



## THE IMPACT OF BILATERAL INVESTMENT TREATIES ON FDI INFLOWS INTO INDIA: SOME EMPIRICAL RESULTS

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### Key Highlights

- The paper studies the effects of IIA investor protection on the inflow of FDI into India
- Usually the impact of IIAs is studied using large cross-country data sets – this paper captures the effects of IIAs on FDI inflows specifically into India, where the empirical Model is based on the Gravity Model and estimated using Generalised Method of Moments.
- Results show that while the individual signing of BITs does not influence the inflow of FDI, the cumulative effect of signing a series of BITs is statistically very significant. Also shown that the largest marginal effects on inflow of FDI are associated with whether a CECA/CERA was signed with a partner country.
- The significance of the cumulative variable suggests that the spillover effect of signing a series of bilateral investment treaties are important, implying that an institutional regime signaling overall protection to investors is important for FDI.
- The findings say that in the future there should be multilateral institutions governing international investment that reduce the negative aspects of the current IIA system, but are able to retain overall international law protection to cross country investors.

## EXECUTIVE SUMMARY

### BACK GROUND AND CONTEXT

India signed a number of International Investment Agreements (IIAs) and by 2016 it had one of the largest investment treaty arrangements in the world, having signed 83 bilateral investment treaties (BITs) and 13 other IIAs. Recently, a number of cases were filed by foreign investors against the Indian state and arbitral awards have awarded large damages to investors. Thus, India has come to change its position with respect to IIAs – in 2017 it denounced the bulk of the treaties it had signed and furthermore insisted that all BITs have to be renegotiated using a template provided by a new Model Treaty. The new Indian Model Treaty substantially privileges state rights over investor rights, reversing the orientation of older treaties. This change in emphasis has meant that only a handful of new treaties have been signed by India. It is too early to predict the future impact of this new set of IIAs on foreign direct investment (FDI) in India.

However, we can get a sense of the impact of bilateral investment treaties by empirically studying their effect on foreign investment inflows into India over the period they were in force – i.e. before they were denounced. The primary purpose of this paper is to detect the magnitude and nature of the effect of IIA protection on the inflow of foreign direct investment into India.

### MODEL

The analysis of the impact of IIAs has typically been performed using large cross-country data sets – our work here is distinct in that we try to capture the effects of international investment agreements on foreign direct investment inflows *specifically* into India. To do this we exploit one of the key findings



suggested in the FDI-Gravity Model literature, namely that the empirical evidence suggests that FDI and trade tend to be complementary rather than substitutes. Thus, in the model we specify we suggest that FDI inflows follow trade and therefore we place a trade variable on the right-hand side of the equation. The volume of trade itself is presumably a product of the forces that make up the Gravity Model but additionally indicates the tenor of the unilateral policy regime, marking the degree of openness, exchange rate policy and capital control regimes. If the trade variable captures dynamic interactions between India and other nations alongside signaling aspects of the unilateral policy regime, a bilateral policy variable in the form of BITs and FTAs can be thought of as signifying the certainty with which investors can expect a protection of their rights.

Using this broad sense, we specify three empirical models to test the impact of BITs and other IIAs on FDI.

The model specifications are:

#### Model I

$$Y_{it} = \alpha + \beta_1 Y_{it-1} + \beta_2 X_{it} + \beta_3 B_{it} + \beta_4 CC_{it} + \epsilon_{it}$$

#### Model II

$$Y_{it} = \alpha + \beta_1 Y_{it-1} + \beta_2 X_{it} + \beta_3 B_{it} + \beta_4 CBI_{it} + \beta_5 CC_{it} + \epsilon_{it}$$

#### Model III

$$Y_{it} = \alpha + \beta_1 Y_{it-1} + \beta_2 X_{it} + \beta_3 B_{it} + \beta_4 CBP_{it} + \beta_5 CC_{it} + \epsilon_{it}$$

where

- i)  $Y_{it}$  is the inflow of FDI into India from country  $i$  in year  $t$ .
- ii)  $Y_{it-1}$  is the inflow of FDI into India from country  $i$  in year  $t-1$ .
- iii)  $X_{it}$  is the bilateral trade (total exports and imports) from country  $i$  in year  $t$ .
- iv)  $B_{it}$  is a dummy variable taking the value 1 if a BIT was signed with country  $i$  in year  $t$  and all years thereafter, or takes the value 0 otherwise.
- v)  $CC_{it}$  is a dummy variable which takes the value 1 if a CECA/CEPA was signed with country  $i$  in year  $t$  and all years thereafter, or takes the value 0 otherwise.

vi)  $CBI_{it}$  is the cumulative number of BITs signed by India in year  $t$ .

vii)  $CBP_{it}$  is the cumulative number of BITs signed by partner country in year  $t$ .

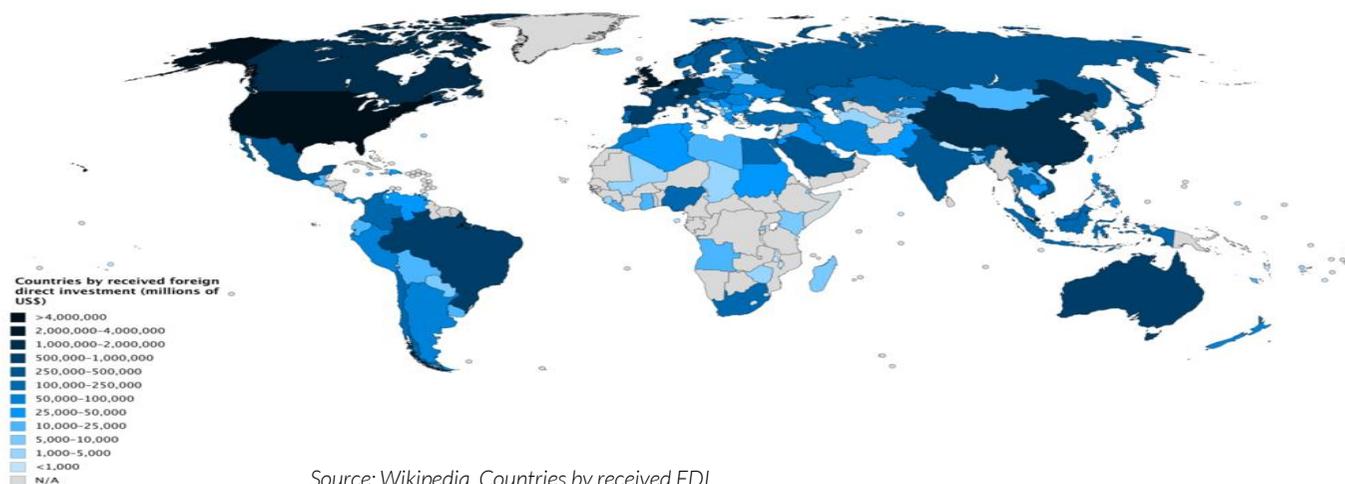
viii)  $\epsilon_{it}$  is the error term (which includes country specific fixed effects) for country  $i$  in year  $t$ .

The three model specifications differ from each other in that while *Model 1* incorporates the presence of a BIT as a binary variable, *Model 2* includes the total number of BITs signed by India in year  $t$  as an additional cumulative variable and *Model 3* contains the total number of BITs signed by partner country in year  $t$  as the additional cumulative variable. Thus, each Model incorporates the BIT variable differently. The other variables reflect relationships that follow from our general discussion above. Following the observation that foreign direct investment follows trade in a complementary manner, we include the volume of bilateral trade as an explanatory variable. Capturing an institutional dimension of this relationship, the models also include a binary variable as to whether a trade agreement in the form of a Comprehensive Economic Cooperation

Table: Parameters Estimated Using Generalised Method of Moments

S. No.	Variable	Model 1	Model 2	Model 3
1.	FDI Lagged ( $Y_{it-1}$ )	0.122** (0.053)	0.078 (0.051)	0.096*** (0.051)
2.	Bilateral Trade ( $X_{it}$ )	0.508* (0.14)	0.206*** (0.122)	0.272** (0.11)
3.	BIT Signed ( $B_{it}$ )	0.271 (0.33)	-0.56 (0.432)	-0.589 (0.441)
4.	Cumulative BITs signed by India ( $CBI_{it}$ )		0.034* (0.007)	
5.	Cumulative BITs signed by Partner Country ( $CBP_{it}$ )			0.068* (0.01)
6.	CECA/CEPA Signed ( $CC_{it}$ )	1.88* (0.67)	1.16*** (0.616)	1.56** (2.40)
7.	Constant	-1.81*** (-0.98)	-0.96 (0.72)	-2.95* (0.95)

\* Significant at 1% level of significance \*\*Significant at 5% level of significance \*\*\* Significant at 10% level of significance  
The values in brackets are the robust standard errors



Source: Wikipedia, Countries by received FDI

Agreement (CECA) or Comprehensive Economic Partnership Agreement (CEPA) has been signed with a trading partner or not. We have included trade agreements of the CECA/CEPA variety because they have a chapter dedicated to investment that is more or less along the lines of a BIT. Finally, all models incorporate the lagged inflow of foreign direct investment, which is commonly thought to influence current levels of similar investment.

## RESULTS

The results can be seen in the Table. The first point to note is that the bilateral trade variable is significant in all the models. The coefficients associated with the variable as to whether a CECA or CEPA was signed with the partner country are also significant and additionally show the largest marginal effects in all the models. The lagged FDI variable is significant but only in Model 1 and Model 3. However, the interesting result visible across all three models is that the variable capturing whether India signed a BIT with a partner country or not is insignificant. This effectively means that the individual signing of bilateral investment treaties

does not influence the inflow of foreign direct investment.

But, we cannot conclude that BITs do not have an impact on the inflow of foreign direct investment into India. The truly remarkable result can be observed in Model 2 and Model 3. In Model 2 where the presence of an additional variable – the cumulative bilateral investment treaties signed by India, captures the effects of international investment treaties differently from the individual signing of such treaties. As can be seen, the estimated coefficient of this variable is very significant. This tells us that while the individual signing of a BIT with a partner country cannot be said to have an effect on FDI inflows, the collective consequence of signing a series of investment treaties by India has had a beneficial effect on the inflow of FDI. In Model 3 the presence of investment treaties is captured differently from Model 2 – here as the cumulative bilateral treaties signed by the partner country. The estimated coefficient is again very significant. This could be understood as capturing the attitude of the partner country towards investment – thus the greater the number of BITs signed by the partner

country, the more conducive it is for investors to invest abroad, and consequently the greater is the volume of FDI inflow into India. Of course, as can be seen in Table, the estimated marginal effects are quite small but the high statistical significance of the coefficients demands our attention.

These results support the view that institutional support is important for investment flows. Our Model 2 tells us that the cumulative effect of signing a series of treaties has influenced the inflow of foreign investment into India. The cumulative effect is a positive externality or a spillover effect of a series of individual acts of signing bilateral investment treaties. Thus, once a whole set of international treaties come into place, they act as a collective signal that international investment arbitration would protect investors in the face of exigencies arising from the actions of host states. The results of Model 3 reinforce this – here the cumulative effect of international investment treaties signed by the partner country seem to assure and encourage investors to invest abroad – in other words investors in countries attuned to an orientation towards signing

international investment treaties are influenced to invest in a country like India. In broad terms these findings point to the fact that the overall governance regime (the institution) that oversees investment is an important determinant of cross-country investment flows. Also important is the variable that captures whether India has signed a comprehensive economic cooperation agreement (CECA/CEPA), which has both a trade dimension as well as a chapter that is akin to a bilateral investment treaty and thus combining both the forces of trade flows and governance, is both statistically significant across all models and shows the highest marginal coefficients.

## LOOKING OUT INTO THE FUTURE

As we look out to the future, our results say that the collective presence of an overall investor protection is positively and significantly linked to foreign investment flows, supporting the view that the risk borne by individual foreign investors is served by IIA based protection. In fact, our empirical study shows that over a period when the IIA protection was in place, though India may have had to confront some adverse rulings against its regulatory actions, the overall participation in a system governed by IIAs did influence the inflow of foreign direct investment positively. This in itself tells us that in the future we

should be supporting multilateral international institutions that benefit the global economy – institutions that can simultaneously take away the negative aspects of the current IIA system that overly impose restrictions on the regulatory space of host states, but retain overall international law protection to cross country investors.

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