



Determinants of FDI and its Impact on BRICS Countries: A Panel Data Approach

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Abstract: This paper examines the impact of factors determining Foreign Direct Investment (FDI) inflows of BRICS countries using annual dataset from the period 1994-2014. The paper proposes to compare the overall trends and factors impact on the FDI in the BRICS countries. The study employs Panel Data analysis and examines the selected variables like Index of Industrial Production (IIP), Gross Domestic Product (GDP), Foreign Exchange Rate (FOREX), Stock Market Capitalization, Infrastructure Index, and Stock Market Turnover ratio. The empirical results are robust in general for alternative variables determining FDI flows. The policy implication of this study is that increasing interest of economic integration around the globe and interdependence of FDI between member's countries is an important feature for maintaining sustainability of growth.

Keywords: FDI, BRICS, panel data, stock market capitalization, economic stability

1. Introduction

The world is experiencing a massive transformation process of globalisation in terms of economies, geopolitics, and distribution of production and investment. The role of Foreign Direct Investment (FDI) in this process of transformation is very crucial. FDI has become an important parameters of economic development in both developed and developing countries. According to UNCTAD Foreign Direct Investment (FDI) is defined as an investment involving a long term relationship and reflecting a long lasting interest and control by a resident entity of one economy of an enterprise resident in a different economy. FDI influences the income, prices, production, employment, development, economic growth and general welfare of the recipient countries. The benefit of FDI can be in the form of knowledge and technology spill over's, employment generation and enterprise development. Foreign Direct Investment going in and out of these emerging and transition economies like Brazil, Russian Federation, India, China and South Africa, collectively known as BRICS, represent the four continents of the world, which are of economic significance in the process of global transformation. This can be evident from the fact that FDI inflows to BRICS countries has increased from \$157 billion in the year 2007 to \$304 billion in the year 2013.

In 2013, FDI flows witnessed an upward trend, global FDI inflows rose by 9 per cent to \$ 1.45 trillion in 2013. FDI inflows increased in all major economic groupings: developed developing and transition economies. Global FDI stock rose by 9 percent, reaching \$25.5 trillion. UNCTAD projects that global FDI flows could rise to \$ 1.6 trillion in 2014, \$ 1.75 trillion in 2015 and \$ 1.85 trillion in 2016. The rise will be mainly driven by investment in developed economies as their economic recovery starts to take hold and

spread wider. The fragility in some emerging markets and risk related to policy uncertainty and regional conflict still derails the expected upturn in FDI flows (UNCTAD, 2014).

As a result of higher expected FDI growth in developed countries, the regional distribution of FDI may tilt back towards the traditional pattern of higher share of developing countries in the global inflows. FDI flows to developing economies reached to \$ 778 billion, accounting for 54 per cent of global inflows, although the growth rate slowed to 7 per cent, compared with an average growth rate over the past 10 years of 17 per cent. Developing Asia continues to be the region with the highest FDI inflows significantly above European Union (EU), traditionally the region with the highest share of global FDI. FDI inflows were up also in the other major developing regions, Africa (up 4 per cent) and Latin American and Caribbean (up 6 per cent). Although FDI to developed economies resumed its recovery path after the steep fall in 2012, it remained at historical low share of total global FDI flows (39 per cent) and still 57 per cent below its peak in 2007. Thus, developing countries maintained their lead over developed countries by a margin of more than \$200 billion for the second year.

Developing economies and transition economies now also constitute half of the top 20 economies ranked by FDI inflows. China recorded its largest ever inflows and maintained its position as the second largest recipient in the world. FDI by Transnational Corporations (TNCs) from developing countries reached \$454 billion. Together with transition economies, they accounted for 39 per cent of the global FDI outflows, compared with only 12 per cent at the beginning.

The BRICS (Brazil, Russia, India, China and South Africa) are the five biggest emerging economies, as they account for two fifth of the total Gross Domestic Product (GDP) of all emerging economies and their share in FDI inflow have been increasing year after year (Table 1). All the BRICS stock markets are volatile in nature and there exists a significant difference in the stock return volatility in all the countries stock markets (Kishor and Singh, 2014).

Table 1. FDI inflows to selected regional and interregional groups
(Billions of dollars)

| Regional/ inter-regional groups | 2005-2007 Pre crisis average | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|--|---|-------------|-------------|-------------|-------------|-------------|-------------|
| G-20 | 878 | 992 | 631 | 753 | 892 | 694 | 791 |
| APEC | 560 | 809 | 485 | 658 | 765 | 694 | 789 |
| TPP | 363 | 524 | 275 | 382 | 457 | 402 | 458 |
| TTIP | 838 | 858 | 507 | 582 | 714 | 377 | 434 |
| RCEP | 195 | 293 | 225 | 286 | 337 | 332 | 343 |
| BRICS | 157 | 285 | 201 | 237 | 286 | 266 | 304 |
| NAFTA | 279 | 396 | 184 | 250 | 287 | 221 | 288 |
| ASEAN | 65 | 50 | 47 | 99 | 100 | 118 | 125 |
| MERCOSUR | 31 | 59 | 30 | 65 | 85 | 85 | 85 |
| Percentage share in world FDI flows | | | | | | | |
| G-20 | 59 | 55 | 52 | 53 | 52 | 52 | 54 |
| APEC | 37 | 44 | 40 | 46 | 45 | 52 | 54 |

| | | | | | | | |
|-----------------|----|----|----|----|----|----|----|
| TPP | 24 | 29 | 23 | 27 | 27 | 30 | 32 |
| TTIP | 56 | 47 | 41 | 41 | 42 | 28 | 30 |
| RCEP | 13 | 16 | 18 | 20 | 20 | 25 | 24 |
| BRICS | 11 | 16 | 16 | 17 | 17 | 17 | 20 |
| NAFTA | 19 | 22 | 15 | 18 | 17 | 17 | 20 |
| ASEAN | 4 | 3 | 4 | 7 | 6 | 9 | 9 |
| MERCOSUR | 2 | 3 | 2 | 5 | 5 | 6 | 6 |

Source: UNCTAD FDI-TNC-GVC information system, FDI/TNC database (www.unctad.org/fdistatistics).

Note: G-20= 19 individual member economies of the G-20, excluding the European Union, which is the 20th member, APEC= Asia-Pacific Economic Cooperation, TTIP = Transatlantic Trade and Investment Partnership, TPP = Trans-Pacific Partnership, RCEP = Regional Comprehensive Economic Partnership, BRICS = Brazil, Russian Federation, India, China and South Africa, NAFTA = North American Free Trade Agreement, ASEAN = Association of Southeast Asian Nations, MERCOSUR = Common Market of the South, Ranked in Descending order of the 2013 FDI flows.

2. Regional trends in FDI

FDI inflows to Africa rose by 4 per cent to \$ 57 billion, driven by international and regional market seeking and infrastructure investments. Expectations for sustained growth of an emerging middle class attracted FDI in consumer oriented industries, including food, IT, tourism, finance and retail. In Southern Africa flows almost doubled to \$13 billion, mainly due to record high flows to South Africa and Mozambique. In both the country's infrastructure was main attraction, intra-African investment are increasing, led by South African, Kenya and Nigeria. With total FDI inflows of \$426 billion in 2013, developing Asia accounted for nearly 30 per cent of the global share and remained the world's number one recipient region. FDI inflows to East Asia rose by 2 per cent to \$221 billion. The stable performance of the sub region was spear headed by rising FDI inflows to China as well as to the Republic of Korea and Taiwan. With inflows at \$124 billion in 2013, China again ranked second in the world.

Inflows to South Asia rose by 10 per cent to \$36 billion in 2013. The largest recipient of FDI in the sub region, India, experienced a 17 per cent increase in FDI inflows to \$28 billion. India has taken various steps to open its service sector to foreign investors, most notably in the retail industry. It seems that the opening up of single brand retail in 2006 has led to increased predominately FDI inflows; that of multi brand retail in 2012 has so far not generated the expected result. Macro-economic uncertainties in India continued to be a major area of concern for foreign investors. The annual rate of GDP growth in that country has slowed to about 4 per cent and Current Account Deficit (CAD) has reached an unprecedented level nearly 5 per cent of GDP. The Indian rupee depreciated significantly in mid-2013, high inflation and other macroeconomic problems have cast doubts on the prospects of FDI, despite the government ambitious goal to boost foreign investment. Policy response to macroeconomic problems will play an important role in determining FDI prospects in the short to medium run. In addition to liberalizing telecommunication investment, India raised the FDI cap in the defence sector beyond 26 per cent upon approval by the cabinet committee on security and under specific condition.

FDI flows to Latin America and the Caribbean reached \$ 292 billion in 2013. Among the main recipient countries, Brazil saw a slight decline by 2 per cent despite 86 per cent increase in flows to the primary sector. In South East Europe, flows increased from \$ 2.6 billion in 2012 to \$ 3.7 billion in 2013, driven by

the privatisation of remaining state owned enterprise in the service sector. In the Commonwealth of Independent States (CIS), the 28th per cent rise in flows was due to the significant growth of FDI to the Russian Federation. In 2013, outward FDI from the region jumped by 84 per cent, reaching a record \$ 99 billion. Rising FDI by TNCs from emerging economies especially the BRICS, contributed to the growth in FDI flows in 2013. Compared with their counterparts from the BRICS, the TNCs from the developed countries have been less active in investing abroad and their international investments remain sluggish and snarled.

3. Review of literature

The classical model for determinants of FDI begins from the earlier research work of Dunning (1973, 1981) which provides a comprehensive analysis based on ownership, location and the internationalization paradigm. Lucas (1993) examined the determinants of FDI inflows for select East and South Asian economies during 1960 to 1987 by using a model based on traditional derived-factor of a multiple product monopolist. The study finds that FDI inflows are more elastic with respect to cost of capital than wages and also more elastic with respect to aggregate demand in exports than domestic demand. Balasubramanyan et al. (1996) found significant positive association between FDI and economic growth and suggested that the above relationship is more holistic in the export promotion policy in contrast to import substitution policy of the country. Sing and Jun (1996) argued that political risk, business conditions and macroeconomic policies matter for FDI in developing countries.

Duran (1999) used the Panel data and time series techniques to find out the drivers of FDI for the period of 1970-1995. The study indicated that the size, growth, domestic savings, country's solvency, trade openness and macroeconomic stability variables are catalyst of FDI. The UNCTAD (1999) advocated both positive and negative association between growth and FDI, depending upon the incorporation of various variables like infrastructure, market integration, etc. in this model.

Bevin and Estrin (2000) established the determinants of FDI flows to transition economies (Central and Eastern Europe) by taking determinants factors as country risk, labour cost, host market size and gravity factors from 1994 to 1998. Sun Qian et al. (2002) examined 30 provinces of China and found that FDI determinants move through time. Labour quality and infrastructure are important determinants of the distribution of FDI. Aguilar and Vallejo (2002) studied the forces behind the bilateral FDI due to regional integration agreement for Latin America. They used gravity model and found that the size and development of both the domestic and foreign economies, the distance between them and the common language existence are the major determinants of bilateral FDI flows. Gliberman et al. (2002) analyzed that for developing and developed countries, governance infrastructure in the form of institutions and policies are important determinants of FDI inflows and outflows. Chakrobarty and Basu (2002), applying co-integration and error correction modelling technique, found a uni-directional causality between FDI and economic growth and that is from economic growth to FDI only. Agarwal and Mohtadi (2004) studied the role of financial market development in the financing choice of firms in 21 developing countries over the period of 1980-1997. Their analysis revealed that FDI as proportion of GDP and investment as proportion of GDP are positively correlated with both the stock market variables and the banking variables.

Nunes et al (2006) found the variables such as market size, openness of the economy, infrastructure, macroeconomic stability (inflation), wages, human capital and natural resources as the determinants of FDI flows during the period 1991 to 1998. The study observed that the market size, infrastructure and

inflation are positively influencing and wage rate is negatively influencing the FDI flows. Sahoo (2006) found that market size, labour force growth, infrastructure index, trade openness are the important determinants of FDI flows in South Asian countries. Sung-Hoon Lim (2008) in his study of China concluded that investment promotion positively affects the attraction of FDI. Nasser and Gomez (2009) using the data of 15 Latin American countries analyzed that FDI is directed to the countries that are financially developed and institutionally strong. Ranjan and Agarwal (2011) explored FDI inflow determinants in BRIC countries and found that market size, trade openness, labour cost, infrastructure and macroeconomic stability and growth prospects are potential determinants of FDI inflows in BRIC whereas gross capital formation and labour force were having insignificant impact on FDI inflows. Kaur et al (2014) analyzed the impact of financial system development on FDI with respect to BRIC countries for the period of 1991 to 2010 and concluded that FDI inflows to BRIC countries are influenced by banking sector and stock market variables.

The above studies indicated mixed results and mostly provided information about determinants related to FDI in BRIC countries. Thus, the reviews helped in choosing the factors or alternative that may gauge empirical analysis of determinants of FDI in BRICS.

4. Data and methodology

This section describes the data used for empirical analysis. The data comprises of annual observation from 1994 to 2014 for the five emerging economies, namely, Brazil, Russia, India, China and South Africa. The dependent variable is a log of FDI inflows in the respective country in US\$ taken from World Development Indicators published by World Bank (2014). It is denoted LFDI. The required data set for the selected countries were obtained from ‘World Development Indicators (WDI) CD-ROM-2014’, except for Industrial Production Index and Exchange rate. The Industrial Productive index is obtained from Centre for Monitoring Indian Economy (CMIE)’s ‘*International Economic Indicators*’ and Exchange rate is obtained from *The Federal Reserve Board Statistics* (Released and Historical data). The variables used for measuring the financial development are described in Table 2.

Table 2. List of variables used in the analysis

| Variables | Definition | Reason for inclusion | Source |
|--------------|--|---|-------------|
| LIPI | Industrial Production Index | Measure of economic stability | CMIE (2014) |
| LGDP | Gross Domestic Product | Measure of market size | WDI(2014) |
| LREER | Real Effective Exchange Rate | Measure of currency value | FRBS(2014) |
| LMCAP | Market Capitalization as a percentage of GDP | Measure of size of capital market | WDI(2014) |
| LINFX | Infrastructure Index | Measure of good infrastructure facilities | WDI(2014) |
| LSTRN | Stock Market Turnover as a percentage of GDP | Measure of depth of capital market | WDI(2014) |

Most of these factors are used by Vijayakumar et al. (2010), Ranjan and Agarwal (2011) and Kaur et al. (2014) to establish the relation among FDI and various factors which have impact on FDI inflows. This study compliments the existing literature by providing empirical analysis on BRICS countries only, as the existing studies contain large number of countries but do not have China and South Africa in their list,

which are the major recipient of FDI in the world. The data series are taken for 1994 onwards because of the non-availability of data prior to that period for Russia and South Africa. Thus, to ensure homogeneity in time period, the data from 1994 is taken for all the countries under study. The dependent variable (in all the five countries) is Log of FDI net inflows (BoP in current US\$) and the independent variables that are expected to determine FDI flows are carefully chosen, based on previous literature and availability of dataset for the selected period. The independent variables in our estimation include: Gross Domestic Product, Industrial production index, Infrastructure index, Foreign Exchange rate, stock market capitalization and stock market turnover. The variable Foreign Exchange rate is substituted with Real Effective Rate Index (REER) because latter variable seems to be more robust in the estimation than the former variables.

Based on the hypotheses posed, the estimated model is as follows:

$$LFDI_{it} = \alpha + \beta_1 LIPI_{it} + \beta_2 LGDP_{it} + \beta_3 LREER_{it} + \beta_4 LMCAP_{it} + \beta_5 LINFX_{it} + \beta_6 LSTRN_{it} + \epsilon_{it}$$

Where,

$LFDI_{it}$ is the log of Foreign Direct Investment in Current US\$ for country i at time t .

$LGDP_{it}$ is the log of Gross Domestic Product in current US\$ for country i at time t .

$REER_{it}$ is the Real Effective Exchange Rate for country i at time t .

$LMCAP_{it}$ is the log value of stock market capitalization for country i at time t .

$INFX_{it}$ is the Infrastructure Index for country i at time t . The Infrastructure Index is constructed for the selected countries as:

$$Y_{jt} = \frac{X_{jt}}{X_{jt} - 1} \times 100$$

Where, X_{jt} is the value of j^{th} indicator at time t for each country.

$LSTRN_{it}$ is the log value of stock turnover for country i at time t .

This study analyses the five emerging economies of the world, known as BRICS.

5. Panel data analysis

The panel data estimation is employed in the study to capture the dynamic behaviour of the parameters and to provide more efficient estimation and information of the parameters. Panel data techniques are used because of their advantage over cross-section and time series in using all the information available, which are not detectable in pure cross-sections or in pure time series. Baltagi and Kao (2000), Hsiao (1985, 1986) and Baltagi (1995) argued panel data sets possess several major advantages. Panel data suggest individual heterogeneity to deduct the risk of procuring biased results and provide a large number of data points (observations) to enhance the degrees of freedom and variability and to be able to study the dynamics of adjustment. The panel data model includes three different methods: (a) Random effects (b) Fixed effect (c) Common Constant method. The study estimates all the three methods so as to incorporate the best fit of the estimation. The common constant method which is also called as pooled OLS method of estimation presents result under the principle assumption that there is no difference among the data matrices of the cross sectional dimension which implies that there is no differences between the estimated cross sections and it is useful under the hypothesis that the data set is a priori homogeneous. The fixed effect method

treats the constant as group (section)-specific, it allows for different constant for each group (section). The fixed effects also called as least Square Dummy Variables (LSDV) estimators. The model for fixed effect method is:

$$Y_{it} = \alpha + \beta X_{it} + \mu_i + v_{it}$$

Where μ_i and v_{it} are decomposition of disturbance term. μ_i represents individual specific effect and v_{it} represents remainder disturbance, which varies over time and entities (capturing everything that is left unexplained about Y_{it}). However, while using fixed effect method, we need to apply tests to check whether fixed effects (i.e. different constant for each group) should indeed be included in the model. To do this the standard F-test can be used to check fixed effects against the simple Common constant OLS method. Therefore, while using fixed effects method one should care about the validity of estimation even the F-test suggest to do so. The significant disadvantage of the fixed effects method suggests for using the Random effects method. Random effects method is an alternative method of estimation which handles the constant for each section as random parameters rather than fixed. Under this model, the intercept for each cross sectional unit are assumed to arise from a common intercept α (which is the same for all cross sectional units and over time), plus a random variables ϵ_i that varies cross sectionally but is constant over time, ϵ_i measures the random deviation of each entity's intercept term from the global intercept term α . We can write the random effects panel model as

$$Y_{it} = \alpha + \beta X_{it} + \omega_{it}$$

$$\text{Where, } \omega_{it} = \epsilon_i + v_{it}$$

Here X_{it} is still a $1 \times k$ vector of explanatory variables, but unlike the fixed effects model, there are no dummy variables to capture the heterogeneity (variation) in the cross sectional dimension. Instead, this occurs via the ϵ_i terms. The parameters (α and the β vector) are estimated consistently, but instead of OLS, Generalised Least Square method (GLS) is used. This study performs all the above three methods of panel data model to analyze the robustness of parameter co-efficient in explaining the factors that determine the FDI inflows to BRICS countries. The fixed effect method is rejected in the analysis based on Hausman specification test (1978), the test evaluates the significance of an estimator versus an alternative estimator. It helps to evaluate if a statistical model correspond to the data. This test compares the fixed versus random effects under the null hypothesis that the individual effects are uncorrelated with the other regressors in the model (Huasman, 1978). If correlated (H_0 is rejected), a random effect model produces biased estimators, violating one the Gauss Markov assumption; so a fixed effect model is preferred.

6. Empirical results

Present study uses Panel Data Analysis technique to estimate the dynamic behaviour of determinants of FDI inflows in Brazil, Russia, India, China and South Africa. Before proceeding to estimate with panel data analysis, correlation analysis has been carried out. Correlation matrix indicates high correlation of LFDI with LGDP (0.76) and LSTRN (0.637), existence of high correlation was found among the independent variables as shown in Table 3.

The variable REER was found to be least correlated with the rest of the variables whereas LSTRN, LGDP and LINFX were highly correlated with rest of the variables which implies that there movement can be predicted through other variables. The existence of high correlation among the independent variables will

Table 3. Correlation of variables in the study

| | LFDI | LIPI | LGDP | REER | LMCAP | LINFx | LSTRN |
|-------|--------|--------|--------|--------|-------|-------|-------|
| LFDI | 1 | | | | | | |
| LIPI | 0.504 | 1 | | | | | |
| LGDP | 0.726 | 0.322 | 1 | | | | |
| REER | -0.124 | -0.167 | -0.015 | 1 | | | |
| LMCAP | 0.439 | 0.256 | 0.654 | 0.134 | 1 | | |
| LINFx | 0.602 | 0.314 | 0.546 | -0.188 | 0.492 | 1 | |
| LSTRN | 0.637 | 0.243 | 0.556 | 0.167 | 0.745 | 0.356 | 1 |

Source: Authors own calculations.

lead to problem of multi-collinearity in the estimation. Still we consider these variables because of the statistical nature of panel data estimation which takes care of the collinearity problems. The estimates through panel data analysis include OLS pooled regression and Random Effects method for the selected period results shown in Table 4. From the table it is clear that, the empirical results obtained from pooled ordinary least squares (OLS) and Random Effects (RE) are somewhere near. So we choose Random Effects model to check the robustness with fixed effect model. Further fixed effect model is rejected in the analysis based on Hausman specification test, higher the value of Hausman test rejects the validity of fixed effect test.

Table 4. Determinants of FDI inflows

| Variables | RE | | OLS | |
|---------------------------------------|---------------|--------------|--------|--------------|
| | Coeff | t-Statistics | Coeff | t-Statistics |
| LIPI | -0.004 | [-0.76] | 0.003 | [0.66] |
| LGDP | 2.8845 | [9.34]* | 2.9987 | [12.96]* |
| REER | -0.006 | [1.81] | 0.001 | [0.39] |
| LMCAP | 0.1433 | [1.88] | 0.1423 | [2.96]* |
| LINFx | 0.0125 | [2.47]* | 0.0112 | [2.68]* |
| LSTRN | 0.0255 | [0.88] | 0.0265 | [0.90] |
| Adj.R ² | 0.62 | | 0.68 | |
| Hausman test (prob>chi ²) | 11.78 (0.156) | | | |

Notes: Figures in the parenthesis represent t- value, * denote Significant at 1 percent level, A constant term is included but not reported. The panel data estimation results based on Random Effects (RE) and Ordinary Least Square Models.

The empirical results (Table 4) obtained from RE shows that regression model with dependent variable LFDI fits well with independent determinants variables as value of adjusted R² is significant (0.62). High value of R² also indicates that the explanatory variables included in the equation can explain most of the variation in the dependent variables. The coefficient of gross domestic product (LGDP), market capitalization (LMCAP) and infrastructure index (LINFx) are statistically significant at 1 per cent level which shows that these determinants are potential determinants of FDI inflows whereas industrial production index (LIPI), foreign exchange rate (REER) and stock turnover (LSTRN) are not significant

which indicate that these determinants might not be important determinants in this case. The positive value of coefficient indicates perfect synchronization of determinants variables with FDI inflows whereas negative sign shows that they affect FDI inflows in reverse manner i.e. decreasing value of the determinants. The coefficient of LGDP and LMCAP shows that foreign investors are highly sensitive to market growth and market size as 1 per cent increase in the variables leads to 2.88 per cent and 0.14 per cent increase in FDI respectively whereas coefficient of foreign exchange (REER) and industrial production index (LIPI) indicates 1 percent decrease in these variables will lead to 0.006 per cent and 0.004 increase in FDI flow. These coefficients have negative relation with FDI inflows and its magnitude is very less so there affect is not much significant.

7. Conclusion

As stated earlier the purpose of the study is to analyze the factors that determine the FDI inflow to the BRICS economies. Economic integration provides development and security to the respective countries and world at large. It can be concluded from analysis that financial system and infrastructure development play very vital role in mobilising FDI inflows. The study made an attempt to identify the factors determining the FDI inflows of BRICS countries from 1994 to 2014. These determinants included Stock Market Capitalization, Stock Market Turnover, Gross Domestic Product, Foreign Exchange Rate, infrastructure Index and Index of Industrial Production. The study found that other than Stock turnover, Foreign Exchange Rate and Index of Industrial Production all other factors are potential determinants of FDI inflow in BRICS countries. The empirical analysis further concludes that improvement of investment opportunities, infrastructural development, and GDP growth rate help in attracting the FDI inflows which further facilitate development of the domestic economy. The challenges for the BRICS countries are how to sustain their economic development so that FDI inflows continue the upward trend. Moreover the governments of the respective countries have to optimize their economic condition to attract more FDIs.

Policy Implication: The study found that Gross Domestic Product (GDP), market capitalization and infrastructure development are crucial factors in attracting FDI, which may help to make appropriate policies for improving the performance of domestic economy. In addition, the business facilitating dimensions in the form of treaties and investment promotion agencies may be supported by good political environment, corporate governance, efficient economic policies and sound infrastructure measures to exploit the benefits from FDI.

Limitation of the Study: The study analyzes the impact of determinants of FDI inflow in the five emerging economies i.e. BRICS as a whole unit but it does not analyze how the selected determinants variable influence the FDI inflows on each country on individual basis. There are other important determinants of FDI inflows which are not covered under this study like Gross Capital formation, labour cost, work force, trade openness, inflation etc. Labour cost and work force may be important when we are analyzing countries like China, India and Brazil.

Scope for further research: The research can be further extended to analyze how profit remittances to home countries by direct investor's contribute to Current Account Deficit (CAD). It can be construed from the above study that as a policy implication FDI can cause worsening of balance of payment position by causing Current Account Deficit (CAD) in the long run. Another area of further research can be sectoral analysis to enhance the understanding of industry specific FDI flows and its determinants to analyse whether FDI stock and output are reinforcing manufacturing sector along with primary sector or not.

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