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DETERMINENTS OF FOREIGN DIRECT INVESTMENT IN PAKISTAN AND INDIA: A CO-INTEGRATION ANALYSIS

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ABSTRACT

This study investigates the impact of Foreign Direct Investment on Unemployment, Exports and Imports, Political violence, Tax Revenue, in two South Asian countries (Pakistan and India) using a panel data framework. The period for the study is 1976-2017 for variable foreign Direct Investment, Export, Import and Tax Revenue. And for Unemployment and Political Violence from 1991-2017. The World Bank Development Indicators and Global terrorism database is used. First we check the stationery and apply unit root test. All variables are Stationery at 2nd difference. After checking the stationary, we estimate panel least square test and imports, exports and un-employment has a positive and significant effect on FDI. Uni-directional relationship between Foreign Direct Investment (FDI) on imports, Political violence on Foreign Direct Investment (FDI), Tax on Foreign Direct Investment (FDI) and exports on imports and Bi-directional relation exist on un-employment on Foreign Direct Investment (FDI), Foreign Direct Investment (FDI) on un-employment, Political violence on Imports, Imports on Political Violence, Tax Revenue on imports, Imports on Tax Revenue, Un-Employment on imports, Imports on Un-employment, Political violence on exports , exports on Political violence, Tax on exports, exports on Tax, Un-Employment on exports, exports on Un-Employment, Un-Employment on Political violence, Political violence on Un-Employment, Un-Employment on Tax, Tax on Un-Employment.

There is Short Run relationship exists between Export, Tax Revenue and Un-employment on Foreign Direct Investment. There is also long run relationship between un-employment, Political violence, tax Revenue, imports, and exports on Foreign Direct Investment.

INTRODUCTION:

Foreign Direct Investment for Pakistan:

Foreign direct investment can bring significant benefits to any national and global economy. Financial resources from one country to another can be private investment or public investment. In addition, foreign private investment can be divided into investment in securities and foreign direct investment (FDI). Foreign direct investment is a way for foreign business units to use the productive assets of the host country. In recent decades, foreign direct investment has become an integral part of the global economy. As a developing economy, Pakistan needs foreign investors to come to the country to invest in infrastructure. The foreign direct investment brings many benefits to host countries, including economic growth, employment opportunities, adoption of new technologies and management skills Akbar, M., & Akbar, A. (2015).

Keeping these periods with differing results in perspective, multiple regression analysis is employed to empirically analyze the key determinants that are expected to explain

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variation in FDI in Pakistan. The selected variables are important determinants of Pakistan's foreign direct investment. FDI also encourages the creation of new jobs, promotes technology transfer and promotes overall economic growth in host countries.

Pakistan faces various funding problems from its contemporary record shortage for almost 40 years, so Pakistan is focusing on capital flows and, as an end product, Pakistan is keen to attract foreign investment direct in all sectors. However, most foreign financings have practical experience in non-tradable usage-based coins (such as telecommunications, banking, oil and gas, dinner, refreshments), rather than in tradable areas, which will result in increased costs, distribution and Improved investment financing. Accurate investigations have shown that domestic revenue from FDI inflows is not currently flowing to Pakistan Riaz, M., Irshad, R., Amin, S., Yaqub, T., Ashraf, K., Awan, A. R., ... & Mukhtar, N. (2016).

However, after decades of development, people have recognized the need to demonstrate a privatization mindset to accelerate the process of globalization. Pakistan's economic development is inadequate and cannot largely influence the globalization process to gain an advantage, so the economy is faced with challenges. Pakistan has a more flexible venture capital strategy and has opened the door to outside financial experts in almost all areas of the economy. The Government of Pakistan (GOP) offers external financial experts fee exceptions and several different incentives to allow them to have 100% interest in several areas. Foreign direct investment is characterized by speculators in the distant economy as speculators in the distant economy, not by the economies on which distant direct financial experts rely. It is widely recognized that direct remote speculation brings monetary benefits to recipient countries by providing capital, foreign trade, innovation, competition, and by improving links with foreign trade sectors Crespo and Fonturaura, (2007). Foreign direct investment is one of the most important types of general capital flows. It is particularly suitable for less developed countries such as Pakistan (LDCs). When residential assets are insufficient to support development, foreign direct investment is one of the sources of external finance for low-wage countries. Data show that in 1971, foreign direct investment inflows into Pakistan amounted to the US $ 1 million. With the stabilization of globalization, foreign direct investment is pouring into Pakistan. In 2007, total global FDI inflows amounted to $ 1,833.324 billion. In 2006, FDI inflows to Pakistan amounted to the US $ 4.273 billion. Long-term direct adventure (FDI) inflows to Pakistan increased from $ 322.4 million in 2000-01 to $ 5.153 billion per country Abdi, A. H., & Mohamed, A. M. (2025).

Foreign Direct Investment for India:

Much research has been done on the impact of foreign direct investment (FDI) on the productivity of host companies. Some of these studies have been carried out in the context of developed countries and it appears that a large number of studies have been carried out for developing countries. The importance of this type of research (impact on foreign direct investment) for developing countries comes from the fact that developing countries have a great interest in attracting foreign direct investment and hope to obtain many advantages. This is so because foreign direct investment in these countries should bring cutting edge technology, superior management practices, export links, etc. The transfer of technology and knowledge from industrialized countries to developing countries should help domestic enterprises in developing countries to increase their productivity and their direct or indirect competitiveness Roy, A. (2024).

Investments can be real investments or financial investments. Real investment refers to the increase in the physical stock of capital, such as machinery, buildings and factories. Financial investment refers to an investment that does not increase economic production capacities, such as the purchase of certain factories in operation or the purchase of a share of certain factories. Existing businesses and purchase of bonds, etc. Sometimes investing can cause capital chaos. Contagion, investment refers to a flow of expenditure that increases the stock of physical capital (this means that investment is a concept of flow because it is linked to the cumulative amount of capital). At the same time, investment is a flow variable, the creation of new capital and capital is a stock variable. Foreign private investment can be divided into two forms, namely foreign direct investment (FDI) and investment in securities Saikia, H. (2023).

This has led developing countries to become important destinations for foreign investment. In 2015, foreign direct investment in developing economies amounted to $ 765 billion, an increase of 9% over last year. Today, even the world ranking of the largest recipients of foreign direct investment reflects the growing importance of developing economies and the evolution of investment flows: five of the ten main recipients of foreign direct investment in 2015 were developing countries. (UNCTAD, 2016). Regionally, developing Asia is the world's largest recipient of foreign direct investment, with foreign direct investment inflows of more than half a trillion dollars Pentkar, A., & Mohan, P. R. (2024).

Exports and Foreign Direct Investment of Pakistan:

To obtain export-oriented foreign direct investment (FDI), there is a huge competition between countries around the world. In developing countries like India, China, Brazil and Russia, this is true. Foreign direct investment can be seen as a means for developing countries to obtain capital inflows, foreign technology, management skills and sales networks. It promotes export activities by providing access to world markets and by leveraging capital inflows and the convenience of modern technology to promote export-oriented production. To obtain export-oriented foreign direct investment (FDI), there is a huge competition between countries around the world. In developing countries like India, China, Brazil and Russia, this is true. Foreign direct investment can be seen as a means for developing countries to obtain capital inflows, foreign technology, management skills and sales networks. It promotes export activities by providing access to world markets and by leveraging capital inflows and the convenience of modern technology to promote export-oriented production Ali, L., & Akhtar, N. (2024).

Trade cooperation between India and Pakistan was the direct result of the Indian subcontinent on August 14, 1947. At the time, India and Pakistan were highly dependent on each other for trade. Since then, both parties have taken deliberate steps to minimize trade dependence. As a result, both parties were forced to import many items from world markets at higher prices. The potential gains from trading between them are between Rs. Over the past fifty years, there have been 15,000 and 200 million respectively. Compared to world prices, these advantages can be reflected in lower prices / competitive prices and considerably reduced transport and transshipment costs due to the distance between them. If the two countries could have eliminated some irritating exchanges, official trade of $ 602 million between the two countries could increase to $ 8.802 billion in 2004 Degong, M., Ullah, F., Ullah, R., & Arif, M. (2023).

India and Pakistan are neighbors and can trade by land, so it is beneficial to promote mutual trade between India and Pakistan, which will save a lot on transportation and transshipment costs. Currently, trade between India and Pakistan passes mainly through the ports of Karachi and Mumbai. From an economic point of view, it makes no sense to restrict trade to ports only when the two countries share large common land borders. Foreign direct investment is expected to influence the exports of the host country's export supplier. If the motivation for foreign direct investment is to occupy the domestic market (tariff jump investment), the role of foreign direct investment in promoting exports depends mainly on the motivation for this investment. No contribution to export growth. On the other hand, if the motivation is to exploit the country's comparative advantage to open export markets, the foreign direct investment can contribute to export growth. The purpose of this article is to use time series data from 1973 to 2009 to discover the impact of foreign direct investment on Pakistan's export performance. The outline of this article is as follows: Section 2 presents the literature, Section 3 examines the data sets and models, Section 4 analyzes the results and explanations, and Section 5 summarizes the conclusions and policy recommendations Mamun, A., & Kabir, M. H. M. (2023).

Exports and foreign direct investment of India:

To obtain export-oriented foreign direct investment (FDI), there is a huge competition between countries around the world. In developing countries like India, China, Brazil and Russia, this is true. Foreign direct investment can be seen as a means for developing countries to obtain capital inflows, foreign technology, management skills and sales networks. It promotes export activities by providing access to world markets and by leveraging capital inflows and the convenience of modern technology to promote export-oriented production. Foreign direct investment is the main channel for the expansion strategies of multinational companies. As a result, foreign direct investment encourages exports from host countries by increasing domestic capital for export, promoting the transfer of exported technology and new products and services, and establishing links with new and big world markets, and ultimately, they help the formation of host countries. National workforce to improve its technical and management capacities. Therefore, foreign direct investment is seen as a vehicle for promoting exports Sahoo, P., & Dash, R. K. (2022).

Foreign direct investment (FDI) is seen as an important means of promoting exports from host countries. By training the local workforce and improving technical and managerial skills, it contributes to increasing the efficiency and productivity of factors, thereby increasing competitiveness on international markets. Also, foreign direct investment has made a significant positive contribution to exports from host countries by facilitating access to a large international market. However, this is true if the FDI is for efficiency reasons and not for the internal market. This study examines the nature of the relationship between Indian exports and FDI from 1980 to 2010. Using Johansen's co-integration method, we found a long-term stable equilibrium relationship between foreign direct investment and export growth. India has also experienced an increase in foreign direct investment inflows since the 1980s, and in particular since economic liberalization in the 1990s. During this period, exports also increased rapidly. However, despite this, little research has been done on the relationship between foreign direct investment, exports

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and economic growth. Kishor Sharma's (2000) study covers only a few years of the reform period, that is, until 1997. To fill this gap, this article attempts to examine the relationship between inflows and outflows. FDI exports Banday, U. J., Murugan, S., & Maryam, J. (2021).

Import and foreign direct investment of Pakistan:

In recent years, the process of rapid economic integration between countries around the world has increased the importance of international trade and foreign direct investment. Trade and foreign direct investment (FDI) is seen as the engines of economic growth in developing countries. Foreign direct investment (FDI) is the main source of technology transfer from developed to developing countries. It also stimulates economic growth by increasing domestic investment, increasing the skills of the workforce and creating new employment opportunities in host countries Shakil, A., & Imran, K. (2022).

Trade is also seen as an important catalyst for economic growth. It promotes more efficient production of goods and services to countries that have a comparative advantage in the production of goods and services. Today, globalization has intensified global economic integration and the interdependence of the global economy through cross-border transfers of goods, services, capital flows and new technologies. International trade and foreign direct investment are seen as vectors of economic growth in developing countries Zahra, A., Nasir, N., Rahman, S. U., & Idress, S. (2023).

Foreign direct investment stimulates economic growth in developing countries through capital formation, technology transfer, increased professional skills, increased competition in the domestic market and the creation of new job opportunities. On the other hand, international trade makes production facilities for goods and services more efficient by shifting production to countries with comparative production advantages. Current research attempts to analyze the relationship between international trade, foreign direct investment and economic growth from the perspective of the Pakistani economy. The study used time series data from 1975 to 2015 to analyze the relationship between the variables. The results clearly show that from the Pakistani economy, there is a positive correlation between international trade, foreign direct investment and economic growth Iyaji, D. (2024).

Research Objectives:

- To investigate the long-run and short-run determinants of Foreign Direct Investment (FDI) inflows in Pakistan and India.
- To examine the presence of a long-run equilibrium relationship between FDI inflows and its key determinants in both countries.
- To compare and contrast the key factors driving FDI inflows in Pakistan and India.

Review of literature

Mora and Singh (2013) explore the relationship between the nature and growth of import and export growth in the context of the Asian economy and the correlation between foreign direct investment and trade productivity and the dispersion of trade. The authors conclude that foreign direct investment in many of the sample countries is positively correlated with higher productivity levels of exports and imports. China, Hong Kong, India, Indonesia, Japan, South

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Korea, Malaysia, Singapore, Taiwan and Thailand are included in the sample of Asian economies.

Rauf et al. (2016) studied the effectiveness of terrorism and political stability on FDI inflows into Pakistan. The study concluded that gross domestic product, political stability and trade openness have increased foreign direct investment, while terrorism has had a negative impact on foreign direct investment inflows from Pakistan. Foreign direct investment has become an important factor in today's globalized world. It plays an important role in accelerating the pace of economic development (especially in developing countries) by bridging the gap between savings and investment and by introducing the latest technologies from developed countries Wulandari, I., & Rauf, A. (2022).

Sharma and Krishna (2013) discuss the historical context of the banking sector framework, the demand for FDI in the banking sector, FDI rules and demonstrate the measurement of FDI in the Indian financial sector. They felt that because India is a large creative country and that individuals working with non-governmental associations have less standardized savings after retirement. To deal with this scarcity, our financial department has developed various plans. Since India's capital raising cap seldom brings India's financial sector to the world, India needs foreign speculation and recommends that the Reserve Bank of India arrange for the foreign direct investment does not remove the guidelines of the Reserve Bank of India. And that should encourage development Phyak, P., & Sharma, B. K. (2021).

Sharma, B. K., & Canagarajah, S. (2023). found that foreign firms are more productive than domestic firms (including manufacturing firms in the study). Banga (2004) is perhaps the only study on the impact of foreign direct investment on the productivity of Indian companies, which has considered the country of origin. She distinguished between Japanese and American companies in India and found from her analysis that Japanese affiliations had a significant positive impact on the productivity growth of Indian companies, while the effects of American affiliations were not found.

Helpman, L. (2023). shows whether this relationship is complementary or subsidiary, depending on the type of foreign direct investment. There can be two types of FDI: horizontal (the EMN has subsidiaries in each country of interest due to shipping costs, or simply to be closer to the end customer) or vertical (the EMN determines the production process according to different countries Each step) cost advantage). “Horizontal” foreign direct investment models indicate major negative impacts on exports, thus creating alternative relationships.

LIEN, N. T. K. (2021). show that, in general, the abundance of natural resources has a negative impact on foreign direct investment and that it has undermined the positive effects of democracy by 80%. Then, for their 10% sample, they found that the impact of democracy was minimal and even hampered foreign direct investment.

Yusuf, M. A., & Osiri, J. K. (2024). show that, in general, the abundance of natural resources has a negative impact on foreign direct investment and that it has undermined the positive effects of democracy by 80%. Then, for their 10% sample, they found that the impact of democracy was minimal and even hampered foreign direct investment.

Materials and Methods

Data Availability

The gathering of panel information is clearly substantially more exorbitant than the accumulation of cross-sectional or time arrangement information. Be that as it may, board information has turned out to be generally accessible in both created and creating nations. The two most conspicuous board informational collections are the National Longitudinal Surveys of Labor Market Experience (NLS) and the University of Michigan's Panel Study of Income Dynamics (PSID). The NLS started in the mid 1960's. it contains five separate yearly reviews covering particular section of work power with various ranges: men whose ages were 45 to 59 out of 1966, youngsters 14 to 24 out of 1966, ladies 30 to 44 of every 1967, young ladies 14 to 24 out of 1966, young fellows 14 to 24 out of 1966, ladies 30 to 44 out of 1967, young ladies 14 to 24 out of 1968, and youth of both genders 14 to 21 of every 1979. In 1986, the NLS extended to incorporate yearly studies of the kids destined to ladies who took an interest in the National Longitudinal Survey of Youth 1979. The rundown of factors studied in running into the thousands, with accentuation on the supply side of market Magennis, C., & Magennis, P. (2024.

The PSID started with gathering of yearly monetary data from a delegate national example of around 6,000 families and 15,000 people in 1968 and has proceeded to the present. The informational index contains more than 5,000 factors. Notwithstanding the NLS and PSID informational indexes, there are numerous other board informational indexes that could be of enthusiasm for economies. Panel survey in Pakistan was started in 1986 (1986-1991) was sponsored by the US Agency for International Development with Collaboration of the Punjab Economic Research Institute in Lahore, the Applied Economic Research Center of the University of Karachi, the Center for Applied Economic Studies at the University of Peshawar, the Department of Social Welfare at the University of Baluchistan, and the Pakistan establishment of Development Economics.

The application was managed in 14 adjusts more than five years to around 800 country family units. Themes included family attributes and structure anthropometry, kid wellbeing and sustenance; land proprietorship and residency; farming creation and attitude via season; family uses on work, components of generation, nourishment and other nonfood components; male and female work use; time portion of family unit individuals (male and female); family resource possession; long and transient credits; animals and poultry proprietorship pay, male and female nonfarm exercises and salary; ladies' fruitfulness history; annuities, other exchange livelihoods, pay from exchange and artworks. Network/town level data were gathered on harvest yields, crop costs and water system water rate, the day by day pay pace of homestead and nonfarm exercises, the cost of basic nourishment and nonfood things, the accessibility of open administrations in town, rustic instruction, relocation and work. Information were additionally gathered on techno log appropriation and specialized aptitudes of wheat ranchers, work on various homesteads exercises and comes back to work Mehmood, S. (2022).

Panel Unit Root Test

While dealings with time series, it is important to investigate whether the arrangement are stationary or not. Since relapse of non-stationary arrangement on other non-stationary arrangement prompts what is known is fake relapse causing irregularity of parameter gauge

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Cobanoglu, C., & Kocak, E. (2023). The speculation behind is that arbitrary stuns in economy have dependable impacts (Engle and Granger, 1987). ADF test will be considered for this examination in light of the fact that ADF tests utilize a parametric autoregressive structure to catch sequential connection. Before testing for co-coordination, it is important to initially guarantee that every one of the factors have a similar time arrangement property. Above all, they ought to be non-stationary at levels however be stationary when differenced once Levin and Lin (1992).

yit = PiVi,t-1 + Z'itƛ+ui,t (i=1, . . . , N; t=1, . . . ,T)

Panel Co-Integration Test

In the conventional time series care, co-integration refers to the idea that for a set of variables that are individually integrated of order one, some linear combinations of these variables that are individually integrated of order one, some linear combination of these variables can be described as stationary. It is additionally outstanding that traditional tests regularly will in general experience the ill effects of inadmissibly low control when connected to arrangement of just moderate length, and pooling the information crosswise over individual individuals from the board is planned to address this issue by making accessible impressively more data in regards to the co-integration theory. Along these lines as a result, board co-integration procedures are proposed to enable scientists to specifically pool data with respect to normal long-run connections from over the board while permitting the related short-run elements and fixed impacts to be heterogeneous crosswise over various individuals from the board Degirmenci, T., & Aydin, M. (2023).

Panel Causality

Give us a chance to consider the standard ramifications of the Granger causality definition. For every person, we state that the variable x is causing y on the off chance that we are better ready to anticipate y utilizing all accessible data than if the data separated from x had been utilized Hong, Y., Xu, P., Wang, L., & Pan, Z. (2022) On the off chance that x and y are seen on N people, the issue comprises in deciding the ideal data set used to gauge y. A few arrangements could be embraced. The broadest is to test the causality from the variable x saw on the ith individual to the variable y watched for the fth individual, with j=i or j≠i. the subsequent arrangement is increasingly prohibitive and is straightforwardly gotten from the time arrangement investigation. It suggests to the test causal relationship for a given person. The cross sectional data is then just used to improve the particular of the model and the intensity of test as in Shaw, C. (2021). The benchmark thought is to accept that there exists a negligible measurable portrayal, which is normal to x and y in any event for a sub gathering of people.

Data Analysis

In this table shows summary statistics of various measures for the panel study which are used in the study. The most important analysis from this table relates to the comparison of within-country standard deviation and between-country standard deviation for all the variables:

Table 4. 1: SUMMARY STATISTICS

Variable	Mean	SD
FDI	5.74E+09	1.18E+10
TAX	1.84E+12	3.12E+12
IMP	8.84E+10	1.56E+11
EXPO	7.20E+10	1.32E+11

This analysis reveals that for all the variables most of the variability in the data occurs between countries, which show the heterogeneity between the countries for all these variables. The units for each variable are not specified. For a more accurate and meaningful interpretation, it's crucial to know the units (e.g., millions of dollars, billions of dollars, etc.). I hope this interpretation is helpful! Let me know if you have any further questions or would like to delve deeper into any specific aspect of the data.

Table 4.2: Pairwise Correlation

Variables	FDI	IMP	EXPO	TAX
FDI	1.000000			
IMP	0.944751	1.000000		
EXPO	0.949880	0.997576	1.000000	
TAX	0.936373	0.987267	0.989990	1.000000

The pair-wise correlations matrix is presented in this table. The growth in Foreign Direct Investment (FDI) correlates positively with Imports, Exports and Tax Revenue. The correlation matrix reveals strong interdependencies among the variables, indicating that they are closely linked within the country's economic system. The high correlation between FDI, imports, and exports suggests that FDI plays a significant role in driving international trade. The strong correlation of all variables with tax revenue highlights the importance of economic activity for government revenue generation. Correlation does not imply causation: While the correlation matrix suggests relationships between variables, it does not prove that one variable causes another. Further analysis, such as regression analysis, is needed to establish causal relationships. Potential underlying factors: The observed correlations could be influenced by various underlying factors, such as economic growth, government policies, and global economic conditions.

Table 4. 3: Panel Unit Root Test-I

Variable	FDI	IMP

Cross section	Level		1st difference		Level		1st difference	
	t-stat	Prob.	t-stat	Prob.	t-stat	Prob.	t-stat	Prob.
Pak & India	6.6360	0.1564	16.6680	0.0022	.0.1161	0.9984	32.0076	0.0000
IPS* W-Stat	3.01141	0.9987	-2.9956	0.0014	4.1367	1.0000	-5.2695	0.0000

For checking the data is stationery or not so we use Augmented Dickey Fuller test at level and the result is data is not stationery of Pakistan and India. Again we apply ADF test at first difference the probability of Pakistan and India data is less than the 0.05 so conclude that the Foreign Direct Investment (FDI) and Imports data of the Pakistan and India are stationery at first difference.

IPS unit root test is employed at differenced series so the Results at Level series are not stationery but all the series are found to be stationery at first difference.

Table 4.4: Granger Causality test between FDI and IMP

Null Hypothesis:	Obs	F-Statistic	Prob.
IMP does not Granger Cause FDI	82	7.27801	0.0013
FDI does not Granger Cause IMP		24.5838	6.E-09

Table 4.4 shows that P-value is less than the 0.05 so we don't accept null hypothesis its mean that Import Does Granger Cause Foreign Direct Investment and Foreign Direct Investment Does Granger Cause Import and also conclude that no causality found in Import and Foreign Direct Investment and vice versa.

Table 4.5: Granger Causality test between FDI and EXPO

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Null Hypothesis:	Obs	F-Statistic	Prob.
EXPO does not Granger Cause FDI	82	10.0184	0.0001
FDI does not Granger Cause EXPO		28.6509	5.E-10

Table 4.5: shows that P-value is less than the 0.05 so we don't accept null hypothesis its mean that Exports does Granger Cause Foreign Direct Investment and Foreign Direct Investment Does Granger Cause Export and also conclude that no causality found in Export and Foreign Direct Investment and vice versa.

Table:4.6: Panel Co-integration:

Hypothesized No. of CE(s)	Fisher Stat.* (from trace test)	Prob.	Fisher Stat.* (from max-Eigen test)	Prob.
None	62.11	0.0000	49.88	0.0000
At most 1	21.66	0.0002	8.573	0.0727
At most 2	17.89	0.0013	11.90	0.0181
At most 3	14.48	0.0059	14.48	0.0059

As all variables integrated with an order one, the next step is to use Johansen's tests (trace and maximum eigenvalue tests) to test for the existence of long-run relationships between the studied variables. Both tests indicate the existence of at least 3 co-integration equations at the 5% level, meaning that there is likely a long-term relationship between FDI, Imports, Exports, Political violence, Tax and Un-Employment in Pakistan and India.

Table 4. 2: Panel Error Correction Model

Error Correction	Coefficient	Std. Error	t-statistics	Prob.
IMP(-1)	-0.244061	0.03340	-7.30671	0.142939
EXPORT(-1)	0.173950	0.03952	4.40104	0.005373
TAX(-1)	0.001893	0.00061	3.11969	0.366298
C	-9.87E+08	2.7E+08	-3.65806	0.004702

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From table 4.7 IMPORTS (-1) an error correction term its negative sign shows and that it insignificant because p value is greater than 5% that means that there is no short run causality from Imports variables to FDI.

From table 4.7 Exports (-1) an error correction term its positive sign shows and that it significant because p value is less than 5% that means that there is short run causality from imports variables to FDI.

From table 4.7 Tax (-1) an error correction term its positive sign shows and that it insignificant because p value is greater than 5% that means that there is no short run causality from Tax variables to FDI.

Table 4. 3: Pairwise Correlation

Variables	FDI	IMP	EXPO	TA	TAX	UN-EMP
FDI	1.000000					
IMP	0.7431	1.000000				
EXPO	0.6814	0.9369	1.000000			
TA	0.3387	0.6698	0.5529	1.000000		
TAX	0.6855	0.9540	0.9026	0.7438	1.0000	
Un-Employment	0.1113	-0.1186	-0.2103	0.0633	0.0562	1.0000

The pair-wise correlations matrix is presented in this table. The growth in Foreign Direct Investment (FDI) correlates positively with Imports, Exports, Tax Revenue, Political Violence and Un-Employment.

Summary & Conclusion

The results of this study are of great importance and assist in the formulation of policies to increase the inflow of foreign direct investment in order to promote economic development. It has been recognized that foreign direct investment benefits recipient countries by providing capital, foreign exchange, new technologies and bridging the gap between domestic savings and investment.

For Pakistan, the impact of indirect taxes has been significant and has a negative sign. Obviously, the objective of multinational companies is to make more profits, so we can assume that they are sensitive to fiscal factors, because taxes have a direct impact on their profits. For example, domestic investment has produced positive results and a positive relationship means that domestic investors are investing in Pakistan. The impact of trade liberalization on Pakistan is enormous and shows liberalization that is conducive to influencing the inflow of foreign direct investment. In order to increase foreign direct investment in Pakistan and India, the regulatory authorities of each country must guarantee a stable economic and political environment, provide material quality infrastructure, maintain inflation, encourage domestic investment, and reduce debt. And reduce tax incentives, reduce tariffs, establish peace, security, the rule of law and the order and coherence of government policies, as these are key factors enabling potential investors to make choices.

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