EVALUATING DETERMINANTS OF SUCCESSFUL MAKE IN INDIA PROGRAM

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'Make in India' is a major new national program of India designed to facilitate investment fostering innovation, enhancing skill development, protecting Intellectual Property and building best-in-class manufacturing infrastructure.

Abstract

The Make in India program launched by the Government of India is targeted to twenty five sectors which has maximum likelihood of attracting FDI, and therefore success of the program is linked to level of FDI inflows to identified sectors. Existing theoretical framework of global FDI movement is based on varied and overlapping ideas and supported by varied empirical research. In this article an attempt has been made to identify best success indicators of the Make in India Program. Based on FDI inflows data of 40 countries in 2013 and 8 dependent variables , it has been concluded that market size is the dominant factor in attracting FDI . However, to intensify the FDI inflows to make in India program a success it is critical factor to improve parameters involved in global competitiveness index.

Key words : *Foreign direct investment, Global competitiveness, Market openness, Regulatory restrictiveness*

1. ' Make in India' Campaign and Current status of FDI flows in India

The government of India has identified twenty five priority sectors for ' Make in India' campaign in which likelihood of foreign direct investment (FDI) is the highest and investment shall be promoted by the government of India. These sectors are : Automobiles, Automobile components, Aviation, Biotechnology, Chemicals, Construction, Defence manufacturing, Electrical Machinery, Electronic Systems, Food processing, IT and BPM, Leather, Media and entertainment, Mining, Oil and Gas , Pharmaceuticals, Ports, Railways, Renewable energy, Roads and highways, Space, Textiles and garments, Thermal power, Tourism and hospitality, and Wellness. " Make in India' is a concerted movement to attract FDI in these selected sectors. Success of this campaign depends on increased FDI flows to India which despite strong GDP growth during 2007-2013 lags way behind its BRICS counterparts. It may be mentioned that BRICS nations received more than one fifth of the FDI[1].

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India is way behind China , Russia and Brazil as a FDI destination when compared among the BRICS nations in absolute and relative term during 1990-2013(See Figures -1&2). In absolute term net *FDI inflows*[2] to China, Brazil and Russia during 2010-2013 was 8.23 times, 1.86 times and 1.45 times respectively. In particular, China as an FDI destination can be decoupled from other BRICs nations since 2000 although FDI flows to China as per cent of GDP is not very impressive.In relative term (FDI as % of GDP), India ranks fourth among five BRICs nations. In absolute term, India ranks 14th in top 20 FDI destinations in 2013 (Figure -3).

The hardest challenge of 'Make in India' is India's rank in global competitiveness, regulatory restrictiveness , trade openness and as a whole ease of doing business . India ranks 92 as per the Global Competitiveness Index 2014-15 (World Economic Forum,2014), 64 as per the ICC Open Markets Index 2013 (International Chamber of Commerce, 2013) and 142 in 'Ease of Doing Business Rank' (2013) of World Bank . Also in the FDI Regulatory Restrictiveness Index 2013 (in the scale of Open economy =0, Close economy = 1) (OECD, 2013)India scored 0.26 (the 53rd rank out of 59 countries meaning highly regulatory restrictive country).Carols et al (2009) ranked India in the list 'under-performer' based on 2007 data in their proposal of improved FDI Performance Index of UNCTAD.


Figure 1 :Comparative FDIs in BRICs counaries during 1990-2013 (in Billion US$)
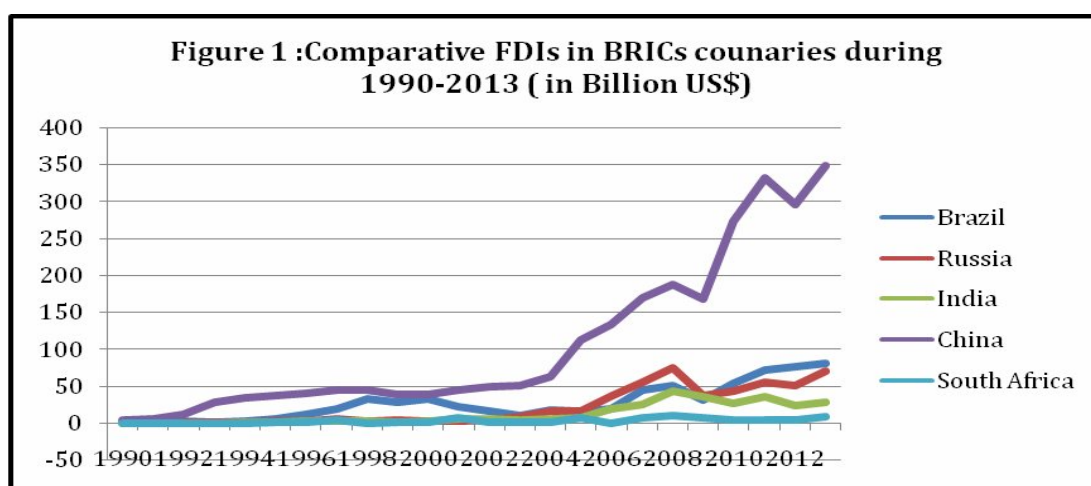
Data Source: data.worldbank.org ; Graphics & Analysis : Author

FDI Policy of India ,2014 (Government of India, 2014) explains various sectoral entry norms and FDI cap . 'Make in India' campaign displays liberalization of sectoral Caps and Indian manufacturing strength :

- India is expected to rank amongst the world's top three growth economies and amongst the top three manufacturing destinations by 2020.

[16]

- Favourable demographic dividends for the next 2-3 decades with sustained availability of quality workforce.
- The cost of manpower is relatively low as compared to other countries.
- Responsible business houses operating with credibility and professionalism.
- Strong consumerism in the domestic market.
- Strong technical and engineering capabilities backed by top-notch scientific and technical institutes.
- Well-regulated and stable financial markets open to foreign investors.

'Make in India' *inter alia* offers opportunities for new initiatives, sets norms for FDI, promises strengthening intellectual property right, and creation of National Investments and Manufacturing Zones (NIMZ). However, the primary challenges to 'Make in India' program is attracting large scale FDI inflows in the backdrop of globally competitive business environment and India's ranking thereupon.
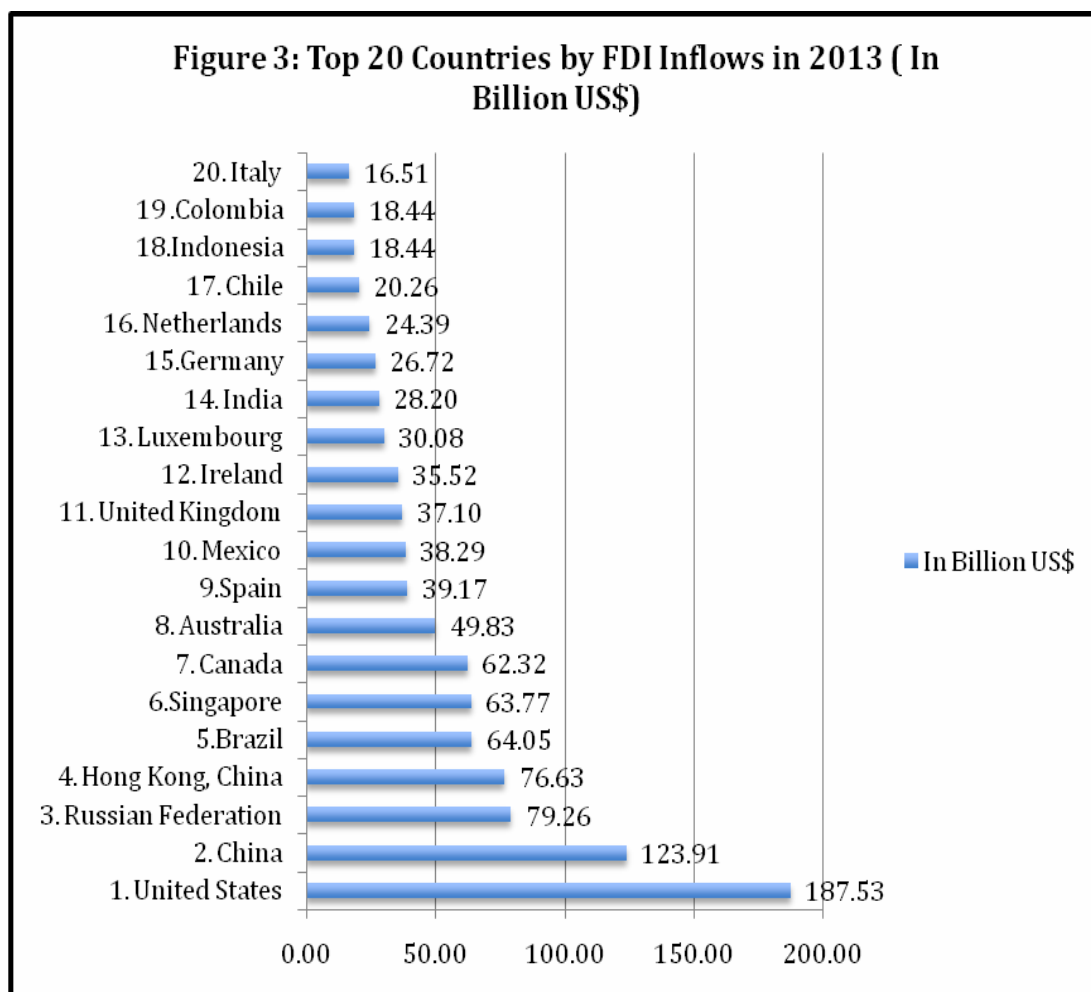
Figure 2 : FDI as % of GDP in BRICS countries 2010-2013
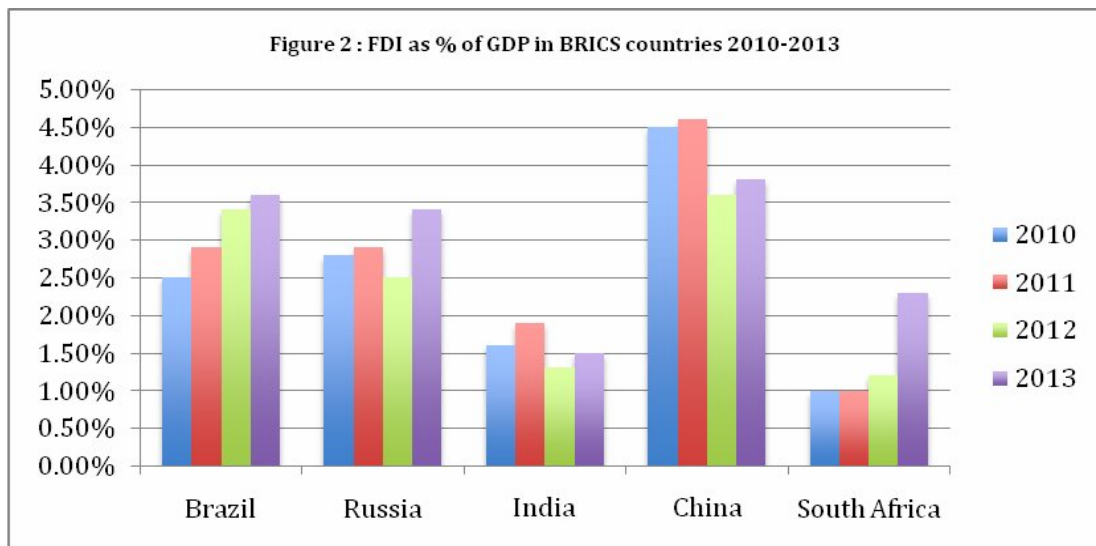
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2. Literature Review, Research Objective and Methodology

This paper covers two important dimensions of ' Make in India' campaign –

(i) it analyses various indices to explore various factors which has been globally viewed as negatives for FDI flows , and

(ii) it analyses comparative impact of selected variables on attractiveness that can be hinges upon for success of 'Make in India' campaign. The objective of this paper is to assess how far widely accepted indices and other economic variables can be treated as determinants of FDI inflows as compared to opportunities of growth and profitability.

Figure 3: Top 20 Countries by FDI Inflows in 2013 (In Billion US$)

Rank & Country	In Billion US$
20. Italy	16.51
19. Colombia	18.44
18. Indonesia	18.44
17. Chile	20.26
16. Netherlands	24.39
15. Germany	26.72
14. India	28.20
13. Luxembourg	30.08
12. Ireland	35.52
11. United Kingdom	37.10
10. Mexico	38.29
9. Spain	39.17
8. Australia	49.83
7. Canada	62.32
6. Singapore	63.77
5. Brazil	64.05
4. Hong Kong, China	76.63
3. Russian Federation	79.26
2. China	123.91
1. United States	187.53

Data Source : UNCTAD, FDI/TNC ; Graphics & Analysis : Author

There are variety of theoretical models and wide range of factors experimented in empirical studies to find determinants of FDI. In general, at least eight different approaches explaining FDI inflows :

(1) The neoclassical trade theory and the Heckscher-Ohlin model in which capital moves acrosscountries owing to differences in capital returns;

(2) Ownership advantages as determinants of FDI (including monopolistic advantage and internalisation theory) based on imperfect competition models and the view that MNCs are firms with market power;

(3) OLI framework which brought together traditional tradeeconomics, ownership advantages and internalisation theory [Dunning's (1977 and 1979)]

(4) Horizontal FDI model or Proximity-Concentration Hypothesis [Krugman (1983)];

(5) Vertical FDI model, Factor-Proportions Hypothesis or the theory of international fragmentation [Helpman (1984) &for models on international fragmentation of production see Dixit and Grossman (1982) andDeardorff (2001)];

(6) Knowledge Capital Model [Markusen (1997)];

(7)Determinants of FDI according to the diversified FDI and risk diversification model [Hansen et al (2001)] ; and

(8) Policy variables as determinants of FDI when FDI flow results from bargaining process between MNCs and Governments [Haaland and Wooton (2001)].

Indian researchers like Basu *et al* (2007) , Chakraborty and Basu (2002) and Monica and Akshay (2011) analysed financial variables to find FDI attractiveness of India. Vijaykumar et al (2010) analysed financial variables to find FDI attractiveness of India and BRICS countries. Yingi & Balasubramanyam (2004) detailed out FDI in India and policy frameworks. However, the above studies do not cover recently used ' Ease of Doing Business' indices.

In the third section, we shall discuss selected globally recognised indices and parameters included in those indices. In the fourth section, we shall evaluate impact of select financial and policy variables as determinants of FDI attractiveness. In the fifth section research findings are summarized and in the last section shortcomings of the research and scope of further research have been briefed.

3. FDI Attractiveness

In this section we shall review India's position as per widely used indices of evaluating stages of economic development and FDI attractiveness. For this purpose we have selected –

- Global Competitiveness Index of World Economic Forum;
- FDI Regulatory Restrictiveness Index of OECD; and
- Open Market Index of International Chambers of Commerce.

Global Competitiveness Index (GCI) : This popular 12 pillar based index of the World Economic Forum is one of the most comprehensive index GCI index is based on 12 pillars :

(i) *Institutions*- The institutional environment is determined by the legal and administrative framework. It influences investment decisions and the organization of production and plays a key role in the ways in which societies distribute the benefits and bear the costs of development strategies and policies.

Institutional framework does not simply cover legal framework. It includes Government attitudes toward markets and freedoms and the efficiency of its operations. Efficiency is judged from the perspectives of excessive bureaucracy and red tape, overregulation, corruption, dishonesty in dealing with public contracts, lack of transparency and trustworthiness, inability

to provide appropriate services for the business sector, political dependence of the judicial system, proper management of public finances. Also ' quick and continuous decision making' by Government (speed) in various areas is critical in achieving institutional flexibility.

(ii) *Infrastructure* –Extensive and efficient infrastructure is critical for ensuring the effective functioning of the economy.

(iii) *Macroeconomic environment* – It includes stability of macro-economic environment covering fiscal deficit , current account deficit , inflation, stability in the taxation system.

(iv) *Health and primary education*- A country's competiveness is showcased by healthy workforce having quality basic education to function in advanced production system.

(v) *Higher education and training* – Globalized economy requires countries to nurture pools of well-educated workers who are able to perform complex tasks and adapt rapidly to their changing environment and the evolving needs of the production system.

(vi) *Goods market efficiency*-This is reflected through healthy market competition and minimized Government intervention. The market efficiency is hindered by burdensome multiple tax system and low level of sectoral cap on FDI or complete disallowance of FDI to protect state monopolies.
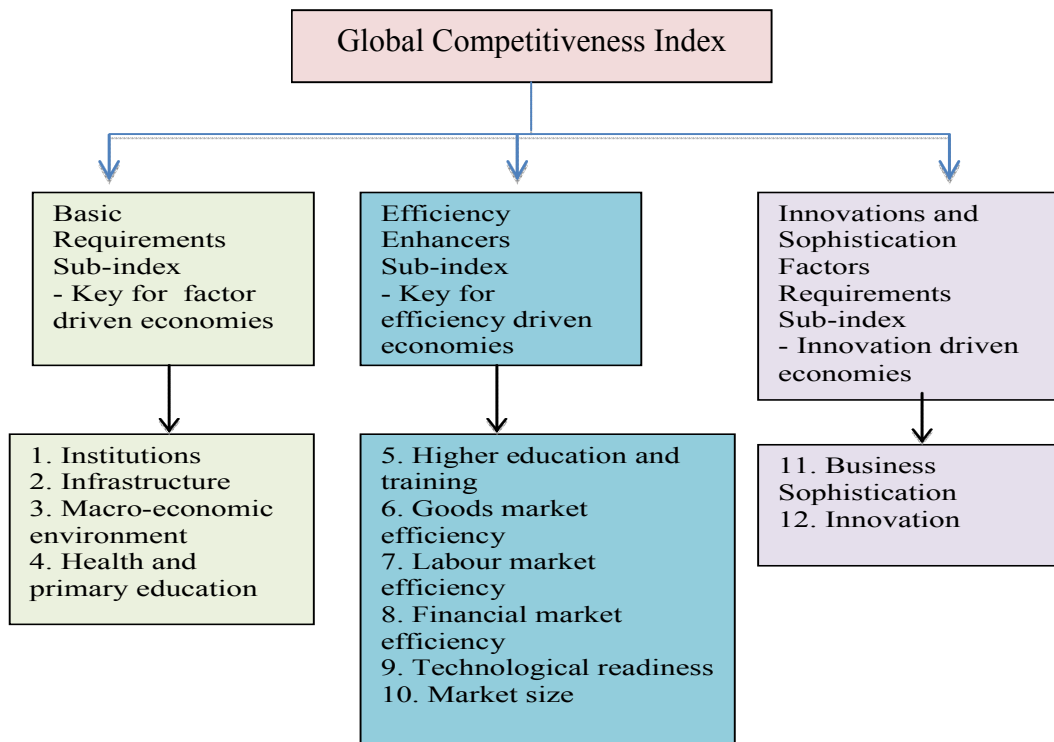
Figure 4 : Linking various pillars to stages of economic development

(vii) *Labour market efficiency*- It is signified by strong incentives for employees , efforts to promote meritocracy at the workplace, providing equity in the business environment between women and men, and ensuring women safety.

(viii) *Financial market efficiency*– It includes efficient and sound banking system , low level non-performing assets in the banking system, well regulated securities market capable of investors' protection preventing insider trading and other frauds.

(ix) *Technological readiness* –It is measured by the agility with which an economy adopts existing technologies to enhance the productivity of its industries, with specific emphasis on its capacity to fully leverage information and communication technologies (ICTs) in daily activities and production processes for increased efficiency and enabling innovation for competitiveness.

(x) *Market size*- For the purpose of GCI market size takes into account both domestic and export market. By including both domestic and foreign markets in our measure of market size, we give credit to export-driven economies and geographic areas (such as the European Union) that are divided into many countries but have a single common market.

(xi) *Business Sophistication*– It measures quality of a country's overall business networks and individual firm's operations and strategies which covers non-technological innovations.

(xii) *Innovation*- It measures technological innovations and non-technological knowledge.

These twelve pillars are classified into three sub-indices as presented in Figure -4.Various economies are classified into appropriate categories based on stages of development measured by level of GDP and weights of different parameters (Table -1)

Table 1: GCI parameters for determining stages of development

	Stage -1: Factor driven	Transition from Stage 1 to Stage 2	Stage 2 : Efficiency Driven	Transition from Stage 2 to Stage 3	Stage 3: Innovation driven
GDP per capital threshold (US$)	<2000	2000-2999	3000-8999	9000-17000	>17000
Weight for basic requirements	60%	40%-60%	40%	20%-40%	20%
Weight for efficiency enhancers	35%	35%-50%	50%	50%	50%
Weight for innovation and sophistication factors	5%	5%-10%	10%	10%-30%	30%
Classification of BRICS nation (Figures within bracket is of GCI rank)	India (71)	China (28) South Africa (56)	Brazil (57) Russian Federation (53)		
	India	China	South Africa	Brazil	Russia
Basic Requirements Rank	92	28	89	83	44
Efficiency Enhancers Rank	61	30	43	42	41
Innovation and sophistication Rank	52	33	37	56	75
Comparative ranks (GCI, FDI Inflows)	(71,14)	(28,2)		(57,5)	(53,3)

Data Source : World Economic Forum , 2014

The mapping of twelve pillars of CCI in respect of India and China is presented in Figure 5 which shows that except ' financial market efficiency' and 'Market Size', India is way behind China. If market size is measured in terms GDP, then India ranks 10th and China 2nd in the World GDP distribution.
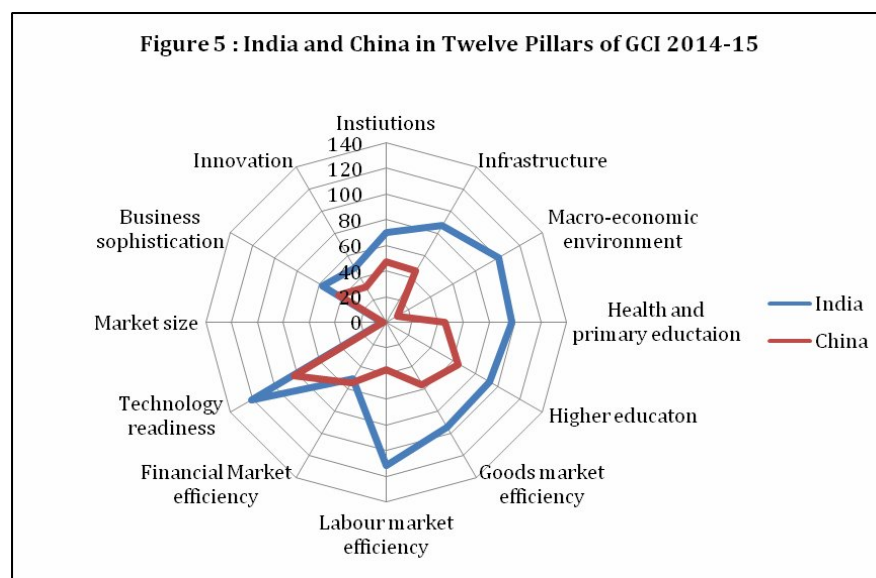
Data Source : World Economic Forum (2014), Graphics & Analysis: Author.

India's GCI rank has dropped from 48/131 in 2007-08 to 71/144 in 2014-15. 'Make in India' campaign has been launched at the weak GCI background of India's slipping from 48th percentile in 2007-08 to 71st percentile in 2014-15.

FDI Regulatory Restrictiveness Index (FDI RR Index) -Secondly, FDI flows to a country are often linked to *FDI Regulatory Restrictiveness Index of* the OECD which is based on level of statutory restrictions on FDI in 58 countries including all OECD and G20 countries, and covering 22 sectors. The OECD RR Index gauges the restrictiveness of a country's FDI rules by looking at the four main types of restrictions on FDI:

1. Foreign equity limitations
2. Screening or approval mechanisms
3. Restrictions on the employment of foreigners as key personnel
4. Operational restrictions, e.g. restrictions on branching and on capital repatriation or on land ownership.

The OECD viewed that the FDI RR Index is not a full measure of a country's investment climate. It does not measure degree of implementation and institutional quality. Entry barriers can also arise for other reasons, including state ownership in key sectors. A country's ability to attract FDI gets affected by factors such as the size of its market, the extent of its integration

with neighbours and even geography. It has been observed that a country which is more open as per FDI RR Index attracts more FDI as % of GDP. Although, reliability of OECD RR Index is low when measured using Spearman's rank correlation coefficient. The correlation coefficient between OECD Openness Score and FDI flows as % GDP correlation is just 0.25. India stood 53rd in the FDI RR Index 2013. The comparative position of four BRICS countries which are among top twenty FDI recipients is : Brazil (39,5), India (53,14) , China (58,2) and Russian Federation (48,3) [the first figure indicates the OECD RRI rank of 2013 and the second figure indicates rank of FDI inflows].

Open Market Index (OMI Index) –OMI index of International Chamber of Commerce is based on 75 economies comprising of all G20 economies, all EU member countries, as well as a heterogeneous group of poor, rich and middle-income economies, which together represent more than 90% of global trade and investment. Four key components of OMI :

- Observed openness to trade – Includes Trade –to-GDP ratio , Merchandise and services imports per capita ratio, Real merchandise import growth.
- Trade policy- Includes Average applied tariff levels, Complexity of tariff profile, Non-tariff barriers : number of anti-dumping actions, efficiency of import procedures.
- FDI openness- Includes FDI inflows to GDP, FDI inflows to gross fixed capital formation , FDI inward stock of GDP, FDI Welcome Index.
- Infrastructure for trade- Logistics performance index, Communication infrastructure.

In OMI index, various economies are classified into five categories (Table -2).

Table 2 : OMI categories of Selected Countries

Categories	Description	Countries
1	Most open, excellent (score of 5-6)	Hong Kong, Singapore
2	Above average openness (Score 4-4.99)	Luxembourg, Belgium, Malta, Netherlands, United Arab Emirates, Ireland, Estonia, Iceland, Switzerland, Sweden, Norway, Slovakia, Denmark, Austria, Finland, Slovenia, Canada, Hungary, Czech Republic, Germany, Bulgaria, Australia, New Zealand, Lithuania, Chinese Taipei, Cyprus, United Kingdom
3	Average openness (Score 3-3.99)	Malaysia, Israel, Latvia, Chile, Poland, France, Ukraine, Romania, United States, Japan, Saudi Arabia, Italy, Portugal, Peru, Spain, Korea, Rep. of, Viet Nam, Turkey, Greece, Thailand, **South Africa (50)** , Jordan, Colombia, Indonesia, Mexico
4	Below average openness (Score 2-2.99)	Kazakhstan, Egypt, **China (57,2)**, Philippines, **Russian Federation (59,3)**, Uruguay, Morocco, Tunisia, Argentina, **India (64,14)**, Sri Lanka, Nigeria, **Brazil (67,5)**, Kenya, Pakistan, Venezuela, Uganda, Algeria
5	Very weak (Score 1-1.99)	Bangladesh, Sudan, Ethiopia

Source: International Chamber of Commerce (2013)
* BRICS countries are shown in bold face.First figure within bracket indicates rank in OMI and the second figure indicates rank in respect of FDI inflows.

Interestingly, all four BRICS countries fall in the below average openness category which are among top twenty recipients of world FDI inflows. Also these countries rank in the lower side as regards World Bank's Ease of Doing Business (EDB) Rank. Comparative ranks of FDI inflows and three global indices discussed above (e.g. Global Competitive Index, Regulatory Restrictive Index and Open Market Index) including EDB rank is presented in Figure 6. Because of the contradictory ranking of ranking FDI inflows and 'Ease of Doing Business' parameters, it necessitates a general confusion whether these parameters are relevant to be addressed to attract FDI inflows.
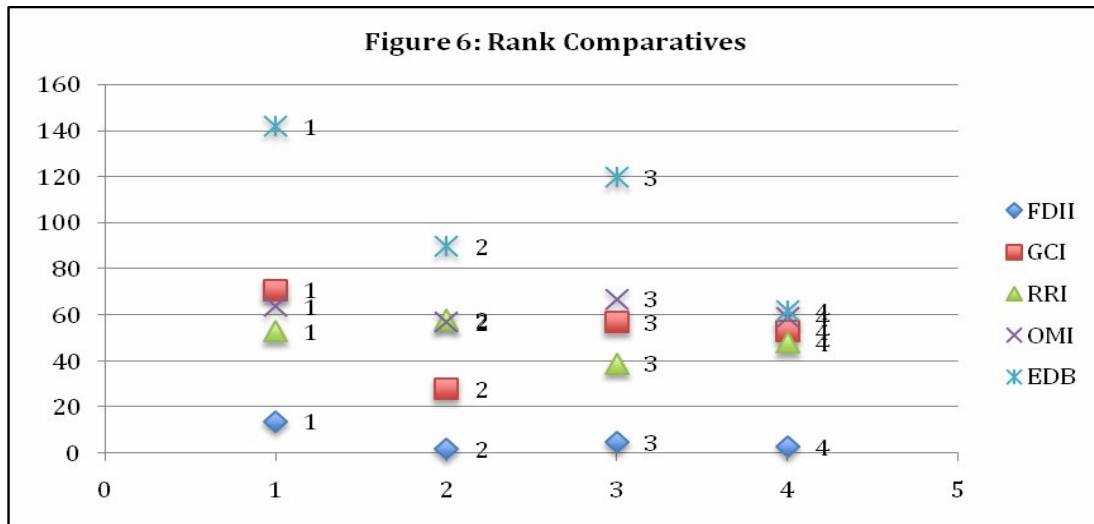
Legend : FDII : Foreign direct investment inflows.
CCI : Global Competitiveness Index , RRI : Regulatory Restriction Index
OMI : Open market index , EDB : ease of Doing Business
FDII ranks are in descending order and other ranks are in ascending order.

In fact , Figure 6 may create a perception that FDI Inflows in Brazil, India, Russia and China at a comparatively higher scale despite of unfavourable ranks as regards global competitiveness, regulatory restrictions and ease of doing business , and below average market openness. FDI inflows to four BRICs countries fall within top twenty FDI recipients (Figure 3).

4. Searching Determinants of FDI Inflows

Having assessed enabling parameters of FDI inflows in Section III which signal a weak linkage to FDI inflows, we shall focus in this Section to two important financial parameters , namely, market size and profitability.The literature on determinants of FDI identifies four most common investment motivations : raw material seeking, market seeking, efficiency seeking and knowledge seeking. CMCG (2003) focused on the market size as the intent of FDI inflows : Market size and growth prospects of the host country play an important role in affecting investment location

since FDI in emerging market countries is increasingly being undertaken to service domestic demand rather than to tap cheap labour.

The market seeker is the archetype of the modern multinational firms which go overseas to produce and sell in foreign markets. Examples include IBM, Volkswagen and Unilever. Branded consumer product companies like Nestle, Louis Vuitton, Mcdonald's , Dior, Coca-Cola have been operating aboard for decades and maintain vast manufacturing , marketing and distribution networks from which they derive substantial sales and income. Although foreign markets may be attractive in and of themselves , multi-national companies (MNCs) possess certain firm-specific advantages. For example, after successfully developing a drug , pharmaceutical companies enter several foreign markets. The access to foreign markets may be possible at considerable lower costs and often access to foreign market by these companies may be essential for obtaining economies of scale. Dunning (1993) added that MNCs might be prompted by to engage in market seeking investment when their main suppliers or customers have set up foreign producing facilities and in order to retain their business they need to follow them overseas.

Alina and Malgorzata (2008) observed based on data from CIS countries that market seeking was dominant motive in FDI inflows. CMCG (2003) while observing that 'FDI in emerging market countries to be led by market-seeking investments that will focus on countries with large markets and promising growth prospects' did not ignore ' efficiency –seeking' factors. Countries with attractive productivity –adjusted labour costs will continue to secure FDIs.

Also capital market theory of FDI focuses on differential return hypothesis [Agarwal (1980), Klaus (1998)]. For maximizing yield and minimizing business risk, firms diversify their investments portfolio through international investments as do financial investors. In this context short term and long term market returns are included in this study as independent variables as proxy to average return on investments in a country to test if capital theory influences FDI flow.

This paper is not an exhaustive study of various factors that drive FDI inflows. It explores whether market size , return and lower degree barriers to capital flows as determinant of FDI inflows and thereby determinants of success of the ' Make in India' program. For this purpose, *market size* is measured by GDP or growth in GDP . As per capital market theory , return in the host country attracts FDI inflows. In this paper, stock market profitability is used to measure profitability of country.

In view of the above, we have selected the following eight independent variables to explain FDI inflows to 40 countries[3] :

   (1) LN GDP – Log of GDP of 2013 has been taken as an indicator of market size (data source : data.worldbank.org) .

   (2) GDP growth - GDP growth % of 2013 has been included in the list to check if FDI inflows are motivated by growth prospect than market size (Data source: data.worldbank.org).

(3) GCI : Global Competiveness Index of World Economic Forum discussed in Section III.

(4) RRI : Regulatory Restrictiveness Index of OECD discussed in Section III.

(5) OMI : Open Market Index of International Chamber of Commerce discussed in Section III.

(6) EDB: Ease of Doing Business as per World Bank data base (data source : data.worldbank.org).

(7) MRS : Stock market return for one year– Short term market return is included in the list independent variables to check if FDI inflows are motivated by recent stock market profit of a country (which can be surrogated as average short term profit performance of various firms of the country) .

(8) MRL : Average stock market return over recent 5 years– Long term stock market return is introduced as a dependent variable to check if long term profitability induces selection of FDI destination.

The dependent variable is log of FDI inflows [LN (FDI)] during 2013.

The FDI determinant equation is set as follows :

$$LN\ (FDI) = \ \alpha + \beta_1\ LN(GDP) + \beta_2\ GDP\ Growth\ +\ \beta_3\ GCI\ +\ \beta_4\ RRI\ +\ \beta_5\ OMI\ +\ \beta_6\ EDB\ +\ \beta_7\ MRS\ +\ \beta_8\ MRL$$

Stepwise linear Regression analysis has been carried out in SPSS using 40 countries FDI inflows as dependent variable based on eight independent variables.

Findings are :

Model 1 : LN (FDI) = 9.520 + 0.524 LN(GDP)$_i$

Model 2 : LN (FDI) = 8.046+ 0.453 LN(GDP)$_i$+ 0.718GCI$_i$

Excluded variables are GDP Growth , RRI, OMI, EDB, MRS, MRL.

This output shows that although FDI inflows are motivated by market size , its other important determinant is global competitiveness of a country.The Capital market approach is not supported by data analysis . Neither short-term stock market return nor the long -term stock market return proved to be influencing variable of FDI inflows. However, this does not reject the capital market theory of FDI inflows.This finding is justified in the sense that firm's return is not necessarily linked general state of the stock market which is often driven by behavioural issues rather than underlying firm-specific fundamentals. It simply rejects stock market return as proxy of firm's return on capital employed. Rejection of other indices are because of collinearity which indirectly indicates the explanatory ability of GCI over other indices because of its comprehensiveness. It may be concluded that it is possible to achieve success in 'Make In India' program since India has the advantage of market size provided it becomes successful in improving twelve parameters of global competitiveness (Model 2). However, GCI as determinant of FDI would demand improvements on 12 parameters of GCI index (Figure - 4) to induce better volume of FDI flows.

However, if market size is the primary determinant of FDI inflows in which the 'Make In India' hinges upon, then " Come Make in India but market anywhere'campaign i.e. production hub emphasis may turn into 'Make for India'. 'Make in India' campaign does not simply invites FDI , it has a broader perspective of increasing exports to achieve sustainable current account balance. Of course, increase in imports driven by ' Make in India' does not contradict its goal if 'Make in India' but sell anywhere can be pursued properly.

Shortcomings and Scope for Further Research

In this analysis, resource,efficiency and knowledge factors contributing to recent FDI inflows are not tested. Inclusion of these factors may unfold newer strategic dimensions. Also it is possible to study sector-wise determinants of FDI flows decomposing the sectoral openness and policy framework.

Notes

1. World Investment Report, 2014, Chapter 1 : Global Investments Trends, UNCTAD,

2. As per World Bank definition, foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. Net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors.

Figures 1 & 2 are on the basis of World Bank data , data.worldbank.org

3. FDI inflows to a country / World FDI Inflows is insignificant beyond 40 countries. Also various indices reflecting barriers to FDI inflows are not available in respect of all countries receiving FDIs.

Figure 7 : Global FDI inflows
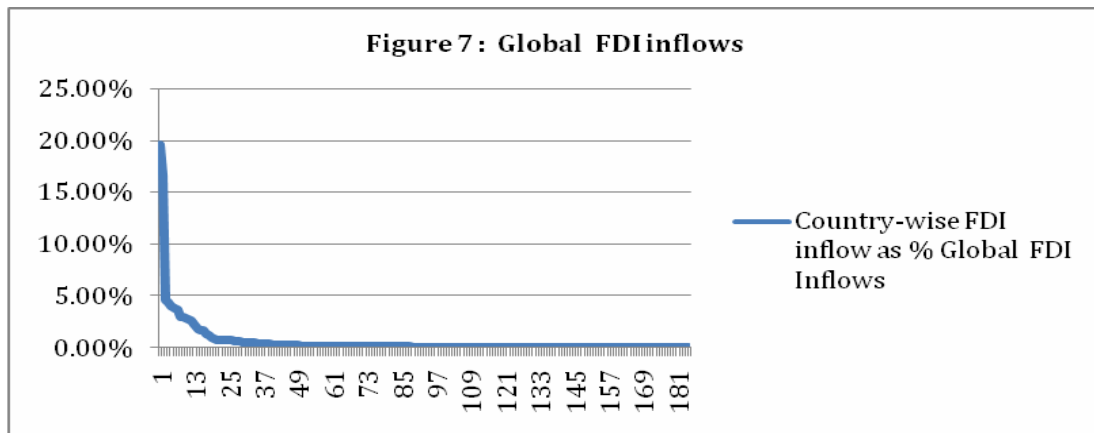
Relevant websites
www.makeinindia.com
www.mapsofindia.com/government-of-india/make-in-india.html
www.data.worldbank.org
www.oecd.org

References

Agarwal J.P. (1980). Determinants of foreign direct investment: A survey Weltwirtscafitliches Archieve, 116, 739-77.

AlinaK. &Malgorzata J. (2008). The motives and impediments to FDI in the CIS, Global Forum on International Investment, OECD.

Basu P., Nayak N.C, Archana (2007). Foreign Direct Investment in India: Emerging Horizon. *Indian Economic Review*, XXXXII (2), 255-266.

Capital Markets Consultative Group(2003), Foreign Direct Investment in Emerging Markets Countries, www.imf.org/2003/eng/091803

Carlos Rodrigues, Carmen Gomez and Jesus Ferreiro (2009). A proposal to improve the UNCTAD's inward FDI potential index. *Transnational Corporations*, 18(3), 93.

Chakraborty, C. and Basu, P. (2002). Foreign Direct Investment and Economic Growth in India a Cointegration approach. *Applied Economics*, 34, 1061-73.

Deardorff, A.V. (2001). Fragmentation in Simple Trade Models. *North American Journal of Economics and Finance,* 12, 121-137.

Dixit, A.K. and Grossman, G.M. (1982). Trade and Protection with Multistage Production, *Review of Economic Studies,* 49, 583-594.

Dunning, J.H. (1977). Trade, Location of Economic Activity and the MNE: A Search for an Eclectic Approach. Ohlin, B. et al. (eds), The International Allocation of Economic Activity, Holmes and Meier, London: 395-418.

Government of India (2014), Consolidated FDI Policy, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry.

Haaland, J.I. and Wooton, I. (2001). Multinational Firms: Easy Come, Easy Go?. CEPR Discussion Paper, No 2600.

Hanson, G. H., Mataloni, R. J., Slaughter, M. J. (2001), Expansion Strategies of U.S.

Multinational Firms, NBER Working Paper 8433, National Bureau of Economic Research, Cambridge, MA.

Helpman, E. (1984). A Simple Theory of Trade with Multinational Corporations. *Journal of Political Economy,* 92, 451-471.

International Chamber of Commerce (2013). ICC Open Market Index, Second Edition, April.

Isabel Faeth (2005). Determinants of FDI in Australia: which theory can explain it best?. University of Melbourne, Research Paper No. 946.

Klaus Myer (1998). Direct Investments in Economies in Transition. Cheltenham : Elgar : 59-79.

Krugman, P.R. (1983). The "New Theories" of International Trade and the Multinational Enterprise. Kindleberger, C.P. and Audretsch, D.B. (eds), The multinational corporation in the 1980s, MIT Press, Cambridge, MA, Ch.3.

Monica Singhania and Akshay Gupta (2011). Determinants of foreign direct investment in India. *Journal of International Trade Law and Policy*, 10 (1), 64 - 82

Vijayakumar N , Sridharan P. &Sekhara K.C (2010). Determinants of FDI in BRICs Countries: A panel analysis. *International Journal of Business Science and Applied Management* 5 (3), 1-13.

World Economic Forum [2014] , Global Competitiveness Report 2014-15.

World Bank (2010), Investing across borders :Indicators of foreign direct investment regulation in 87 countries.

Yingi A.W. &Balasubramanyam (eds.) (2004), Foreign Direct Invetsment : Six Country Case Studies.

Annexure

Regression output

Variables Entered/Removed[a]			
Model	Variables Entered	Variables Removed	Method
1	LN(GDP)	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	GCI	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
a. Dependent Variable: LN(FDI)			

Model Summary[c]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.617[a]	.381	.364	.8425282	
2	.716[b]	.513	.486	.7574333	1.724
a. Predictors: (Constant), LN(GDP)					
b. Predictors: (Constant), LN(GDP), GCI					
c. Dependent Variable: LN(FDI)					

ANOVAᵃ						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.148	1	16.148	22.749	.000ᵇ
	Residual	26.265	37	.710		
	Total	42.413	38			
2	Regression	21.760	2	10.880	18.964	.000ᶜ
	Residual	20.653	36	.574		
	Total	42.413	38			
a. Dependent Variable: LN(FDI)						
b. Predictors: (Constant), LN(GDP)						
c. Predictors: (Constant), LN(GDP), GCI						

Coefficientsᵃ										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	9.520	2.995		3.179	.003	3.453	15.588		
	LN(GDP)	.524	.110	.617	4.770	.000	.301	.746	1.000	1.000
2	(Constant)	8.046	2.733		2.944	.006	2.503	13.589		
	LN(GDP)	.453	.101	.534	4.476	.000	.248	.659	.950	1.052
	GCI	.718	.230	.373	3.127	.003	.253	1.184	.950	1.052
a. Dependent Variable: LN(FDI)										

	Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	GDP Growth	.039[b]	.288	.775	.048	.948	1.055	.948
	GCI	.373[b]	3.127	.003	.462	.950	1.052	.950
	RRI	-.002[b]	-.017	.986	-.003	.930	1.076	.930
	OMI	.351[b]	2.968	.005	.443	.986	1.014	.986
	EDB	-.239[b]	-1.908	.064	-.303	.999	1.001	.999
	MRS	-.118[b]	-.907	.370	-.150	.996	1.004	.996
	MRL	-.137[b]	-1.063	.295	-.174	.997	1.003	.997
2	GDP Growth	.097[c]	.796	.431	.133	.927	1.079	.915
	RRI	.059[c]	.474	.639	.080	.907	1.103	.869
	OMI	.149[c]	.690	.495	.116	.294	3.399	.283
	EDB	.074[c]	.418	.678	.070	.443	2.255	.422
	MRS	-.087[c]	-.740	.464	-.124	.988	1.012	.943
	MRL	-.122[c]	-1.044	.304	-.174	.995	1.005	.949

Excluded Variables[a]

a. Dependent Variable: LN(FDI)

b. Predictors in the Model: (Constant), LN(GDP)

c. Predictors in the Model: (Constant), LN(GDP), GCI