

**FOREIGN DIRECT INVESTMENT AND INFRASTRUCTURAL  
DEVELOPMENT; AN EMPIRICAL STUDY OF BRICS NATIONS**

**Ms. Vishakha Goyal,**

Assistant Professor (Economics)  
Galgotias University  
Greater Noida , U.P, India.

**ABSTRACT**

*Investment in basic infrastructure is a prerequisite for economic development. There remains a significant infrastructure gap in many developing countries and especially in least developed countries. Along with public investment, foreign investment has a major role in addressing this gap due to its often superior access to finance, technologies, and skills. Whether in power, water, transport or telecommunications, the existence of high quality basic infrastructure is necessary for economic and social development. Low-cost access to infrastructure services supports industrial growth, increase an economy's competitiveness, helps alleviate poverty, and is a vital ingredient for many developing countries to meet their millennium development goals (MDGs)(UNCTAD2011)<sup>(1)</sup>Infrastructure in its broader sense comprises the physical facilities, institutions and organizational structures, or the social and economic foundations for the operation of a society. Within this broad concept, social infrastructure e.g. health and education can be distinguished from economic infrastructure. The later directly support production activities of enterprises at various point of the value chain, and are thus directly relevant to the competitiveness of firms and to economic development. Economic infrastructure consists of a group of industries, including electricity, gas, telecommunication, water and sewage, airport, road, railways and seaport. The present study represents an effort to create a better understanding of problems and opportunities among BRICS nations in four specific sectors i.e, energy, water, Transport and telecommunication. This will facilitate each nation by using economies of scale. In my introductory comments, I define the importance of foreign direct investment and present a conceptual framework for understanding trade-offs that arise in conducting international research. Next, I describe a number of new avenues for international*

*research. Finally, I have given an overview of the articles included in this forum and integrate them into our general framework.*

**Keywords:** Economic Infrastructure, Social Infrastructure, Public investment, foreign direct investment, BRICS, Energy sector, transport sector, Telecommunication sector and water sector

## **REVIEW OF THE LITERATURE**

Most developing countries face a considerable ‘infrastructural gap’. to meet their economic growth and poverty reduction targets, the world 2008 has identified the need for these countries to invest between 7 and 9 of their domestic product GDP annually to build and maintain infrastructure, yet actual investment rates are much lower, ranging between 3 and 4 .In general, infrastructure investment tend to be highly capital intensive, have long gestation periods and strong government involvement. For this reason, the potential risks associated with such investment are a matter of concern for foreign investors. The combination of high commercial risk and a weak regulatory and institution environment in a host country can effectively block the inflow of foreign investment, especially in countries with relatively small domestic markets(UNCTAD,2008).Traditionally ,infrastructure was the exclusive province of the public sector, with large, state owned enterprises(SOEs) being responsible for investment and service delivery Typically, SOEs were costly and inefficient providers of infrastructure services in most developing countries. Since the mid-1980s, however government around the world pursued policies to involve the private sector in the delivery and financing of infrastructure services. Encouraged by international organizations such as the world bank, privatization has been a major component of the economic reforms programs pursued by many developing countries over the past two decades.(parker and Kirkpatrick,2004)<sup>{2}</sup>.privatization was thought to promote more efficient operations, expand Service delivery, reduce the financial burden on government and increase the level of foreign and domestic private investment(World Bank,1995).Early privatization measures were, on the whole ,concentrated in the manufacturing sector but, in recent year, the private sector has become increasingly involved in the financing and delivery of infrastructure services. The trend towards greater reliance on the private sector has also seen a growing role for FDI infrastructure TNCs. Infrastructural problem have been identified as major constraints on development in countries such as India. A threshold level of public infrastructure

is required to attract FDI is offered by Haaland and Wooton (1999) and Kelloenberg (2007)<sup>(3)</sup>. These studies develop a general-equilibrium based model to examine the effect on FDI of government intervention that reduces the production cost for multinational Enterprises (MNEs); such reduction in production cost can occur if the government provides subsidies or tax benefits to MNEs or through the provision of public inputs such as infrastructure. Rakesh Chakrabarti et al (2012), discussed the impact of public infrastructure-physical and financial-on FDI inflow, though positive, is essentially non-linear. FDI inflow remain insensitive to improvements in infrastructure till a threshold is reached; thereafter FDI inflow increase steeply with an increase in infrastructure. To identify this effect, they exploit cross-sectional variation in infrastructure and FDI flows among close to 600 districts in India. They used four different indicators of infrastructure in our data: (i) Habitation connected by paved roads (ii) Household with electricity connections (iii) Household with telephone connection (IV) The number of scheduled commercial branches. While the first three indicators capture the effect of physical infrastructure, the fourth indicators captures that of financial infrastructure. The world investment report (UNCTAD, 2008) took up infrastructure challenge as its principle theme on foreign investment and its contribution to development

#### Case Study :Australia and Peru

Roads lessons from Australia and Peru: In 2009, United Nations emphasis that in Australia, there is no concerted government policy to attract FDI in the developer/operator or contractor roles. This is left to the market. But financial promoters are not proactive in seeking foreign investment either. This reflects two related factors. One as noted above is the depth of the domestic capital market which enables equity and debt finance to be raised locally. The other is the technical and financial capacity of local D&C contractors and operators who are able to shoulder key project risk to the satisfaction of financial investors (including foreign portfolio investment) and banks. Whereas the immaturity of Peru's capital market and size limitations of the domestic construction firms mean that Peru's largest road concession could not have started without FDI (and in most cases, sizeable government-supported debt financing). FDI has not come from foreign developer /operators but from foreign construction companies, who have partnered local construction firms such as Grana y Montero and JJC Contratistas Generales. These partnerships have been very fruitful joint ventures for the local firms. Construction operations are genuine

partnerships in which each party contributed equipment and staff and thus local firms have been introduced to the disciplines involved in construction on a much larger scale than in traditional public works contracts. The local firms are also likely to manage road operations over the project life and some may emerge as potential developer/operators in due course. Although FDI offers significant opportunities to enhance basic infrastructure in developing countries, it also poses two set of policy challenges. The first involves attracting infrastructure TNCs to undertake projects. Given their significant capital requirement and long investment timeline, the associated financial risk can be quite high. Strong efforts are needed to craft a stable policy environment that ensures the viability of these projects. Secondly, there are challenges related to ensuring that the activities of infrastructure TNCs are carried out according to the public interest. TNCs often enjoy considerably higher bargaining power in their relations with host government, which may limit the demand that can be made of them in term of investment commitment, risk allocation and performance requirements. Ensuring universal access to certain infrastructure service may be an important policy goal, requiring additional consideration of cost sharing between the TNC and the host government. (UNCTAD 2011)

#### *Infrastructure Investment Highlights-BRICS Economies*

It is widely agreed that the BRICS (Brazil, Russia, China, India and South Africa)-five of the world's largest emerging economics – have massive growth potential. Under the right conditions, the combined economies of these five could be worth more in US dollar terms than the G6 (Germany, France, Italy, Japan, UK, and the US) by 2041 .In 2011<sup>{4}</sup>, the BRICS economies accounted for almost 27 percent of global gross domestic product in purchasing power parity terms and 20 percent of global gross domestic product in nominal terms.<sup>{5}</sup> The latest Global Investment Trends Monitor (GITM).<sup>{6}</sup> Shows that over the 3 past decade, FDI going into BRICS has more than tripled ,totaling \$263 billion in 2012.This figure represents 20 percent of world FDI flows, and is a significant increase considering it was only 6 percent in 2000.Meanwhile,investment from BRICS into other countries has climbed from \$7 billion in 2000 to \$126 billion in 2012,rising from 1 percent of world flows to 9 percent, with China and Russia accounting for the majority of these investments. In particular, the report highlights that foreign investment from BRICS into Africa represented 25 percent of Africa's inflows last year, with most funds going to the manufacturing and services sectors. Brazil, for example, has

expanded its business in the new African ethanol industry in countries like Angola, Ghana and Mozambique, China is one of the top investing countries in LDCs such as Sudan and Zambia; an Indian company recently acquired an African mobile phone network;<sup>{7}</sup> and Russian bank are expanding to countries such as cote d' Ivories' and Nigeria.

Development of infrastructure is a common agenda for all the BRICS countries. The Infrastructure deficit faced by these economies is a constraining factor in sustaining high growth rates in the long run. The infrastructure requirements in the BRICS countries are huge and each nation has set an ambitious target for investments in infrastructure. Investment in infrastructure in India during the 12<sup>th</sup> five-year plan is estimated to be US\$ 1 trillion. The eleventh Five year Plan (FYP) had projected investment in infrastructure to be about Rs.20.5 lakh Crs (at 2006-07 prices), equivalent to \$514 billion. At the same time the planning Commission provided initial estimates of infrastructure investment for the Twelfth Five year plan .According to these projections, an investment of Rs 41 lakh Crs is targeted over the duration of the twelfth five year plan in order to sustain a real GDP growth rate of 9 percent. This is almost double the amount proposed under the eleventh plan in real terms. Taking this investment requirement as a starting point and converting these estimates into nominal terms (based on expected inflation of 5% p.a.), yields a target investment of about Rs.65 lakh Crs for the Twelfth FLP <sup>{8}</sup>

On the other side Brazil's government plans to spend Rs.28 lakh crores (US\$582 billion) from 2011-2014 on infrastructure as part of its "growth acceleration" (PAC) phase-2 introduced in 2007, PAC laid out investment plan of nearly Rs.16 lakh crores (US\$306 billion) until 2010 to solve many long –overdue infrastructure issues. Brazil aims to give private-sector banks more direct access to government-subsidized loans destined for infrastructure projects. Brazilian Development Bank (BNDES) provides loans directly to companies investing in infrastructure, guarantees and securities underwriting, and buys bonds placed by some corporations. Russia's infrastructure investment (2.5% of GDP) continues to lag behind that of other emerging nations due to a lack of adequate investment from the private sector. Most of Russia's financing is in the form of grants and debt relief. In China Local government has been one of the major drivers behind China's infrastructure. State owned commercial bank and policy bank hold around 80% of total infrastructure loan portfolios, and bank financing accounts for more than 50 % of total infrastructure. China has been successful in attracting foreign investment by providing improved

infrastructure and a favorable regulatory environment. Corporate bonds have become more important but remain a small share in total financing as the bond market remains underdeveloped. China has many infrastructure SPVs listed in the stock market. South Africa government has spent Rs.3.8 lakh crores(US\$70 billion) on infrastructure over the last three years. It continues to support large-scale infrastructure projects to address transportation, water, and energy sector bottlenecks plan to spend Rs 4.9 lakh crores(US\$91 billion) over the next three years, of which Rs2.4 lakh crore (US\$45 billion) would come from the government budget, and rest Rs2.5 lakh crore(US\$46 billion) would be drawn from state-owned enterprises. The value of major infrastructure projects in progress or under consideration in the public sector totals Rs 21.7 lakh crore(US\$396 billion).<sup>{9}</sup>

### Sector Specific Infrastructure Funding Mechanism (Brics)

#### Energy Sector :

In Africa (AFR), six countries implemented 9 new projects. The total investment for Sub-Saharan Africa was US\$ 1,496 million. All generation projects had at least 50% foreign equity, coming from the United State, India, The United Kingdom and Turkey. The African Development Bank (ADB) was the dominant multilateral development bank in the region, supporting 4 of the 9 projects. Financing was provided by OPIC, the World Bank issued a Partial Risk Guarantee and a MIGA guarantee issued earlier was extended. Foreign equity investors were active in 89% of the projects. China implemented 34 new projects, mainly solar and wind projects reached closure. China closed five natural gas distribution projects valued at US\$ 35 million, with China Gas Holdings (four LNG projects) and Xinao Gas Holdings. There were no expansions of existing projects. Total investment was lower than last year's high of US\$ 15.0 billion. Foreign equity investors were active in 9% of the projects. India implemented 51 new projects. CLP Andhra Lake Wind farm (113MW, India) was the largest project in the renewable energy category. In the non-renewable category, the Lalitpur Power Generation Company coal plant (1980 MW India) was the largest project. Most projects in India were financed by domestic state-owned banks. Brazil implemented 46 new projects in energy sector. Existing projects invested US\$ 807 million, bringing total investment to US\$ 18.9 billion in 2011. Foreign equity investors were active in 59% of the projects. Russian Federation implemented 1 project.

Management contract of Tomsk Distribution Company was awarded to Electricite de France. Foreign equity investors were active in 40% of the project.<sup>{10}</sup>

### Transport sector

In 2011, 68 new transport projects reached financial or contractual closure in 15 lower-and upper-middle income countries. Private activity in transport was concentrated in South Asia (SA), namely in India where 41 new projects closed in 2011. Total investment in transport projects in the region amounted to US\$17 billion, a 4% increase from 2010 levels. Following SA, was Latin America and the Caribbean sao Paula Rodoanel Sul e Leste, a highway concession, closed in March 2011 in Brazil, and involved US\$2.2 billion in investment commitments. East Asia and Pacific (EAP) ranked fourth, with four new projects, two seaport terminals and two highway projects, all located in China. Total investment in transport projects in EAP amounted to over US\$1 billion. In Africa (AFR) there were three new projects; two seaport projects in Nigeria and tango and one cross broader highway project, Beitbridge- Border post, in Zimbabwe and South Africa. Total investment in transport projects in sub-Saharan Africa amounted to US\$851.4 million. Indian sponsors dominated the transport sector both by number of projects (41) and by investment (over US\$16 million). They only invested locally, in India. Indian sponsor were followed by Chinese sponsors.<sup>{11}</sup>

### Water Sector

By number of projects, private activity in the water sector was concentrated in East Asia and Pacific (EAP), specifically in China, where 25 new projects closed in 2011. Following EAP was Latin America and the Caribbean (LAC) where four projects closed in 2011. There hasn't been any activity in Europe and Central Asia (ECA), or Africa (AFR) since 2008, and since 2010 in South Asia (SA)<sup>{12}</sup>

### Telecommunication Sector

In Africa, there were several leading countries; South African sponsors (17% of projects), Indian sponsors (14%), U.A.E (12%), and France (9%). Large telecommunications companies active in Africa were South Africa's MTN (responsible for 21% of investment in the region in 2011), U.K's

Vodafone(15%),Bharati Airtel of India(13%),France telecom(11%),and Emirates(U.A.E5%);in Latin America and the Caribbean, most projects are enacted by sponsors from Mexico and Spain(roughly one in three and one in four projects respectively).South Asia's telecom investment were led by Indian investor, who were responsible for 38% of the projects and 76% of total capital invested (close to US\$4 billion out of a total of US\$5.2 billion).the Indian investor included large brand names such as Essar group,Bharati airtel and Reliance.US\$1.7 billion of investment was associated with UK's Vodafone was, or about 33% of investment in south Asia. With US\$7.4 billion of investment, Russia attracted the biggest share of investment in this region. Investment by Russia sponsor investment came from a wide range of local investor companies, although M&A-activity hinted strongly at consolidation of operations. <sup>{13}</sup>

### Sources Of Infrastructure Funding

Financing infrastructure projects is a contentious and politically challenging issue. Once seen as solely a public-sector responsibility, infrastructure turned toward private financing in the early 1990s, as government privatized state assets and expected the private sector to step in to supply adequate services at a reasonable cost. Despite some early successes this turned out not to be the case. After a strong start, private sector financing for infrastructure fell off sharply during the 1997-1998 financial crisis, and the recovery has been slow. Since 2000,private sector investment have been fairly small, averaging about \$45 per year into telecoms, energy, transportation and water in total across all developing countries, according to world Bank data. The private sector now supplies 20%-25% of infrastructure financing in developing countries, according to World Bank and other estimates, with public funds and official development assistance still bearing 75%-80% of the cost.The vast needs for infrastructure financing in the coming decade will likely lead to the development of more creative financing structures. This may include wider use of public/private partnerships, government credit guarantees and co-investment by governments alongside private finance. Sovereign wealth funds may also be developed to finance infrastructure, both domestically and externally. To attract the needed capital, the BRICS may well need to adapt their regulatory systems and move towards market pricing-even in politically sensitive sectors such as water and electricity. Government will need to lead a shift in the public perception of infrastructure as free or nearly –free “public goods”. Subsidizes electricity and water for farmers, and cheap urban water and waste systems, should come under review. One of

the most important long-term effects of massive infrastructure investment could be the growth of domestic capital market. A local bond market is a natural home for infrastructure financing. In India, which has plans to invest nearly \$500bn in a broad range of infrastructure projects over the next five years, the government considers the domestic bond market to be an important source of finance and sees infrastructure as a catalyst for the market's growth. This could be true in China as well, and in the GCC, where governments are seeking to deepen their own domestic markets. If infrastructure offers attractive investment opportunities at home, it may also be able to absorb some of the capital that has gone into US assets in recent years, reversing some of the capital flows that have fuelled global imbalances. Goldman Sachs<sup>{14}</sup>

### *Regional Cooperation In Infrastructure Development*

The role of regional cooperation in infrastructure development has been increasingly discussed in recent years and offers considerable potential for fulfilling the infrastructure dream of this region. In order to strengthen the cooperation among BRICS nations the fifth BRICS summit was held in Durban, South Africa on March 26 and 27. Leaders of the five nations agreed to establish a BRICS development bank and a contingent reserve arrangement, announced the establishment of a business council and a think tank council and unveiled an action plan on further cooperation in nearly 20 fields, including finance, infrastructure, economy and trade, technology, health, agriculture and people-to-people and cultural exchange. Such practical cooperation would fully tap the potential of BRICS cooperation, show the vitality of the BRICS countries, bring concrete benefits to the people of all member countries, and help consolidate the social and public basis for cooperation among the BRICS countries. The establishment of a BRICS development bank would help developing countries face challenges of infrastructure development due to insufficient long-term financing and foreign direct investment, especially investment in capital stock. "This bank would ensure that the infrastructure development needs of member states, in particular Africa gets much needed infrastructure funding to address infrastructure gaps on the continent."

### *Issues And Challenges Constraining Infrastructure Funding*

While there are multiple roadblocks like delays in approvals, land acquisition, and environment

Clearances etc. One of the key on which infrastructural development is depended will be critical for future is the availability of funds. The financing of a project is the mean by which the funding is leveraged to provide enough up-front cash to purchase construct or adapt the project. Key issues and challenges that are thought to be constraining the flow of funds towards infrastructure development are as listed below.

*Addressing financial sector and related regulatory issues*

A deeper and more diversified financial sector could certainly help increase private participation in infrastructure. Developing local capital markets can play a critical role in facilitating private investment in infrastructure. Key priorities include:

*1. Facilitating equity financing*

In the longer term, equity finance from financial investors- including private equity funds such as venture capital funds and other institutional investors., which include dedicated infrastructure funds sponsored by a consortium of insurance companies, pension funds, government sponsored funds, commercial banks, development bank, private fund managers and other privately-held companies – is essential for increasing private investment in Infrastructure.

*2. Developing a longer term corporate bond market*

A well developed government bond market is a critical prerequisite to the development of the corporate bond market. Hence, there is an urgent need to increase the depth and the breadth of the government bond market, through the following measures:

- To improve the breadth of the government bond market, the government should consider recalling the existing illiquid, infrequently traded bonds and re-issue liquid bonds.
- The existing regulation that requires institutional funds such as pension funds and insurance funds to hold till maturity all government securities should be removed and they should be allowed to actively trade in the market.
- To bring in more retail investors to the government bond market there is a need to introduce an element of marketability and price discovery, which can only be brought in by making securities trading screen based and more transparent.

*Encouraging participation by FIIs in infrastructure financing*

Investment policies and regulatory guidelines for insurance companies, pension fund, mutual

Funds, banks and other FIIs need to be sufficiently flexible for these entities to choose an appropriate risk-return profile within fiduciary constraints. This will also help professionalize fund management. Project evaluation and fund management skills at banks and other FIIs with long term funds (insurance companies and pension funds) need to be strengthened. In particular, insurance companies need to be encouraged to develop specialized appraisal skills in the infrastructure projects. Given the large corpus of funds available with these companies, going forward they will need to become lead financiers in infrastructure projects. However, at present they do not have the requisite appraisal skills to appropriately evaluate project viability.

#### *Encouraging International Investments*

International investors looking to invest in any emerging market with a low credit rating would always be constrained and also the emerging market is competing with other markets for funding. Given the huge investment requirement in the infrastructure sector, which cannot be met only domestic savings, there is therefore a strong need to facilitate flow of funds from the international markets with flexible but prudent regulatory framework. Currently, the international funds could be channelized into the domestic market, either through (1) ECB borrowing or (2) FII inflow into domestic corporate debt and (3) Foreign direct investment. One has to give more importance to FDI flow because of its long term commitments in the host countries.

#### *Laying the foundations for FDI in infrastructure in India*

Each country should have basic foundation to attract FDI in infrastructure, beyond this basic guidelines any infrastructure policy must be suited to a country's specific characteristics and conditions; there is no "one-size fits all" model.

- Develop a strong legal and regulatory framework prior to the entry of FDI. Foreign infrastructure investors require a transparent and stable policy framework underpinned by the rule of law. Before committing funds to a project, companies whether laws and contracts are likely to be enforced, and whether their rights and responsibilities are well defined and likely to be well respected. This reinforces the importance of having the vast majority of laws, regulations and institutions in place prior to FDI entry.
- Secure the capacity and skills to facilitate and regulate private investment in infrastructure. Inviting TNCs to deliver infrastructure services often puts more pressure on public authorities than a state-run system. Understanding the legal, economic,

financial and political aspect of the infrastructure sector is necessary to perform demanding planning, negotiation and regulatory functions.

- Empower high-level taskforce to catalyze necessary reforms. The many legal and regulatory prerequisites to private investment in infrastructure require strong political will and institutional coordination. The creation of an interdepartmental body with direct access at the ministerial level is one way to ensure that infrastructure reforms receive priority and that all necessary steps are accounted for.
- Develop an integrated strategic infrastructure plan identifying key needs. The identification of priority infrastructure projects should be informed by the government's socio-economic development objectives. The commercial viability of a project is certainly an important consideration, but cost-sharing can also be used to ensure the construction of less profitable projects that are nonetheless deemed to be the public interest.
- Create a "pipeline" of pre-assessed, commercially attractive projects that can be actively promoted. After an infrastructure project is identified as eligible for private involvement, there are a number of preparatory steps that the government can take to reduce the risk facing investors, particularly in the case of Greenfield investment. These include completing any necessary feasibility studies or environmental and social impact assessments, as well as land acquisition if required for the project.
- Open the bidding stage to as many investors as possible. In most cases of private infrastructure investment, the government should have a competitive bidding or auctioning process to determine which investor can offer the best deal in terms of investment commitments, delivery of goods and services, price reductions, contribution to public revenues, etc.
- Help mitigate political and regulatory risk faced by foreign investors. Many developing countries face the challenge of actual or perceived political instability, and weak legal and regulatory institutions. These countries may benefit from committing themselves to international arbitration in cases of disagreement between the investor and host government.
- Monitor and follow up on project implementation. Private investment in infrastructure is typically characterized by complex terms and condition between the investor and the

government. This is particularly the case for concession agreements. Positive outcomes for the host country depend on government efforts to monitor the project's progress and enforce agreement with infrastructure investors. In most infrastructure sectors, government can create an independent body for this purpose.

*Concluding Remarks*

An assessment of the condition of infrastructure in BRICS, countries underlines the need for greater investment in the region. Investment in infrastructure has been restricted by many factors including limited domestic ability to carry out projects ,credit constrains due to both external constrain and country specific inability to raise capital ,and reduced invest interest in infrastructure projects tied to high perceived political risk.In the last two decades ,government in the region have turned to private participation as an answer to infrastructure as an answer to infrastructure investment must increase ,but investment needs remain beyond its capability if fiscal sustainability is to be preserved.

Private participation will continue to be required; what is important is to learn from past experiences to maximize the benefits of such involvement. The government's role in infrastructure is not limited to that of financier, but includes that of monitor, regulator and enabler. In this sense, governments in the region face the challenge of not only increasing infrastructure financing, but of creating the necessary condition to promote and retain quality investment in the sector. In particular, government must dedicate themselves to establishing the necessary juridical and regulatory framework to promote credibility and security in the sector.

Finally, infrastructure is closely linked to regional integration. On the one hand adequate infrastructure promotes deeper integration through the increased and more fluid movement of goods, services and people. On the other hand, many infrastructure projects are cross-border, requiring the commitment of more than one country. Regional cooperation in infrastructure investment, by internalizing spillover and taking advantage of economies of scale, plays an important role in regional infrastructure development, ultimately promoting greater and deeper regional integration and faster growth among the region's countries.

**Referances :**

{1} UNCTAD(2011), the Trade and Development Board ,at its fiftieth executive session ,on 8<sup>th</sup> july 2010 ,approved the agenda for the third session of the investment ,Enterprise and Developing Commission ,with the item “Promoting investment in basic infrastructure in developing countries.”

{2} Parker,D ,Karkpatrick,C. (2004).Privatisation in Developing countries:A Review of the Evidence and the policy Lessons.Journal of Development Studies,Vol.41,Issue 4,pp.513-541.

{3} Haaland,I.J.and Wooton,I(1999).”International Competition for Multinational investment,”The Scandinavian Journal of Economics,101(4),pp631-649

{4} Brazil:Growth Market for the future.Euromonitor international :Strategy Briefing,2008

{5} Background paper for the BRICS Business Forum Meeting 26,March,2013.

{6} UNCTAD on emerging markets FDI trends March 27,2013

{7} In march 2010,Bharti struck a deal to buy the Zain’s mobile operations in 15 African countries ,in india’s second biggest overseas acquisition after Tata Steel’s \$ 13 billion buy of corus in 2007.Bharti Airtel the world’s fifth largest wireless carrier by subscriber base.

{8} Planning Commission-Working subgroup on infrastructure funding Requirements and its sources over the implementation period of the 12 FYP(2012-2017)

{9} Analysis by Deloitte Touche Tohmatsu India Private Limited March 2013, “Funding the infrastructure in Transport”.

{10} World Bank (2011),Private Participation in Infrastructure Development, “Private investment in Energy”.

{11} World Bank (2011),Private Participation in Infrastructure Development, “Private investment in Transport”.

{12} Private Participation in Infrastructural Development, World Bank, Private investment in water and sewage recovers in 2011, mostly due to activity in china.

{13} World Bank(2012) Private Participation in Infrastructural Development, World Bank, Private activity in telecommunication

{14} Goldman Sach Global Economic Paper No. 166 “Building the world mapping Infrastructural Demand”.