



DOES NORTH EAST DOMESTIC BUSINESS GROWTH IMPACT THE TRADE PERSPECTIVE? A STUDY OF TRADE OUTLOOK OVER INDIA FDI SCENARIO

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ABSTRACT

Northeast region is best known for its tremendous resources endowed with varieties of natural assets favorable for economic activities. A largeshare of geographical boundaries with international has a remarkable prospect for trade relations, the vision of Act East policy and external infrastructure amenities of the neighboring countries added more outlook on trade potential. This is why the region is considered to be the gateway to Southeast Asia. However, The efforts implemented by the government failed to create substantial economic avenues thus far for the northeast region. The various stakeholder across the country committed investing in this region which is why the trends on flows of FDI are negligible. Therefore, The study is initiated to investigate the prospect of FDI in India and the North East region, determined the prospect of export with neighboring countries for the last 23 years (1996 to 2019). Finally, the relationship between export and FDI is examined with the help of the Vector Error Correction Model (VECM) and the analysis result indicates that the variables such as FDI and export have bi-directional causality. However, Internal environmental challenges such as lack of infrastructures, insurgency problems, market instability, and border drug menace are also played a crucial role in this region.

Keywords: Trade, Neighboring Countries, Export, FDI and Causality

Introduction

Northeast region is known for its cultural legacy, ethnic magnificence, and its favorable climatic conditions advantageous over economic activities. The region is gifted with varieties of natural resources such as oil, gas, coal, forest wealth, etc. Given the strategic natural location, the region has the emerging cross-border markets potential, likely to be more coin-integration of premium production than the national market **Bhargav & Kumar (2015)**. 95 percent of its boundary is surrounded by various neighboring countries such as Nepal, Bhutan, China, Myanmar, and Bangladesh. The region occupies only 7.9% of land area and 3.8% population of the country. A major portion of

the land area covered by the forest **Goswami and Saikia (2012)**, the population of the region is thinly populated as such 149 per square km. of density which is below the national level. The trade points in the NER border such as at Moreh (Manipur) and Tamu (Myanmar), Zakhawthar (Mizoram) and Rikhwadhar (Rhee, Chin), Avankhug - Somra point at Nagaland, Nampong through Pangsung Pass in Arunachal Pradesh, Dawki in Meghalaya, Suterkandi in Assam and Nathula Pass in Sikkim need to be developed and made operative for fructifying the essence of economic cooperation with the neighboring countries **Bhargav and Kumar (2015)**. Despite the tremendous natural resources and the international trade potential, the region is still

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lagging of infrastructure development to the rest of the country. **Ahmed (2017)** has pointed out that the NESs are small and underdeveloped states which have a long way to go in economic development and trade. The states have factor endowments and skills which are quite amenable to trade and be further developed and promoted for exports and create an international /ASEAN trade image of the NER. The scope of foreign direct investment is expanded in all sectors, except in some sectors which imposed limiting ceiling on FDI.

Survey of Literature

The role of FDI in domestic exporting: Evidence from China and determined that there is positive output break through from foreign direct investment, the situation expanded on domestic firms offset in the company of foreign firms which enhance the domestic market profitable **Sun (2012)**. The study also observed that in the past three decades China's promote substantial export climate and suitable destiny of the foreign direct investment. The long-run relationship between economic freedom and capital inflows and the value-added components of sector-specific production for thirty European countries. Further highlight the effect of the economic freedom of exporters on the agricultural sector is greater than that of importers. However, this relationship is the opposite for the other sectors (i.e., machinery, chemicals, and other manufacturing) **Sayari, et al. (2017)**. Based on the study Chiara **(2012)** Exports and FDI motivations: The empirical evidence from U.S. foreign subsidiaries determined that there is the effect of U.S. FDI on export concentration at the sector-wise in 16 OECD countries over the period 1990–2001 by bringing together international economics and international business perception on FDI motivations. He also highlights the asset exploiting motivations, and in particular, market-seeking FDI is those that affect export concentration to a greater extent. Due to the cautious FDI policy adopted by the government the flow of FDI is not satisfactory as compared to China's performance. They also maintained

that despite the North East Region having natural advantages of trade with the neighboring country, the region fails to attract FDI. "Lack of infrastructure amenities, insurgency, and inefficient governance are important findings of their study "**Goswami and Kanta (2012)**.

An attempted of this study is to serve three objectives: (a). To examine the trends of FDI in India during 1996-97 to 2018-19, (b). To evaluate the relationship between FDI and Export, and (c). To study the status of FDI and Export in North East Region

Methodology

The study is based on the annual data relating to Export, flows of FDI as indicators of GDP for the last 20 years i.e., 1996-97 to 2016-17. The online data-based sources from the World Bank open access are the core component of the study. For the statistical convenience, the variables such as FDI to GDP are signified as FDI_GDP and Export to GDP as Ex_GDP. Initially, the two variables i.e., Export and FDI are put indifferent tests to perform a time series analysis. Further, we examine the Augmented Dickey-Fuller (ADF) test to confirm and understand the unit root of the variables, and if the result indicates the presence of the unit root, then stationary is attained by the first differencing of the data. Next, having recognized the order of integration, Johansen Juselius' maximum likelihood method of coin-integration is run intended to find the numbers of co-integrating vectors or whether the variables have a long-run relationship. Finally, with the help of Vector Error Correction Modal (VECM) both long runs as well as short-run causality between the variables are investigated.

Trends and Performance of FDI

This section highlights the trends and performance of the FDI in India from 1998-99 to 2018-19. The table endeavors to show the performance of FDI in terms of Rupee, US dollar, Net inflows on GDP, and presented to percentage-wise.

Table 1.1: FDI and its Performance in India

Year	FDI Rupee Crores	FDI in million	FDI net inflows (% of GDP)	Trends of FDI in Percentage (%)
1998-99	7172	2426	0.6	31
1999-00	10015	3577	0.9	26
2000-01	13220	2634	0.6	-30
2001-02	10358	2168	0.5	-12
2002-03	18406	4029	0.8	86
2003-04	29235	6130	1.1	52
2004-05	24367	5035	1.0	-18
2005-06	19860	4322	0.6	-14
2006-07	27188	6051	0.8	40
2007-08	39674	8961	0.9	48
2008-09	103367	22826	2.2	146
2009-10	161536	34843	2.1	53
2010-11	176304	41873	3.7	20
2011-12	138411	37745	2.7	-10
2012-13	157508	34847	1.7	-08
2013-14	197226	46847	2.0	34
2014-15	125771	34298	1.3	-26
2015-16	162937	36048	1.5	5
2016-17	190073	45148	1.7	25
2017-18	203734	55559	2.1	23
2018-19	252945	60082	1.5	8

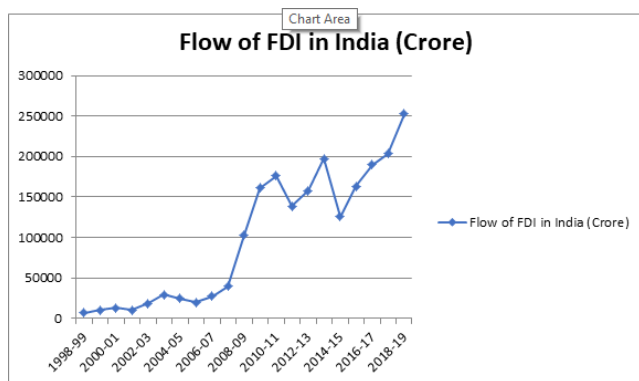
Sources: World Bank Database

Table 1.1 determined the fluctuation trends of FDI from 1998-99 to 2016-17. It is shown that there is an increasing trend up to 2000-01 the implementation and the effect of the New Economic Policy are main behind on this trend. "The flows of FDI figure have bound but yet again declined for a few following years because of lethargic industrial growth" Kumar, (2005). From the period of 2003-04, the formulation of strategic economic fundamental promotes an environmentally friendly of FDI

destiny. Which is in return increased the industrial production and vigorous for the growth of GDP. The establishment special economic zone act (SEZ) in 2005 considerably fascinated the major inflows of FDI in the following year 2006-07 with 146% as record highest annual growth. The rhythm continued till 2007-08. However, "during a couple of years, the inflows of foreign direct investment (FDI) have extremely reduced due to global crisis set off by the US sub-prime crisis leading to the

credit crunch and unemployment all over the world" Goswami and Kanta (2012). While observing the trends of FDI for the last couple of 10 years from 2007-08 to 2016-17 it shows the increasing trend of FDI even though the historical record of the devaluation of Indian Rupee. Massive liberalizing policies of the Indian economy expected furthermore growth orientation of the economy.

Figure 1.1 Flows of FDI in India



Unit Root Test

In this stage, an effort is made to investigate the stationarity of a time series.

Here, we applied the Augmented Dickey-Fuller (ADF) test to inspect the plots between the variables, the test is run with a constant as first differencing such as D-Exp_GDP variables and D-FDI_GDP variables. Here, the formula of the Augmented Dickey-Fuller Method as follows

$$\Delta Y_t = B_1 + \Delta Y_{t-1} + a_i + e_t \quad (1.1)$$

Where, Y is the interest variable, t as time index, B₁ is a coefficient on a time trend, a_i as residual of the equation, and e_t as an error correction term. The results of the ADF test are represented in Table 1.2.

Table 1.2: Result of ADF Unit Root Test

	Test Statistic	1% critical Value	5% critical value	10% critical value
Z(t)	- 1.898	- 3.750	- 3.000	- 2.630
Z (t)	- 2.172	- 4.380	-3.600	- 3.240

Mackinnon approximate p-value Z(t) = 0.9614

D. Exp_GDP	Coef.	St.Err	T	P > (t)	95% Conf. Interval	
Export	-.3657023	.1926586	- 1.90	0.075	-. 7721764	.0407718
L1						
_cons	958545.08	50283.29	1.91	0.074	- 10243.39	201933.6
D- FDI_GDP						
FDI	- .4282616	.1972021	- 2.17	0.045	- .8463.113	.0102118
L1						
_Trend	155.915	657.5946	2.37	0.031	162.1138	2951.717
_cons	- 2809.953	3278.932	- 0.86	0.404	- 9760.978	4141.072

Table 1.2 confirmed that both the variables have a unit root at their levels; with the presence of high p-value, the null hypothesis of a unit root cannot be rejected. Meaning that the

absolute Trace Statistic is less than the absolute critical value (-1.87 < - 3.00). However, they are stationary at the first differences as p values are significant. Hence, both the variables are

integrated i.e., I (1) similar observation with (Goswami, 2012), i.e., I (1). Therefore, the investigation results extended that the Null Hypothesis can't be rejected rather accept it.

Cointegration Test

The investigation having recognized the integrating of two variables at the level, the next step is an investigation on the Cointegration of the variables. The two non-stationary variables are co-integrated if they incline to have a long run association or moving together through in

the long run co-integrating. Here, the formula of Johansen Cointegration is followed

$$\Delta X_t = \sum_{i=1}^{p-1} \Gamma_i \Delta X_{t-i} + \lambda X_{t-1} + e_t \quad (1.2)$$

Where, X_t is the 2 x 1 vector (Exp, GDP and FDI, GDP), Δ is a difference operator, e_t is a 2 x 1 vector residual, Γ_i & λ the estimated parameter and λX_{t-1} is the error correction term. To investigate the coin-integration of variables, here, we apply the Johansen Coin-integration Test as given below

Table 1.3: Result of Johansen Cointegration Test

Maximum Rank	Parms	LL	Eigenvalue	Trace Statistics	5% critical value
0	6	- 418.78564		8.8785	15.41
1	9	- 414.47402	0.38064	0.2553	3.76
2	10	- 414.34638	0.01408		

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The above table 1.3 initially observed the performance in Trace Statistic to evaluate the co-integration between the variables. It is determined that there are several levels of co-integration of variables such as 0, 1 & 2 co-integration. Analysis based on the co-integration level, in 0 co-integration reveals that the calculated value of trace statistic is less than critical value i.e., (8.8785 < 15.41) it also similar results in 1 co-integration (0.2553 < 3.76). Therefore, both the condition established that we accept the null hypothesis meaning that there is a long-run association between export and FDI or the variables moving together in the long run. Here applied the same results in the case of max statistics performance which means the 5% critical values are more than the max statistics.

Vector Error Correction Model

Since both the variables such as Exp_GDP and FDI_GDP are found to be co-integrated, there established a long-run association between the two. Hence, to investigate the causality of the variables, we apply the Granger Causality Test and here, the formula as given,

$$\Delta \text{Exp}_t = \sum_{i=1}^{p-1} M1 \Delta \text{FDI}_{t-i} + \sum_{i=1}^{p-1} N1 \Delta \text{Exp}_{t-i} + \lambda \text{EC}_{t-1} + e_t \quad (1.3)$$

Where M1 and N1 are the short-run coefficients, EC as error correction term, e_t is a residual in the equation, EC is the lag value of the residuals derived from the co-integrating regression of Export to FDI and vice versa.

Table 1.4: Result of Vector Error Correction Modal

	Coef.	Std.err	Z	P > z	95% conf.	Interval
D. Export						
_Cel						
L1	- 4.690074	1.036694	- 4.52	0.000	- 6.721957	- 2.658191
Export						
LD	- 3.037766	.8468387	3.57	0.000	1.377913	4.69154
L2D	- 3.615433	.8110704	4.46	0.000	2.025764	5.205101
L3D	- 4.848648	1.112704	4.36	0.000	2.667787	7.029509
L4D	- 1.513201	1.525921	0.99	0.021	-1.477542	4.503975
_Cons	102.2499	29048.63	0.00	0.237	-56902.58	57107.08
FDI						
LD	-21.92974	8.112465	- 2.76	0.007	-37.82988	-6.029599
L2D	-28.62408	4.913884	- 5.83	0.000	-38.25511	-18.99304
L3D	-20.59833	7.742761	- 2.66	0.008	-35.77388	-5.422813
L4D	-14.61414	6.28169	- 2.33	0.020	-26.92603	-2.302258
_Cons	3402.459	3214.027	1.06	0.290	-2896.917	9701.836

The above table 1.4 showcases both the long run and the short-run causalities of the variables, while analyzing the long-run causality it is found that the error correction term has a negative sign and also significant, meaning that the probability value is less than the critical value (i.e. $0.00 < 5\%$ critical value). Therefore, there is a long-run causality between the variables running from FDI to Export. It is pointed out the schedule required for FDI to influence export expansion. On the other hand, "exports also Granger cause FDI. The expected conduct through which exports guide the inflows of FDI to export-led growth, i.e., Exports- to- Growth -to-FDI" Miankhel et al (2009). The analysis based on the several lags such as LD, L2D, L3D, L4D of both export and FDI variables it is found that all the error correction term have a negative sign and significant except L4D of export which means the rest of the lags have the short-run causality running from FDI to export. Since the set of

estimation on the lags exports are zero (short-run causality). Hence, bi-directional causalities from export to FDI (Export Granger cause FDI) occur in the above equation (1.3).

Our findings disagree with the finding observed by Sharma (2000). However, supported by Prusty (2006) that "net FDI inflow is positively and significantly influencing export growth in India". The time lag between the two studies might be the reasons for which differ the results on flows of FDI. However, there is also delimitation of our studies since it is also based on only two variables involving small samples.

Profile of North East Region and the Trade Outlook

Northeast region is known as the home of tremendous resources endowed with varieties of natural products, her landscape, and climatic conditions are favorable for economic activities. 95 percent of its boundary is surrounded by the

various neighboring countries, it shares 1880 km with Bangladesh, 1643 km with Myanmar, 1000 km with China, and 110 km with Bhutan.

There is a disproportionate of export share between the North East Region and the total country exports in regards to agricultural and other allied products. "Only the product like minerals that share around 2 to 4% in the last few years" (Adhikary *et al.*, 2009). The region needs a trade-oriented environment and a suitable investment climate to incline with the recent free trade agreement (FTA) under the Indo-ASEAN agreement. Few studies such as Singh (2010); Bezbaruah (2007) identified that "adequate infrastructure, transparent and accountable governance and to appease the problem of insurgency by instilling self-assurance among different stakeholders are considered as a vital solution".

Conclusion

The introduction of the New Economic Policy in 1991 has outshined the flows of FDI in the country. It breaks through a slowdown of economic mechanism, liberalizing the economy is a primary factor promoting the FDI destiny. The paper first analyses the trends in the inflows of FDI. The investigation reveals that there are fluctuating flows of FDI over the years of course with an increasing trend. The flows have been considered in recent years. However, the country's inflow of FDI is not satisfactory while comparing to that of China and other Southeast Asian countries. The cautious of the government policy formulation are the significant factors impact on FDI climate, market stability, infrastructure development, and a slowdown of industrial growth. Next, the paper analyzed the relation between FDI and Exports by applying the vector error correction model (VECM). Initially, data are investigated to ascertain the stationary by using Augmented Dickey-Fuller (ADF) test and the result found to be non-stationary at the level and stationary at the first differences of variables. Followed by testing the coin-integration of variables by applying Johansen Juselius co-integration method, the two variables such as Export and FDI are found to be co-integrated meaning that the two

variables have long run an association or moving together in the long run. Finally, the results of the Vector Error Correction Model (VECM) shows the long run bi-directional causality of the two variables, i.e., "FDI causes export in the long run causality and then export-led growth further support the flows of FDI" Goswami and Kanta (2012). Finally, we present a brief profile of the North East Region and trade outlook. It is a matter of regret that the New Economic Policy has been incapable to make any positive contact on the growth of the region. The outlook of border trade in this region is below the potential, the flows of FDI is one factor and also found to be neglected. However, Indo-ASEAN FTA as part of LEP is significant trade development, which required adequate investment to incline on the benefits. Therefore, the government needs to remove fundamental constraints such as lack of infrastructure, market instability, insurgent problem, and illegal trade through strategic intervention.

Limitation

The whole study was strictly based only on the collected data from the world bank open access and RBI online database. The shortcoming of this study may be inclusive, since the study may potential for sampling bias.

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