward for the following guidelines and it is suggested in this study that these would be the most beneficial measure to undertake so as to gain the economic prosperity.

- It has been observed that Pakistan is emphasizing on its trade promotion. Pakistan is involved in the talks with the world for promotion of exports as its priorities are to "Trade but not Aid". This slogan has been floated in many platforms by the officials of Pakistan. This shows that Pakistan is intended to enhance its trading base.
- Our study finds that promoting trade between Pakistan and India is expected to raise Pakistan's exports to USA, EU and UAE significantly.

- Pakistan has been given GSP plus arrangement by European Union. The Generalized System of Preferences status for Pakistan will enhance the exports to EU. It is expected to raise the Pakistani exports by 2 Billion. If Pakistan settles down a good platform for trade, it could even benefit more from exports to European Union. In the light of this study Pakistan should be looking forward to enhance the regional trade so as to get significant results by exporting to EU.
- As a first step to improve trade between India and Pakistan, we should give India MFN status. It should be noted that Pakistan has already moved from positive list to negative list that has improved the number of goods traded with India. Initially Pakistan was following the positive list of 1938 items (vide import policy orders of Pakistan, 2008). It is expected that the positive list is transformed into a negative list of 1100 items that is issued for non traded items. Pakistan is intended to lower down the number of items to 700 by end of this year. It is a step in a right direction.
- Pakistan and India will also go a long way in improving the relationship between the two countries. There will be a greater motivation in solving bilateral issues between two countries if these two countries trade.
- Trade will solve the problems between the two countries it could be an important medium for lowering down the tension. An anticipated benefit from bilateral trade would be improvement in the security climate which will enhance the investment and economic development for both the countries.

- It is also in a greater interest to increase the trade as it could be an important sign to lower down political anxiety by resolving the issues between the two neighboring countries.
- It would be a good gesture for Pakistan and India to amend the fences by encouraging the trade.

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ANNEXURE

Annexure - I

(Million US$)

Time Period	Exports of Pakistan to India	Share in Pakistan Total Exports (%age)	Imports of Pakistan to India	Share in Pakistan Total Imports(%age)	Trade Balance with India
1951-52					
1994-95	41.60	0.51	63.99	0.62	-22.39
1995-96	40.74	0.47	94.50	0.80	-53.76
1996-97	36.13	0.43	204.66	1.72	-168.53
1997-98	88.97	1.03	153.41	1.52	-64.45
1998-99	174.72	2.25	145.60	1.54	29.12
1999-00	53.65	0.63	127.35	1.24	-73.70
2000-01	55.40	0.60	235.09	2.19	-179.69
2001-02	49.20	0.54	186.50	1.80	-137.30
2002-03	70.70	0.63	166.50	1.36	-95.80
2003-04	93.70	0.76	382.40	2.45	-288.70
2004-05	288.20	2.00	548.20	2.66	-260.00
2006-07	20805081				
2007-08	15905036				
2008-09	24350255				
2009-10	22488501				

Source: Trade Development Authority of Pakistan

Annexure– II

CHAIN BASED INDICES

YEAR	NOMINAL EXCHANGE RATE	FIXED BASE INDICES	CHAIN RELATIVE	YEAR	NOMINAL EXCHANGE RATE	FIXED BASE INDICES	CHAIN RELATIVE
1975	9.91	100	100	1994	30.16	304.34	116.178
1976	9.91	100	100	1995	30.85	311.30	102.287
1977	9.91	100	100	1996	33.57	338.75	108.816
1978	9.91	100	100	1997	38.99	393.44	116.145
1979	9.91	100	100	1998	43.19	435.82	110.77
1980	9.91	100	100	1999	46.79	472.14	108.33
1981	9.91	100	100	2000	51.77	522.40	110.643
1982	9.91	100	100	2001	58.44	583.71	112.881
1983	12.71	128.25	128.25	2002	61.43	619.88	105.116
1984	13.48	136.02	106.05	2003	58.50	590.31	95.2303
1985	15.15	152.87	112.39	2004	57.57	580.93	98.4102
1986	16.14	162.86	106.53	2005	59.34	598.79	103.074
1987	17.18	173.36	109.045	2006	59.86	604.04	100.876
1988	17.60	177.60	102.44	2007	60.63	611.81	101.286
1989	19.22	193.95	109.204	2008	62.55	631.18	103.166
1990	21.45	216.45	111.602	2009	78.50	792.13	125.499
1991	22.42	226.24	104.522	2010	83.80	840.57	106.751
1992	24.84	250.66	110.793	2011	85.50	862.76	102.028
1993	25.96	261.96	104.508	2012	89.24	900.50	104.374

Source: State Bank of Pakistan

Annexure III

Pakistan's Overall Trade Pattern with India

Sectoral Share of Various Sectors in GDP (at Constant Factor Cost) in Percent

	1969-70	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**
Commodity producing sector	61.6	47.9	47.1	48.4	48.7	47.7
Agriculture	38.6	24.1	24.0	22.9	22.5	21.6
Major crops	23.4	8.0	8.2	7.8	8.4	7.6
Minor crops	4.2	3.1	3.0	2.9	2.8	2.7
Livestock	10.6	12.0	11.8	11.2	10.6	10.7
Fishing	0.5	0.3	0.3	0.3	0.3	0.3
Forestry	0.1	0.7	0.7	0.6	0.4	0.3
Mining and quarrying	0.5	2.4	2.5	2.6	2.7	2.6
Manufacturing	16.0	15.9	16.3	17.3	17.9	18.2
Large scale	12.5	10.4	10.6	11.7	12.4	12.7
Small scale	3.5	4.1	4.2	4.2	4.2	4.3
Construction	4.2	2.4	2.4	2.0	2.1	2.2
Electricity and gas distribution	2.0	3.0	2.4	3.7	3.5	3.0
SERVICES SECTOR	38.4	52.1	52.3	51.6	51.3	52.3
Transport storage and communication	6.3	11.4	11.4	10.9	10.4	10.5
Wholesale and retail trade	13.8	17.8	18.0	18.2	18.6	19.2
Finance and Insurance	1.8	3.5	3.3	3.4	4.0	4.6
Ownership of dwellings	3.4	3.2	3.1	3.0	2.9	2.8

Public Admin and defence	6.4	6.4	6.6	6.3	5.9	5.8
Other services	6.7	9.8	9.9	9.7	9.5	9.5
GDP (constant factor cost)	100.0	100.0	100.0	100.0	100.0	100.0

Source: Government of Pakistan GoP (2006)

Annexure IV

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	EXRT, PAKEXPOtoIND[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: PAKtoUSA

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.902[a]	.814	.795	526.94956

a.Predictors: (Constant), EXRT, PAKEXPOtoIND

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	293.736	315.432		.931	.363
	PAKEXPOtoIND	4.981	1.557	.495	3.199	.005
	EXRT	24.377	8.184	.461	2.978	.007

a.Dependent Variable: PAKtoUSA

Annexure V

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	EXRT, PAKEXPOtoIND[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: PAKtoUSA

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.902[a]	.814	.795	526.94956

a.Predictors: (Constant), EXRT, PAKEXPOtoIND

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	293.736	315.432		.931	.363
	PAKEXPOtoIND	4.981	1.557	.495	3.199	.005
	EXRT	24.377	8.184	.461	2.978	.007

a.Dependent Variable: PAKtoUSA

Annexure VI

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	EXRT, PAKIMPfrmIND[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: PAKtoUSA

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.874[a]	.764	.741	593.10369

a. Predictors: (Constant), EXRT, PAKIMPfrmIND

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	549.034	441.143		1.245	.228
	PAKIMPfrmIND	.733	.373	.403	1.965	.063
	EXRT	26.744	10.853	.506	2.464	.023

a. Dependent Variable: PAKtoUSA

Annexure VII

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	EXRT, SumEXPIMP[b]	.	Enter

a. Dependent Variable: PAKtoEU

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.976[a]	.952	.947	311.837914

a. Predictors: (Constant), EXRT, SumEXPIMP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1485.969	226.824		6.551	.000
	SumEXPIMP	1.377	.172	.753	8.021	.000
	EXRT	15.479	5.794	.251	2.672	.015

a. Dependent Variable: PAKtoEU

Annexure VIII

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	EXRT, PAKEXPOtoIND[b]	.	Enter

a. Dependent Variable: PAKtoEU

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.923[a]	.852	.838	547.546890

a. Predictors: (Constant), EXRT, PAKEXPOtoIND

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	624.697	327.762		1.906	.071
	PAKEXPOtoIND	4.388	1.618	.374	2.712	.013
	EXRT	37.110	8.504	.601	4.364	.000

a. Dependent Variable: PAKtoEU

Annexure IX

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	EXRT, PAKEXPOtoIND[b]	.	Enter

a. Dependent Variable: PAKtoEU

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.923[a]	.852	.838	547.546890

a. Predictors: (Constant), EXRT, PAKEXPOtoIND

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	624.697	327.762		1.906	.071
	PAKEXPOtoIND	4.388	1.618	.374	2.712	.013
	EXRT	37.110	8.504	.601	4.364	.000

a. Dependent Variable: PAKtoEU

Annexure X

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	EXRT, SumEXPIMP[b]	.	Enter

a. Dependent Variable: PAKtoUAE

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.968[a]	.938	.931	180.44501

a. Predictors: (Constant), EXRT, SumEXPIMP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-106.833	131.252		-.814	.425
	SumEXPIMP	.604	.099	.651	6.075	.000
	EXRT	11.012	3.353	.352	3.284	.004

a. Dependent Variable: PAKtoUAE

Annexure XI

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	EXRT, PAKEXPOtoIND[b]	.	Enter

a. Dependent Variable: PAKtoUAE

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.933[a]	.870	.857	261.02203

a. Predictors: (Constant), EXRT, PAKEXPOtoIND

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-475.529	156.248		-3.043	.006
	PAKEXPOtoIND	2.069	.771	.347	2.683	.014
	EXRT	19.892	4.054	.635	4.907	.000

a. Dependent Variable: PAKtoUAE

Annexure XII

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	EXRT, PAKIMPtoIND[b]	.	Enter

a. Dependent Variable: PAKtoUAE

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.969[a]	.939	.933	178.39800

a. Predictors: (Constant), EXRT, PAKIMPtoIND

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-75.068	132.690		-.566	.578
	PAKIMPtoIND	.694	.112	.645	6.183	.000
	EXRT	11.272	3.264	.360	3.453	.003

a. Dependent Variable: PAKtoUAE