Foreign Direct Investment And Performance Of Indian States

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Abstract

In this article we examine the effects of FDI in Indian States in the post reform (post 1991) era. The variation across these states and territories is immense in regard to demography, geography, culture, and economic conditions. During early 1990s India suffered from massive balance of payment and foreign exchange crisis, which led Indian Government to opt for liberalized economic policies in 1991. Since the adoption of New Industrial Policy (NIP) and on-going reform process, Foreign Direct Investment (FDI) inflows have increased substantially. This paper undertakes an empirical investigation to determine the impact of FDI on growth of Indian states. Using most recent data on FDI our results indicate higher human capital and financial assistance are essential ingredients to reap benefits from FDI for Indian states. Results are robust to inclusion of other relevant variables.

Keywords: Foreign Direct Investment; Growth; Human Capital; Financial Assistance

1. Introduction

The stable macroeconomic fundamentals, increasing size of the economy and improving investment climate has attracted multinational corporations to invest in India. An important outcome of economic reform process aimed at opening up the economy and embody globalization in 1991 has led to massive increase in Foreign Direct Investments (FDI) inflows to the subcontinent. In fact, UNCTAD's World Investment Report 2006 ranks India as the second most attractive spot amongst multinational corporations. The strong economic fundamentals driven by economic reforms for 17 years has helped India to attract FDI from meager US $103 million in 1991 to US $ 29 billion in 2006 [1].

India being a resource poor country, particularly in capital resources, was always receptive to foreign investment [2]. However, the government adopted a restrictive attitude towards foreign capital in late 1960s as local industries started to develop. Private savings financed most of India's investment, but by the mid-1980s further growth in private savings was difficult because they were already high level. As a result, during the late 1980s India relied increasingly on borrowing from foreign sources. Increased borrowing from foreign sources in the late 1980s, which helped economic growth, led to pressure on the balance of payments. The problem became an exogence in August 1990 when Iraq invaded Kuwait, and the price of oil soon doubled. The direct economic impact of the Persian Gulf conflict was exacerbated by domestic social and political developments.In the early 1990s, there was violence over two domestic issues: the reservation of a proportion of public-sector jobs for members of Scheduled Castes and the

Hindu-Muslim conflict at Ayodhya. The central government fell in November 1990 and was succeeded by a minority government.The cumulative impact of these events shook international confidence in India's economic viability, and the country found it increasingly difficult to borrow internationally. As a result, India made various agreements with the International Monetary Fund (IMF) and other organizations that included commitments to speed up liberalization. Thus, in the early 1990s, considerable progress was made in loosening government regulations, especially in the area of foreign trade. Many restrictions on private companies were lifted, and new areas were opened to private capital.

Amongst other sources, FDI is a major source of private capital in India. FDI is allowed in almost all sectors, except those of strategic interest such as manufacture of arms and ammunitions. Under current policy multinational firms can set up 100% subsidiaries in India without prior approval from exchange control authorities (Reserve Bank of India, RBI). According to the policy, FDI can enter into India in two ways. The first one is automatic route that does not require any approval from either by Government or RBI. This includes sectors like power, manufacture of drugs and pharmaceutical, road and highways, airports, hotels and tourisms. Apart from these FDI upto 100% is permitted for establishment of Special Economic Zones (SEZ) and Export Oriented Units (EOUs). They are specifically designed duty free areas and are targeted to attract foreign firms for the purpose of trade operations. The second route requires prior government approval. The list includes important sectors like telecommunication, agricultural sector, trading, broadcasting, mining, and postal services. Apart from this small list of sectors which require prior approval, India also offers various fiscal incentives in forms of tax breaks or tax holidays to Multi National Corporations (MNCs). Tax holidays are particularly available in SEZs to make industry globally competitive. In order to improve infrastructure, infrastructure sector projects also enjoy special tax treatment and holidays. In addition, foreign nationals working in India are taxed only on their income in India. And they further have the option of utilizing tax treaties that India may have signed with their country. Thus, in a nutshell India like other developed and developing nations provides various fiscal and financial incentives to attract FDI. The primary reason for alluring FDI is not only the capital it brings in but along with capital it is also an important source of various technologies knows how, better managerial skills, labor training and other externalities which generate increasing return in production.

The primary focus of this paper is to investigate whether Indian states have benefitted from FDI after offering such financial and fiscal incentives. In this paper we aim to make a major contribution to the literature by examining the effects of FDI in Indian States in the post reform (post 1991) era. The use of Indian states as a data set provides an excellent platform to undertake this analysis. By choosing states within a single country, one already controls for differences in macroeconomic environments which can only be corrected imperfectly in a cross-country analysis. Further, in the case of Indian states, the growth of FDI was driven by a common exogenous shock that affected all states (the balance of payments crisis in 1991). Finally, Indian states despite facing the same macroeconomic environment and judicial system, display considerable heterogeneity in human capital, labor regulations, infrastructure availability, business friendly environments, access to seaports, etc.

1.1. Related literature

At the cross country level, there exists a large literature that studies impact of FDI on economic growth. Based on the popular cross section regression approach, authors [2] emphasize that effects of FDI on growth are stronger in those countries that follow export promotion rather than import substitution. Using a panel dataset for the time period 1960 to 1995 an empirical research [3] find that FDI does not exert any positive effect

on economic growth. Nevertheless, another significant article [4] show that FDI is more productive than domestic investment only when the host economy has a minimum threshold stock of human capital. Besides human capital and trade regimes, the literature also suggests the level of financial development of an economy can enhance the positive effects of FDI on economic growth. However, the research [5]also points out that countries with adequately developed financial markets gain substantially from FDI. Thus at national level, empirical findings generally indicate a positive role for FDI in enhancing economic growth after a country reaches a threshold in the stock of human capital, the level of financial development, and/or maintains open trade regimes.

Various studies relating FDI and growth of Indian economy fail to document a robust and positive link between them. It is often stated that for a country like India the quality of FDI is more important than quantity. Unless FDI inflows change their present target of producing for the domestic economy and displacing local firms in India, the

subcontinent is not going to get any fruitful result from FDI. On the contrary, economists [6] stress on lack of local skills which are required to initiate spillovers. Sharma [7] hypothesizes export as one of the channels through which FDI influences growth. Using annual data for 1970-98 he finds that FDI has no significant impact on export performance and thus on growth. On similar lines, Chakrabarty and Nunnenkamp [8] show that FDI is unlikely to do wonders in India unless remaining regulations are relaxed and more industries open up to FDI. In a more recent study [8] show that FDI in India is only concentrated in a few relatively advanced regions which may have prevented FDI effects from spreading across India. They mention " FDI is likely to increase regional income disparity in India." However, a comparative study between India and China find that FDI and its interaction with labor quality improvement play a significant role in economic growth of India. Some research also stresses that increasing investments along with FDI is an essential input for India to reap benefits from FDI. Similarly, Nagraj [9] states "what is needed is a strategic view of foreign investment as a means of enhancing domestic production and technological capability .... as China has precisely done". Pradhan [10] estimates a production function for the Indian economy and shows that FDI stock has contributed positively to the national production. The study concludes that the effect of FDI is not significant for the overall period, but during the liberal policy phase FDI plays a significant impact on production of India.

Researchers have also documented several obstacles to increased flows of FDI to India. For example, Menon and Sanyal [11] examine how labor conflict, credit constraints and indicator's of state's economic health affect foreign investment. They find that labor unrest is the most important factor in determining the effect of foreign investment. Their results indicate that labor unrest has a strong negative effect on foreign investment and also labor unrest is endogenous across Indian states. Bajpai and Sachs [12] identify lack of infrastructure, FDI-friendly policies as main obstacles for attracting FDI. They summarize "India has the resource base, it has the entrepreneurship, has the access to the sea, a vast labor force, it has everything that coastal China has had except the interest of the Government which even today underemphasizes the role of industrial facilities, of infrastructure, of land area, of effective port facilities". Tybout [13] while discussing manufacturing sectors states that institutional barriers, labor market regulations, poorly functioning financial market and limited domestic demand create inefficiencies in developing economies like India. This in turn can reduce foreign investment.

Although there are studies on effect of FDI on overall performance of India, there is lack of research which focuses at state level impact. The variation across these states and territories is huge in regard to demography, language, ethnicity and economic conditions. Also, some states have achieved rapid economic growth in recent years, while others have not. In this paper, we ask a simple question whether FDI has benefitted these states over the period ? If yes, does this benefit depend on any particular factor or independent of any such factors? Primarily, our results indicate that a state with larger enrollments in engineering, MBBS, and other professional degrees and higher financial assistance benefits more from FDI than the other ones. In a way our results are similar to Schumpeterian growth model presented by Aghion et al. [14]. They show that more trade or FDI is associated to positive growth effects in regions and sectors that are initially close to the technological frontier. This is primarily due to higher absorptive capacities of these regions or sectors and their engagement in R&D when foreign competitors enter the market. The study Agrawal [1] reports that growth effects of FDI in India may also be choked by concentration of FDI in some advanced locations. In fact they conclude that FDI may have contributed to regional divergence rather than enhancing convergence among Indian states. The next section describes the data.

2. Data

Data for this study is obtained from Indiastat database. This database is constructed by pooling information and data from various sources. It includes economic survey of India, Reserve bank of India, census, different parliamentary questions, and policy papers amongst many other important sources.

To investigate the influence of FDI on the growth of Indian states for period 2000-2005, we focus on FDI as a share of SDP (State Domestic Product) as the main explanatory variable. In order to control for the "financial health" of a state we use financial assistance provided by all financial institutions. All financial institutions include IDBI (Industrial Development Bank of India), IFCI (Industrial Finance Corporation of India), ICICI (Industrial Credit and Investment Corporation of India), SIDBI (Small Industries Development Bank of India) and IIBI (Industrial Investment Bank of India).

Previous studies have shown that a country with higher human capital reaps more benefit from FDI. To address the potential effect of human capital, we use literacy rates and the enrolment rates in professional studies at state level. Professional studies refer to bachelor of engineering, science, architecture, polytechnique institutes and M.B.B.S. Aggregate enrolment rates as a share of total population of the state is also employed in the regression analysis. As mentioned earlier [11], previous research shows that labor unrest has a strong negative impact on foreign investment. In order to capture labor unrest we use state-wise man-days lost resulting in work stoppages due to both industrial disputes as well as reasons other than industrial disputes. Other variables which are used in the analysis include aggregate Research and Development (R&D) expenditure as a share of SDP, state-wise total power supply and few demographic variables.

Figure (1) shows the total amount of FDI inflows in India during 2000-2005 while Figure (2) displays FDI inflows for 26 states and union territory for the same period. A glance at the diagram clearly reveals that over these years FDI inflows have increased rapidly. Within a short span of 5 years amount of FDI in India has increased by 4 times. Figure (2) indicates that all states have not been equally successful in attracting FDI. One possible reason mey be the differences across states in the area of policy reforms. They show that those states that have been more reform oriented attracted more FDI compared to others. According to figure (2) top four states in terms of attracting FDI are Maharashtra, Delhi, Karnataka and Tamil Nadu. At the same time, states like Bihar, Madhyapradesh, Rajasthan, Uttarpradesh have lagged behind. Along with them North Eastern states like Nagaland, Manipur, Meghalaya and Assam also have failed miserably in attracting FDI. However, states like West Bengal, Haryana, Gujarat and Andhrapradesh got some share of the aggregate FDI inflows.
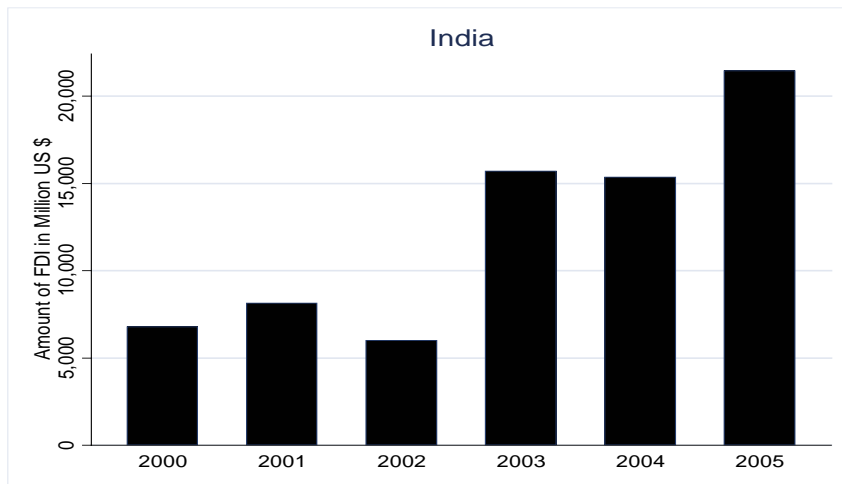
Figure 1: Total Amount of FDI Inflows in India (2000-2005)
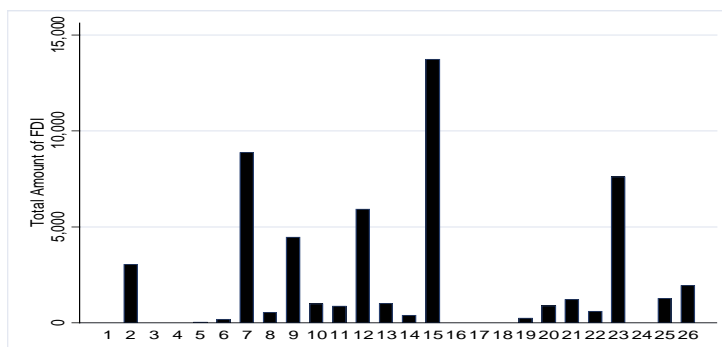
Figure 2: Total Amount of State-wise FDI Inflows (2000-2005)

Table 1 provides the descriptive statistics of the major variables used in the analysis. There is considerable variation in the dataset. Growth rate of SDP per capita ranges from minimum of -0.7% to maximum of 6%. Similarly, FDI as a share of SDP varies from minimum value of 0 to as high as 39%. Amongst two measures of human capital, enrolment rates display huge variation compared to literacy rates. Measures of financial assistance also demonstrates marked variation across states.

Table 2 reports correlation coefficients between these variables. Although not very strong, growth rate is positively correlated with FDI as a share of SDP. But FDI is strongly related with enrolment rates and initial percapita. To be noted, literacy rate is more correlated with growth than enrolment rates. Not surprisingly, literacy rate is positively correlated with enrolment rates.

Table 1: Descriptive Statistics

Variables	Mean	Standard Deviation	Minimum	Maximum
Growth	0.033	0.017	-0.007	0.060
Humancap	0.001	0.001	0.000	0.006
Literacy	0.698	0.102	0.475	0.909
FDI/SDP	0.069	0.093	0.000	0.392
Finassist/SDP	0.017	0.018	0.000	0.087

Table 2: Correlations

Variables	Growth	Humancap	Literacy	FDI/SDP	Finassist/SDP
Growth	1.00				
Humancap	0.169	1.000			
Literacy	0.345	0.657	1.00		
FDI/SDP	0.190	0.649	0.545	1.00	
Finassist/SDP	0.171	0.091	0.438	0.480	1.00
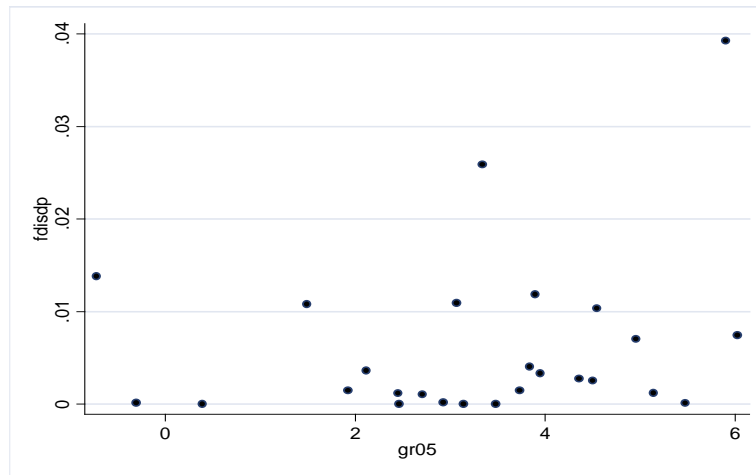
Figure 3: Average Annual Growth Rate of Indian States and FDI as a Share of SDP

Finally, figure (3) shows the relationship between FDI as a share of SDP and growth rates. Prima facie there is little or no obvious evidence that FDI promotes growth in Indian states. The next section reports the regression results.

3. Results

This section considers FDI and growth in a cross-sectional dataset. The central issue of this study is whether FDI has a robust effect on economic growth of Indian states. If so does it depend on any other macro-economic variable or simple presence of FDI can enhance growth. There are 23 states and union territories that are considered in this study. The cross-sectional analysis employs data averaged over 2000-2005 and the baseline regression is:

$$GRTH_i = \alpha' + \beta' SDP_{i,2000} + \gamma' FDI_i + \eta' CONTROLS_i + \epsilon_i \qquad (1)$$

where $GRTH_i$ stands for average annual growth rate, $SDP_{i,2000}$ is the initial per capita income of each state, FDI_i refers to the FDI as a share of SDP, $CONTROLS_i$ is the set of conditioning variables for state i and ϵ_i is the error term.

To start our analysis, we report results of regressions which only use the major variables that are expected to affect growth. Table 3 presents regression results using literacy rate, human capital, financial assistance, initial per capita income, research and development expenditure, labor dispute and power.

The results indicate that even after controlling for broad range of variables we cannot explain a significant amount of growth of these states. In fact if we follow the conventional R-square, only 30% of growth can be explained. In addition, it is also to be noted that none of these variables are statistically significant. However, this insignificance can arise due to very small sample size. But, results of table 3 provide motivation for our work. Results clearly indicate that apart from human capital, research and development expenditure, financial assistance etc., there is room for some other explanatory variables which can explain the growth. Since the primary objective of this paper is to identify the impact of FDI on Indian states, we introduce FDI as a probable candidate to account for growth of Indian states.In ALL regressions robust standard errors are reported in parenthesis. Labordisp represents statewisemandays lost resulting in workstoppage due to both industrial and non-industrial disputes. We use the average value for the entire period. RD exp is teh average value of R&D expenditure as a share of SDP. Power stands for the overall power supply in a state.

Table 3: Growth and Major Variables for Indian States

Variables	(1)	(2)	(3)	(4)	(5)
Percapita$_{2000}$	-1.006	-1.042	-1.522	-1.808	-1.334
	(1.101)	(1.185)	(1.343)	(1.481)	1.333
Finassist	0.117	0.122	0.195	0.131	-0.086
	(0.245)	(0.255)	(0.297)	(0.306)	(0.384)
Literacy$_{2000}$	0.096	0.095	0.091	0.106	0.132
	(0.043)	(0.046)	(0.051)	(0.067)	(0.075)
Humancap		0.004	0.001	0.009	-0.004
		(0.004)	(0.004)	(0.008)	(0.007)
Labordisp			0.005	0.001	-0.002
			(0.004)	(0.007)	(0.009)
RDexp				0.119	0.222
				(0.201)	(0.273)
Power					0.035
					(0.038)
Constant	-0.023	-0.018	-0.008	-0.018	-0.078
	(0.026)	(0.050)	(0.054)	(0.062)	(0.098)
Observation	23	23	23	23	23
R-squared	0.185	0.186	0.255	0.271	0.302

Table 4 shows results for regressions including FDI as an explanatory variable and its interaction with literacy rate, human capital and financial assistance. The basis for introducing these interaction terms stem from the existing literature on FDI and economic growth. It has been documented in the literature that a country with higher level of human capital reaps more benefit from FDI. Similarly, Alfaro et. al [5] find that a country with well-developed financial markets gain substantially from FDI. In order to capture these effects we introduce only FDI as an explanatory variable in column 1 (of table 4) and then in following columns interaction terms are included. In all regressions we control for initial per capita income, financial assistance, literacy rate and human capital. In column 1, other than literacy rate none of the other variables turn out to be significant at conventional level. The coefficient estimate of literacy rate is 0.095 and significant at 10% level. Although coefficient of FDI is positive but it fails to gain any statistical significance. In the following column we interact FDI with literacy rate. But results remain the same qualitatively. Like previous, literacy rate is positive and significant and both FDI and its interaction term remain insignificant. Results of column (1) and (2) clearly suggest that literacy rate is an important determinant of growth of Indian states. This definitely indicates that literacy in India is an indispensable means for effective social and economic participation. At the same time results also imply simple presence of high literacy rate is not enough to extract benefits from FDI. According to the official definition of literacy in India: "A literate person is one who can with understanding both read and write a short simple statement relevant to his everyday life". Thus, it is highly unexpected from a "literate" person to adopt new technology, production methods, and/or skill which are bundled with FDI.

To investigate whether human capital enhances effects of FDI on growth we employ sum of statewise enrolment in Bachelor of Engineering, science, architecture, polytechnic and M.B.B.S. interacted with FDI. It is needless to mention that it is not a perfect measure of human capital but we are handicapped due to unavailability of data. In the dataset neither the enrolment ratio nor the total number of engineers, doctors etc., are available for the time period of this study. Thus, to achieve our goal we rely on the above mentioned variable and use it as a proxy for human capital. The result of including this interaction term is reported in the third column of table 29. The interaction term is significant at 5% level and enters with positive sign and magnitude of 0.75. However, the coefficient of FDI itself is -0.43 and significant at conventional level. This in turn implies that FDI has some negative impact in absence of any human capital. But it is clear from the result that a state with higher human capital extracts more from FDI compared to another state which has lower human capital. To evaluate the importance of human capital in enhancing growth effects of FDI, we can calculate by how much a one standard deviation increase in human capital can boost the growth rate of a state receiving mean level of FDI in the sample. It turns out that a state with higher human

capital allows it to experience an annual growth rate increase of 0.07%. The effect is calculated by $\beta_{FDI}*FDI_{mean}*\sigma_{hum}+\beta_{FDI*hum}*\sigma_{hum}$.In column (4) we add the interaction term between FDI and financial assistance. The coefficient of interaction between FDI and financial assistance is positive and significant. Thus one can infer that a state with higher financial assistance reaps more benefit from FDI. The interaction term between FDI and human capital still remains positive and significant. We also conduct the F test for the coefficients of interaction terms to be significantly different from zero in each case. Apart from FDI interacted with literacy, (column 2) in all the cases we reject the null hypothesis. To be noted in all regressions (refer to table 4) literacy rate is throughout positive and significant. This clearly reinstates the immense importance of literacy rate in growth rate of Indian states. However, for our objective the main result to be noted from this table is that a state with higher human capital and financial assistance is expected to gain more from FDI. The next point of concern is robustness of these results.

Table 4: Growth and Role of FDI in Indian States

Variables	(1)	(2)	(3)	(4)
Percapita$_{2000}$	-1.249	-1.015	-1.385	-1.215
	(1.396)	(1.385)	(1.071)	(1.102)
Finassist	0.088	0.023	1.271*	1.145
	(0.250)	(0.244)	(0.698)	(0.711)
Literacy$_{2000}$	0.095*	0.108**	0.083*	0.084*
	(0.047)	(0.051)	(0.044)	(0.042)
Humancap	-0.002	-0.002	-0.002	-0.007*
	(0.004)	(0.004)	(0.004)	(0.004)
FDI	0.034	0.575	-0.435*	-0.494**
	(0.066)	(0.836)	(0.220)	(0.210)
FDI*Literacy$_{2000}$		-0.665		
		(1.030)		
FDI*Humancap			0.753**	0.827**
			(0.345)	(0.332)
FDI*Finassist				0.002**
				(0.001)
Constant	-0.022	-0.048	-0.035	-0.056
	(0.052)	(0.058)	(0.050)	(0.053)
Observation	23	23	23	23
R-squared	0.202	0.218	0.439	0.494

In addition to above variables we include research and development expenditures (as a share of SDP) by the state government in our estimation (refer to column 1 of table 5). We hypothesize that state support for research and development has beneficial effect on growth of a state. Although the coefficient of R&D expenditure turns out to be positive but it does not gain any statistical significance. FDI interacted with human capital and financial assistance still remains positive and significant.

In column 2 we introduce the labor dispute variable. It is measured as statewisemandays lost resulting in work stoppages due to both industrial disputes as well as reasons other than industrial disputes. A state with large number of labor disputes is expected to have low output. In fact previous research shows labor disputes have detrimental effect on firm location and investment decisions. Thus, it can also reduce the aggregate investment in a state. The results of column 2 report a negative coefficient estimate for labor dispute but it has no statistical significance.

Another important variable in the context of economic growth of Indian states is power tariff. India stands out as an exception with industrial electricity tariffs much higher than domestic rates. Industrial tariffs are comparatively much higher due to cross-subsidisation of agriculture and domestic sectors. At the same time power tariff varies from one state to the other. Since, power is an essential input in the production process we also control for statewise cost of power. Column 3 indicates a negative coefficient for power implying higher cost of power can reduce growth. However, this coefficient is not statistically significant. In our final specification, we control for total number of urban and agricultural workers to total workers in column 4 and 5 respectively. But, results remain the same. Thus the key result of this analysis implies that a state with higher human capital and financial assistance can gain more from FDI compared to others.

Table 5: Robustness Check

Variables	(1)	(2)	(3)	(4)	(5)
Percapita$_{2000}$	-2.103*	-1.990	-2.032	-2.121	-2.077
	(1.129)	(1.187)	(1.206)	(1.283)	(1.415)
Finassist	1.019*	1.020*	1.053	1.105*	1.050
	(0.541)	(0.563)	(0.616)	(0.601)	(0.649)
Literacy$_{2000}$	0.099**	0.113*	0.111	0.116	0.109
	(0.046)	(0.059)	(0.076)	(0.081)	(0.080)
Humancap	-0.007	-0.009	-0.009	-0.007	-0.009
	(0.004)	(0.006)	(0.008)	(0.009)	(0.009)
FDI	-0.440**	-0.518**	-0.527**	-0.414*	-0.529**
	(0.165)	(0.210)	(0.220)	(0.224)	(0.207)
FDI*Humancap	0.772**	0.854**	0.865**	0.670**	0.865**
	(0.255)	(0.292)	(0.279)	(0.314)	(0.290)
FDI*Finassist	0.002**	0.003*	0.003*	0.004**	0.003*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
RDexp	0.146	0.250	0.243	0.165	0.243
	(0.094)	(0.205)	(0.257)	(0.292)	(0.269)
Labordisp		-0.005	-0.005	-0.004	-0.005
		(0.008)	(0.010)	(0.011)	(0.010)
Power			-0.003	-0.015	-0.002
			(0.041)	(0.045)	(0.043)
Urban/Total Wks				-0.000	
				(0.000)	
Agri/Total Wks					-0.000
					(0.000)
Constant	-0.061	-0.078	-0.073	-0.055	-0.070
	(0.057)	(0.075)	(0.108)	(0.117)	(0.116)
Observation	23	23	23	23	23
R-squared	0.569	0.580	0.580	0.606	0.580

4. Conclusion

In the 1990's Foreign Direct Investment became the major source of private capital flows to developing economies. Due to the sudden disappearance of commercial bank lending in 1980's many developing nations started to offer various fiscal and financial incentives to foreign firms. It is widely believed that the extent to which FDI can affect output growth is not limited to the capital it supplies. Instead, FDI is thought of as composite bundle of capital stocks, technology know how, better managerial skills, labor training and other externalities that benefit output in several ways.

Prior to early 1990's India used to have restrictive and regulated market for foreign capital. During this period, there were various obstacles (red tapes) and procedures for approval of foreign collaborations. However in early 90's,

India faced extreme foreign exchange and balance of payments crisis which forced policy makers to opt for liberal policy regime. New Industrial Policy (NIP) in 1991 dissolved industrial licensing and market became less regulated. Due to the adoption of liberalization policies by India since 1990's the FDI inflows have increased consistently from 237 million dollars to 5335 million dollars in 2004.Given this fact, we investigate whether Indian states (which vary in terms of demography, economy, geography, labor regulations etc.,) have benefitted from the rapid increase in FDI inflows.

Using a cross-sectional dataset on 23 Indian states and union territories for the period 2000-2005 we find that states which have higher human capital and financial assistance gain more benefits from FDI compared to others. Our results remain the same after controlling for other relevant variables. Results also indicate that literacy rate is an important determinant of growth of Indian states, but just being "literate" is not enough for a state to extract externalities from FDI. Rather, intensive financial assistance and higher enrollments in technical studies such as engineering, medicine, architecture etc., are essential ingredients for FDI to enhance growth. Our results re-iterate findings of few cross-country studies which also stresses on financial development and human capital. Thus, primary results of this paper imply that before offering various incentives to foreign firms Indian states should concentrate on their financial environment and human capital.

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