A Study on Impact of FDI Flows on Poverty Reduction in India

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Abstract

A key element for successful economic growth in the developing countries is foreign direct investment (FDI) due to the fact that it makes possible the fast and effective transfer and adoption of "best practices" across the national boundaries. Foreign direct investment also translates into large-scale growth, including the improvement of human capital. Considering growth to be one of the most important factors for causing a reduction in poverty, FDI is critical to achieve this goal. Keeping in view this fact, the present paper investigated the relationship between FDI inflows and poverty reduction in India during the time period from 1990 - 2013. This study employed ARDL (auto regressive distributed lag) approach to study the relationship between the two variables. To measure the extent of poverty reduction in the country, the study used HDI index as a welfare proxy due to limited data available on poverty headcount in India. The independent and control variables considered in the study included net FDI inflows as a percentage of GDP, general government final consumption expenditure as % of GDP, education measured by school enrollment ratio, and inflation. The results of this study revealed that there existed a short-run positive relationship between FDI inflows and poverty reduction in India, that is, the increase in the FDI inflows led to an increase in the HDI, which means an increase in the welfare of the poor, hence resulting in poverty reduction. However, the findings of the study indicated the non-existence of a long run relationship between the FDI inflows and poverty reduction in India.

Keywords : economic development, FDI inflows, poverty reduction, Human Development Index

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Investment is known to be the engine of sustainable growth. However, in the developing countries, the level of national savings is quite low. Consequently, there is a big gap between the rate of required investment and the existing savings rate. The alternative source of capital that can be used to fill this gap and promote sustainable development is foreign direct investment (FDI). The shortage of capital, which leads to more poverty in developing countries, has often been linked to weak and volatile financial markets that do not collect and distribute resources efficiently. The common belief that foreign capital can contribute to poverty reduction through making for the shortfall was used to justify the political initiatives to promote FDI and to improve its contribution to economic development.

The issue of poverty is one of the most debated topics on the world stage. For the first time in history, the reduction of extreme poverty had a tangible scale because it is one of the eight millennium development goals (MDGs) promising to reduce by half extreme poverty till 2015. According to the *Millennium Development Goals Report 2013*, majority of the poor live in the developing regions of the world (as cited in Agarwal & Atri, 2015). A higher degree of growth would greatly benefit the developing regions in poverty alleviation. Therefore, the

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benefits of FDI in terms of growth are more pronounced for the developing countries.

After independence, India had adopted a mixed economic model focusing on import substitution strategy. In June 1991, a deliberate strategy of integration into the global economy was established to integrate the Indian economy into the global economy. The reforms introduced under the new economic policy reflected the provision of India to facilitate the introduction of foreign capital, management methods, industrial technologies, and their commitment to modernize their economy within the framework of open international economic relations around poverty, a fair society, and reach true self-sufficiency. Against this background, it will be interesting to analyze the link between FDI and poverty in India. The issue of linking the FDI flows with poverty reduction has attracted the interest of researchers across the globe.

Review of Literature

A study by Hung (2004) aimed at studying the effects of FDI (both direct and indirect) on poverty reduction. The methodology employed in the paper for panel data in provinces and cities was the two stage ordinary least squares method and the data were for the period from 1992-2002. The variables considered in the study included FDI inflows, private investments, government spending, gross domestic product (GDP), GDP growth rate, and employment. The results showed that FDI inflows in a province had a significant impact on economic growth, which also had a significant positive impact on poverty reduction. In addition, FDI inflows also had a direct and very positive impact on the reduction in poverty in a province.

Another study by Rafi and Hussain (2013) focused on determining whether FDI played an important role in economic growth and thus poverty reduction in Pakistan. The methodology used in this study was the correlation analysis and regression for the period from 2007- 2012 for Pakistan. The dependent variable taken was poverty (poverty rate) and the independent variables were FDI and three intermediate variables, namely GDP, the labor market, and per capita income. The results showed that reducing poverty had a strong negative correlation with FDI and per capita income.

A similar study by Shamim, Azeem, and Naqvi (2014) aimed at the following objectives: first, to analyze the pattern of FDI in Pakistan; secondly, to investigate the role of FDI in reducing poverty in Pakistan and, thirdly, to propose policies to achieve the desired objectives. Using time series data for the period from 1973-2011, the authors applied auto regressive distributed lag model and Johansen co-integration technique. The major variables used in the study included gross domestic product (GDP), foreign direct investment (FDI), financial development (FD), head count ratio (HCR), public investment (PI), trade openness, investment to GDP ratio, exchange rate, and political stability. The results showed that FDI had a negative impact on poverty and thus contributed in reducing the poverty in the country as well as other variables such as financial development, gross domestic product, and public investment, which also reduced poverty in the country.

Thereafter, a study by Agarwal and Atri (2015) examined empirically the impact of FDI flows on poverty in India (analyzing separately for FDI inflows and FDI outflows). A comparative study was then undertaken for SAARC countries. The methodology used in the study was generalized least square method. The data were collected for the period from 1980 to 2011. The dependent variable for the study was poverty, which was measured from head count ratio and poverty gap index. The explanatory variable of the study was the flow of FDI. The control variables in the model were total fertility rate, log of school enrollment, general government final consumption expenditure, agricultural growth rate, and non-agricultural growth rate. The results showed that in India, FDI inflows increased the poverty levels, while for the other SAARC countries, FDI flows caused significant reduction in poverty.

A study by Fauzel, Seetanah, and Sannassee (2016) aimed to investigate the extent to which the foreign direct investment flows of Mauritius reduced poverty and increased well - being. The econometric technique employed was dynamic vector auto regressive model for the period from 1980 - 2013. The study used time - series data. The

dependent variable of the study was welfare measured by HDI ; the independent variable was FDI measured as a ratio of FDI to real GDP. The results showed that, in fact, foreign direct investment had made a contribution to poverty reduction ; although, the value of the coefficient was relatively lower in the short term as was in the long term.

Moreover, a study by Magombeyi, Odhiambo, and Nicholas (2017) examined the direct impact of FDI on reducing poverty in South Africa. This study employed three poverty measures; first was the household consumption expenditure (Pov 1); second via the infant mortality rate (Pov 2), and third was life expectancy (Pov 3). The time period of this study was from 1984 - 2014. The econometric technique used in the study was the autoregressive distributed lag approach. The independent variable of the study was FDI, and the control variables in the study were gross primary school enrollment, a summation of imports and exports as a proportion of GDP, consumer price index, and infrastructure captured by fixed telephone lines. The main source of data used in the study were The World Bank development indicators. The results showed that the impact of FDI on poverty reduction was sensitive to the poverty reduction proxy and the time under consideration, whether the analysis was done for long-term or short-term. When child mortality was used as an indicator of poverty reduction, the study indicated a positive impact of FDI on poverty reduction in the long-term, but in the short-term, there was a negative impact on poverty reduction. However, when proxied by household consumption expenditure and life expectancy, the study showed no significant link between FDI and the reduction of poverty, neither short-term nor long-term. Chawla and Sharma (2014) attempted to establish a relation between macro-economic variables and the inflow of foreign investment in India through a review of studies in this area.

Objectives of the Study

The review of literature indicates that the dynamic impact of FDI on poverty is widely covered in the literature, although the results are still inconclusive. Most studies have separately explored the indirect effects of FDI inflows on poverty achieved through economic growth channels, and the direct impact of FDI inflows on poverty through employment creation. Empirical studies to examine the effects of FDI inflows on poverty reduction in India are very limited. The present study is a preliminary attempt to fill this gap. The major objectives of the present study are as follows :

(i) To examine the theoretical linkages between foreign direct investment and poverty reduction.

(ii) To investigate empirically the relationship between FDI inflows and poverty reduction in India.

Methodology and Data Sources

First, in order to examine the theoretical linkages between FDI and poverty reduction, the study draws heavily on review of existing literature. Next, for investigating empirically the relationship between FDI inflows and poverty reduction in India, time series analysis was done covering the period from 1990 - 2013. The study makes use of secondary data for empirical tests.

On the basis of review of literature done in the present study, the following econometric model has been constructed in the present study :

$$\text{Welfare} = \alpha + \beta \times \text{FDI} + \Sigma \gamma t \times \text{Economic Vars} + \varepsilon, \qquad \qquad ..... (1)$$

where, Human Development Index (HDI) has been used to measure welfare and as a proxy for poverty reduction, FDI is measured by FDI inflows as percentage of GDP, and the control variables are the economic variables as specified :

Model 1: Welfare/HDI = f(FDI, Govt. Spending, Education, Inflation)   ..... (2)

Model 1 is used to analyze the impact of FDI inflows on poverty reduction.

(1) Dependent Variable:

Poverty : To measure the extent of poverty reduction in the country, the study uses the HDI index (as used in a study for Mauritius by Fauzel et al., 2016 as a welfare proxy) since there is limited data availability year wise on poverty headcount ratio in India.

The Human Development Index (HDI) is a statistical tool used to measure a country's overall achievements in social and economic dimensions. The social and economic dimensions of a country are based on the health of the people, their educational attainment level, and standard of living. Interpolation technique has been used to fill in the gaps of the data.

(2) Independent and Control Variables : The independent and control variables considered in the study are :

FDI Inflows : This variable is measured as net FDI inflows as a percentage of GDP. FDI inflows have the potential of reducing poverty through two channels, that is, through direct and indirect channels. Through the direct channel, FDI would result in the creation of employment in a country. An increase in employment through foreign investment will result in increasing the aggregate demand due to which there will be pressure on other sectors to increase production, resulting in increase in demand for labor in other sectors as well. Thus, it would help in reducing poverty levels in the country concerned.

The control variables in the study include, firstly government spending. This variable is measured by general government final consumption expenditure as % of GDP. This variable is expected to have an ambiguous sign. The reason being higher share of government expenditure may or may not reduce poverty depending upon how the additional expenditure is allocated among different income groups.

The second control variable of the study is education. This variable is measured by school enrollment ratio (in % gross). This variable is expected to have a positive sign. The reason being, with the increase in the level of education, there will be an improvement in the welfare of the poor. Hence, it would result in poverty reduction.

The third control variable of the study is inflation. This variable is measured by the consumer price index. This variable is expected to have a negative sign. The reason behind this would be if the prices in the economy are increasing more than the increase in income, then the purchasing power of the consumer will fall, that is, the consumers would have less cash in hand for spending. Thus, poor people will be the most affected during the period of inflation.

Since the study is a time series analysis, therefore, one difficulty of using data would be non - stationarity. Therefore, to study the impact of FDI inflows on poverty reduction, we need to ascertain the time - series statistics of the included variables. In order to judge the stationarity of the variables, the study employs Augmented Dickey-Fuller test for testing the presence of unit root. It becomes imperative to test for the presence of unit root since otherwise, the results might be spurious.

Next, the study employs ARDL (auto regressive distributed lag) model. The pre-condition for this model is that firstly, variables should not be co-integrated with each other and, secondly, the variables can be at different stationarity. There are various advantages of using this model. Firstly, it involves the use of a single reduced form equation, unlike other methods that use a system of equations. Secondly, this approach does not require all the variables to be integrated of the same order. It is against this background that the ARDL bounds test approach was employed in this study.

The ARDL specification model of the study is :

$$\Delta HDI_t = \mu_0 + \mu_1 t + \mu_1 \Delta FDI_{t-1} + \mu_2 \Delta GOVT_{t-1} + \mu_3 \Delta GOVT_{t-2} + \mu_4 \Delta EDUCATION_{t-1} + \mu_5 \Delta INFLATION_{t-1} + \mu_6 \Delta HDI_{t-1} + \mu_7 \Delta HDI_{t-2} + \mu_8 \Delta HDI_{t-3} + \mu_9 \Delta HDI_{t-4} + \varepsilon_{1t}$$

where, $\mu_1 - \mu_9$ are regression coefficients and ε is the error term.
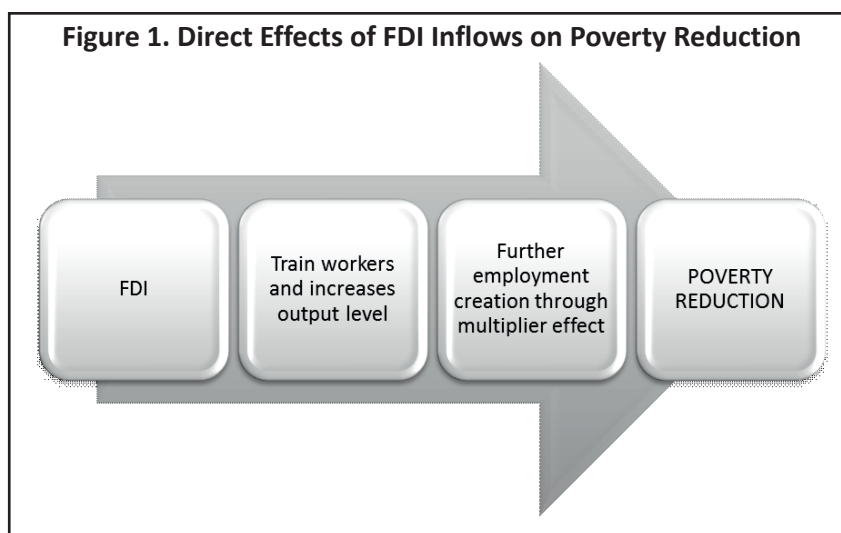
The study depends on the secondary data for studying the relationship between FDI inflows and poverty reduction. The data were collected from a variety of sources including The World Bank (n.d. a., n.d. b.) and Index Mundi (n.d. a., n.d. b.).

Linkages Between FDI Inflows and Poverty Reduction : Theoretical Foundation

Earlier, foreign direct investment was seen by policy makers with lack of conviction because it was believed that it were likely to hurt infant domestic industries, lead to loss of political sovereignty, and worsening of balance of payments due to excessive importation of capital goods by foreign investors and return of profits to their respective countries. However, recently, FDI began to be promoted because of its positive impact on poverty reduction. On the consideration of some intrinsic benefits, FDI is favored compared to other forms of capital flows. An important argument in favour of FDI is that it provides a relatively stable, risk free form of finance for development in capital poor countries (Mold, 2004).

So far as the role of foreign direct investment inflows in reducing the poverty in the host country is concerned, it can be understood by analyzing the positive impact of FDI on economic growth and job creation in improving the technology and knowledge of the host country, and the development of human capital through training. In addition, foreign investment also stimulates the tax revenues of the government in the form of corporate taxes.

(1) Impact of FDI on Poverty Reduction Through Employment Generation : Whenever FDI is made, it is assumed to have a potential of creating jobs in the host countries. Heavy investment made by foreign firms in host countries would lead to an increase in the levels of production, thus creating economic growth and development. Besides investment in physical assets by the firms, local people also get employment and training by foreign firms to work in their established firms locally (Fauzel et al., 2016). This can be regarded as economic growth led

Figure 1. Direct Effects of FDI Inflows on Poverty Reduction

FDI → Train workers and increases output level → Further employment creation through multiplier effect → POVERTY REDUCTION

employment creation in the host countries, which may further lead to a reduction in poverty levels.

Next, through multiplier effects, the increase in employment in some sectors due to FDI may lead to further generation of more jobs in the other sectors. This would occur due to the fact that the increase in overall employment boosts aggregate demand. Increase in aggregate demand will put pressure on the other sectors to increase production, requiring more labor in other sectors as well. The employment creation resulting from FDI would help in bringing about a reduction in the poverty levels. This is also termed as the direct effect of FDI inflows on poverty reduction for the host countries. The Figure 1 summarizes these linkages.

(2) Impact of FDI on Poverty Reduction Through Economic Growth : One of the important factors to reduce the level of poverty in a given country is economic growth. Economic growth, if accompanied with more equitable distribution of income, tends to increase the incomes of those down the income ladder/ poor in relation to the overall economic growth. FDI is considered to be an important element for the growth of the host countries. As mentioned in a study by Srinivasan (2010), researchers and policy makers have a strong belief in the positive role of FDI in boosting economic growth through various channels. FDI can generate economic growth in several ways (Fauzel et al., 2016). First, a very important way is to create jobs directly and indirectly. By doing so, foreign companies help local people find employment, hence reducing poverty in the recipient countries. Secondly, there

Figure 2. Indirect Effects of FDI Inflows on Poverty Reduction
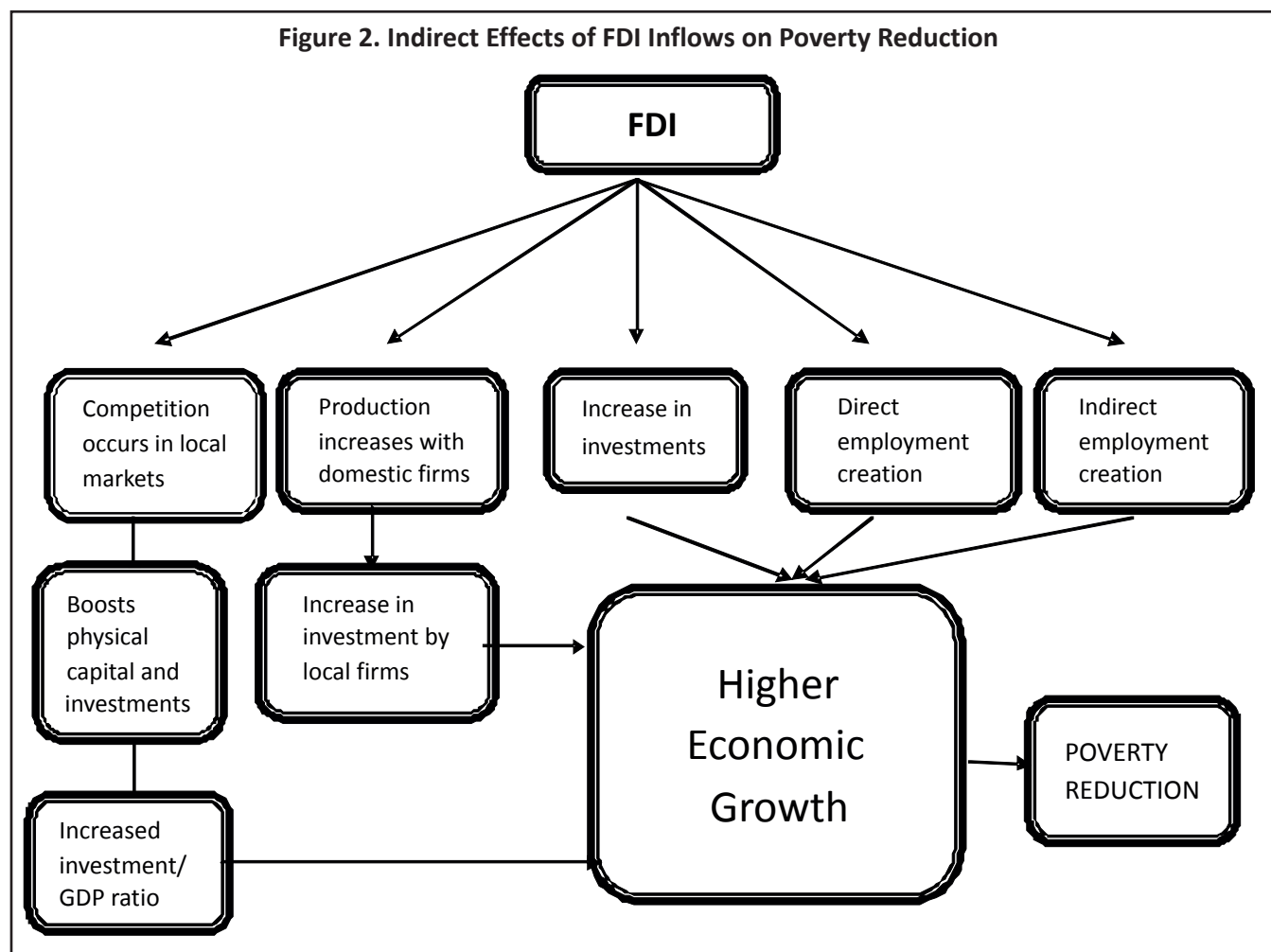
are significant benefits of FDI in terms of technology transfer and knowledge transfer resulting from linkages of production with local firms, which helps in improving overall efficiency and productivity in the recipient countries. Overall, these advantages generate a considerable degree of growth and poverty reduction in the countries hosting FDI.

In addition, an increased competition resulting from FDI flows would ultimately lead to an increase in the quality of physical capital and efficiency of investment in the host countries, thus making the local investment more effective. As a result of FDI, the ratio of investment/ GDP increases and the higher level of investment through the multiplier and accelerator effects leads to increased demand for goods and services in other sectors as well. An overall increase in the country's production indicates a higher economic growth, which leads to a reduction in the poverty levels. Figure 2 highlights the linkage effects described above. These are the most common ways through which FDI inflows affect poverty reduction in the country. In this paper, the study focuses on the direct effects of poverty reduction.

Data Analysis and Results

(1) Unit Root Test : The ARDL bounds test approach, which is employed in the study does not require pre-testing of the unit root of variables. However, this test was done to ensure that all the variables are of the highest order, that is, $I(1)$. The results of bound test in respect of HDI, FDI inflows, government spending, education, and inflation are shown in Figure 3, Figure 4, Figure 5, Figure 6, and Figure 7, respectively.

The variable HDI (proxy taken for welfare and poverty reduction) shows a slight upward trend (Figure 3) that seems convergent to the trend line. Hence, unit root test is not present in this variable. The Figure 4 shows the upward trend with respect to FDI inflows over time. This shows the presence of the unit root in the above variable. As shown in the Figure 5, the variable - government spending shows slight presence of unit root test with a slight downfall in the trend line. The variable - education shows an upward trend (Figure 6). Hence, it confirms the presence of unit root. The variable - inflation (Figure 7) shows the downward trend. Hence, it confirms the presence of unit root.

(2) Augmented Dickey - Fuller Test : Now, to correct for stationarity among the variables, the augmented Dickey-Fuller test was applied. The results of the test are given in Table 1. The results shown in Table 1 reveal that all the variables are stationary at either level or first difference. This confirms the suitability of the ARDL
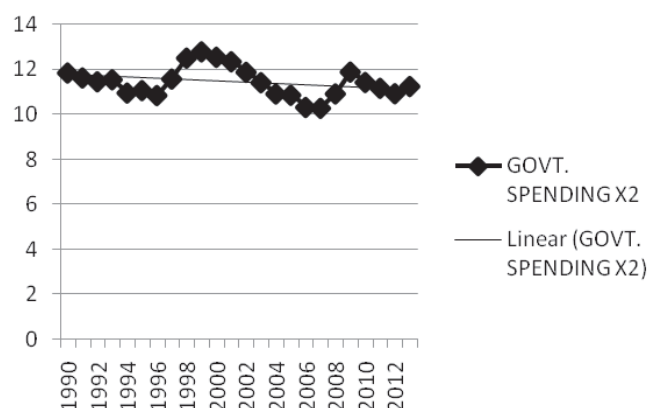

Figure 3. Poverty Reduction (HDI)

Source: Created using data from the Appendix (Table A1).
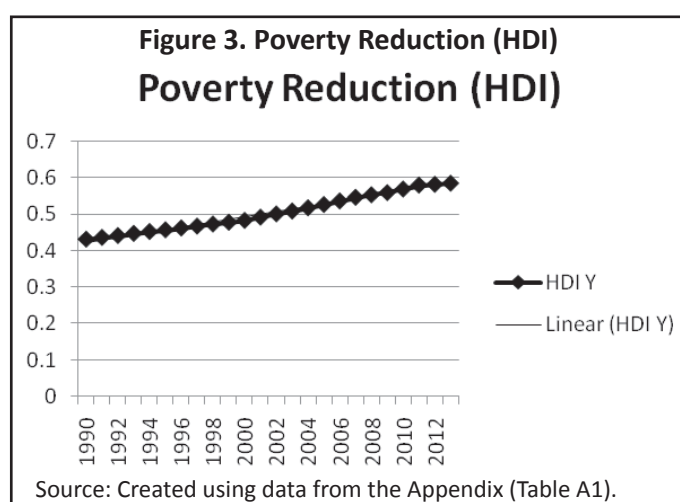
Figure 4. FDI Inflows (% of GDP)
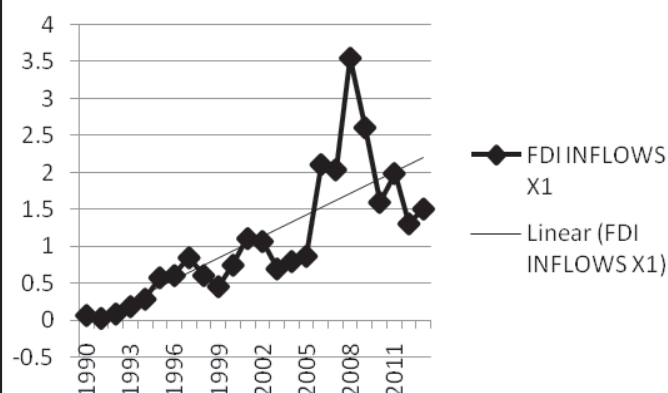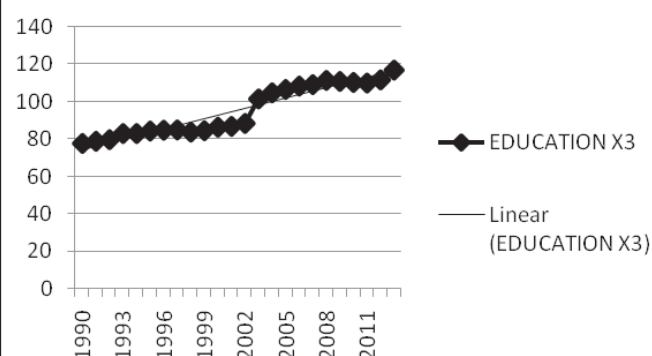
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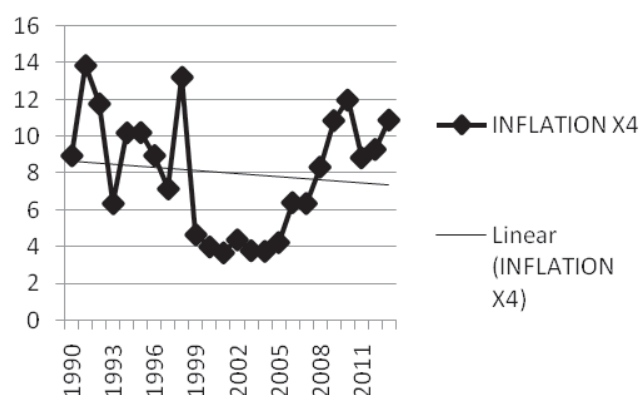

Figure 5. Govt. Spending (% of GDP)

Source: Created using data from the Appendix (Table A1).

Figure 6. Education (School Enrollment Rate, % Gross)

Source: Created using data from the Appendix (Table A1).

Figure 7. Inflation (CPI)

Source: Created using data from the Appendix (Table A1).

Table 1. Augmented Dickey - Fuller Test Results

AUGMENTED DICKEY- FULLER TEST		
VARIABLES	Stationarity of Variables in Levels	Stationarity of Variables in First Difference
Poverty (HDI)	-4.349*	
FDI Inflows		-5.480*
Government Spending		-3.178*
Education		-3.578*
Inflation		-6.678*

Note : *All the variables are showing stationarity at 5% significance levels.

Source: Created using data from the Appendix (Table A1).

Table 2. Bounds *F* - Statistic for Co-Integration Results

Null Hypothesis: No Long-run relationship exists		
Test Statistic	**Value**	**K**
F-Statistic	2.186807	4
Critical Value Bounds		
Significance	*I*0 Bound	*I*1 Bound
10%	2.2	3..09
5%	2.56	3.49
2.5%	2.88	3.87
1%	3.29	4.37

Source: Created using data from the Appendix (Table A1).

Table 3. Cointegrating Form

Co-integrating Form				
Variable	**Coefficient**	**Std. Error**	***t* - statistic**	**Prob.**
D(*Y*(-1))	-0.1549	0.1904	-0.8136	0.4754
D(*Y*(-2))	-2.1156	0.2290	-9.2366	0.0027
D(*Y*(-3))	-0.6257	0.4610	-1.3571	0.2678
D(*X*1)	0.0013	0.00037	3.5381	0.0384
D(*X*1(-1))	0.00052	0.00040	1.2867	0.2885
D(*X*2)	-0.00010	0.00052	-0.2009	0.8536
D(*X*2(-1))	-0.00054	0.00052	-1.0398	0.3749
D(*X*3)	0.00069	0.00010	6.4329	0.0076
D(*X*3(-1))	0.00012	0.00008	1.4781	0.2359
D(*X*4)	0.00006	0.00008	0.7651	0.4999
D(*X*4(-1))	0.00031	0.00009	3.4833	0.0400
Coint Eq(-1)	-0.1099	0.01859	-5.9151	0.0097

Cointeq = *Y* - (0.0137*X1 + 0.0147 * X2 + 0.0072 * X3 - 0.0032*X4 - 0.1067)

Long- Run Coefficients				
Variable	**Coefficient**	**Std. Error**	***t* - statistics**	**Prob.**
*X*1	0.0137	0.0132	1.0370	0.3760
*X*2	0.0147	0.0144	1.0198	0.3829
*X*3	0.0071	0.0024	2.9856	0.0583
*X*4	-0.0032	0.0048	-0.6564	0.5584
C	-0.1066	0.2281	-0.4674	0.6720

Source: Created using data from the Appendix (Table A1).

approach. After the Augmented Dickey-Fuller Test, we obtain the optimal lag length of the model before applying the ARDL approach. The optimal lag length is (4, 1, 2, 1, 1).

(3) Bounds Test : The test confirms the long-run relationships among the variables. The results of the bound *F*-statistics for co-integration are given in the Table 2. Since the value of the *F*-statistic is 2.186 (Table 2), this

value is even less than the value of the lower bound at 5% significance levels. Therefore, the variables are not co-integrated. Hence, we cannot reject the null hypothesis, that is, no long run relationship exists between the variables.

(4) Short - Run Coefficients : The results of the model show that FDI inflows is a significant variable for HDI (proxied for poverty reduction). There is a positive relationship between the two variables. This means that with the increase in the FDI inflows, there will be an improvement in the welfare of the poor people, thereby leading to poverty reduction. Other independent variables of the study, that is, government spending is an insignificant variable according to this study. Thus, government spending will not impact poverty reduction. Education comes out as a significant variable of the study and is positively related with poverty reduction, that is, with the increase in the educational levels, welfare of the poor people will rise, leading to a reduction in the poverty levels. Hence, there exists a short-run positive relationship between education and poverty reduction. Inflation comes out as an insignificant variable and thus, cannot impact poverty reduction in this study. The results are shown in the Table 3.

Discussion and Conclusion

The focus of the present study was to examine the theory and empirics of impact of FDI inflows on poverty reduction in India for the time period from 1990 - 2013. The literature on the impact of FDI on poverty reduction is pervasive, with many studies studying the indirect channel, that is, effect of FDI inflows on poverty reduction through economic growth. With few studies focusing on the direct relationship between FDI and poverty, the results are mixed, that is, some studies showed a positive relationship, and some studies showed a negative relationship between the variables under study. This study made an attempt to fill the gap and add to the existing literature by studying the relationship between FDI inflows and poverty reduction in India using the ARDL approach, given its advantages. The study has used poverty proxy, that is, the HDI (human Development Index) to study the relationship with FDI inflows. The results of this study reveal that there is a short-run relationship between the two variables and that there is a positive relationship between the two, that is, with the increase in the FDI inflows, there would be an increase in the HDI, which means an increase in the welfare of the poor, hence, resulting in poverty reduction.

The results of the study regarding the long-term impact of FDI on poverty reduction are in contrast with empirical findings of some of the researchers for other countries, which found significant long-term relationship between FDI flows and poverty reduction. However, the findings are in line with results of the study conducted by Agarwal and Atri (2015) in the Indian context. The basic reason for these differences is that the countries have considerably different basic economic structures from each other. The reason for this might be because the direct or indirect reduction effect of FDI for poverty is not the same in any terms and conditions, and this effect may vary depending upon many factors. Some of the factors which may cause a difference in the results are: the amount and characteristic of investment, the type of investment for the country (acquisition - merger, privatization), the status of the sector in which the investment is implemented, technological improvements, and the impact of these on the community, taxes paid by FDI and how they are spent, and productivity of the investment and wages (Sarisoy & Koc, 2012). Future research studies may incorporate one or more of the above factors to examine the impact of FDI on poverty reduction in India.

Policy Implications

From the conclusions of the study, we can infer that although FDI inflows are a significant factor in poverty

reduction, but it is presently only in the short-run. The 'Make in India' program launched by Prime Minister Narendra Modi aims at placing India as a manufacturing hub on the world map and giving global recognition to the Indian economy. An ambitious target has been set by the Government of India to increase the share of manufacturing output to 25% of the GDP by 2025, from 16% currently. In this respect, it is also worth mentioning that during April - November 2016, FDI inflows in India's manufacturing sector grew by 82% on a year-on-year basis to US$ 16.13 billion (India Brand Equity Foundation, 2017). Therefore, it is extremely important that efforts should be made both by the government and the private sector to channelize this foreign investment in the sectors, whereby the incomes of the poor people are also increased, thereby providing them employment in the manufacturing sector. In this respect, countries, in their strategies, while framing programs for economic development and poverty reduction put greater emphasis on the small-scale industrial sector (Saifil Ali & Sristy, 2010).

From this point of view, framing of appropriate policies under the Skill India Mission of the present government and the effective governance of their implementation assumes importance to reap maximum potential benefits from FDI from the point of view of poverty reduction and inclusive growth. Since, as discussed above, the status of the sector in which the investment is implemented and the impact of these on the community are also the important factors that determine the effect of FDI on poverty reduction.

Limitations of the Study and Scope for Future Research

The present study used the Human Development Index (HDI) as a proxy for poverty reduction to study the relationship between FDI inflows and poverty reduction due to non- availability of year wise time series data on poverty index, that is, headcount ratio and poverty gap index. Further studies may be conducted based on panel data for states/regions and using more indicators of poverty reduction as mentioned.

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APPENDIX

Table A1. Human Development Index, Foreign Direct Investment, Government Spending, School Enrollment Rate, and Inflation in India (1990-2013)

1	2	3	4	5	6
Year	Poverty Reduction (HDI)	FDI Inflows (as % of GDP)	Government Spending (as % of GDP)	Education (School Enrollment Rate, % Gross)	Inflation (CPI)
1990	0.431	0.07	11.86	77.5	8.97
1991	0.436	0.03	11.64	78.66	13.87
1992	0.441	0.09	11.47	79.54	11.788
1993	0.447	0.19	11.56	82.83	6.362
1994	0.452	0.29	10.97	82.83	10.212
1995	0.457	0.58	11.08	84.17	10.225
1996	0.462	0.61	10.86	84.63	8.977
1997	0.467	0.85	11.59	84.77	7.164
1998	0.473	0.61	12.52	83.6	13.231
1999	0.478	0.46	12.8	84.36	4.67
2000	0.483	0.75	12.56	86.26	4.009
2001	0.492	1.11	12.36	86.69	3.685
2002	0.501	1.07	11.89	88.27	4.392
2003	0.509	0.7	11.43	101.48	3.806
2004	0.518	0.8	10.93	104.78	3.767
2005	0.527	0.87	10.87	106.59	4.246
2006	0.537	2.11	10.33	108.41	6.416
2007	0.547	2.04	10.29	109.19	6.37
2008	0.554	3.55	10.93	111.44	8.352
2009	0.56	2.61	11.9	110.91	10.877
2010	0.57	1.6	11.44	110.36	11.992
2011	0.581	1.99	11.18	110.03	8.858
2012	0.583	1.31	10.94	111.73	9.312
2013	0.586	1.51	11.26	116.99	10.908

Sources :

For Column 2, compiled and computed from the Open Data Government Platform India, Human Development Index of India and World, 1980-2013 (Government of India, 2016).

For Column 3, compiled based on the Index Mundi database (Index Mundi, n.d.a., n.d.b.), foreign direct investment, net inflows (% of GDP).

For Column 4, compiled based on The World Bank database (The World Bank, n.d.a., n.d.b.), general government final consumption expenditure (% of GDP).

For Column 5, compiled based on the World Bank database (The World Bank, n.d.a., n.d.b.), school enrollment rate (% of gross).

For Column 6, compiled based on the Index Mundi database (Index Mundi, n.d.a., n.d.b.), inflation, consumer prices (annual %).

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