# Foreign Direct Investment: A Potential Export Platform for Pakistan

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### ABSTRACT

Over the last two decades, developing countries, in particular have taken several policy measures to encourage inflows of foreign investment for the achievement of sustainable economic growth. Foreign investment not only brings and transfers the knowledge-based technology and managerial skills but also injects the most needed capital in the host economy. Further, the global linkage via foreign association enables the local product compatible with international standards. Thus, the country's product demand increases in the international market. The research endeavors the motive of source countries to Foreign Direct Investment in Pakistan. Besides, examines the relationship between exports and FDI for the source country USA has a strong association with exports to them.

*Keywords:* Exports, Foreign Investment, Economic Growth, Pakistan JEL classification: F10, F21, F62

### **INTRODUCTION**

United Nations Conference on Trade and Development (UNCTAD, 1996) defined Foreign Direct Investment (FDI) as, "An investment involving managing control of a residing entity in the host country by the enterprise resident in another economy". FDI provides resource flow in the shape of advance technology, managerial skills and technical and technological knowledge along with the long-term investment capital. Investment capital is the most important component of FDI and considered as a lifegiving blood for developing economies. Developing and under-developed economies lacks with the needed capital investment from its own source including national savings etc. The latter has been observed with the drying-up of commercial banks lending in 1980's. This observation forced many countries to revise their policies regarding foreign investments and to reframe a policy to attract more and more foreign capital inflows. FDI and the capital investments also reduced the risk of elevation in the debt burden of the developing nations which remained a common fiscal subject of emergent economies.

An indicator for achievement in international trade by any country relies largely on its Export performance. This is also considered vital for economic growth with multiplier and spillover effects. These are; 1) improves net flow of foreign exchange, 2) support as resource for imports, 3) increase in production and employment, and 4) increases domestic demand of raw material. All of these particularly the improvement in domestic demand have cyclical effect on economic growth.

To elaborate, FDI have a positive impact on the export performance of host state, by facilitating access to the market of neighbor countries through by using technology, administrative skills, and advertising expertise. As foreign investors establish and expand their businesses in the host country, they create new export opportunities and enhance the competitiveness of local firms by improving their product quality and reducing their costs. This, in turn, can lead to increased export earnings for the host country and contribute to its economic growth. Thus, the country's product demand increases in the international market and hence improves the export value of the host country. However, this example cannot be generalized to

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all developing countries including Islamic Republic of Pakistan (Pakistan). Pakistan as a developing country has gone through several attempts at foreign policy front to attract the foreign investments in the country. Despite this, the FDI in Pakistan as to-date is still at infancy stage (Memon, 2008). Low and under-developed infrastructure facilities, lack of human resource to cope with the latest technologies and the under-develop commodity markets in the country have restricted the economy to attract the foreign inflows. The commodity market development initiative is considered necessary to gain the benefits of foreign inflows.

The function of FDI in developing countries for promoting exports, can be explained by two types of effects. These effects are based on FDI-home country motive which is either promoting export in the host state or to capture the potential of host state market. If, latter is the key objective of FDI, then such investment may not be beneficial for the host country's exports. However, if 'comparative advantage' is the aim of the home country behind FDI then it will definitely affect the exports of the host state. Thus, the association between exports growth and the foreign investments in the host economy largely depends upon the motives behind such foreign inflows.

Thus, the study is initiated to look into the relationship between the two interlinked components having external and global impacts i.e. exports in relation to FDI in Pakistan from selected source countries. The results of the study would assist the policy making and implementing bodies to prepare a guideline for promoting foreign investment policies and providing an incentive to investments for selected source countries in the context of export promotion. The study would establish a model to assess the relationship between the two important variables with selected source states to identify various potential investments partner for boosting exports in a host country.

### History of Exports and FDI in Pakistan

Pakistan has experienced a significant export boost in the mid and late 80's since it has started adopting the liberalization policies. However, the exports of Pakistan are largely concentrated in a few economies (Ghaus, Memon and Iqbal, 2017). As exhibited in the table, below the decline in the share of five major markets of Pakistan with few exceptions is the result of the expansion of export host countries due to liberalization policies. Amidst these, the share of exports to the United States of America (USA) has increased many folds vis-à-vis reported in 1977-78.

	← Years →								
Countries	1977- 78	1982- 83	1986- 87	1991- 92	1997- 98	2001- 02	2007- 08	2013- 14	2016- 17
United States of America	5.6	6.02	10.11	12.8	20.5	24.7	26.4	16	17
United Kingdom	6.6	4.87	7.15	6.1	6.9	7.2	5.6	7	8
Germany	5.6	4.50	6.94	7.1	6.3	4.9	4.3	5	6
Japan	8.5	8.17	13.30	8.3	4.2	1.8	0.8	n.a.	n. a.
Saudi Arabia	3.3	9.31	7.08	4.3	2.5	3.6	1.7	n.a.	n. a.

 Table 1 Percentage Share of Pakistan's Exports in Major Markets

Source: Pakistan Economic Survey (various issues).

#### n.a: . not available

Since beginning, the USA market is the considered to be a major market for exports followed by the United Kingdom and Germany. It is also noted that other than the USA, share of other major export markets varies in due course with the several rise and falls. Moreover, the share of exports in the United Kingdom and Germany considerably low vis-à-vis the USA.

Besides export trends, the FDI in the country remained stagnant in the earlier period. However, it rises robustly in the new millennium with the realization of foreign inflows and policy effort to attract investments in the country. Nevertheless, Pakistan has still to achieve a meaning full capital investment in the country and the share in the World's FDI sectors are remained considerably low. Despite an increase in foreign inflows in the last one decade, the foreign investments from the countries remained highly volatile. Likewise exports sector, the USA was the major contributor with few exceptions during the period.

Country	2001-02	2003-04	2005-06	2007-08	2009-10	2011-12	2013-14	2015-16	2017-18
USA	67	25	15	24.2	21.8	27.7	12.7	0.6	4.4
UK	6.3	6.8	6.9	8.5	13.7	25.1	9.4	6.6	9.9
UAE	4.4	14.2	40.4	10.9	11.3	4.5	-2.8	4.8	0.4
JAPAN	1.3	1.6	1.6	2.4	1.2	3.6	1.8	1.5	1.9
Hong Kong	$0.0^{*}$	$0.0^{*}$	$0.0^{*}$	6.3	0.5	9.8	13.7	4.0	0.1
Switzerland	1.5	21.6	4.8	3.1	7.9	15.5	12.6	2.5	2.6
Saudi Arabia	$0.0^{*}$	$0.0^{*}$	7.9	$0.0^{*}$	-6.2	-9.7	-2.4	n.a.	n.a.
Germany	2.3	$0.0^{*}$	$0.0^{*}$	1.3	2.5	3.3	-0.3	n.a.	n.a.
Norway	$0.0^{*}$	15.4	7.2	5.1	$0.0^{*}$	-33.5	-1.3	4.5	n.a.
China	$0.0^{*}$	1.5	$0.0^{*}$	$0.0^{*}$	-0.2	15.4	41.7	46.1	58.6

Table 1.1 Percentage Share of Country Wise FDI Inflow

Note: Investment flow also includes the privatization proceeds.

### \* Less than 0.01

From the above data on exports and FDI, the USA is considered to be the major export market of Pakistan as well as the major contributor in investment inflows (exception for the last few years). Thus, the country USA is taken as a sample to check the relationship with exports and FDI.

#### LITERATURE REVIEW

As far as theoretical integration between FDI and trade is considered, there is a lot of space for further investigation on the concepts in lieu of related and changing economies. Despite strong foundations, the FDI impact on trade and productivity is not theoretically very clear.

The theoretical thoughts developed on the subject reveals two likely associations. One is the substitution effect of FDI and trade, while the second is the complementary effect between them. These indicates that an increase in FDI whether inward or outward will be significant on exports in either direction i.e. decrease the exports to foreign countries or increases the exports.

According to Omelańczuk (2013), foreign direct investment (FDI) can take either ahorizonal form, where it is market-seeking, or a vertical form, where it is resource-seeking, such as for the ability to utilize natural resources and access inexpensive labor and cheap energy. Establishing trade avenues and / or replacing trade with local / domestic market expansion are the two effects of international production and inflows. The rise in domestic demand vis-à-vis population and economic growth, selling overseas is reduced while international demand and product competitiveness give rise to exports. However, both situations have a positive impact on domestic productivity.

Heckscher-Ohlin-Samuelson model put forwards the debates as a substitution effect of international trade in the context of the factors of production which also include FDI. This implies that there is an indirect exchange of factors between commodities in an international commodity trade (Liu, Wang, & Wei, 2001). On contrary, there are arguments for complementary impact that have an effect via increase in exports thus reveals a causal link between the two variables i.e. FDI and trade. Studies have been conducted to examine the theories and explain the possible effects of FDIs.

Arguments have been built up by researchers that proximity and concentration mainly lead to the choice of type of FDI and trade both at a firm level and state. Horstman and Markuesn (1992), and Markusen (1984) in their studies distinguish scale economies between the firm and plant. Proximity is mainly considered to overcome trade barriers, while concentration has impact on return to scale. While understanding the concept, size, factor endowments and technologies are assumed as symmetric at firm and country level (Brainard, 1993).

Markuesen (1998) and Markusen and Venables (1995, 1996, 1998) in their study rejected the symmetric assumption and assumed the asymmetries in relative endowments. They study revealed that companies from more developed nations tend to set up branches or subsidiaries in less developed nations due to variations in their relative resources. Gray (1998) in his study found that country seeking for market usually displace the trade, while the objective improving the efficiency increases the trade volume. Nonetheless, whether there is a market-seeking objective or efficiency seeking purpose, both assist the disadvantage country to increase the market size, improve factor endowments and bring in the technological efficiency.

According to various studies, the initial strategy for manufacturing firms when entering foreign markets is to trade in order to minimize risks associated with direct capital investments in the host country. Once they gain an in-depth understanding of the investment climate, they may consider establishing subsidiaries in the foreign market. The decision to export or import is typically influenced by size and demand of the local market. This highlights the reciprocal relationship between FDI and Trade, where each may cause the other. This cyclicality (product cycle hypothesis) is also supported by Vernon's (1966). The establishment of subsidiaries by firms from the country of origin in a foreign market is dependent upon a comprehensive evaluation of the economic, socio-economic, political, and social status in the host state.

There is immense empirical literature on importance and relationship between the two foreignlinked sectors. However, the empirical literature varies with case to case economies and provides a different varied results about the association between exports and FDI i.e. some studies states positive association while others contradict. It means that the situation vary from economy to economy, thus indicates that each economy requires separate empirical investigation.

The literature provides diverse results. FDI is positively associated with exports (Pfaffemayr, 1996), other empirical studies show no such significance in the relationship of the two variables (Sharma.2000). Some studies states that non-manufacturing FDI does not affect the export while manufacturing FDI positively affects the host country's exports. (Lemi, 2004). Similarly, some studies have proven conditional relationship. FDI will be beneficial only if the source country aims to take comparative advantage over the host state (Hoekman & Djankov. 1999). Therefore, it is necessary to investigate the situation for every different economy before reaching some logical conclusion.

Several factors needed to be considered behind FDI motives of the source country. Khan (2011) investigates the nexus of the diplomatic relationships of Pakistan with other nations with FDI inflows from the source country USA for the period 1972-2009. Empirically, there is no long-run association between Pakistan and USA. While in the short-run the negative impact on FDI is revealed.

LIU, Xiaming, WANG, Chengang, WEI, Yingqi (2001), conducted a study using the panel data that spanned from 1984 – 1998, and covered 19 home countries/regions. The study found that there is unidirectional (one-way) complementary causality between 1) FDI (inward) and imports, 2) between exports and FDI (inward), 3) between exports to imports in China. This reveals a cyclical association, suggesting that FDI is led by imports, which led to more exports. Thus, more exports further led to increased imports in the host country.

Atique, Ahmed & Azhar (2004) conducted an analysis based on empirical observations to explore the impact of FDI under different circumstances. The study shows that FDI effect on growth of an economy is influenced by policies of the host country. Empirical result states that export promotion and import substitution policies expand and reduce FDI inflow simultaneously.

Helpman, Melitz & Yeaple, (2003) proposed a general equilibrium model that span multiple countries and sectors, used to elucidate how heterogeneous firms make decisions. They observed that firms have various options regarding production i.e. to choose the domestic market, to export the finished product or to involve themselves in foreign direct investment so that to serve the foreign markets, Based upon their findings, they argued that low production firms serve the domestic market while the high productive firms serve both markets via foreign investments i.e. domestic and the foreign markets.

Greenway (2000) investigates a relationship of FDI (horizontal and vertical) for 26 partner countries of United States over the period of 12 years. He draws the conclusion that FDI and trade are substitutes between symmetric countries in various aspects (horizontal FDI) while it is complement when countries varies in terms of skill, size etc. (vertical FDI).

Sharma (2000) investigates the determinants of export for India and revealed that there is insignificant relationship of FDI with the export performance of India.

Goldberg & Klein (1999) investigates for Latin American economies and found mixed results, with some countries experience a positive impact (e.g., Argentina, Brazil, and Venezuela) while others (e.g., Mexico and Colombia) experienced a negative worsening impact.

Pain & Wakelin (1998), analyzed examined FDI with manufacturing exports for Organization for Economic Cooperation and Development countries (OECD). They suggest that even after controlling for relative price change, there is positive effect on export performance of Manufacturing sector.

Pfaffermayr (1996), studied for outward FDI with the exports of Austria for 1980 an 1990. The framework used as exogenous variable of GNP. The study identifies the complementary relationship between the two variable focused variables.

Kojima (1975) examine the substitution and complimentary effects of FDI and international trade. They found positive impact on the country's export, in case there is a shortage of resources for exports. However, the author also summarizes the framework of capital movements and its impact on commodity market from the view point of Hecksher-Ohlin-Samuelson theorem. The FDI complement country's disadvantage industry by improving commodity trade. Thus, led to trade harmony between the trade partners.

Mundell (1957) holding the Hecksher-Ohlin- Samuelson theory describes FDI as substitute for international trade. The author assumes physical capital under FDI as a homogenous factor of production.

### DATA AND METHODOLOGICAL FRAMEWORK

### **Data Source and Validity**

Data of the core variables in the model specified in following sections is taken from sources including State Bank of Pakistan, Pakistan Economic Survey, Federal Bureau of Statistics, International Financial Statistics and World Bank database. The data is taken for the period from 1971 to 2016. Standard empirical methods were used to check the data validity, noise concerns and analysis. Techniques including the validation of data and normalization were used for robustness in the analysis and results. Models of Co-integration and Auto Regressive Distributed Lag (ARDL) model were used with error correction method to see the short run impacts.

Cointegration techniques are subject to and sensitive to order of integration of variables in a model. Since the order of integration in the model is of different order, the most suitable technique introduced by Pesaran and Shin (1998) and Pesaran, Shin & Smith (2001) is used in the Study. The Auto-regressive Distributed Lag model (ARDL) is applied to test the objectives of the study.

### Diagnostic and Stability Test: Short Run

The diagnostic and stability tests are also used as follows:

- 1. Heteroscedasticity,
- 2. Serial Correlation,
- 3. Functional form of the model
- 4. Normality of the model
- 5. Cumulative sum of residuals (CUSUM) and
- 6. Cumulative Sum of Squares of the residuals (CUSUMSq)

### MODEL SPECIFICATION

EXP<sub>root</sub>= f (FDI<sub>root</sub>, GDPG GDP<sub>root</sub> REER, RP)

The variables are also used by Sharma (2000) and Xing, Y and. Xuan, N.T (2008).

Where, root country means source country of FDI which in this case is USA

EXP<sub>root =</sub> Export to the root country

GDProot = Root country Gross Domestic Product.

FDI<sub>root =</sub> Net inflows from the root country.

GDPG = Growth Rate of GDP (annualized)

REER = Real Effective Exchange Rate

(Nominal Effective Exchange Rate **multiply** Trading Partner's Xs price index **divide** Pakistan's Price Index)

RP = Relative Prices or PX/P - export prices in relation to prices in the domestic market

PX is the unit price (Exports from Pakistan in US\$)

P is the Price Index of Pakistan (Wholesale Price).

Long run relationship is estimated using the un-restricted error correction model as follows;

$$\Delta \ln(\text{EXPUSA})t = \alpha 0 + \alpha 1 \sum_{i=1}^{n} \Delta \ln (\text{EXPUSA})t - i + \alpha 2 \sum_{i=1}^{n} \Delta \ln (\text{FDIUSA})t - i$$
  
+  $\alpha 3 \sum_{i=1}^{n} \Delta \ln (\text{REER})t - i + \alpha 4 \sum_{i=1}^{n} \Delta (\text{GDPG})t - i + \alpha 5 \sum_{i=1}^{n} \Delta \ln (\text{GDPUSA})t - i$   
+  $\alpha 6 \sum_{i=1}^{n} \Delta (\text{RP})t - i + \gamma 1 \ln (\text{EXPUSA}) + \gamma 2 \ln (\text{FDIUSA}) + \gamma 3 \ln (\text{REER})t - i$   
+  $\gamma 4 (\text{GDPG})t - i$   
+  $\gamma 5 \ln (\text{GDPUSA})t - i + \gamma 6 (\text{RP})t - i + \varepsilon t \dots \dots (1)$ 

Where;

Ln is used to explain the data in natural log form;

LnEXPUSA is the Export to USA;

LnFDIUSA is the Foreign Receipts from USA;

LnREER is the Real Effective Exchange Rate,

GDPG is the Growth Rate of Gross Domestic Product,

LnGDPUSA is the Gross Domestic Product of USA;

RP is the relative price.

 $\alpha$  (1, 2, 3, 4, 5 and 6) represents short-run

 $\gamma$  (1, 2, 3, 4, 5 and 6) represents long-run

The null hypothesis of the model is

H0:  $\alpha 1 = \alpha 2 = \alpha 3 = \alpha 4 = \alpha 5 = \alpha 6 = 0$  (means long-run association do not exist)

H1:  $\gamma 1$ ,  $\neq \gamma 2 \neq \gamma 3 \neq \gamma 4 \neq \gamma 5 \neq \gamma 6 \neq 0$ 

The H0 (Null hypothesis) is used for non-existence of long-run association, whereas alternative hypothesis is used to identify co-integration. Following this, the model for the long-run:

$$\ln(\text{EXPUSA}) t = \alpha 0 + \alpha 1 \sum_{i=1}^{n} \ln(\text{EXPUSA}) t - i + \alpha 2 \sum_{i=1}^{n} \ln(\text{FDIUSA}) t - i + \alpha 3 \sum_{i=1}^{n} \ln(\text{REER}) t - i + \alpha 4 \sum_{i=1}^{n} (\text{GDPG}) t - i + \alpha 5 \sum_{i=1}^{n} \ln(\text{GDPUSA}) t - i + \alpha 6 \sum_{i=1}^{n} (\text{RP}) t - i + \varepsilon t \dots \dots (2)$$

To estimate the short-run coefficients, Error Correction (ECM) is applied. ECM is applied to understand the convergence to long-run equilibrium path along with the adjustment pace towards equilibrium;

$$\Delta \ln(\text{EXPUSA})t = \alpha 0 + \alpha 1 \sum_{\substack{i=1\\n}}^{n} \Delta \ln (\text{EXPUSA})t - i + \alpha 2 \sum_{\substack{i=1\\i=1}}^{n} \ln\Delta (\text{FDIUSA})t - i + \alpha 3 \sum_{\substack{i=1\\i=1}}^{n} \ln\Delta (\text{REER})t - i + \alpha 4 \sum_{\substack{i=1\\i=1}}^{n} \Delta (\text{GDPG})t - i + \alpha 5 \sum_{\substack{i=1\\i=1}}^{n} \ln\Delta (\text{GDPUSA})t - i + \alpha 6 \sum_{\substack{i=1\\i=1}}^{n} \Delta (\text{RP})t - i + \alpha 4 \sum_{\substack{i=1\\i=1}}^{n} \Delta (\text{RP})t - i + \alpha$$

### **RESULTS AND DISCUSSIONS**

The results for FDI source country (USA) are discussed below.

Variable(c)	ADF				
variable(s)	At Level	1 <sup>st</sup> Difference			
LnEXPUSA	- 1.649572	- 6.249025*			
LnFDI	- 1.748676	- 9.284856*			
LnREER	- 0.586831	- 4.825069*			
LnGDPUSA	- 5.295133*	- 5.662221*			
GDPG	- 4.587383*	- 8.368644*			
RP	- 5.375883*	- 5.330924*			

## **Table 5.1 Unit Root**

\* Significant at 1% level, \*\* 5% level, \*\*\* 10% level

The unit root results (Table 5.1) reveals that variables are integrated of different orders. The variable LnGDPUSA, GDPG and RP are stationary at level [I (0)]. Whereas the variables LnEXP, LnFDI and LnREER are stationary at order I (1) i.e. first difference.

The bound testing approach to select optimal lag order are used for ARDL. The table (Table 5.2) reveals the results of Akaike Information Criteria, suggesting that there is optimal lag order of '1'.

Lag	LogL	LR	FPE	AIC	SC	HQ
0	- 43.6870	NA	9.56 e-06	2.63173	2.8494	2.7085
1	110.217	257.8930*	9.14 e-09*	-4.3361*	-3.0299*	-3.8756*
2	132.362	31.12242	1.14e-08	-4.1817	-1.7871	-3.3376
* selected lag order						

### Table 5.2 Lag length Selection

Using the lag order selected, the model is regressed and the findings are presented in table (Table 5.3):

### Table 5.3 Long Run Relationship

Critical Value	F-statistic	6.08633	
	Lower bound I (0)	Upper bound I (1)	
10%	2.53	3.59	
5%	2.87	4.00	
1%	3.60	4.90	

Table CI (V) unrestricted intercept & unrestricted trend, (pesaran.2001)

The result indicates that there exists long run relationship in the model variables (F-statistic is greater than the upper bond critical value) at 1% significance level.

Dependent Variable: LnEXPUSA					
Regressor(s)	Coefficient	t-Statistic	Prob.		
LnREER	-0.7256	-1.60742	0.119		
LnFDI	0.0664	1.8883	0.069		
LnGDPUSA	2.01687	1.7709	0.0875		
GDPG	-0.01496	-0.9997	0.326		
RP	-0.00437	-1.5320	0.138		
С	-8.7556	-3.9937	0.0004		
R-squared	0.99713				
R-squared Adjusted	0.9962				
Durbin-Watson stat	2.3697				
F statistic	1079.17 (0.000000)				

## **Table 5.4 Long Run Coefficients**

The long run relationship of LnEXP with FDI source country is presented in the table (Table 5.4). FDI and GDP of the source country (USA) positively affects LnEXP at 10% significance level. Whereas no significant relationship found for other variables.

# Table 5.5 Short run coefficients

Dependent variable: LnEXPUSA						
Regressors	Coefficient	t-Statistic	Prob.			
D (LnREER)	- 1.0815	-3.05822	0.005			
D (LnFDI)	0.0585	2.32005	0.029			
D (LnGDPUSA)	1.7317	1.7642	0.089			
D (GDPG)	- 0.01822	-1.8518	0.075			
D (RP)	0.00228	0.7622	0.453			
ECM (-1)	- 0.9074	-4.0552	0.0004			

С	- 1.0814	-3.05822	0.005
Durbin-Watson stat	1.7008		
F-statistic	7.4 (0.000021)		
R-squared	0.73899		
R-squared Adjusted	0.6386		
Diagnostic Tests: Short Run Normality         0.55734 (0.757)           Arch Test         0.5412 (0.467)           Serial Correlation 1.467478 (0.2505)           Heteroscedasticity 1.0737 (0.4483)           Ramsey Reset 0.44498 (0.5114)			

The results of short run relationship with FDI-source country (USA) are presented in Table 5.5. The results reveals that except relative price (RP) all other variables are found to be significant. The sign of the Growth of Gross Domestic Product (GDPG) variable is negative which indicates that expansion of the domestic economy push up the domestic demand and hence negatively affect the export.

The coefficient of ECM (-1) is with sign (-'ve) confirms the convergence to long run equilibrium path. The coefficient value 0.9074 exhibits that the rate of convergence is just above one year with 90% convergence per annum. The significance of the test validates that there is co-integration between the variables.

The diagnostic tests reveals that the model clears the sensitivity analysis. There is no such problem of functional form the model, no serial correlation found, no issues of normality and heteroscedasticity.

The stability of the ECM is investigated through CUSUM and CUSUMSq (Pesaran & Shin, 1998). If their plots remains within the critical bound (See Appendix A & B), then it indicates that regression equations are correctly specified (Bahmani-Oskooee & Nasir, 2004).

#### CONCLUSION AND RECOMMENDATIONS

The study investigated the FDI from USA and its impact on exports of Pakistan to USA. Based on empirical results, it appears that there is a favorable or beneficial outcome, indicating a positive correlation or effect. This indicates that policies aimed at increasing FDI may also have a positive impact on exports to USA. The current research effort provides policymakers with guidelines that opening-up to countries that have a complementary impact on exports. Thus, providing incentives to boost investment flows can lead to significant increase in host country exports, such as Pakistan. This is supposed to be an important channel for sustainable economic growth. In addition to this, amidst promoting other export promotion policies, FDI promotion policies should be prioritized to achieve a multiplier impact through knowledge spillover, technology transfer, and human development.





Figure 1: Plot of cumulative sum of residuals (CUSUM)

Appendix- B



Figure 2: Plot of cumulative sum of square residuals (CUSUM Sq)

#### REFERENCES

- Atique, Z., Ahmad, M. H., & Azhar, U. (2004). The Impact of FDI on Economic Growth under Foreign Trade Regimes: A Case Study of Pakistan. *The Pakistan Development Review*, 43(4II), 707-718. doi:10.30541/v43i4iipp.707-718
- Bahmani-Oskooee, M., & Nasir, A. B. (2004). ARDL Approach to Test the Productivity Bias Hypothesis. *Review of Development Economics*, 8(3), 483-488. doi:10.1111/j.1467-9361.2004.00247.x
- Brainard, S. L. (1993). A Simple Theory of Multinational Corporations and Trade with a Trade-Off Between Proximity and Concentration. *NBER Working Paper*, 4269. doi:10.3386/w4269
- Engle, R. F., & Granger, C. W. (1987). Co-Integration and Error Correction: Representation, Estimation, and Testing. *Econometrica*, 55(2), 251-276. Doi: 10.2307/1913236
- Ghaus, K., Memon, M. H., & Iqbal, M. I. (2017). Trade and Compliance of Labour Standards in Global Supply Chain. A Case Study of Pakistan. *Friedrich-Ebert-Stiftung (FES) & Social Policy* and Development Centre (SPDC).<u>http://library.fes.de/pdf-</u> files/bueros/pakistan/13953.pdf;<u>http://www.spdc.org.pk/Data/Publication/PDF/13953.pdf</u>
- Goldberg, L. S., & Klein, M. W. (1999). International trade and factor mobility: an empirical investigation.
- Greenway, D., Katherine, W., & Mary, A. (2000). Foreign Direct Investment and Trade: Substitutes or Complements? *Preliminary Draft*, 5.
- Helpman, E., Melitz, M. J., & Yeaple, S. R. (2003). Export versus FDI. SSRN Electronic Journal. doi:10.2139/ssrn.386924
- Hoekman, B., & Djankov, S. (1999). Foreign Investment and Productivity Growth in Czech Enterprises. *Policy Research Working Papers*. doi: 10.1596/1813-9450-2115
- Horstmann, I. J., & Markusen, J. R. (1992). Endogenous market structures in international trade (natura facit saltum). *Journal of International Economics*, 32 (1-2), 109-129. doi:10.1016/0022-1996(92)90038-1
- Johanson, J., & Wiedersheim-Paul, F. (1975). The Internationalization Of The Firm? Four Swedish Cases. *Journal of Management Studies*, 12(3), 305-323. doi:10.1111/j.1467-6486.1975.tb00514.x
- Khan, A. H. (1997). Foreign Direct Investment in Pakistan: Policies and Trends. *The Pakistan Development Review*, 36(4II), 959-985. doi:10.30541/v36i4iipp.959-985
- Khan, A. H. (1999). Foreign Direct Investment in Pakistan: Policies and Trends. EDRC Report Series, 66
- Kojima, K. (1975). International Trade and Foreign Investments: Substitutes or Complements? *Hitotubashi Journal of Economics*, 74, 119-147.
- Lemi, A. (2004). Foreign Direct Investment, Host Country Productivity and Export: The Case Study of US and Japanese Multinational Affiliates. *Journal of Economic Development*, 29 (1), 163-1887. doi:10.30541/v36i4iipp.959-985

- Liu, X., Wang, C., & Wei, Y. (2001). Causal links between foreign direct investment and trade in China. *China Economic Review*, 12 (2-3), 190-202. doi:10.1016/s1043-951x(01)00050-5
- Markusen, J. R. (1984). Multinationals, multi-plant economies, and the gains from trade. *Journal of International Economics*, *16*(3-4), 205-226. doi:10.1016/s0022-1996(84)80001-x
- Markusen, J., & Venables, A. (1995). Multinational Firms and the New Trade Theory. *World Economy*, 21(6), 733-755. doi:10.3386/w5036
- Markusen, J., & Venables, A. (1996). The Increased Importance of Direct Investment in North Atlantic Economic Relationships: a Convergence Hypothesis. *The New Economy*, Cambridge University Press, 169-189.
- Markusen, J. R. (1998). Multinational Firms, Location and Trade. *The World Economy*, 21(6), 733-756. doi:10.1111/1467-9701.00161
- Memon, M. H. (2008). International Trade Theories on FDI still at an Infancy Stage. The Pakistan and Gulf Economist,XXVII (36), 9-10. <u>http://www.pakistaneconomist.com/pagesearch/Search-Engine2008/S.E793.asp</u>
- Mundell, R. A. (1957). International Trade and Factor Mobility. *The American Economic Review*, 47(3), 321-351.
- Nicholas, S. (1983). Agency Contracts, Institutional Modes, and the Transition to Foreign Direct Investment by British Manufacturing Multinationals Before 1939. *Journal of Economic History*, 43(03), 675-686. doi:10.1017/s0022050700030308
- Pain, N., & Wakelin, K. (1998). Export Performance and the Role of Foreign Direct Investment. The Manchester School, 66 (S), 62-88. doi:10.1111/1467-9957.66.s.4
- Omelańczuk, M. (2013). Export Platform FDI as a Concept for Growth Selected Global Experiences. Entrepreneurial Business and Economics Review, 1 (1), 91-102. doi:10.15678/eber.2013.010107
- Pesaran, M. H., & Shin, Y. (1998). An Autoregressive Distributed-Lag Modelling Approach to Cointegration Analysis. *Econometrics and Economic Theory in the 20th Century*, 371-413. doi:10.1017/ccol521633230.011
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16 (3), 289-326. doi:10.1002/jae.616
- Pfaffermayr, M. (1994). Foreign direct investment and exports: A time series approach. *Applied Economics*, 26(4), 337-351. doi:10.1080/00036849400000080
- Sharma, K. (2000). Export Growth in India: Has FDI Played a Role? *Economic Growth Centre, Yale University, Discussion Paper 81*, 17-18.
- United Nations Conference on Trade and Development (1996). World investment report United Nations.
- Vernon, R. (1966). International Investment and International Trade in the Product Cycle. *The Quarterly Journal of Economics*, 80(2), 190-207. doi:10.2307/1880689