Foreign Direct Investment and Growth: The Role of Domestic Financial Sector

By

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Introduction

- The role of FDI has been widely recognized as a growth-enhancing factor in LDCs.
- There are a variety of channels through which FDI can promote economic growth. The most important are the transfer of technology and spillovers.
- Spillover occurs through the interaction of multinational firms with domestic suppliers, customers and worker mobility.
- LDCs rely primarily on FDI as a source of external finance because FDI stimulates economic growth more than any other sources of capital inflows.

- FDI is supposed to be less volatile to offer financial resources, transfer of modern technology, market access and managerial know-how
- Financial resources are used to expand productive capacity by increasing fixed investment while transfer of technology and managerial know-how improves productive capacity.
- FDI brings various networks such as sales and procurement networks, which can be used to expand business opportunities.
- FDI also increases competitive pressures to the local firms that result in an improvement in technical and allocative efficiency.

- UNCTAD (2006) asserts that FDI has the potential to generate employment, raise productivity, transfer foreign skills and technology, enhance exports and contribute to the long-term economic development of the world's LDCs.
- Over some 64000 foreign affiliates of TNCs generate 53 million jobs.
- FDI is the largest source of external finance of LDCs, and the inward stock of FDI in 2000 amounted to around one-third of their GDP, as compared to just 10 percent in 1980.

- Zhang (2001) has noted that FDI is likely to be an engine of host country’s economic growth, because:
  - FDI may enhance capital formation and employment generation
  - FDI may promote manufacturing exports
  - FDI may bringing resources into host country such as, management know-how, access of skilled labour to international production networks, and established brand names.
  - FDI may result in technology transfers and spillover effects.
  - Improving foreign exchange reserves and facilitating stability of the BOPs
- The FDI inflows in Pakistan was $1101.7 millions in 1995-96 and was jumped to $1524 at the end of 2004-05. Today, it was around $3521 million.

Role of Domestic Financial Sector

- Hermes and Lensink (2003) have pointed out that the development of domestic financial system of the host country is an important pre-condition for FDI to have a positive impact on economic growth.
- Well-developed financial intermediaries enhancing technological innovation, capital accumulation, and economic growth
- The domestic financial system enhances the efficient allocation of resources and helps to improve absorptive capacity of a country with respect to FDI inflows.
- Development of all financial institutions exerted positive influence on economic growth

- A more developed financial system may contribute to the process of technological diffusion associated with FDI.
- If entrepreneur adopts new technologies made available by FDI, then the absence of well-developed financial markets limits the potential positive FDI externalities.
- Economies with well-developed financial markets are able to reap more benefit from FDI in promoting their economic growth.
- Financial markets affect both the financing of investment and day-to-day business activities
- Hence, well-efficient domestic financial markets encourage entrepreneurial activities and output, and attract more FDI.

Theories of FDI

- ❑ Theories play an important role in shaping legal attitudes both nationally and internationally.

(i) Neo-classical Economic Theory of FDI

- ❑The central message of this theory is that:

  – FDI contributes positively to the economic development and increases the level of social well-being, because foreign investors are bringing capital in to the host country, thereby influencing the quality and quantity of capital formation.

- Capital inflows and reinvestment of profits increases the total savings of the country and government revenue also increases through tax and other payments
- Infusion of foreign capital reduces the balance of payments pressures of the host country
- FDI replaces the inferior production technology by a superior one from advanced industrialized countries through the transfer of technology, managerial and marketing skills, market information, organizational experience, and the training of workers.
- FDI generates employment, influences incomes distribution and generates foreign exchange.
- Infrastructure facilities would be built and upgraded by foreign investors.

(ii) Dependency Theory of FDI

- According to this theory:
  - Foreign investment is harmful to the long-term economic growth of developing nations.
  - The theory asserts that First World nations became wealthy by extracting labour and other resources from the Third World nations.
  - Developing countries are inadequately compensated for their natural resources.
  - Global division of labour causes distortions, hinder growth, and increases income inequality. Hence, Third World nations must develop independently without depending on foreign capital and goods.

(iii) Industrialization Theory on FDI

- FDI represents not simply a transfer of capital, but the transfer of a “package” in which capital, management, and new technology are combined, termed as industrialization theory of FDI (Hymer, 1976)
- FDI entails a cross-border transfer of resources including, process and product technology, managerial skills, marketing and distribution know-how and human capital.

Theoretical Framework of FDI Flows and Growth

- To understand the link between FDI flows and economic growth, it is necessary to review the existing theories of growth.
- Rationale of the FDI flows and growth is based on the H-D, neoclassical and endogenous growth models.
- H-D argued that capital formation raises the standards of living, which in turn results in higher growth.
- H-D model basically compare the natural growth rate and warranted growth rate.

- It emphasizes that natural growth rate as a result of increase in labour force in the absence of technological change as compared to the warranted growth rate, which depends on the savings and investment habits of households and firms.
- However, Solow argued that capital formation increases labour productivity in a dynamic process of investment growth.
- Solow considers an economy that combines capital and labour to produce a single homogenous commodity through savings, which is proportional to income and labour productivity.
- According to neoclassical models of growth, with diminishing returns to physical capital, and exogenous technological change, FDI cannot affect the long-run growth rate.

- Unlike the neoclassical growth theories, the new growth theories have focused on the creation of technological knowledge and the way of its transmission. It views the innovation and imitation efforts that respond to economic incentives as a major engine of growth. Therefore, it emphasizes the role of R&D, human capital accumulation, and externalities
- Externalities and their impact on long-term growth have been a common element in endogenous growth models. FDI can lead to increasing returns to scale in domestic production through spillovers.
- Through endogenous growth theory we are able to examine the channels through which FDI can promote long-term growth.

Theoretical Modelling of FDI and Growth

- For the empirical purpose, we estimate the following equation:

$$RGDPG_t = \beta_0 + \beta_1 LRFDI_t + \beta_2 LFC_t + \beta_3 LRFD_t + \beta_4 (LRFDI_t \times LRFD_t) + \beta_5 CAP_t + u_t$$

- With interaction term between FDI and financial development indicator i.e.(LRFDI*LRPSC), we test the hypothesis that both FDI and financial development is complementary to enhancing the process of technological diffusion, thereby enhancing the economic performance

Empirical Results

Unit Root Test

Series	Log-level	Log-difference	Decision
LRGDPG	-5.8776(0)*	-5.8321(0)*	I(0)
LFC	-0.4538(1)	-4.0578(1)*	I(1)
LRFDI	-1.3488(3)	-6.2719(2)*	I(1)
LRPSC	-0.4660(0)	-6.4014(0)*	I(1)
LCAP	-1.8698(1)	-3.5013(1)**	I(1)
LRFDI*LRPSC	-0.6410(0)	-6.5115(0)*	I(1)

- RGDPG is I(0) and all other series are I(1). Hence the appropriate estimation technique is ARDL. ARDL representation of above equation is

$$\Delta LRGDPG_t = \beta_0 + \beta_1 LRGDPG_{t-1} + \beta_2 LRFDI_{t-1} + \beta_3 LFC_{t-1} + \beta_4 LRPSC_{t-1} + \beta_5 LCAP_{t-1}$$
$$+ \beta_6 (LRFDI \times LRPSC)_{t-1} + \sum_{i=1}^{k} \beta_7 \Delta LRGDPG_{t-i} + \sum_{i=0}^{k} \beta_8 \Delta LRFDI_{t-i} + \sum_{i=0}^{k} \beta_9 \Delta LFC_{t-i}$$
$$+ \sum_{i=0}^{k} \beta_{10} \Delta LRPSC_{t-i} + \sum_{i=0}^{k} \beta_{11} \Delta LCAP_{t-i} + \sum_{i=0}^{k} \beta_{12} \Delta (LFDI \times LFD)_{t-i} + \varepsilon_t$$

Variable	Short-run Coefficients	Long-run Coefficients
Constant	-	-4.8750*
LFC	0.3028**	1.4518*
LRFDI	-0.5897*	-0.2705*
LRPSC	0.6040*	-0.6283*
LCAP	-0.2638*	0.8184*
(LRFDI*LRPSC)	0.2310*	0.1108*

- The core objective of this study is to empirically investigate the hypothesis that FDI and domestic financial sector is complementary in enhancing the process of technological diffusion, thereby increasing the rate of economic growth. Therefore, our attention has been focused only on the variables LRFDI and the interactive term LRFDI*LRPSC.
- The interactive term LRFDI*LRPSC is positive and significant.
- LRFDI alone is negative and significant.
- This result supports the hypothesis that LRFDI exerted positive impact on economic growth if and only if when the development of the domestic financial sector has reached at a certain minimum level.

- Based on these results, we are able to determine the threshold value of LRPSC above which LFDI starts to have positive impact on growth.

Following Durham (2004), we calculated the threshold value LRPSC:

$$LRGDPG = -4.88+1.45LFC+0.82LCAP-0.27LRFDI -0.63LRPSC+0.11LRFDI*LRPSC$$

The long-run threshold level is

$$LRPSC = 2.4413$$

Similarly, the short-run threshold level is

$$LRPSC = 2.5528$$

- The antilog of 2.4413 and 2.5528 is 12.84 and 11.49. This result implies that FDI will have a positive impact on economic growth only when the private sector credit relative to GDP is above 11.49% and 12.84% in the and long-and short-run respectively. In other words, LRPSC should be larger than 11% and 13% for FDI to have positive impact on economic growth.
- The interaction term between FDI and financial development indicator is positive, while the coefficient on FDI is negative in the case of Pakistan. This suggests that FDI will have a positive impact on growth only if the domestic financial sector is well-developed and functioning efficiently, otherwise, the effect of FDI on economic growth will be negative.

Conclusions

- FDI is now widely considered as an important source for expediting economic development of LDCs.
- Pakistan has perused proactive policies to attract FDI, but local conditions can limit the potential benefits generated by FDI.
- Our Results suggest that Pakistan can enjoy the positive externalities embodied in FDI only if the efficiency and development of domestic financial sector at certain minimum level is attained.

- Pakistan can influence the technological change through extending its absorptive capacity by further promoting financial sector reforms to gain sustainable economic growth and make productive use of FDI inflows.
- Our findings suggest that FDI plays an important role in contributing to economic growth. However, domestic financial sector development is crucial for positive effects to realize that has not been shown before.
- The study also provides evidence that the link between FDI and growth is causal, where FDI promotes growth through financial sector development.
- Results further suggest that better domestic financial conditions not only attract foreign companies but also allow host economy to maximize the benefits of foreign investments.

Thank You