INTERNATIONAL JOURNAL OF LAW MANAGEMENT & HUMANITIES

[ISSN 2581-5369]

Volume 4 | Issue 3

2021

© 2021 International Journal of Law Management & Humanities

Follow this and additional works at: https://www.ijlmh.com/
Under the aegis of VidhiAagaz – Inking Your Brain (https://www.vidhiaagaz.com)

This Article is brought to you for "free" and "open access" by the International Journal of Law Management & Humanities at VidhiAagaz. It has been accepted for inclusion in International Journal of Law Management & Humanities after due review.

In case of any suggestion or complaint, please contact Gyan@vidhiaagaz.com.

To submit your Manuscript for Publication at International Journal of Law Management & Humanities, kindly email your Manuscript at submission@ijlmh.com.

Exploring the Relation between Foreign Direct Investment and Human Capital: A South Asian Perspective

OISHIKI MUKHERJEE¹ AND ATREYEE ROY²

ABSTRACT

The paper examines the impact of Human Capital in attracting Foreign Direct Investments (FDI) to South-Asian economies, with particular emphasis on India, Bangladesh, Pakistan, and Sri Lanka. There have been immense studies concerning human capital and FDI on the growth of developing and developed economies. This study uses data on FDI, GDP, Secondary School Enrolment taken as a proxy variable for Human Capital, Consumer Price Index, Export and Import, Exchange Rate, and Domestic Credit to private sectors taken from World Development Indicators provided by World Bank. Empirical analysis has been conducted with time-series data on annual percentage change for 1995-2019 using Panel Regression Model. The results portray that these developing South-Asian economies with low levels of human capital attract more FDI. Thus, human capital has a positive impact on FDI inflows. Aside from human capital, other variables that affect FDI inflows include exchange rate, trade, domestic credit, and inflation. Exchange rate appreciation attracts foreign investment, which steadily stabilizes currency volatility and allows for necessary policies. In addition, financially well-equipped economies, i.e., have a high level of domestic credit, attract more foreign investment.

JEL CLASSIFICATION: B23, C12, C23, C87, Y40, F35, F43, J2

Keywords: Human Capital, Foreign Direct Investment (FDI), South-Asian, Developing Economies, Panel Regression Model

I. Introduction

(A) Context of the Study

Theoretical studies have revealed a strong link between human capital and foreign direct investment (FDI). However, only a few observational experiments have tried to explore this interaction at the same time. This study examines the interrelationship between FDI and human

¹ Author is a student at St. Xavier's College, India.

² Author is a student at Jadavpur University Kolkata, India.

capital in developing countries of Southeast Asia with a particular focus on - India, Bangladesh, Sri Lanka, and Pakistan. A ton of literature reveals that FDI inflows facilitate technological improvement and, as a positive spillover, also induce economic growth and additional human capital. The main context of this study is to show that FDI has a positive impact on human capital variables. As FDI inflows result in higher human capital stocks, this can have a growing impact on a country's economy and thus on FDI attractiveness. If the country has skilled and educated workers, it is bound to work more efficiently and productively and attract MNCs technology. The MNCs would not have to incur extra money or time to educate them. Another critical component of human capital is health. If a country's workers are physically and mentally healthy, they are more likely to be productive. Thus, the availability of ample human resources in the host country may result in lower transaction costs, so multinationals do not need to invest as much in training staff. We see that three demand-side channels allow FDI to affect human resource growth in host countries. First, there is the transition of technologies from the MNC to the host nation affiliates, increasing the need for more trained professionals. Second, technological expertise transfers to host country associates spill overs to other domestic companies, potentially improving domestic competitiveness and the demand for qualified workers. Finally, Human capital investment can also be stimulated by physical capital. Increased investment in a physical stock could result in the production of new capital goods, increasing demand for skilled workers. The most important benefit is that these MNCs train workers, which leads to increased competitiveness, and as a result, local firms benefit from this in the long run. Thus, FDI is a natural element in developing the investment climate and attracting foreign investment. Rehabilitation of labor and technology are the significant ways to do so. Since the 1980s, limits on FDI inflows to developed countries have been substantially relaxed, resulting in a substantial increase in their effects in the 1990s. During a debt crisis in a developed economy, FDI becomes a critical financial source when other capital inflows are drastically reduced.

Furthermore, the less evolved a country is, the greater its emphasis on FDI to alleviate its skill and capital constraints and boost economic development through the positive spill overs of FDI. According to UNCTAD, FDI inflows to developing markets accounted for more than 40% of external development funding in 2015. Five of the top ten economies reaping off the benefits of FDI are China, Singapore, Brazil, Hong Kong, and India.

In current U.S. dollars, India foreign direct investment for 2019 was \$50.61B, a 20.17% increase from 2018. For Pakistan, according to the central bank's numbers, FDI dropped 35.1 percent to USD 1.395 billion during July-March, compared to USD 2.15 billion during the

same period last fiscal year. According to the UNCTAD World Investment Report 2020, FDI inflows to Bangladesh dropped by 56% in 2019 to USD 1,6 billion (USD 3,6 billion in 2018). According to the most recent Bangladesh Bank numbers, FDI flows increased by 5.36 percent yearly to USD 1.65 billion in July-October 2019. FDI inflows to Sri Lanka have slowly risen in recent years, owing to the end of the civil war and economic growth. However, according to UNCTAD's 2020 World Investment Report, inflows to Sri Lanka have fallen from a high of USD 1.6 billion in 2018 to USD 758 million in 2019.

FDI is not only a source of funding or a means of providing job opportunities; it is also a means of acquiring technologies, organizational and administrative expertise, and access to business processes. It also boosts the host country's physical and human capital growth (Busse and Groizard, 2008). To absorb such technological advances through the favorable spill over effects of FDI, the host country must possess a minimum level of human capital threshold.

(B) Rationale of the Study

The paper that motivated me to research this topic is "Human Capital and FDI Inflows to Developing Countries: New Empirical Evidence" by Farhad Noorbaksh, Alberto Paloni, and Ali Youssef 2001 Elsevier Science Ltd. This paper empirically tests that human capital is statistically a critical determinant of FDI inflows, and its relevance has become more significant over time. The analysis used in this paper is based on a regression equation; it employs panel estimation because it saves a large number of degrees of freedom. Panel data based on three-year averages are used to exterminate the random fluctuations in the data, alongside exploiting the time-series variation.

(C) Review of Related Literature

The interaction between FDI and human capital is complex. Foreign direct investment paves the way for technological and learning spill overs. At the same time, the developing countries' level of human capital determines the amount of FDI it can attract and the benefits the local labor force can gain from it. Thus, in no way is the relationship between FDI and human capital is linear and has multiple equilibria.

For instance, Farhad Noorbakhsh, Alberto Paloni have discussed whether augmenting the standard of local skills and magnifying the capabilities of human resources can attract FDI towards the developing countries. The paper also empirically tests how human capital is a statistically integrated determinant of FDI inflows and how its availability might uplift the geographical distribution of FDI. In their research,

the dependent variable is FDI, expressed as a percentage of GDP; HK as a measure of human

capital; CV is the vector of control variables; λ is a standard fixed effect term, and ϵ is a white-noise error term. The analysis is based on a regression equation; it employs panel estimation because it saves many degrees of freedom. Panel data based on three-year averages are used to exterminate the random fluctuations in the data, alongside exploiting the time-series variation. This paper successfully pointed out that human capital

is essential for attracting FDI. The coefficients of proxy variables for human capital are always significant, mainly at the 1% level. The growth rate of market size, trade openness, and past changes in FDI inflows are of prime importance. The role of Human capital in FDI inflows becomes increasingly crucial over time.

Magnus Blomström and Ari Kokko have noted the interaction between FDI, and human capital is highly non-linear and complex, with an incidence of several distinguished outcomes. The level of human capital impacts the geographical attraction of FDI flows and whether the host country will absorb the positive benefits from "spill over effects."

Basu Sharma and Azmat Gani have analyzed the effect of FDI on human development from 1975 to 1999. The variables essential for accounting for the variations in HDI are- Economic Growth, Government, Unproductive Expenditure, Misery, Conflict. A regression analysis was conducted on a fixed-effects model. The study's findings include meaningful inferences for public policy in regards to multinational corporations and host countries. FDI contributes to the amplification of human development through a positive effect on economic growth and infrastructure development. This further implies that open economic policies that drive towards integrating national economies globally are essential factors for human development. Moreover, it has been well established that TNCs invest more in countries with higher levels of achievement if human capital, and governments should work towards enhancing the elements of human development of their population.

Dr. Muhammad Aslam Khan has asserted that one of the major causes of slow economic growth is backdated technology, inadequate knowledge, and poor skills. So, to gain from intensified FDI flows, corporate expertise and market-driven skills need to be developed. The South Asian economies benefit from investing in crucial infrastructure and fortify economic sectors. Flows, corporate knowledge, and market-driven skills need to be developed.

Khalid Zaman, Iqtidar Ali Shah, and Muhammad Mushtaq Khan have tried to recognize major macroeconomic factors that invigorate FDI inflow to Pakistan over a time period from 1980 to 2008. They used a Johanson co-integration model to establish a long-term relationship between variables and an error correction model for the short-run dynamics. GDP, FDI, TOP (trade

openness), HCAP (primary school enrollment in millions has been taken as a proxy variable for human capital), SIZE (government size), and CPI. They have noted that there exists a long-term relationship between FDI and the variables taken into consideration. FDI, along with the other factors, impacts the economic growth of the host country. The extent to which an FDI inflow will benefit an economy depends on the absorptive capacity concocted through increased capital goods import, exports, human capital development, and trade liberalization policies. It also shows that higher inflation subdues the economic growth of the selected country.

T. Bhavan, Changsheng Xu, and Chunping Zhong have tried to investigate significant determinants of FDI in the selected South Asian economies from period 1995-2008 and analyze the growth effect of FDI using a growth model. A gravity model and a growth model were used. The variables taken are as follows - FDI_{ijt} is the log of total FDI flow from home country j to the host country I in time t; g_{it} denotes the log of growth rate in host countries; g_{jt} denotes log of growth rate in home countries; Y_{it} and Y_{jt} represent log of GDP in host and home country respectively; dist_{ij} is the log of the distance between home and host country; V_{irt} denotes the vector of r variables that influences FDI inflow to host countries; v_t denotes time effects, and ε_{ijt} is the white noise error term. They found that All the explanatory variables positively impact the economic growth of home and host countries, while the distance variable has a negative association with FDI. The exchange rate is positively related to FDI. HDI is insignificant in impacting FDI inflows. Log of GDP has a positive and significant impact on FDI flows to South Asian countries. Business cycles in host and home countries play an important role in pulling and pushing factors, respectively.

Meskerem Demissie has examined the general impact of FDI on the economic growth of 56 developing countries from 1985-2014. The research methodology follows the growth model of Borensztein et al (1998) and Alfaro et al (2003). Panel data estimation was implemented to analyze the impact of economic growth on the host country. OLS estimation, the Random-effects model; the Hausman test; the Endogeneity test was used. The variables used in the econometric framework are the natural logarithm of GDP, which is a proxy variable for economic growth; FDI; Inflation; Trade openness; Government expenditure, and human capital. The study realized that FDI has a positive effect on economic growth. Inflation is statistically significant, with a negative impact on growth. The coefficient of trade openness is negative in all models. The coefficient of human capital has a positive effect and is highly vital for growth.

In her paper, Vrinda Gupta has conducted a national level analysis succeeding a state-level

study to scrutinize whether growth in FDI and human capital development enhance each other exclusively in the context of India. The research conducted here is based on secondary data which has been accumulated from various sources. A time-series data has been considered for FDI and human capital for the period 1975-2013. World Development Indicators (World Bank) has provided the data on FDI stock. Gross enrollment ratio in secondary and tertiary education and Life Expectancy at birth is taken as proxy variables to indicate the Human Capital Index. The required data on Infant Mortality Rate, Crude Death Rate, and Crude Birth Rate has been collected from the Planning Commission's website, Government of India, Gross State Domestic Product from Directorate of Economics, and the necessary statistical data has been taken from Central Statistics Office (CSO). The methodology used to gain the empirical results is the Granger Causality Approach, which examines a two-way relation between human capital development and FDI growth.

A Panel Regression Model is also used with two specifications- Fixed Effects and Random Effects. This model tests the impact of human capital on FDI inflows. The findings of this paper states-

- The hypothesis that FDI inflows and Human Capital Development have a casual twoway relation has been empirically refuted exclusively for India.
- Indian Brand Equity Foundation (IBEF), 2014, has statistically shown that the cheap availability of efficient human capital in the IT sector has attracted FDI inflows.
- The results of the Panel Regression Model have invalidated and negated the coefficient on the human capital index hence concluding that human capital doesn't play a significant role in attracting FDI to different regions.
- The regional mobility of skilled or unskilled laborers across states makes a state's own human capital endowment indecisive and insignificant.

(D) Research Gap

Globalization has brought a lot of changes during the last two decades. The world economy has gone through multi-faceted crises, both financial and global leading developing economies to take major blows economically. This has also resulted in lowering economic barriers and opening several emerging market economies to FDI. Most of these investments have been nurtured over time and are mainly directed towards services, new technology, training workers. Much study has been conducted in this area to conclude that FDI and human capital have a complex relationship. It is assumed that the MNCs play a role in this by generating human

capital spillover effects. But this is highly non-linear in the sense that the spillover of knowledge and education from these MNCs depends on the host country's level of human capital. Host countries with higher levels of human capital are most likely to attract foreign MNCs that would help contribute mainly to developing the skill set of the local labor.

On the other hand, developing countries with a lower level of human capital are most likely to attract a lower investment level from these MNCs. They are going to use lower classes of technology. It has been brought to notice that significantly less is known in this field. There is not much data or research on the training activities that these multinational companies are engaged in and how they influence the local employees and labourers to work in their local firms or set up firms for themselves. There is a massive necessity for further research in the relationship between human capital and FDI, the extent of the spill over effects of these foreign MNCs on the local economy, and human capital due to the training and education. The first notable discussions of spill overs as a result of FDI dates back to the 1960s. The most prominent among them is MacDougall (1960), who detailed analysis of the welfare effects of foreign investments. Corden (1967) looked into the impact of FDI on optimum tariff policy. Caves (1971) also contributed to examining the industrial pattern and welfare effects of FDI. These studies have proposed that the presence of MNCs would result in higher technological diffusion, improvement of allocative efficiency by entering into these developing economies. A considerable number of research and case studies have shown a long list of spillover effects, but little is revealed about their general importance. Circumstantial evidence has been shown everywhere, but little or none has been written about their significance them. We see in numerous papers that there have been technological and educational transfers between MNCs and local employees and subcontractors, which could be the basis of a spillover. Still, almost nothing is known whether these MNCs could benefit from this technology and knowledge diffusion. Hence, no clear proof has been found. Similarly, there is a lot documented on the entry of MNCs and the various channels of spillover effects; nothing is mentioned about their overall importance and impacts.

Previous research has demonstrated that there is potential for positive externalities through FDI and human capital development. The spill over effects is not the immediate consequences of the presence of MNCs. The benefits come to effect only when the local labor has an initial level of education and human capital; they have the ability and motivation to soak in a higher level of knowledge and skills. However, the authors Magnus Blomström and Ari Kokko, in their paper , have concluded that knowledge is very limited sketchy. There is enormous potential for further research to develop a clearer image of the relationship between FDI and

human capital, which could further lead to better strategies and policies for developing countries and MNCs.

Khalid Zaman, Iqtidar Ali, and Muhammad Mushtaq Khan's paper had a very restricted scope of the study, which induced in non-inclusion of all the factors on FDI growth in the selected developing economy. Again, since this paper focuses on a particular nation that retains its distinct characteristics, we cannot generalize its findings and conclusions for South Asia or the global framework.

The proxy variables for human capital used in the econometric analysis done by Farhad Noorbakhsh, Alberto Paloni may be a distant variable for the quality of labor.

Vrinda Gupta has clearly stated that inconsistency in cross-section and time-series data has restricted examining the effect of the variables considered in the model. She has also suggested that specific sector studies can be conducted to scrutinize the influence of human capital on FDI growth. The inclusion of factors like migration, training, research, and development activities in the Human Capital Index may enhance the quality and reliability of findings.

(E) Objectives of the Study

The objectives of my study are given as follows-

- To examine the conceptual framework between FDI and human capital in selected South Asian economies.
- An exploration of determinants of FDI in the selected countries within the framework of human capital.

(F) Proposed Data and Methodology

This study considers the four South-Asian economies, namely; India, Bangladesh, Sri Lanka, and Pakistan. Secondary data from the World Development Indicators (World Bank) has been considered for the period 1995-2019, and empirical analysis has been conducted on the collected data.

(G) Limitations of the Study

In this study, we have restrained ourselves to only four South-Asian countries due to the paucity of time. It is believed that if more developing countries, globally, could be included in our analysis, then more detailed and comprehensive results could have been achieved. There exists a lack of consistency due to the unavailability of data for specific years. As a consequence, the accuracy of the results might be compromised to a certain extent. Several other variables could also be taken into account to get an even more precise image of how the economy could attract

more FDI inflows for economic development, such as wages and salary per capita, corruption cases, expenditures on the health sector, indirect taxes, and likewise.

II. CONCEPTUAL FRAMEWORK

Foreign direct investment (FDI) is generally acknowledged to play an essential role in global growth and development. According to UNIDO, Industrial plans in developing countries often aim to draw FDI inflows, and Southeast Asian countries have proved to be leaders in this regard. South and East Asia, on average in the 1980s, attracted 7% of annual global FDI flows and slightly under 15% in the 1990s. The share of FDI every year is pretty asymmetric, with some south Asian economies faring much better than others. For the fourth consecutive year, share of FDI as a percentage of GDP in South Asian countries increased in 2006. Inflows to India (\$11.7 billion), Pakistan (\$6.0 billion), and Bangladesh were aided by better economic conditions and a more transparent FDI environment. Among South Asian countries, India has emerged as the most powerful host nation.

Notably, foreign contracting and supplier partnerships ('offshore outsourcing') have continued to be centralized in the economics of East and Southeast Asia, with the economic potential of these areas serving a large portion of the global economy. India went through liberalization in 1991, which is one of the driving factors of FDI flows. This is shown by advancements in procurement and outsourcing and the digital convergence of manufacturing, marketing, and service networks as integrated structures that can be delivered globally. Multinational firms do most of these via their strategic partnerships with associates, branches, and vendors, which are becoming more diverse and fluid. Economies of scale and economies of opportunity can be used to achieve a strategic edge. The Southeast Asian field encompasses a diverse number of countries at varying levels of economic growth and transformation. It thus serves as a valuable topic of research for the majority of developing countries.

Peter Buckley popularised the concept of multinational enterprises (MNEs) as global networks that aim to "circulate mobile inputs worldwide, to blend with locationally fixed influences." These MNCs outsource jobs to other countries and thus cause spillovers of technological and educational knowledge.

Human capital is a competitive advantage that a developed economy can have through low costs, multilingualism, and solid education, especially technical education and vocational training. Singapore's experience shows that countries with limited natural resources can also draw vast amounts of FDI by providing high-quality human capital to foreign investors. Countries that can provide affordable labor will always attract FDI.

The World Bank's annual Human Capital Index, which ranks core components of human capital across countries, has ranked India 116th in the latest edition. However, India's ranking rose from 0.44 in 2018 to 0.49 in 2019. With a score of 0.46, Bangladesh ranks 123rd. Bangladesh's results in the World Bank's Human Capital Index deteriorated in 2020, with the country's score falling by two percentage points to 0.46 points in the year, down from 0.48 points in 2018. Bangladesh's Human Capital Index performance declined in 2020, with the country's score dipping by two percentage points to 0.46 points in the year, down from 0.48 points in 2018. Pakistan ranks 144 with a score of 0.41. Sri Lanka leads the South Asian area on the latest Human Capital Index, with 74.

III. DATA AND METHODOLOGY

(A) Data and Variables

The nature of the current study is empirical and is based on secondary data, all of which have been collected from World Development Indicators provided by the World Bank. The data used for the analysis are time-series data on annual percentage change for the period 1995-2019. The variables for which the necessary data has been collected are defined as follows-

a. Foreign Direct Investment (FDI):

The World Investment Report (2012) by United Nations Conference on Trade and Development (UNCTAD) defined FDI as "Foreign direct investment (FDI) is defined as an investment involving a long-term relationship and reflecting a long-term interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in another economy (FDI enterprise or affiliate enterprise or foreign affiliate). FFDI means that the investor has a considerable impact on the management of the business based in the other economy. Such an investment includes both the initial transaction between the two companies as well as any future transactions between them and their overseas affiliates, both incorporated and unincorporated. Individuals and business entities may both engage in FDI."

b. Gross Domestic Product (GDP):

""GDP per capita is calculated by dividing gross domestic product by the midyear population." GDP at purchaser's prices equals the total of the gross value contributed by all resident producers in the economy plus any product taxes and minus any subsidies not included in the product value. It is computed without taking into account the depreciation of manufactured assets or the depletion and deterioration of natural resources. Data are in constant local currency" (World Bank).

c. Human Capital:

"GDP at purchaser's prices is the sum of the gross value provided by all resident producers in the economy plus any product taxes and minus any subsidies not included in the product value. It is calculated without taking into consideration the depreciation of produced assets or the depletion of natural resources." (World Bank). The secondary school enrolment as a percentage of gross enrolment ratio is considered to be the proxy variable for human capital.

d. Inflation:

Consumer Price Index or CPI is an index required to measure retail inflation in the economy by amassing the change in prices of the most common goods and services consumers buy. "The consumer price index (CPI) represents variations in the cost to the average consumer of obtaining a basket of goods and services that may be set or modified at predetermined intervals, such as annually." (World Bank).

e. Export and Import:

"The value of services exported and imported by a country's residents reflects the value of services given to residents of other countries by a country's people and those received by residents of the domestic territory. They are the credits and debits of international service transactions as reported by the International Monetary Fund in its Balance of Payments Statistics. The economic production of intangible commodities that may be created, transmitted, and consumed at the same time is described as services." (UNCTAD).

f. Exchange Rate:

"The real effective exchange rate is the nominal effective exchange rate (a measure of a currency's worth relative to a weighted average of multiple foreign currencies) divided by a price deflator or cost index." (World Bank)

g. Domestic Credit to Private Sectors:

"Domestic credit provided by banks to the private sector refers to financial resources provided to the private sector by other depository corporations (deposit-taking corporations other than central banks), such as loans, purchases of non-equity securities, and trade credits and other accounts receivable, which establish a claim for repayment. For certain nations, these claims include credit to public enterprises" (World Bank).

(B) Empirical Specifications

This empirical study analyses the relationship between FDI and Human Capital along with various other variables using panel structure, and the equation can be stated as follows:

 $lfdi_{it} = \alpha + \beta_1 lgdp_{it} + \beta_2 lhc_{it} + \beta_3 lcpi_{it} + \beta_4 lx_{it} + \beta_5 lm_{it} + \beta_6 ler_{it} + \beta_7 ldomcredit_{it} + \epsilon_{it}$

i= number of countries =4

t= selected time period (1995-2019) = 25

lfdi_{it}= Natural logarithmic value of FDI per capita for country i in time period t

lgdp_{it}= Natural logarithmic value of GDP per capita (annual %) for country i in time period t

lhc_{it}= Natural logarithmic value of the human capital index for country i in time period t

lcpi_{it}= Natural logarithmic value of inflation for country i in time period t

lx_{it}= Natural logarithmic value of exports for country i in time period t

lm_{it}= Natural logarithmic value of imports for country i in time period t

ler_{it}= Natural logarithmic value of exchange rate for country i in time period t

ldomcredit_{it}= Natural logarithmic value of domestic credit for country i in time period t

 ε_{it} = error term for country i in time period t

In this case, there are both country-specific and time-specific effects. A Panel Regression Model comprises of two specifications- Fixed Effects and Random Effects. So, fixed effect and random effect estimations are done in this empirical analysis. The Random Effects model assumes that the time-specific effect is more dominant than the country-specific effect. In contrast, the Fixed Effects model assumes that the country-specific impact is the dominant factor. Before we proceed with the regression test, one must examine which one amongst the two aforementioned models is better suited for the exercise. Hence, the Hausman test is conducted to comprehend the relevance of a particular model regarding our current analysis. The null hypothesis of this test assumes that the model follows Random Effects, and the alternative hypothesis states that the model follows Fixed Effects. We reject the null hypothesis if the probability is less than 0.05 (P<0.05). The test results of the Random Effects regression are mentioned below in Table 1.

According to the Hausman test result using random effects regression, the probability is 0.0001(<0.05), hence the null hypothesis is rejected, and fixed effect regression is accepted. The test results of the Fixed Effects regression are given below in Table 2.

(C) Empirical Findings

The overall significance of the Fixed Effect regression model is given by F=13.32, which is significant at the 5% level. The equation is given by-

 $lfdi_{it} = 4.89 + 0.01lgdp_{it} - 2.63lhc_{it} + 1.43lcpi_{it} - 1.73lx_{it} + 1.66lm_{it} - 1.82ler_{it} + 1.87ldomcredit_{it}$

The above analysis states that GDP is statistically insignificant in affecting FDI since the probability is much more than 0.05. Using heterogeneous panel estimators, it has been empirically stated by Hansel and Rand (2006) that in developing countries, there is no long-run effect of GDP on FDI.

Secondary school enrolment as a percentage of gross enrolment ratio, taken as a proxy variable for human capital index, significantly affects FDI, but the effect is negative. A negative relationship can be attributed to the factor that countries with a deficiency in skill formation need foreign investments. The selected south Asian countries struggle with human capital development. Hence, to improve their labor market conditions, infrastructure, and economic activities, foreign establishments need to offer financial support via investments. Vrinda Gupta has presented a similar analysis in context to the Indian scenario.

Inflation is an indicator of the economic stability of an economy. But the regression result portrays an unanticipated positive relation between inflation and FDI. This indicates that inflation is not a primary factor for attracting FDI inflow into a country; there are various other more significant factors whose influence overpowers the growth in inflation.

The effects of trade on FDI are significant but unexpectedly negative; it means a fall in exports or, rise in imports attracts FDI inflow into the host country. A similar conclusion has been attained by Lionel Fontagné (Fontagn, where it is said that in the short term, there exists a complementary relationship between trade and FDI. While the investing country improves, the condition of the host country deteriorates temporarily.

The regression analysis states that the effect of the exchange rate on FDI is significant, but a negative relationship exists between them. Jaratin Lily and Mori Kogid explain that the relationship between exchange rate and FDI depends on the objective of FDI. If the investment is intended to impact and accelerate the local market, then there is a negative relation. But if the purpose is reexporting and costs reduction, then the link between them becomes positive. Zafar Mueen Ñas ir and Arshad Hassan clearly explain that exchange rate appreciation indicates policies should be designed to achieve stability in currency fluctuation. Only then, foreign investors would be keen on taking a step forward to facilitate economic growth.

The effect of Domestic Credit on FDI is significant and positive. Financially strong economies catalyze the inflow of foreign investment. If a country is submerging with debts and low levels of economic development, foreign establishments find it challenging to infiltrate such an economy without incurring losses; hence, they are highly demotivated towards it.

IV. CONCLUSION

The current empirical analysis endeavors to analyze the connection between FDI and human capital from a South Asian perspective. The study applies a Panel Regression Model possessing both country-specific and time-specific effects. Hence, fixed effects and random effects estimation are done by conducting the Hausman test. The outcomes portray that these developing South-Asian economies with low levels of human capital attract more FDI. The realities expressed that more than the availability of exceptionally qualified laborers, it is the cheap accessibility of human resources that may drive in FDI. Since these countries provide skilled workers at affordable costs, it always appeals the overseas investments. Other than Human Capital, other factors influence FDI inflow, such as exchange rate, trade, domestic credit, and inflation. Exchange rate appreciation brings in foreign investments, which gradually stabilizes currency fluctuations in the economy and accordingly develops required policies. Economies that are financially equipped, i.e., with high domestic credit, drive in more overseas funding. Low levels of trade and a rise in inflation, as shown by the results, do not restrain foreign companies from investing in the said economies.

V. POLICY RECOMMENDATIONS

- a) Market-driven skills and appropriate know-how occupy the potential sources of productivity and competitiveness to reap a relatively sustainable economic rise and create a congenial environment for foreign funding. One of the important causes of slow socio-financial progress in the South Asian countries stems from inadequate skills, a low understanding base, and obsolete technology. The South Asian nations want to expand corporate knowledge and market-driven multiple skills to enjoy the magnified FDI flows.
- b) Human capital is a competitive benefit that a developing country can provide via language abilities, low cost, and stable education, mainly technical training and vocational training.
- c) Globalization has made the world witnessed a surge of recent initiatives on finance, foreign trade, and development. The South Asian nations, as a set, have to date accomplished little progress in mobilizing required monetary assets. These economies can attract massive amounts of FDI with the aid of growing human capital, investing in crucial infrastructure inclusive of roads, ports, telecommunications, strength networks, and strengthening economic sectors to increase and maintain competitiveness inside the international market.
- d) Vocational and technical education will advance these developing economies from laborintensive to skill-intensive. Hence, human resources should be allocated efficiently to facilitate foreign investments.

e) Reduction in inflation and currency fluctuations by devising appropriate policies will attract overseas investment into these nations. The policymakers must focus on the channels to stimulate investment in human capital through trade in services and the import of intellectual capital.

VI. REFERENCES

- 1. Anitha, R. (2012). FOREIGN DIRECT INVESTMENTS AND ECONOMIC GROWTH IN INDIA.
- 2. Bhavan, T., Xu, C., & Zhong, C. (2011). Determinants and Growth Effect of FDI in South Asian Economies: Evidence from a Panel Data Analysis.
- 3. Demissie, M. (2015). FDI, Human Capital, and Economic Growth- A panel data analysis of developing countries.
- 4. Farhad Noorbakhsh, A. P. (2001). Human capital and FDI Inflows to Developing Countries: New Empirical Evidence.
- 5. Fontagné, L. (1999). FOREIGN DIRECT INVESTMENTS AND INTERNATIONAL TRADE: COMPLEMENTS OR SUBSTITUTES?
- 6. Freeman, & Bartels. (2004).
- 7. Gupta, V. (2017). Exploring the Relation between Human Capital and Foreign Direct Investment- Indian Context.
- 8. Herzer, & Dierk. (2010). How Does FOREIGN DIRECT INVESTMENT REALLY AFFECT DEVELOPING COUNTRIES' GROWTH?
- 9. ir, Z. M., & Hassan, A. (2011). ECONOMIC FREEDOM, EXCHANGE RATE STABILITY AND FDI IN SOUTH ASIA.
- Khan, D. M. (2007). Role of Human Capital in Attracting Foreign Direct Investment: A South Asian Perspective.
- 11. Kokko, Blomström, M., & Ari. (2002). FDI and Human Capital: A Research Agenda.
- 12. Lily, J., & Kogid, M. (2014). EXCHANGE RATE MOVEMENTS AND FOREIGN DIRECT INVESTMENTS IN ASEAN ECONOMIES.
- 13. Meeting, U. E. (21-23 March 2005). Foreign Direct Investment in Southeast Asia: Experience and Future Policy Implications for Developing Countries. Bangkok.
- 14. Noorbakhsh, F., & Paloni, A. (2001).
- 15. Sharma, B., & Gani, A. (2004). The Effects of Foreign DIrect Investment On Human Development.
- 16. Zaman, K., Shah, I. A., & Khan, M. M. (2011). Macroeconomic factors determining FDI impact on Pakistan's growth.

VII. APPENDIX

Table 1: Results for Random Effects GLS Regression

Random-effects GLS regression Group variable: cty	Number of obs = Number of groups =	67 4
R-sq: within = 0.5291 between = 0.0507 overall = 0.4618	Obs per group: min = avg = max =	8 16.8 24
Random effects u_i ~ Gaussian corr(u_i, X) = 0 (assumed)	Wald chi2(7) = Prob > chi2 =	50.62 0.0000

. xtreg lfdi lgdp lhc lcpi lx lm ler ldomcredit, re

1fdi	Coef.	Std. Err.	Z	P> z	[95% Conf.	Interval]
lgdp lhc lcpi lx lm ler ldomcredit _cons	0152915 9845095 .2746818 .200357 .5032905 .0705094 1.181206 -3.80708	.1355747 .2990095 .2490295 .6684704 .5942721 .334342 .4222809 .9992566	-0.11 -3.29 1.10 0.30 0.85 0.21 2.80 -3.81	0.910 0.001 0.270 0.764 0.397 0.833 0.005 0.000	2810131 -1.570557 213407 -1.109821 6614615 584789 .3535503 -5.765587	.25043 3984616 .7627706 1.510535 1.668042 .7258077 2.008861 -1.848573
sigma_u sigma_e rho	.40568917 0	(fraction	of varia	nce due 1	to u_i)	

Table 2: Results for Fixed-effects (within) Regression

Fixed-effects (within) regression Group variable: cty	Number of obs = Number of groups =	67 4
R-sq: within = 0.6248 between = 0.0628 overall = 0.1291	Obs per group: min = avg = max =	8 16.8 24
corr(u_i, Xb) = -0.8072	F(7,56) = Prob > F =	13.32 0.0000

1fdi	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
lgdp lhc lcpi lx lm ler ldomcredit _cons	.0015117 -2.626724 1.428427 -1.732254 1.659788 -1.81645 1.867678 4.89412	.1081117 .7784719 .623129 .6221995 .5706625 .8975917 .368045 3.570568	0.01 -3.37 2.29 -2.78 2.91 -2.02 5.07 1.37	0.989 0.001 0.026 0.007 0.005 0.048 0.000 0.176	215062 -4.18619 .1801499 -2.97867 .5166139 -3.614542 1.130395 -2.258588	.2180854 -1.067257 2.676705 485839 2.802962 018358 2.604961 12.04683
sigma_u sigma_e rho	1.2839945 .40568917 .90923154	(fraction	of varia	nce due t	co u_i)	

F test that all $u_i=0$: F(3, 56) = 13.26 Prob > F = 0.0000