

# [Impact of foreign capital inflows on economic growth in pakistan](https://assignbuster.com/impact-of-foreign-capital-inflows-on-economic-growth-in-pakistan/)

## Impact of Foreign Capital Inflows (FCI) on Economic Growth in Pakistan (1970-2007)

## ABSTRACT

Foreign Capital Inflows (FCI) are an important catalyst for economic growth, especially for the capital scarce developing countries like Pakistan. It affects the economic growth through various channels like by increasing human capital formation, by facilitating the technology transfer in the host countries, by diffusion of knowledge, by stimulating domestic investment, etc. The main objective of this paper is to examine the impact of FCI (FDI, ODA) on the economic growth in Pakistan, for the period 1970 – 2007. The relationship between FCI and economic growth is analyzed by using the “ Multiple Linear Regression (with intercept) model”.

## INTORDUCTION

Foreign Capital Inflow (FCI) includes all types of capitals that come in the home country from other countries. FCI comes in different forms in a country, which includes the grants, loans, foreign direct investment (FDI), foreign aid, export credit, project/non-project assistance, technical assistance and emergency relief etc. Pakistan is a capital scare country that is why Pakistan needs FCI to bridge the saving-investment gap for its development. Foreign Capital Inflow (FCI) is a growth-enhancing variable and it has received great attention of developed countries in general and less developed countries in particular in recent decade.

It has been a matter of great concern for many economists that how FCI affects economic growth of the host country. In a closed economy, with no access to foreign saving, investment is financed solely from domestic savings. However, in an open economy investment is financed both through domestic savings and foreign capital flows. The main reason that makes the impact of the trade policies different for the countries operating under different trade regimes is that countries working under IS (Import Substitution) target very small domestic market of the consumers whereas the countries with more open policies of EP (Export Promotion) have bigger international target customer market. Due to this the countries with EP regime attract more foreign investment as compared to the countries operating under IS trade policies. Pakistan also follows export-oriented policies. Pakistan’s trade policy has been moving towards more openness, fewer control and tariff rates have tumbling down. FDI enables investment-receiving (host) countries to achieve investment levels beyond their capacity to save. Foreign direct investment (FDI) can have important positive effects on a host country’s development effort. In addition to the direct capital financing it supplies, FDI can be a source of valuable technology and know-how while fostering linkages with local firms, which can help jumpstart an economy. Based on these arguments, industrialized and developing countries have offered incentives to encourage foreign direct investments in their economies. The special merits of FDI and particularly the kinds of incentives offered to foreign firms in practice have begun to be questioned.

During the fluctuation of capital flows in the 1990s, foreign direct investment (FDI) was the main source of flows to developing countries. Unlike other capital flows, FDI is less volatile. It has therefore become the “ favorite capital inflows” for developing countries. Many argue that, given appropriate policies and a basic level of development, FDI plays a key role in the process of creating a better economic environment but potential drawbacks do exist, including a deterioration of the balance of payments as profits are repatriated and negative impacts on competition in national markets. At present, the consensus view seems to be that there is a positive association between FDI inflows and growth provided receiving countries have reached a minimum level of educational, technological and/or infrastructure development. However, there is no universal agreement about the positive association between FDI inflows and economic growth. The potential advantages of the FDI on the host economy are it facilitates the use and exploitation of local raw materials; it introduces modern techniques of management and marketing, it eases the access to new technologies. Foreign inflows could be used for financing current account deficits, finance flows in form of FDI do not generate repayment of principal and interests (as opposed to external debt), it increases the stock of human capital via on the job training. In case of Pakistan the amount of FDI inflows increased from $ 0. 24 billion in 1990 to $ 55 billion in 2007(WDI indicators 2008).

Foreign direct investment serves as a strong mechanism for the promotion and spread of business opportunities throughout the developing and industrialized economies. This mechanism raises income level and provides employment opportunities to the working class of the host country giving an overall boost to their economic situation. Host countries find themselves in an advantageous condition on account of foreign direct investment because they get the benefits of new (foreign) technology through licensing agreements, commencement, and competition for resources, employee’s training, export spillovers and direct capital financing. Especially for a developing economy like Pakistan all these are certain crucial incentives as it has a tremendous effect on the major macroeconomic variables like domestic investment and savings, technology, employment generation and labor productivity, environment and export competitiveness. To face the growing challenges of the world economy, this channel helps not only in boosting the potential of an economy like Pakistan regarding an increase in the production level but also the capacity to save resources to the extent possible.

The trends and the patterns have shown that the FDI, ODA, portfolio investment and borrowing through private sources have increased sharply. Pakistan lacks physical, financial & human capital as well as political & macroeconomic stability. FDI in Pakistan has been on the decline. These declining trends in FDI have resulted from public policy and the changing geo-strategic environment of Pakistan. The FDI was constrained by a number of other factors as well, namely, political instability, law and order, economic environment and no proper infrastructure, the instability in stock markets and regulatory regime.

Foreign Capital usually comes in the form of FDI, through the involvement of large Transnational Corporations (TNCs). FDI under the sponsorship of TNCs gravitates towards the destinations that are inclined to profitable opportunities. These “ Global Factories” search for highest financial returns and greatest security for their operation in the host regions. To attract the foreign investors, the successive governments in Pakistan, offered various investment incentives in the form of tax concessions (tax expenditure) and direct expenditure on infrastructural provisions. The taxation policy of a host developing country has great relevance for TNCs’ involvement in production activities. It is perceived to be a significantly influential factor in determining the inflow of foreign investment through the cost of capital and the resulting after tax return. There are also many specific accusations against multinationals. They depress wages and employment at home by moving production abroad. They depress wages in their host countries by exploiting helpless workers. They choke host country growth by displacing local firms and obstructing their technological progress.

The main purpose of this paper is to analyze the effectiveness and impact of the foreign capital inflows (FCI), namely, FDI (Foreign Direct Investment) and ODA (Official Development Assistance) on economic growth of Pakistan. The organization of this paper is as follows: a detailed synopsis of the recent literature on the relevant topic is presented in next section (Section – II). The section – III deals with the data and methodology. Empirical analysis and estimated results are analyzed in Section – IV, while Section – V gives the conclusion and the last Section – VI is about the policy recommendations.

## REVIEW OF LITERATURE

Studies show diversified results about the impact of foreign capital on economic growth of a country. There are conflicting views about the opinion that foreign capital accelerates the process of economic growth.

Arshad (2008) in his study considered the role of the foreign direct investment (FDI) as a growth-enhancing factor in developing countries. FDI boost up the level of economic growth and has a tendency to promote and increase efficiency (Shahbaz, et, al., (2007) concluded in case of Pakistan. He further argued that FDI creates a positive effect on economic growth like Pakistan because it comprises of certain very important factors like capital, technology management, and market access (Shahbaz, et al., (2007). Therefore, it can be considered a positive impact of FDI inflow which it exerts on the economic development. Bashier and Bataineh (2007) investigated relationship between FDI & savings and found combination in long span of time between FDI and savings.

Chowdhury and Mavrotas (2005), concluded that FDI: is an important source of capital, complements domestic private investment which is usually associated with new job opportunities; enhances both technology transfer and spillover and human capital (knowledge and skill) enhancement boosts overall economic growth in host countries. Concerning developing countries, macro-empirical work on the FDI-growth relationship has shown that-subject to a number of crucial factors, such as the trade regime, the human capital base in the host country, financial market regulations, banking system and the degree of openness in the economy-FDI has a positive impact on overall economic growth. Alfaro et al. (2004) draw attention to financial markets as they find that FDI promotes economic growth in economies with sufficiently developed financial markets.

Choe (2003) results points towards bi-directional causality between FDI and growth, although he finds the causal impact of FDI on growth to be weak. Basu et al. (2003) addresses the question of the two-way link between growth and FDI. Basu et al. emphasize trade openness as a crucial determinant for the impact of FDI on growth, as they find two-way causality between FDI and growth in open economies, both in the short and the long run, whereas the long run causality is unidirectional from growth to FDI in relatively closed economies. There seems to be a strong relationship between FDI and growth and this relationship is highly heterogeneous across countries.

Tax incentives or free trade zones are used by some countries to attract investors, despite mixed evidence about their impact on FDI flows and the potentially high costs compared to the benefits (Piritta Sorsa, 2003). One lesson that Carkovic and Levine draw from their study is that “…do not support special tax breaks and subsidies to attract foreign capital”. FDI attracted by tax breaks or subsidies, especially if protection is part of the incentives, may be more likely to fit badly with the host country’s comparative advantages and may be less likely to be associated with enlarged trade. Moran’s (2005) paper gives many examples of such ill-fitting foreign investments.

Ahmed, Butt, and Alam (2003), found significant effect from FDI to domestic output. Calvo and Robles, (2003) concluded that FDI stimulates the investment in R&D. The work by, Xu (2000), and Alfaro et al. (2003) suggests that educational level, development of local financial markets, and other local conditions play an important role in allowing the positive effects of FDI to materialize. Borenztein et al. (1998) found that FDI raises growth, but only in countries where the labor force has achieved a certain level of education. Blomstrom and Kokko (2003) concluded that spillovers are not automatic, and local conditions influence firms’ adoption of foreign technologies and skills. Findlay (1978) argues that FDI increases the rate of technical progress in host countries through a “ contagion” or knowledge diffusion effect from the more advanced technologies in parent countries. Chenery and Strout (1966) concluded, on the basis of empirical evidence from LDCs that foreign capital has a positive effect on economic growth. Rosenstein-Rodan (1943) and Hirschmann (1981). Markusen and Venables (1999) provide an explicit application to the case of FDI. The transfer of knowledge (know-how) is a strongly emphasized, point in the FDI literature.

De Mello (1999), found strong relationship between FDI, capital accumulation, output and productivity growth. He found that effect of FDI on growth or on capital accumulation and total factor productivity (TFP) varies greatly across the countries and the extent to which FDI is growth-enhancing depends on the degree of complementarity or substitution between FDI and domestic investment. De Mello (1997) lists two main channels through which FDI may be growth enhancing. First, FDI can encourage the adoption of new technology in the production process through capital spillovers. Second, FDI may stimulate knowledge transfers, both in terms of labor training and skill acquisition and by introducing alternative management practices and better organization- de Mello (1999) looks at FDI impact on total factor productivity, which is one way of assessing the importance of the knowledge transfers. The way in which FDI affects growth is likely to depend on the economic and technological conditions in the host country. In particular, it appears that developing countries have to reach a certain level of development, in education and/or infrastructure, before they are able to capture potential benefits associated with FDI. FDI seems to have more limited growth impact in technologically less advanced countries.

FDI inflows led to higher per capita GDP, increase economic growth rate and higher productivity growth (De Mello 1997, Kumar and Siddharthan 1997, & Saggi 2000). Blomström et. al, (1994), FDI inflows had a significant positive effect on the average growth rate of per capita income. Blomström et al. (1994) argue that FDI has a positive growth-effect when a country is sufficiently rich in terms of per capita income. De Gregorio (1992), suggest a positive and significant impact of FDI on economic growth.

Borensztein, et. al, (1995), included 69 developing countries in his sample. The study found that the effect of FDI on host country growth is dependent on stock of human capital. They infer from it that flow of advanced technology brought along by FDI can increase the growth rate only by interacting with country’s absorptive capability. Markusen and Venables (1999) analyzed the effect of foreign firms on the development of domestic firms in the industrial sector.

Many economists like Borensztein, De Gregorio, and Lee (1998) and Carkovic and Levine (2002) and Alfaro et al. (2003) concluded that FDI has an exogenous little positive effect on economic growth. Hanson (2001) argues that FDI generates positive spillovers for host countries is weak. There is also a belief that FDI inflow posits negative impact on economic growth in developing countries by replacing savings (Chung, 1995). Gorg and Greenwood (2002) conclude that the effects are mostly negative. Lipsey (2002) takes a more favorable view and argues that there is evidence of positive effects. However Lipsey concluded, that there is no consistent relation between the size of inward FDI stocks or flows relative to GDP and growth. Carkovic and Levine (2002) conclude that FDI has no impact on long run growth. Shabbir and Mahmood (1992) found the negative impact of foreign capital on the national savings in Pakistan. Khan, Hasan and Malik (1992) estimated that the FCI caused to decline national savings in Pakistan during the period of 1959-60 to 1987-88. Empirical studies have found a significant negative relationship between FDI and the cost of capital in both developed and developing countries (Root & Ahmed, 1979; Auerbach, 1990; Lucas, 1993; Rubio & Rivero, 1994; Wang & Swain, 1997; Khan, 1997; and Love & Hidalgo, 2000) and (Nishat & Anjum, 1998). Leff (1969) and Griffin (1970) have analyzed the negative impacts of FCI on growth. They argued that the foreign aid could adversely affect the economic growth by substituting the domestic savings. So, the literature on effectiveness of foreign aid shows both, positive as well as the negative effects, of foreign aid on the economic development. Singh, (1988) found FDI penetration variable to have a little or no consequences for economic or industrial growth in a sample of 73 developing countries.

Maria Carkovic and Ross Levine (2002) concluded in their econometric study on FDI and GDP growth that the exogenous component of FDI does not exert a robust, independent influence on growth. However, no consensus has yet been reached on the steady state as well as dynamic effects of FDI on growth. Some studies argue that the impact of FDI on growth is highly heterogeneous across countries with relatively open economies showing statistically significant results, the other studies maintains that the direction of causality between the two variables depends on the recipient country’s trade regime. Economic reasoning supports many different forms of causality between FDI and GDP: causality from FDI to GDP, from GDP to FDI, permanent long-run movements, and transitory short-run adjustments. For open economies, causality between FDI and GDP appears to be bi-directional. But causality is bi-directional only in the short run for relatively closed economies. Long run causality for relatively closed economies is uni-directional and runs mainly from GDP to FDI.

Bhagwati (1973) has explored the importance of trade regime in benefiting the host countries in terms of economic growth and economic activity. Bhagwati, (1978), (1994); Brecher and Findlay, (1983); Brecher and Diaz-Alejandro (1977) countries gain more from FDI which follow the export promotion trade regime rather than those working under the protection of Import substitution policies. The connection between the benefits from inward FDI and the trade policy of the host country echoes an earlier suggestion by Bhagwati (1978). Balasubramanyam et al. (1996) emphasize trade openness as being crucial for acquiring the potential growth impact of FDI. He said that growth effects of FDI could be positive or negative, with negative effects associated with import-substitution policies. The results of the analysis carried out by Archanun Kohpaiboon on the impact of FDI on growth performance in investment receiving countries through a case study of Thailand for the period 1970-1999, shows that the growth impact of FDI tends to be greater under an export promotion trade regime compared to an import substitution regime.

Athukorala and Chand (2000) provide some evidence that the growth-enhancing effect of FDI would be significant and strong in countries with open trade policies and better trade regimes with export-promoting FDI. Balasubramanayam et al. (1996) found that in developing countries pursuing outward-oriented trade policies, FDI flows were associated with faster growth than in those developing countries that pursued inward oriented trade policies. These considerations suggest, that positive effects of FDI on a host economy might depend not only on local conditions and policies but also on the sector into which FDI occurs. Razin, Sadka and Yuen (1999) argue that foreign investors’ asymmetric information advantage might lead them to over-invest; Hausmann and Fernandez-Arias (2000) also cast doubts on the special merits of FDI. One of the main reasons to examine productivity spillovers from foreign-owned to domestically owned firms, as Lipsey (2002) mentions, is to understand the contribution of inward FDI to host country economic growth.

FDI can create economies of scale, infact a higher level of production can be achieved by means of the linkage effects. Further investigating the trends of FDI it is obvious that when investors earn profit, they instead of remitting abroad reinvest which requires repayment. This situation demands a favorable economic environment in a country which is an underlying factor in building up an investor’s confidence. Thus this confidence building effect is considered to be the greatest advantage of FDI inflows. Overall pace of economic growth, degree of confidence building and FDI inflows together have a positive interrelation.

Over the last couple of decades FDI has remained the largest form of capital flow in the developing countries far surpassing portfolio equity investment, private loans, and official assistance. According to the study done by Pradeep Agrawal (2000) on economic impact of foreign direct investment in south Asia by undertaking time-series, cross-section analysis of panel data from five South Asian countries; India, Pakistan, Bangladesh, Sri Lanka and Nepal, that there exist complementarily and linkage effects between foreign and national investment. Further he argues that, the impact of FDI inflows on GDP growth rate is negative prior to 1980, mildly positive for early eighties and strongly positive over the late eighties and early nineties. Bosworth, Collins and Reinhart (1999) applied a regression analysis on a sample of developing economies to analyze the effectiveness of various forms of the FCI and found that FDI has a strong positive impact on domestic savings and investments than other form of FCI like loans, portfolio investment and borrowings where some of these forms of FCI have negative impact on domestic savings and investment. Aslam (1987) examined that the public FCI did not affect the domestic investment significantly, while the private FCI covered the domestic saving-investment gap.

Shabbir and Mahmood (1992), regarding Pakistan, indicated that net foreign capital investment and disbursement of grants and external loans have a positive impact on the economic growth of Pakistan. The evidences are mixed regarding contributions of foreign aid. Ali (1993) found no significant relationship between the flow of foreign resources and economic growth in the case of Pakistan. Mosely (1980) stated that the relationship between aid and economic growth is positive for U. K. aided countries and negative for the French and Scandinavian aided countries.

Foreign direct investment (FDI) which is a strong source of exterior finance is also an outcome of capital account liberalization. It not only promotes capital formation but also helps in transferring the productive technology among countries (William, 1998).

Zhang (2001a) reports that the extent to which FDI is growth-enhancing appears to depend on country-specific characteristics. FDI may promote export of manufactured products if the FDI can enable recipient region to exert its comparative advantage. It may generate a technology spillover effect and raise productivity. It may create a demonstration effect through a closer observation in market conditions and better management knowledge. Allocating capital to more valuable uses, foreign investors would generate a demonstration effect for domestic enterprises when higher return to FDI is observed. FDI thus increase efficiency through signaling correct investment directions. Zhang and Song (2001) found that FDI to China up to 1997 promoted export. Li, Liu and Parker (2001) confirm that there is a technology spillover effect from FDI.

Athukorala and Menon (1995), Zhang and Felingham (2001) and Liu et al. (2001) find that FDI promotes the manufactured exports of recipient countries. Although there is no consensus regarding the relationship between FDI and GDP growth, to attract FDI as a strategy of development has become a trend among developing countries following the development technology transfer effect (Campos and Kinoshita, 2002), Chakraborty and Basu (2002), for example, find that increase in Indian GDP is not Granger caused by increase in FDI. The causality between Indian GDP and FDI runs more from GDP to FDI. Yet, Balasubramanyam et al. (1996), drawing upon theoretical work of Bhagwati , argue that import-substitution FDI would lead to misallocation of resources. FDI plays a positive developmental role as mentioned by Chen (1992).

Narula and Dunning (2000) point out that the increased competition for FDI is more for the “ right” kind of investment and less developed countries increasingly need to provide unique, non-replicable created assets to maintain a successful FDI-assisted development strategy.

The synopsis of recent studies tells us that FI (Foreign Investment) has a diversified impact on the economic growth of a country. It depends on various factors like, policies of a country, its trade regime, educational level, political stability etc. that whether the impact of FI will be negative or positive.

## DATA AND METHODOLOGY

I will be using the research article of Ghulam Mohey-ud-Din of GC University, Lahore as my base article. He examined the impact of FCI on economic growth of Pakistan of twenty years from 1975-2004 in his paper. He took FDI (Foreign Direct Investment) and ODA (Official Development Assistance) as independent variables and measured its impact on GDP of Pakistan and used the Multiple Regression (without intercept) Model for his analysis. There are various problems in this paper. First of all the number of observations used for the empirical analysis are too small just twenty years of data has been taken. Secondly, he used the Multiple Regression Model without intercept which is not a suitable model because if intercept is not included the independent variables become stronger and shows a very strong result which can be misleading. In the multiple regression without intercept, the line is forced to pass from origin. Thirdly, Ghulam Mohey-ud-Din did not check the stationarity of data. I am using Multiple Regression (with intercept) Model and take FDI and ODA as my independent variables and will inspect the impact of FDI and ODA on GDP of Pakistan. I am taking 38 years of data from 1970 – 2007 for my analysis.

In the previous years many economists examined various factors and under took a variety of studies to gauge the impacts of foreign capital inflows (FCIs) on the economic growth of a country. And a very wide range of methods and variables were used to examine the role of foreign Capital Inflow on the economic growth. Some studies tell us positive results about the impact of FCI on economic growth and some other studies show us a negative relationship between FCI and economic growth. This relationship varies according to the situation, country and the variables taken under consideration. FCI has many forms like ODA, FDI, grants, loan, portfolio investment etc. each type of FCI depicts its own behavior on the economic development.

It is very complicated to investigate the impact of foreign capital inflows on all the sectors and variables all at once in a single paper using a single model. The major purpose of this paper is to explore the impact of FCI on the GDP Growth in Pakistan. Therefore, I narrow down my analysis only to the impact of FCI on GDP growth and as there are many types of FCI so I am not including all of them. I am using ‘ Foreign Direct Investment’ (FDI) and ‘ Official Development Assistance’ (ODA), as independent variables for showing FCI and GDP is taken as the dependent variable. Data for GDP, FDI and ODA is taken from the “ World Bank Development Indicators: Online Database”.

## YEARS

## GDP

## (US $ Million)

## FDI

## (US $ Million)

## ODA

## (US $ Million)

1970

10027. 09

23

420. 83

1971

10602. 06

1

413. 46

1972

9309. 11

17

304. 73

1973

6324. 88

-4

282. 35

1974

8773. 03

4

444. 27

1975

11340

25

656. 92

1976

13338. 49

8. 22

1011. 75

1977

15126. 06

15. 22

585. 52

1978

17820. 1

32. 27

633. 37

1979

19707. 98

58. 25

708. 14

1980

23689. 7

63. 63

1180. 88

1981

28100. 61

108. 08

820. 78

1982

30725. 97

63. 83

913. 58

1983

28691. 89

29. 46

726. 05

1984

31151. 82

55. 51

727. 48

1985

31144. 92

131. 39

767. 49

1986

31899. 07

105. 73

912. 99

1987

33351. 53

129. 38

815. 69

1988

38472. 74

186. 49

1353. 2

1989

40171. 02

210. 6

1410. 5

1990

40010. 42

245. 26

1126. 62

1991

45451. 96

258. 41

1368. 87

1992

48635. 24

336. 48

1011. 49

1993

51478. 36

348. 56

1001. 49

1994

51894. 8

421. 02

1603. 25

1995

60636. 07

722. 63

820. 85

1996

63320. 17

921. 98

881. 91

1997

62433. 34

716. 25

595. 81

1998

62191. 96

506

1052. 53

1999

62973. 85

532

732. 93

2000

73952. 38

308

700. 35

2001

72309. 74

383

1941. 51

2002

72306. 82

823

2135. 73

2003

83244. 8

534

1070. 54

2004

97994. 78

1118

1432. 57

2005

109502. 1

2201

1624. 83

2006

127325. 8

4273

2144. 74

2007

142893. 4

5333

2212. 42

FCI is represented here in terms of FDI and ODA. Foreign Direct Investment is usually the investment done through the MNCs (Multi National Corporations). These MNCs have their own advantages and disadvantages for the host country in different form but here we are only concerned with its economic impacts on the economic growth of Pakistan. To estimate the impact of FCI (FDI + ODA) on the GDP growth in Pakistan, I will run a regression between FCI (FDI + ODA) and the GDP data for 38 years (1970-2007). I will use the ‘ Multiple Linear Regression (with intercept) Model’ in this paper. The Multiple Linear Regression Model is given as:

GDP = Î± + Î²1 FDI + Î²2 ODA + Îµ0 – – – – – – – (Eq. I)

Here;

GDP = Gross Domestic Product

FDI = Foreign Direct Investment, net inflow

ODA = Official Development Assistance

Î± = Intercept term

Î²1 = Regression Coefficients (to be estimated) measures how much units of GDP would be changed with a unit change in FDI.

Î²2 = Regression Coefficients (to be estimated) measures how much units of GDP would be changed with a unit change in FPI.

Îµ0 = Error Term

By running the Eq. I in the results of the coefficient are not very much significant that’s why I applied the log on the Eq. I and then used the OLS technique to run the line. After taking log the equation becomes like this.

LOG(GDP) = Î± + Î²1 LOG(FDI) + Î²2 LOG(ODA) + Îµ0 – – – – – – – (Eq. II)

## EMPIRICAL ANALYSIS

I checked the stationarity of all the variables before running the regression line and for checking stationarity I applied the Augmented Dick