

Foreign Direct Investment Flows to India¹

FDI inflows to India remained sluggish, when global FDI flows to EMEs had recovered in 2010-11, despite sound domestic economic performance ahead of global recovery. The paper gathers evidence through a panel exercise that actual FDI to India during the year 2010-11 fell short of its potential level (reflecting underlying macroeconomic parameters) partly on account of amplification of policy uncertainty as measured through Kauffmann's Index.

FDI inflows to India witnessed significant moderation in 2010-11 while other EMEs in Asia and Latin America received large inflows. This had raised concerns in the wake of widening current account deficit in India beyond the perceived sustainable level of 3.0 per cent of GDP during April-December 2010. This also assumes significance as FDI is generally known to be the most stable component of capital flows needed to finance the current account deficit. Moreover, it adds to investible resources, provides access to advanced technologies, assists in gaining production know-how and promotes exports.

A perusal of India's FDI policy *vis-à-vis* other major emerging market economies (EMEs) reveals that though India's approach towards foreign investment has been relatively conservative to begin with, it progressively started catching up with the more liberalised policy stance of other EMEs from the early 1990s onwards, *inter alia* in terms of wider access to different sectors of the economy, ease of starting business, repatriation of dividend and profits and relaxations regarding norms for owning equity. This progressive liberalisation, coupled with considerable improvement in terms of macroeconomic fundamentals, reflected in growing size of FDI flows to the country that increased nearly 5 fold during first decade of the present millennium.

Though the liberal policy stance and strong economic fundamentals appear to have driven the steep rise in FDI flows in India over past one decade and sustained their momentum even during the period of global economic crisis (2008-09 and 2009-10), the subsequent moderation in

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investment flows despite faster recovery from the crisis period appears somewhat inexplicable. Survey of empirical literature and analysis presented in the paper seems to suggest that these divergent trends in FDI flows could be the result of certain institutional factors that dampened the investors' sentiments despite continued strength of economic fundamentals. Findings of the panel exercise, examining FDI trends in 10 select EMEs over the last 7 year period, suggest that apart from macro fundamentals, institutional factors such as time taken to meet various procedural requirements make significant impact on FDI inflows.

This paper has been organised as follows: Section 1 presents trends in global investment flows with particular focus on EMEs and India. Section 2 traces the evolution of India's FDI policy framework, followed by cross-country experience reflecting on India's FDI policy vis-à-vis that of select EMEs. Section 3 deals with plausible explanations of relative slowdown in FDI flows to India in 2010-11 and arrives at an econometric evidence using panel estimation. The last section presents the conclusions.

Section 1: Trends in FDI Inflows

Widening growth differential across economies and gradual opening up of capital accounts in the emerging world resulted in a steep rise in cross border investment flows during the past two decades. This section briefly presents the recent trends in global capital flows particularly to emerging economies including India.

1.1 Global Trends in FDI Inflows

During the period subsequent to dotcom burst, there has been an unprecedented rise in the cross-border flows and this exuberance was sustained until the occurrence of global financial crisis in the year 2008-09. Between 2003 and 2007, global FDI flows grew nearly four -fold and flows to EMEs during this period, grew by about three-fold. After reaching a peak of US\$ 2.1 trillion in 2007, global FDI flows witnessed significant moderation over the next two years to touch US\$ 1.1 trillion in 2009, following the global financial crisis. On the other hand, FDI flows to developing countries increased from US\$ 565 billion in 2007 to US\$ 630 billion in 2008 before moderating to US\$ 478 billion in 2009.

The decline in global FDI during 2009 was mainly attributed to subdued cross border merger and acquisition (M&A) activities and weaker return prospects for foreign affiliates,

which adversely impacted equity investments as well as reinvested earnings. According to UNCTAD, decline in M&A activities occurred as the turmoil in stock markets obscured the price signals upon which M&As rely. There was a decline in the number of green field investment cases as well, particularly those related to business and financial services.

From an institutional perspective, FDI by private equity funds declined as their fund raising dropped on the back of investors' risk aversion and the collapse of the leveraged buyout market in tune with the deterioration in credit market conditions. On the other hand, FDI from sovereign wealth funds (SWFs) rose by 15 per cent in 2009. This was apparently due to the revised investment strategy of SWFs - who have been moving away from banking and financial sector towards primary and manufacturing sector, which are less vulnerable to financial market developments as well as focusing more on Asia.

As the world economic recovery continued to be uncertain and fragile, global FDI flows remained stagnant at US \$ 1.1 trillion in 2010. According to UNCTAD's Global Investment Trends Monitor (released on January 17, 2011), although global FDI flows at aggregate level remained stagnant, they showed an uneven pattern across regions – while it contracted further in advanced economies by about 7 per cent, FDI flows recovered by almost 10 per cent in case of developing economies as a group driven by strong rebound in FDI flows in many countries of Latin America and Asia. Rebound in FDI flows to developing countries has been on the back of improved corporate profitability and some improvement in M&A activities with improved valuations of assets in the stock markets and increased financial capability of potential buyers.

Improved macroeconomic conditions, particularly in the emerging economies, which boosted corporate profits coupled with better stock market valuations and rising business confidence augured well for global FDI prospects. According to UNCTAD, these favourable developments may help translate MNC's record level of cash holdings (estimated to be in the range of US\$ 4-5 trillion among developed countries' firms alone) into new investments during 2011. The share of developing countries, which now constitutes over 50 per cent in total FDI inflows, may increase further on the back of strong growth prospects. However, currency volatility, sovereign debt problems and potential protectionist policies may pose some risks to this positive outlook. Nonetheless, according to the Institute of International Finance (January 2011), net FDI flows to EMEs was projected to increase by over 11 per cent in 2011. FDI flows into select countries are given in Table 1.

Table 1 : Countries with Higher Estimated Level of FDI Inflows than India in 2010							
	Amount (US\$ billion)				Variation (Per cent)		
	2007	2008	2009	2010 (Estimates)	2008	2009	2010 (Estimates)
World	2100.0	1770.9	1114.2	1122.0	-15.7	-37.1	0.7
Developed Economies	1444.1	1018.3	565.9	526.6	-29.5	-44.4	-6.9
United States	266.0	324.6	129.9	186.1	22.0	-60.0	43.3
France	96.2	62.3	59.6	57.4	-35.2	-4.3	-3.7
Belgium	118.4	110.0	33.8	50.5	-7.1	-69.3	49.4
United Kingdom	186.4	91.5	45.7	46.2	-50.9	-50.1	1.1
Germany	76.5	24.4	35.6	34.4	-68.1	45.9	-3.4
Developing Economies	564.9	630.0	478.3	524.8	11.5	-24.1	9.7
China	83.5	108.3	95.0	101.0	29.7	-12.3	6.3
Hong Kong	54.3	59.6	48.4	62.6	9.8	-18.8	29.3
Russian Federation	55.1	75.5	38.7	39.7	37.0	-48.7	2.6
Singapore	35.8	10.9	16.8	37.4	-69.6	54.1	122.6
Saudi Arabia	22.8	38.2	35.5	-	67.5	-7.1	-
Brazil	34.6	45.1	25.9	30.2	30.3	-42.6	16.6
India	25.0	40.4	34.6	23.7	61.6	-14.4	-31.5

Source: World Investment Report, 2010 and Global Investment Trends Monitor, UNCTAD.

Section 1.2: Trends in FDI Inflows to India

With the tripling of the FDI flows to EMEs during the pre-crisis period of the 2000s, India also received large FDI inflows in line with its robust domestic economic performance. The attractiveness of India as a preferred investment destination could be ascertained from the large increase in FDI inflows to India, which rose from around US\$ 6 billion in 2001-02 to almost US\$ 38 billion in 2008-09. The significant increase in FDI inflows to India reflected the impact of liberalisation of the economy since the early 1990s as well as gradual opening up of the capital account. As part of the capital account liberalisation, FDI was gradually allowed in almost all sectors, except a few on grounds of strategic importance, subject to compliance of sector specific rules and regulations. The large and stable FDI flows also increasingly financed the current account deficit over the period. During the recent global crisis, when there was a significant deceleration in global FDI flows during 2009-10, the decline in FDI flows to India was relatively moderate reflecting robust equity flows on the back of strong rebound in domestic growth ahead of

global recovery and steady reinvested earnings (with a share of almost 25 per cent) reflecting better profitability of foreign companies in India. However, when there had been some recovery in global FDI flows, especially driven by flows to Asian EMEs, during 2010-11, gross FDI equity inflows to India witnessed significant moderation. Gross equity FDI flows to India moderated to US\$ 20.3 billion during 2010-11 from US\$ 27.1 billion in the preceding year.

Table 2: Equity FDI Inflows to India					
(Per cent)					
Sectors	2006-07	2007-08	2008-09	2009-10	2010-11
Sectoral shares (Per cent)					
Manufactures	17.6	19.2	21.0	22.9	32.1
Services	56.9	41.2	45.1	32.8	30.1
Construction, Real estate and mining	15.5	22.4	18.6	26.6	17.6
Others	9.9	17.2	15.2	17.7	20.1
Total	100.0	100.0	100.0	100.0	100.0
Equity Inflows (US\$ billion)					
Manufactures	1.6	3.7	4.8	5.1	4.8
Services	5.3	8.0	10.2	7.4	4.5
Construction, Real estate and mining	1.4	4.3	4.2	6.0	2.6
Others	0.9	3.3	3.4	4.0	3.0
Total Equity FDI	9.3	19.4	22.7	22.5	14.9

From a sectoral perspective, FDI in India mainly flowed into services sector (with an average share of 41 per cent in the past five years) followed by manufacturing (around 23 per cent) and mainly routed through Mauritius (with an average share of 43 per cent in the past five years) followed by Singapore (around 11 per cent). However, the share of services declined over the years from almost 57 per cent in 2006-07 to about 30 per cent in 2010-11, while the shares of manufacturing, and 'others' largely comprising 'electricity and other power generation' increased over the same period (Table 2). Sectoral information on the recent trends in FDI flows to India show that the moderation in gross equity FDI flows during 2010-11 has been mainly driven by sectors such as 'construction, real estate and mining' and services such as 'business and financial services'. Manufacturing, which has been the largest recipient of FDI in India, has also witnessed some moderation (Table 2).

Section 2: FDI Policy Framework

Policy regime is one of the key factors driving investment flows to a country. Apart from underlying macro fundamentals, ability of a nation to attract foreign investment essentially depends upon its policy regime - whether it promotes or restrains the foreign investment flows. This section undertakes a review of India's FDI policy framework and makes a comparison of India's policy *vis-à-vis* that of select EMEs.

2.1 FDI Policy Framework in India

There has been a sea change in India's approach to foreign investment from the early 1990s when it began structural economic reforms encompassing almost all the sectors of the economy.

Pre-Liberalisation Period

Historically, India had followed an extremely cautious and selective approach while formulating FDI policy in view of the dominance of 'import-substitution strategy' of industrialisation. With the objective of becoming 'self reliant', there was a dual nature of policy intention – FDI through foreign collaboration was welcomed in the areas of high technology and high priorities to build national capability and discouraged in low technology areas to protect and nurture domestic industries. The regulatory framework was consolidated through the enactment of Foreign Exchange Regulation Act (FERA), 1973 wherein foreign equity holding in a joint venture was allowed only up to 40 per cent. Subsequently, various exemptions were extended to foreign companies engaged in export oriented businesses and high technology and high priority areas including allowing equity holdings of over 40 per cent. Moreover, drawing from successes of other country experiences in Asia, Government not only established special economic zones (SEZs) but also designed liberal policy and provided incentives for promoting FDI in these zones with a view to promote exports. As India continued to be highly protective, these measures did not add substantially to export competitiveness. Recognising these limitations, partial liberalisation in the trade and investment policy was introduced in the 1980s with the objective of enhancing export competitiveness, modernisation and marketing of exports through Trans-national Corporations (TNCs). The announcements of Industrial Policy (1980 and 1982) and

Technology Policy (1983) provided for a liberal attitude towards foreign investments in terms of changes in policy directions. The policy was characterised by de-licensing of some of the industrial rules and promotion of Indian manufacturing exports as well as emphasising on modernisation of industries through liberalised imports of capital goods and technology. This was supported by trade liberalisation measures in the form of tariff reduction and shifting of large number of items from import licensing to Open General Licensing (OGL).

Post-Liberalisation Period

A major shift occurred when India embarked upon economic liberalisation and reforms program in 1991 aiming to raise its growth potential and integrating with the world economy. Industrial policy reforms gradually removed restrictions on investment projects and business expansion on the one hand and allowed increased access to foreign technology and funding on the other. A series of measures that were directed towards liberalizing foreign investment included: (i) introduction of dual route of approval of FDI – RBI's automatic route and Government's approval (SIA/FIPB) route, (ii) automatic permission for technology agreements in high priority industries and removal of restriction of FDI in low technology areas as well as liberalisation of technology imports, (iii) permission to Non-resident Indians (NRIs) and Overseas Corporate Bodies (OCBs) to invest up to 100 per cent in high priorities sectors, (iv) hike in the foreign equity participation limits to 51 per cent for existing companies and liberalisation of the use of foreign 'brands name' and (v) signing the Convention of Multilateral Investment Guarantee Agency (MIGA) for protection of foreign investments. These efforts were boosted by the enactment of Foreign Exchange Management Act (FEMA), 1999 [that replaced the Foreign Exchange Regulation Act (FERA), 1973] which was less stringent. This along with the sequential financial sector reforms paved way for greater capital account liberalisation in India.

Investment proposals falling under the automatic route and matters related to FEMA are dealt with by RBI, while the Government handles investment through approval route and issues that relate to FDI policy *per se* through its three institutions, *viz.*, the Foreign Investment Promotion Board (FIPB), the Secretariat for Industrial Assistance (SIA) and the Foreign Investment Implementation Authority (FIIA).

FDI under the automatic route does not require any prior approval either by the Government or the Reserve Bank. The investors are only required to notify the concerned regional office of the RBI within 30 days of receipt of inward remittances and file the required documents with that office within 30 days of issuance of shares to foreign investors. Under the approval route, the proposals are considered in a time-bound and transparent manner by the FIPB. Approvals of composite proposals involving foreign investment/ foreign technical collaboration are also granted on the recommendations of the FIPB. Current FDI policy in terms of sector specific limits has been summarised in Table 3 below:

Table 3: Sector Specific Limits of Foreign Investment in India			
Sector	FDI Cap/Equity	Entry Route	Other Conditions
A. Agriculture			
1. Floriculture, Horticulture, Development of Seeds, Animal Husbandry, Pisciculture, Aquaculture, Cultivation of vegetables & mushrooms and services related to agro and allied sectors.	100%	Automatic	
2. Tea sector, including plantation	100%	FIPB	
<i>(FDI is not allowed in any other agricultural sector /activity)</i>			
B. Industry			
1. Mining covering exploration and mining of diamonds & precious stones; gold, silver and minerals.	100%	Automatic	
2. Coal and lignite mining for captive consumption by power projects, and iron & steel, cement production.	100%	Automatic	
3. Mining and mineral separation of titanium bearing minerals	100%	FIPB	
C. Manufacturing			
1. Alcohol- Distillation & Brewing	100%	Automatic	
2. Coffee & Rubber processing & Warehousing.	100%	Automatic	
3. Defence production	26%	FIPB	
4. Hazardous chemicals and isocyanates	100%	Automatic	
5. Industrial explosives -Manufacture	100%	Automatic	
6. Drugs and Pharmaceuticals	100%	Automatic	
7. Power including generation (except Atomic energy); transmission, distribution and power trading.	100%	Automatic	
<i>(FDI is not permitted for generation, transmission & distribution of electricity produced in atomic power plant/atomic energy since private investment in this activity is prohibited and reserved for public sector.)</i>			
D. Services			
1. Civil aviation (Greenfield projects and Existing projects)	100%	Automatic	

2. Asset Reconstruction companies	49%	FIPB	
3. Banking (private) sector	74% (FDI+FII). FII not to exceed 49%	Automatic	
4. NBFCs : underwriting, portfolio management services, investment advisory services, financial consultancy, stock broking, asset management, venture capital, custodian , factoring, leasing and finance, housing finance, forex broking, etc.	100%	Automatic	s.t. minimum capitalisation norms
5. Broadcasting a. FM Radio b. Cable network; c. Direct to home; d. Hardware facilities such as up-linking, HUB. e. Up-linking a news and current affairs TV Channel	20% 49% (FDI+FII) 100%	FIPB	
6. Commodity Exchanges	49% (FDI+FII) (FDI 26 % FII 23%)	FIPB	
7. Insurance	26%	Automatic	Clearance from IRDA
8. Petroleum and natural gas : a. Refining	49% (PSUs). 100% (Pvt. Companies)	FIPB (for PSUs). Automatic (Pvt.)	
9. Print Media a. Publishing of newspaper and periodicals dealing with news and current affairs b. Publishing of scientific magazines/speciality journals/periodicals	26% 100%	FIPB FIPB	S.t. guidelines by Ministry of Information & broadcasting
10. Telecommunications a. Basic and cellular, unified access services, national/international long-distance, V-SAT, public mobile radio trunked services (PMRTS), global mobile personal communication services (GMPCS) and others.	74% (including FDI, FII, NRI, FCCBs, ADRs/GDRs, convertible preference shares, etc.	Automatic up to 49% and FIPB beyond 49%.	
Sectors where FDI is Banned			
1. Retail Trading (except single brand product retailing); 2. Atomic Energy; 3. Lottery Business including Government / private lottery, online lotteries etc; 4. Gambling and Betting including casinos etc.; 5. Business of chit fund; 6. Nidhi Company;			

7. Trading in Transferable Development Rights (TDRs);
8. Activities/sector not opened to private sector investment;
9. Agriculture (excluding Floriculture, Horticulture, Development of seeds, Animal Husbandry, Pisciculture and cultivation of vegetables, mushrooms etc. under controlled conditions and services related to agro and allied sectors) and Plantations (Other than Tea Plantations);
10. Real estate business, or construction of farm houses;
Manufacturing of Cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco or of tobacco substitutes.

2.2 *FDI Policy: The International Experience*

Foreign direct investment is treated as an important mechanism for channelizing transfer of capital and technology and thus perceived to be a potent factor in promoting economic growth in the host countries. Moreover, multinational corporations consider FDI as an important means to reorganise their production activities across borders in accordance with their corporate strategies and the competitive advantage of host countries. These considerations have been the key motivating elements in the evolution and attitude of EMEs towards investment flows from abroad in the past few decades particularly since the eighties. This section reviews the FDI policies of select countries to gather some perspective as to ‘where does India stand’ at the current juncture to draw policy imperatives for FDI policy in India.

China

- Encouragement to FDI has been an integral part of the China’s economic reform process. It has gradually opened up its economy for foreign businesses and has attracted large amount of direct foreign investment.
- Government policies were characterised by setting new regulations to permit joint ventures using foreign capital and setting up Special Economic Zones (SEZs) and Open Cities. The concept of **SEZs** was extended to fourteen more coastal cities in 1984. Favorable regulations and provisions were used to encourage FDI inflow, especially export-oriented joint ventures and joint ventures using advanced technologies in 1986.
- Foreign joint ventures were provided with preferential tax treatment, the freedom to import inputs such as materials and equipment, the right to retain and swap foreign exchange with each other, and simpler licensing procedures in 1986. Additional tax benefits were offered to export-oriented joint ventures and those employing advanced technology.

- Priority was given to FDI in the agriculture, energy, transportation, telecommunications, basic raw materials, and high-technology industries, and FDI projects which could take advantage of the rich natural resources and relatively low labour costs in the central and northwest regions.
- China's policies toward FDI have experienced roughly three stages: gradual and limited opening, active promoting through preferential treatment, and promoting FDI in accordance with domestic industrial objectives. These changes in policy priorities inevitably affected the pattern of FDI inflows in China.

Chile

- In Chile, policy framework for foreign investment, embodied in the constitution and in the Foreign Investment Statute, is quite stable and transparent and has been the most important factor in facilitating foreign direct investment. Under this framework, an investor signs a legal contract with the state for the implementation of an individual project and in return receives a number of specific guarantees and rights.
- Foreign investors in Chile can own up to 100 per cent of a Chilean based company, and there is no time limit on property rights. They also have access to all productive activities and sectors of the economy, except for a few restrictions in areas that include coastal trade, air transport and the mass media.
- Chile attracted investment in mining, services, electricity, gas and water industries and manufacturing.
- Investors are guaranteed the right to repatriate capital one year after its entry and to remit profits at any time.
- Although Chile's constitution is based on the principle of non-discrimination, some tax advantages are extended to foreign investors such as invariability of income tax regime, invariability of indirect taxes, and special policy regime for large projects.

Malaysia

- The Malaysian FDI regime is tightly regulated in that all foreign manufacturing activity must be licensed regardless of the nature of their business.

- Until 1998, foreign equity share limits were made conditional on performance and conditions set forth by the industrial policy of the time.
- In the past, the size of foreign equity share allowed for investment in the manufacturing sector hinged on the share of the products exported in order to support the country's export-oriented industrial policy.
- FDI projects that export at least 80 per cent of production or production involving advanced technology are promoted by the state and no equity conditions are imposed. Following the crisis in 1997-98, the restriction was abolished as the country was in need of FDI.

Korea

- The Korean government maintained distinctive foreign investment policies giving preference to loans over direct investment to supplement its low level of domestic savings during the early stage of industrialisation. Korea's heavy reliance on foreign borrowing to finance its investment requirements is in sharp contrast to other countries.
- The Korean Government had emphasised the need to enhance absorptive capacity as well as the indigenisation of foreign technology through **reverse engineering** at the outset of industrialisation while restricting both FDI and foreign licensing. This facilitated Korean firms to assimilate imported technology, which eventually led to emergence of global brands like Samsung, Hyundai, and LG.
- The Korean government pursued liberalised FDI policy regime in the aftermath of the Asian financial crisis in 1997-98 to fulfil the conditionality of the International Monetary Fund (IMF) in exchange for standby credit.
- Several new institutions came into being in Korea immediately after the crisis. Invest Korea is Korea's national investment promotion agency mandated to offer one-stop service as a means of attracting foreign direct investment, while the Office of the Investment Ombudsman was established to provide investment after-care services to foreign-invested companies in Korea. These are affiliated to the Korea Trade Investment Promotion Agency.

- Korea enacted a new foreign investment promotion act in 1998 to provide foreign investors incentives which include tax exemptions and reductions, financial support for employment and training, cash grants for R&D projects, and exemptions or reductions of leasing costs for land for factory and business operations for a specified period.
- One of the central reasons for the delays in the construction process in Korea is said to be the lengthy environmental and cultural due diligence on proposed industrial park sites. (OECD, 2008).

Thailand

- Thailand followed a traditional import-substitution strategy, imposing tariffs on imports, particularly on finished products in the 1960s. The role of state enterprises was greatly reduced from the 1950s and investment in infrastructure was raised. Attention was given to nurturing the institutional system necessary for industrial development. Major policy shift towards export promotion took place by early 1970s due to balance of payments problems since most of components, raw materials, and machinery to support the production process, had to be imported.
- On the FDI front, in 1977 a new Investment Promotion Law was passed which provided the Board of Investment (BOI) with more power to provide incentives to priority areas and remove obstacles faced by private investors (Table 4). After the East Asian financial crisis, the Thai government has taken a very favourable approach towards FDI with a number of initiatives to develop the industrial base and exports and progressive liberalisation of laws and regulations constraining foreign ownership in specified economic activities.
- The Alien Business Law, which was enacted in 1972 and restricted majority foreign ownership in certain activities, was amended in 1999. The new law relaxed limits on foreign participation in several professions such as law, accounting, advertising and most types of construction, which have been moved from a completely prohibited list to the less restrictive list of businesses.

To sum up, the spectacular performance of China in attracting large amount of FDI could be attributed to its proactive FDI policy comprising setting up of SEZs particularly exports catering to the international market, focus on infrastructure and comparative advantage owing to the low labour costs. A comparison of the FDI policies pursued by select emerging economies, set out above, suggests that policies although broadly common in terms of objective, regulatory framework and focus on technological upgradation and export promotion, the use of incentive structure and restrictions on certain sectors, has varied across countries. While China and Korea extend explicit tax incentives to foreign investors, other countries focus on stability and transparency of tax laws. Similarly, while all the countries promote investment in manufacturing and services sector, China stands out with its relaxation for agriculture sector as well. It is, however, apparent that though policies across countries vary in specifics, there is a common element of incentivisation of foreign investment (Table 4).

	Year of Liberalisation	Objective	Incentives	Priority Sectors	Unique features
China	1979	Transformation of traditional agriculture, promotion of industrialization, infrastructure and export promotion.	Foreign joint ventures were provided with preferential tax treatment. Additional tax benefits to export-oriented joint ventures and those employing advanced technology. Privileged access was provided to supplies of water, electricity and transportation (paying the same price as state-owned enterprises) and to interest-free RMB loans.	Agriculture, energy, transportation, telecommunications, basic raw materials, and high-technology industries.	Setting up of Special Economic Zones
Chile	1974	Technology transfer, export promotion and greater domestic competition.	Invariability of tax regime intended to provide a stable tax horizon.	All productive activities and sectors of the economy, except for a few restrictions in areas that include coastal trade, air transport and the mass media.	Does not use tax incentives to attract foreign investment.
Korea	1998	Promotion of absorptive capacity and indigenisation of foreign technology through reverse engineering at the outset of industrialisation	Businesses located in Foreign Investment Zone enjoy full exemption of corporate income tax for five years from the year in which the initial profit is made and 50 percent reduction for the subsequent two years. High-tech foreign investments in the Free Economic Zones are eligible for the full exemption three years and 50 percent for the following two years. Cash grants to high-tech green field investment and R&D investment subject to the government approval.	Manufacturing and services	Loan-based borrowing to an FDI-based development strategy till late 1990s.

		while restricting both FDI and foreign licensing.			
Malaysia	1980s	Export promotion	No specific tax incentives.	Manufacturing and services.	Malaysian Industrial Development Authority was recognised to be one of the effective agencies in the Asian region
Thailand	1977	Technology transfer and export promotion	No specific tax incentives. The Thai Board of Investment has carried out activities under the three broad categories to promote FDI. 1. Image building to demonstrate how the host country is an appropriate location for FDI. 2. Investment generation by targeting investors through various activities. 3. Servicing investors	Manufacturing and services	-

2.3 Cross-Country Comparison of FDI Policies – Where does India stand?

A true comparison of the policies could be attempted if the varied policies across countries could be reduced to a common comparable index or a measure. Therefore, with a view to examine and analyse ‘where does India stand’ *vis-a-vis* other countries at the current juncture in terms of FDI policy framework, the present section draws largely from the results of a survey of 87 economies undertaken by the World Bank in 2009 and published in its latest publication titled ‘Investing Across Borders’.

The survey has considered four indicators, *viz.*, ‘Investing across Borders’, ‘Starting a Foreign Business’, ‘Accessing Industrial Land’, and ‘Arbitrating Commercial Disputes’ to provide assessment about FDI climate in a particular country. **Investing across Borders** indicator measures the degree to which domestic laws allow foreign companies to establish or acquire local firms. **Starting foreign business** indicator record the time, procedures, and regulations involved in establishing a local subsidiary of a foreign company. **Accessing industrial land** indicator evaluates legal options for foreign companies seeking to lease or buy land in a host economy, the availability of information about land plots, and the steps involved in leasing land. **Arbitrating commercial disputes** indicator assesses the strength of legal

frameworks for alternative dispute resolution, rules for arbitration, and the extent to which the judiciary supports and facilitates arbitration. India's relative position in terms of these four parameters *vis-à-vis* major 15 emerging economies, which compete with India in attracting foreign investment, is set out in Tables 5A and 5B.

Following key observations could be made from this comparison:

- A comparative analysis among the select countries reveals that countries such as Argentina, Brazil, Chile and the Russian Federation have sectoral caps higher than those of India implying that their FDI policy is more liberal.
- The sectoral caps are lower in China than in India in most of the sectors barring agriculture and forestry and insurance. A noteworthy aspect is that China permits 100 per cent FDI in agriculture while completely prohibits FDI in media. In India, on the other hand, foreign ownership is allowed up to 100 per cent in sectors like 'mining, oil and gas', electricity and 'healthcare and waste management'.

Country	Mini ng, oil and gas	Agricult ure and forestry	Light manuf act uring	Telecomm unications	Electricity	Banking	Insurance	Trans portati on	Media	Constr uction, touris m and retail	Health care and waste manag ement
Argentina	100	100	100	100	100	100	100	79.6	30	100	100
Brazil	100	100	100	100	100	100	100	68	30	100	50
Chile	100	100	100	100	100	100	100	100	100	100	100
China	75	100	75	49	85.4	62.5	50	49	0	83.3	85
India	100	50	81.5	74	100	87	26	59.6	63	83.7	100
Indonesia	97.5	72	68.8	57	95	99	80	49	5	85	82.5
Korea,	100	100	100	49	85.4	100	100	79.6	39.5	100	100
Malaysia	70	85	100	39.5	30	49	49	100	65	90	65
Mexico	50	49	100	74.5	0	100	49	54.4	24.5	100	100
Philippines	40	40	75	40	65.7	60	100	40	0	100	100
Russian	100	100	100	100	100	100	49	79.6	75	100	100
South	74	100	100	70	100	100	100	100	60	100	100
Thailand	49	49	87.3	49	49	49	49	49	27.5	66	49

- India positioned well *vis-a-vis* comparable counterparts in the select countries in terms of the indicator 'starting a foreign business'. In 2009, starting a foreign business took

around 46 days with 16 procedures in India as compared with 99 days with 18 procedures in China and 166 days with 17 procedures in Brazil (Table 5 B).

- In terms of another key indicator, *viz.*, ‘accessing industrial land’ India’s position is mixed. While the ranking in terms of indices based on lease rights and ownership rights is quite high, the time to lease private and public land is one of the highest among select countries at 90 days and 295 days, respectively. In China, it takes 59 days to lease private land and 129 days to lease public land. This also has important bearing on the investment decisions by foreign companies.
- In terms of the indicator ‘arbitrating commercial disputes’ India is on par with Brazil and the Russian Federation. Although, the strength of laws index is fairly good, the extent of judicial assistance index is moderate.

Country	Starting a Foreign Business			Accessing Industrial Land						Arbitrating Commercial Disputes		
	Time (days)	Procedures (number)	Ease of establishment index (0 = min, 100 = max)	Strength of lease rights index (0 = min, 100 = max)	Strength of ownership rights index (0 = min, 100 = max)	Access to land information index (0 = min, 100 = max)	Availability of land information index (0 = min, 100 = max)	Time to lease private land (days)	Time to lease public land (days)	Strength of laws index (0 = min, 100 = max)	Ease of process index (0 = min, 100 = max)	Extent of judicial assistance index (0 = min, 100 = max)
Argentina	50	18	65	79.3	100	44.4	85	48	112	63.5	72.2	55.1
Brazil	166	17	62.5	85.7	100	33.3	75	66	180	84.9	45.7	57.2
Chile	29	11	63.2	85.7	100	33.3	80	23	93	94.9	62.8	74.8
China	99	18	63.7	96.4	n/a	50	52.5	59	129	94.9	76.1	60.2
India	46	16	76.3	92.9	87.5	15.8	85	90	295	88.5	67.6	53.4
Indonesia	86	12	52.6	78.6	n/a	21.4	85	35	81	95.4	81.8	41.3
Korea,	17	11	71.1	85.7	100	68.4	70	10	53	94.9	81.9	70.2
Malaysia	14	11	60.5	78.5	87.5	23.1	85	96	355	94.9	81.8	66.7
Mexico	31	11	65.8	81.3	100	33.3	90	83	151	79.1	84.7	52.7
Philippines	80	17	57.9	68.8	n/a	23.5	87.5	16	n/a	95.4	87	33.7
Russian	31	10	68.4	85.7	100	44.4	90	62	231	71.6	76.1	76.6
South	65	8	-	84.5	100	47.4	85	42	304	82.4	79	94.5
Thailand	34	9	60.5	80.7	62.5	27.8	70	30	128	84.9	81.8	40.8

Thus, a review of FDI policies in India and across major EMEs suggests that though India's policy stance in terms of access to different sectors of the economy, repatriation of dividend and norms for owning equity are comparable to that of other EMEs, policy in terms of qualitative parameters such as 'time to lease private land', 'access to land information' and 'Extent of Judicial assistance' are relatively more conservative. Since time taken to set up a project adds to the cost and affect competitiveness, an otherwise fairly liberal policy regime may turn out to be less competitive or economically unviable owing to procedural delays. Thus, latter may affect the cross border flow of investible funds. But an assessment of precise impact of these qualitative parameters on the flow of FDI is an empirical question. The following section makes an attempt to quantify the impact of various factors that govern the flow of FDI in India.

Section 3: FDI flows to India in recent period – *Distinct slowdown despite strong fundamentals – Plausible Explanations*

As stated above, global FDI flows moderated significantly since the eruption of global financial crisis in 2008, *albeit* with an uneven pattern across regions and countries. Though initially developing countries showed some resilience, crisis eventually spread through the trade, financial and confidence channels and FDI flows declined in both the advanced and developing economies during 2009. Subsequently, while FDI flows to advanced countries continued to decline, FDI flows to many of the Latin American and Asian countries witnessed strong rebound during 2010 on the back of improved corporate profitability and some improvement in M&A activities.

FDI flows to India also moderated during 2009 but unlike trends in other EMEs, flows continued to be sluggish during 2010 despite strong domestic growth ahead of global recovery. This raised concerns for policy makers in India against the backdrop of expansion in the current account deficit.

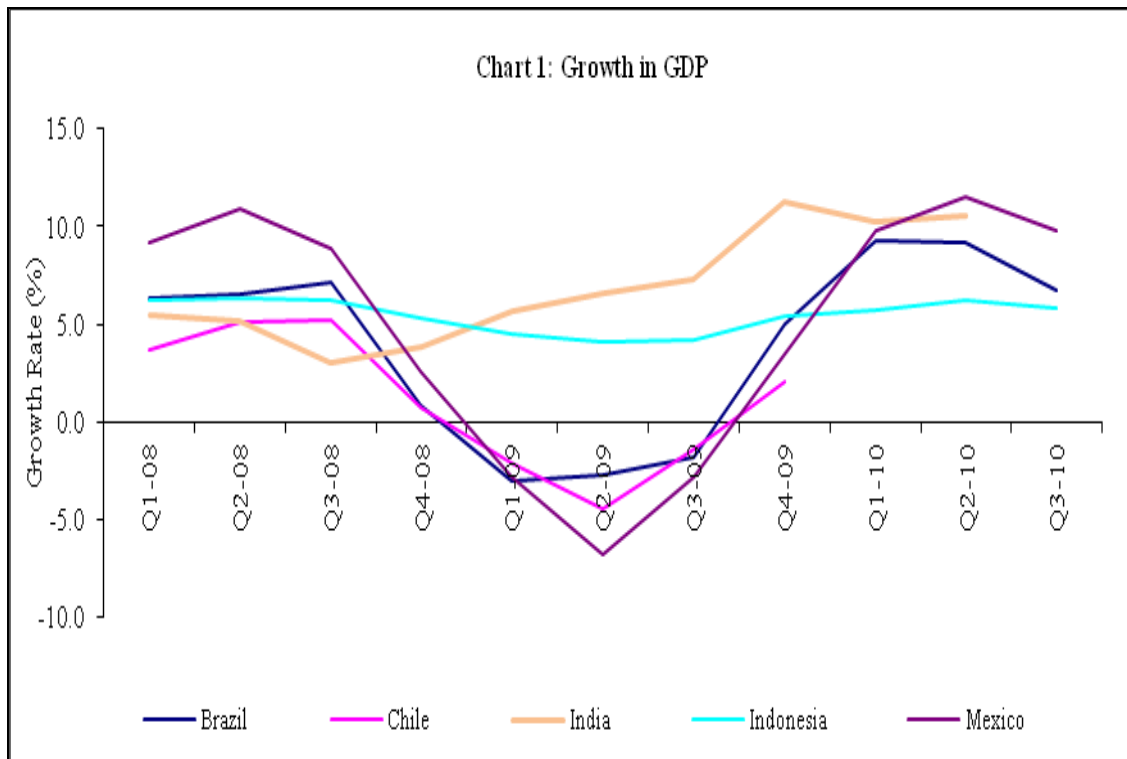
Table 6: FDI Inflows in Select EMEs								
								(US\$ billion)
	Argentina	Brazil	Chile	India	Indonesia	Mexico	South Africa	Thailand
2007	6.5	34.6	12.5	25.5	6.9	29.1	5.7	11.3
2008	9.7 (50.2)	45.1 (30.3)	15.2 (21.1)	43.4 (70.3)	9.3 (34.5)	24.9 (14.3)	9.6 (68.1)	8.5 (24.7)
2009	4.0 (92.0)	25.9 (14.3)	12.7 (39.9)	35.6 (49.4)	4.9 (85.9)	14.5 (200.8)	5.4 (92.1)	5.0 (120.2)
Q1-10	1.9	5.5	5.5	6.1	2.9	4.8	0.4	1.5
Q2-10	0.0	6.6	2.5	6.0	3.3	7.6	0.4	2.0
Q3-10	1.9	10.5	5.3	6.7	3.4	2.4	0.1	1.5
Q4-10	0.9	25.9	1.9	5.3	3.7	2.8	-	0.7
2010	4.7 (17.5)	48.5 (87.3)	15.2 (19.7)	24.1 (32.3)	13.3 (171.4)	17.6 (21.4)	0.9 (80.4)	5.7 (14.0)

Note: Figures in brackets relate to percentage variation over the corresponding period of the previous year.

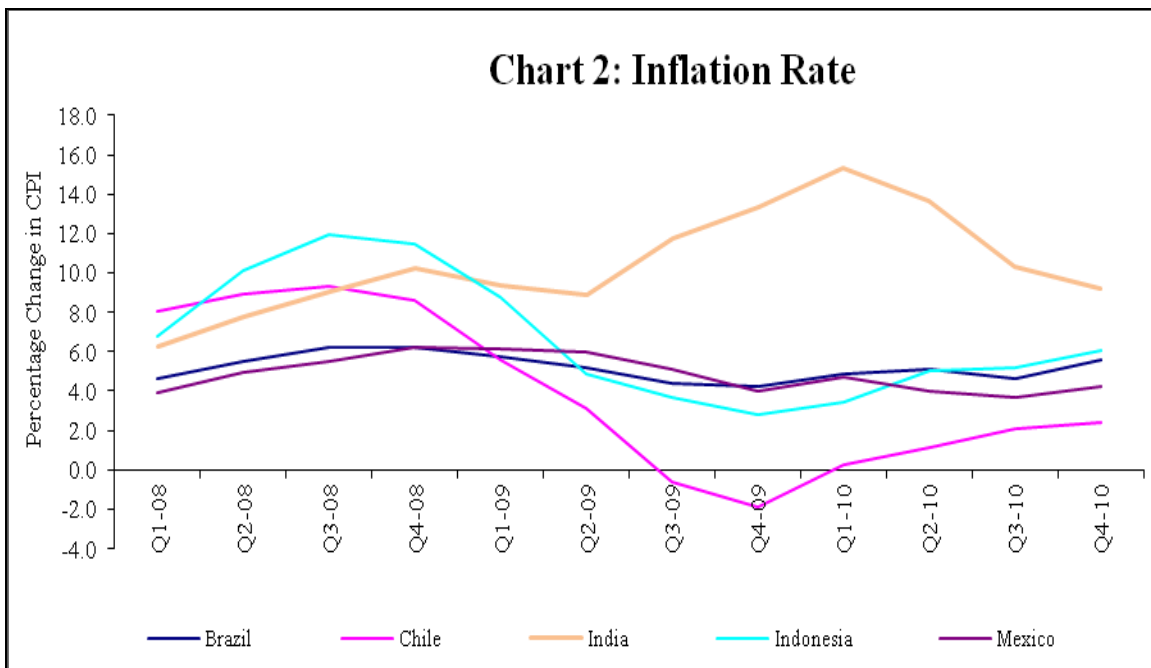
Source: IMF, BOP Statistics.

An analysis of trends in FDI flows during 2010 reveal that among the EMEs, countries such as Indonesia, Thailand, Brazil, Argentina, Chile and Mexico registered increases in the range of 14-171 per cent during 2010 over 2009 (Table 6). In contrast, FDI inflows to India declined by 32 per cent, year-on-year, during 2010. This moderation in FDI inflows warrants a deeper examination of the causal factors from a cross-country perspective.

An analysis of key macroeconomic indicators in the select EMEs reveals that India's macroeconomic performance compares with other EMEs which received higher FDI inflows during 2010 (Charts 1 & 2).



For instance, the GDP growth of India improved during 2010 as was the case with the select EMEs. The current account balance as percent of GDP deteriorated across the select EMEs, except Argentina. However, inflation in India was generally higher (remaining at double digits for a long period) than other select EMEs (except Argentina).



Thus, without any significant deterioration in Indian macroeconomic performance compared to the select EMEs during 2010, the moderation in FDI inflows to India points towards the probable role of institutional factors that might have discouraged FDI inflows.

3.1 FDI slowdown – Explanations Offered

In the recent past, various economists, policymakers, academicians and corporate researchers suggested that India's regulatory policies in terms of procedural delays, complex rules and regulations related to land acquisition, legal requirements and environmental obligations might have played a role in holding the investors back from investing into India. The uncertainty created by the actions taken by policy makers might have led to unfriendly business environment in India. In this context, some of the statements and observations made in various reports are detailed below:

“Infrastructure projects in India carry significant risks associated with meeting government regulation, environment norms and legal requirements; inadequate user charges; and execution and construction risks” (CRISIL Report, January 2011).

“Procedural delays are bothering nearly all of the respondents with almost 93 percent of the respondents indicating this issue to be ‘quite to very serious’. The time consuming systems and procedures to be complied with, the bureaucratic layers to be dealt with and the multiple bodies from which clearances are to be obtained- all add up substantially to the transaction cost involved and take up a lot of management time thus making it an issue of serious concern for the investors” (FDI Survey by FICCI, December 2010).

Identification of ‘environment clearances, land acquisition and rehabilitation’ as the key issues that delayed large investment projects in the steel industry (Kotak Institutional Equities Research, October, 2010).

“The Posco project (still in the pipeline) involves wider issues: Rs. 52,000 crore in foreign direct investments that will be seen as a test case for India's ability to accommodate big-ticket capital from abroad. The mining project by Vedanta in the same state (Orissa) has already been stalled on environment grounds” (The Telegraph newspaper statement, October 19, 2010).

“When hard choices need to be made about large projects that are considered central to economic growth but are detrimental to the environment. Let us all accept the reality that there is undoubtedly a trade-off between growth and environment” (EPW, October 16, 2010).

“Apart from hundreds of industry projects, he (environment Minister) has held up construction of a second airport in the commercial hub of Mumbai and dozens of road and dam projects await clearance” (China Daily, November 6, 2010).

To ascertain these assertions which seek to imply that probably relatively more restrictive policy environment in India *vis-à-vis* other countries might have caused sluggishness in FDI flows, following section undertakes an econometric exercise using data of select EMEs.

3.2 Reasons for FDI slowdown – An Econometric Evidence

The review of theoretical and select empirical literature reveals that FDI flows are driven by both pull and push factors. While pull factors that reflect the macroeconomic parameters could be influenced by the policies followed by the host country, push factors essentially represent global economic situation and remain beyond the control of economies receiving these flows (Box I).

Box I **Foreign Investment Flows – Theoretical Underpinnings**

The research on this subject has so far been largely devoted to factors determining the FDI and policy formulations in response to those factors. Until 1960s, FDI was modelled as a part of neoclassical capital theory and the basic motive behind the movement of this capital into a host country was search for higher rate of returns. Over the period, with growing realisation the motives for capital movement have been far more diverse than mere search for higher returns, there has been a plethora of theoretical and empirical research directed towards identifying factors determining different types of capital flows. It was the insight of Hymer (1960) who by differentiating direct investment from portfolio investment created basis for studies on factors determining the FDI flows. Hymer highlighted certain facts and evidences² on the basis of which he concluded that the nature of the direct and portfolio investment differs and therefore same

² Hymer highlighted the evidences such as the case of US as a net exporter of FDI but a net importer of portfolio investment, the predominance of direct investment in manufacturing and of portfolio investment in financial organisations and investment into a single country despite the opportunity available to mitigate risk by diversifying investment across different countries.

theories cannot be applied to both types of investment. The key feature that Hymer identified for motivation of FDI was the level of control which a firm of home country gets through direct investment in host country. He also stressed upon market imperfections such as the ownership of knowledge not known to rivals, existence of differentiated products giving profit advantage to a firm investing abroad, problems related to licensing the product, *etc.*, for supporting FDI decisions. However, the literature argues that his theory over-emphasised the role of structural market failure and ignored the transaction cost side of market failure (Dunning and Rugman, 1985). Moreover, his theory did not explain the locational and dynamic aspect of FDI.

Later, Caves (1971) expanded upon Hymer's theory of direct investment and embedded it in the industrial organisation literature. By differentiating horizontal and vertical FDI, he identified factors such as possession of superior knowledge or information, motives to avoid uncertainty in a market characterized by a few suppliers and objective of creating entry barriers, *etc.*, as being responsible for rising FDI flows. With the rising presence of multinational enterprises in the global economy, the view on FDI was expanded with the internationalisation theories of FDI that stressed on transaction costs (Dunning and Rugman, 1985; Horaguchi nad Toyne, 1990). The internationalisation theory of FDI identified accumulation and internalisation of knowledge as the motivation for FDI, which bypasses intermediate product markets in knowledge (Tolentino, 2001).

The theorists such as Horst (1972), who stressed upon locational determinants of FDI, identified prevalence of natural resources as an important factor for FDI inflow. Wheeler and Mody (1992) identified ergodic and non-ergodic systems that determine the location of FDI. The ergodic system focussed on classical variables such as geographical features, labor costs, transport costs and market size as factors determining the FDI flows. Various empirical studies still rely on these variables to determine potential for FDI flows. The non-ergodic system focussed on externalities that emerge from investment in firms experiencing agglomeration economies, in other words, indicating the clustering effects of FDI. The studies such as Venables (1996), Potter *et al* (2002) explained spatial patterns of FDI in terms of these factors.

The research work of Dunning (1973, 1981) provided a comprehensive analysis of FDI based on ownership, location and the internationalisation (OLI) paradigm. His eclectic theory of FDI highlighted various benefits emerging from FDI: the ownership-specific advantages which comprise access to spare capacity, economies of joint supply, greater access to markets and knowledge, diversification of risk, technology and trademarks, firm size; the location-specific advantages consisting of distribution of inputs and markets, costs of labor, materials and transport costs, government intervention and policies, commercial and legal infrastructure, *etc.*; internalisation-specific advantages covering reduction in search, negotiation and monitoring costs, tariff avoidance, *etc.* The critics of eclectic theory of FDI have regarded it as a taxonomy rather than a theory of FDI (Ietto-Gillies, 1992) as it covered a range of theories and employs a large number of variables. It has also been criticised for reformulation over time to incorporate new ideas and to reflect contemporary trends in FDI. The prior version of his theory ignored the role of strategy in determining the FDI flows. The role of strategic motivations, which was first analysed by Knickerbocker (1973), were extended by Acocella (1992). As per these strategic theories, the reasons behind strategic alliances included economies of scale, the reduction of risk and access to knowledge and expertise (Inkpen, 2001). The strategic alliances highlight the motivation for mergers and acquisitions taking place in the current era of M&A boom.

All these theories mainly explain the supply side of FDI that creates a push to FDI for flowing out of the home economy. Broadly, these factors and motives comprise profit expansion

through knowledge advantage, lower cost advantage, greater market access, gains from scale economies, strategic motives such as acquiring input supplies or creating worldwide near to monopoly powers, locational advantages, reduction in risk and agglomeration gains.

A vast literature on demand side factors that pull FDI into a host economy is also available. The studies such as World Bank (1995), Blomstrom and Kokko (1998), Markusen and Venables (1999), highlight gains from FDI in the form of competition and efficiency effects, spillover effects, effects of backward and forward linkages, technological effects, accumulation of knowledge capital, stable flow of funds with no debt-servicing obligation attached, greater external market discipline on macroeconomic policy, broadening and deepening of national capital markets, *etc.* for the host country. These theoretical studies have given a lot of space for empirical research on factors determining the inflow and outflow of FDI and the role played by policy initiatives undertaken on the part of host countries to attract FDI. The country specific studies have analysed the role of regulatory regime of the host country in attracting FDI. These studies have focussed on timing, activities of supervisory authorities and content of external and internal regulatory measures.

A lot of literature highlighting the role played by policy environment discusses the issues of creating investor friendly environment for FDI. As per Oxelheim (1993), in attracting inward investment during the period of transition from a national market to an integrated part of the global market, governments can influence the relative cost of capital by using an adequate mix of interventions. Policymakers may affect the corporate decision about where to locate a production facility by managing a set of international relative prices: exchange rates, relative inflation and interest rates. In general, they can create investment incentives or business opportunities by creating deviations from the international purchasing power parity and the international Fisher effect. Additional business incentives controlled by policymakers are relative taxes and relative political risk. This study has argued that appropriate policies appear to be a necessary precondition for attracting FDI.

The UNCTC (1991) has provided seven policy instruments used to attract FDI: ownership policies, tax and subsidy measures, policies concerning convertibility of foreign exchange and remittance of earnings, price control measures, performance requirements, sector-specific limitations and incentives and miscellaneous entry and procedural rules that are assumed to impose a considerable cost on a potential FDI. A World Bank report on indicators of FDI regulation (2010) has found that restrictive and obsolete laws and regulations impede FDI, red tape and poor implementation of laws creates further barriers to FDI, good regulations and efficient processes matter for FDI and effective institutions help in fostering FDI. Thus, the report highlights the importance of regulatory framework.

Data and Methodology

The paper attempts a panel exercise for the select major emerging market economies to ascertain determinants of FDI flows. The data set comprises observations for the period from 2003-04 to 2009-10 for 10 major emerging economies, *viz.*, Argentina, Brazil, Chile, India, Malaysia, Mexico, Philippines, Russia, South Africa and Thailand. To ensure the comparability entire dataset has been sourced from the Global Development Finance, published by the World

Bank. FDI flows have been measured as FDI inflows to GDP ratio which has been regressed over a range of explanatory variables. Drawing from the literature review presented above, some of the variables that have been chosen and could be significant in determining the FDI flows comprise: market size, openness, currency valuation, growth prospects, macroeconomic sustainability, regulatory regime and proportion of global FDI received by emerging economies.

Market size: Larger market size is expected to attract more FDI as it provides greater potential for demand and lower production costs through scale economies. Market size has been proxied by GDP in purchasing power parity (PPP) terms.

Openness: Impact of openness or liberalised trade is somewhat ambiguous and depends on relative strength of two effects. First, economy with trade barriers is expected to attract more horizontal FDI so that production sites could be built within the national boundaries of those restricted economies. Second, increasing openness attracts vertical FDI flows in search of cheap intermediate and capital goods (Resmini, 2000). Also, openness in trade is correlated with economic liberalisation policy of an economy that may sound favorable to investors. Openness has been proxied by sum of current receipts and payments to GDP ratio.

Macroeconomic stability - Lower inflation rate and stable exchange rate are expected to attract greater FDI by mitigating uncertainty risk. It has been proxied by inflation and exchange rate volatility.

Exchange rate valuation - Froot and Stein (1991) have evidently found that a weaker host country currency tends to increase inward FDI as depreciation makes host country assets less expensive relative to assets in the home country which may act as an attraction for vertical FDI. On the other hand, a stronger real exchange rate might be expected to strengthen the incentive of foreign companies to produce domestically thereby attract more horizontal FDI. However, the second hypothesis does not appear to have attracted much support in the empirical literature (Walsh and Yu, 2010). It has been measured by value of US dollar in terms of respective domestic currencies.

Clustering effects: A larger stock of FDI is regarded as a signal of a benign business climate for foreign investors and thus may attract more FDI. Moreover, by clustering with other firms, new investors benefit from positive spillovers from existing investors in the host country. The studies of Wheeler and Mody (1992), Barrell and Pain (1999) and Campos and Kinoshida

(2003) have found empirical evidence of agglomeration effects. It has been proxied by the stock of FDI.

Institutions and Governance - Institutional and Governance quality has been identified as a likely determinant of FDI, particularly for less developed countries, for a variety of reasons. First, good governance is associated with higher economic growth, which should attract more FDI inflows. Second, poor institutions that enable corruption tend to add to investment costs and reduce profits. Third, the high sunk cost of FDI makes investors highly sensitive to uncertainty, including the political uncertainty that arises from poor institutions (Walsh and Yu, 2010). Institutional framework and governance has been captured by ‘Government Effectiveness’ Index (Kaufmann Index)³. It captures “*perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies*”. Score is assigned on the scale of -2.5 to 2.5. Higher score means Government procedures are more efficient.

Macro Economic Sustainability could be a key factor in attracting foreign investment. If government finances and external sector are considered sustainable, foreign investor feel assured of the safety of its investments. Sustainability has been captured through two variables. Fiscal sustainability has been captured by GFD to GDP ratio and external sector sustainability has been captured by net IIP to GDP ratio.

Apart from these pull factors, push factors such as global economic environment and policy stance of the developed world may be critical factors in determining the FDI flows. For instance, higher global liquidity would cause larger flow of resources to EMEs searching for higher returns. It could be proxied by the FDI to EMEs.

Limitations of the data

Inferences drawn in the study should however be seen in the light of following data limitations:

- The study is based on the macro level data and may not capture strictly the firm specific characteristics in the determination of FDI.

³ This is released as part of ‘World Wide Governance Indicators’ prepared by D. Kaufmann of Brooking Institution and A. Kraay & M. Mastruzzi of World Bank.

- Dataset for each variable have been sourced from a single source to ensure comparability. Since international agencies may make suitable adjustments for the sake of comparability, data for an individual country may marginally vary from the country's own datasets.
- The sectoral caps for India, as provided by the World Bank in its survey 'Investing across Borders', in respect of agriculture, banking, media, 'construction, tourism and single brand retail' are apparently at variance with extant guidelines. This is because the average caps were reported for the respective sectors in its publication and the same have been reproduced in the study.

Fixed effect model⁴ of the following form was estimated for a group of emerging economies, where $fy(i, t)$ is the FDI to GDP ratio of an individual economy i in the year t , and $x(i, t)$ is the vector of explanatory variables.

$$y(i,t) = a_1 d_1(i,t) + a_2 d_2(i,t) + \dots + b\phi x(i,t) + e(i,t)$$

$$= a(i) + b\phi x(i,t) + e(i,t),$$

where the $a(i)$ s are individual specific constants, and the $d(i)$ s are group specific dummy variables which equal 1 only when $j = i$.

Panel has been estimated for the period 2000-01 to 2010-11 for 10 countries⁵.

Results

The estimated equation⁶ is shown below, with t-statistics shown in parentheses:

$$Fy = -1.42 + 0.03 openness - 0.004 dwages + 0.009 FDIEMEG +$$

(2.6) (6.1) (2.3) (3.5)

$$.08 Gdiff + 4.08 Govt.Effect (-2) + 0.02 IIPY(-1)$$

4 As some specific economies among the emerging market economies that are believed to offer competition to India, have been included in the sample, it cannot be treated as random sampling.

5 Panel is unbalanced as data on labour cost for all the countries were not available beyond 2008-09. However, results for a balanced panel estimated for 2000-01 to 2008-09, were not significantly different from the results of full period panel and inferences did not vary in any manner.

6 To account for the risk aversion during global financial crisis, dummy for 2009/2010 has been incorporated. Apart from this, an India specific dummy for the period 2004/2005 has also been used.

(2.6)

(4.1)

(2.4)

$$R^2 = .75, \quad D.W. = 2.04$$

where

fy – foreign direct investment to GDP ratio; Openness – current flows to GDP ratio; Gdiff – growth differential amongst the sample countries; dwages – change in labour cost; FDIEMERG = size of FDI to emerging economies; IIPY – Net International Investment Position; Govt. Effect – Index of Government Effectiveness (Kaufmann Index).

In line with *a priori* expectations, all the pull factors *viz.*, openness, growth differential, net international investment position and Kaufmann Index of Government Effectiveness were found to be positively related. Labour cost, as expected, had inverse relationship with FDI inflows. All the variables were statistically significant. Similarly, the push factor captured through size of FDI flowing into emerging economies was also found to be positively related and impact has been statistically significant.

GDP in PPP terms capturing size of the market was also examined. Although it was statistically insignificant (not reported), its sign was in line with *a priori* expectations, i.e., bigger the market size larger the FDI flows. Similarly, the sign for exchange rate although correct as per *a priori* expectation, was statistically insignificant and has not been reported.

The results show that ten percentage points rise in openness, growth differential and IIP cause 0.3, 0.8 and .2 percentage point rise in FDI to GDP ratio, respectively. Similarly, every US\$ 10 billion rise in the size of global FDI to emerging economies causes 0.09 percentage point rise in FDI/GDP ratio. On the other hand, every US\$ 10 rise in the wage rate is likely to reduce the FDI ratio by .04 percentage points.

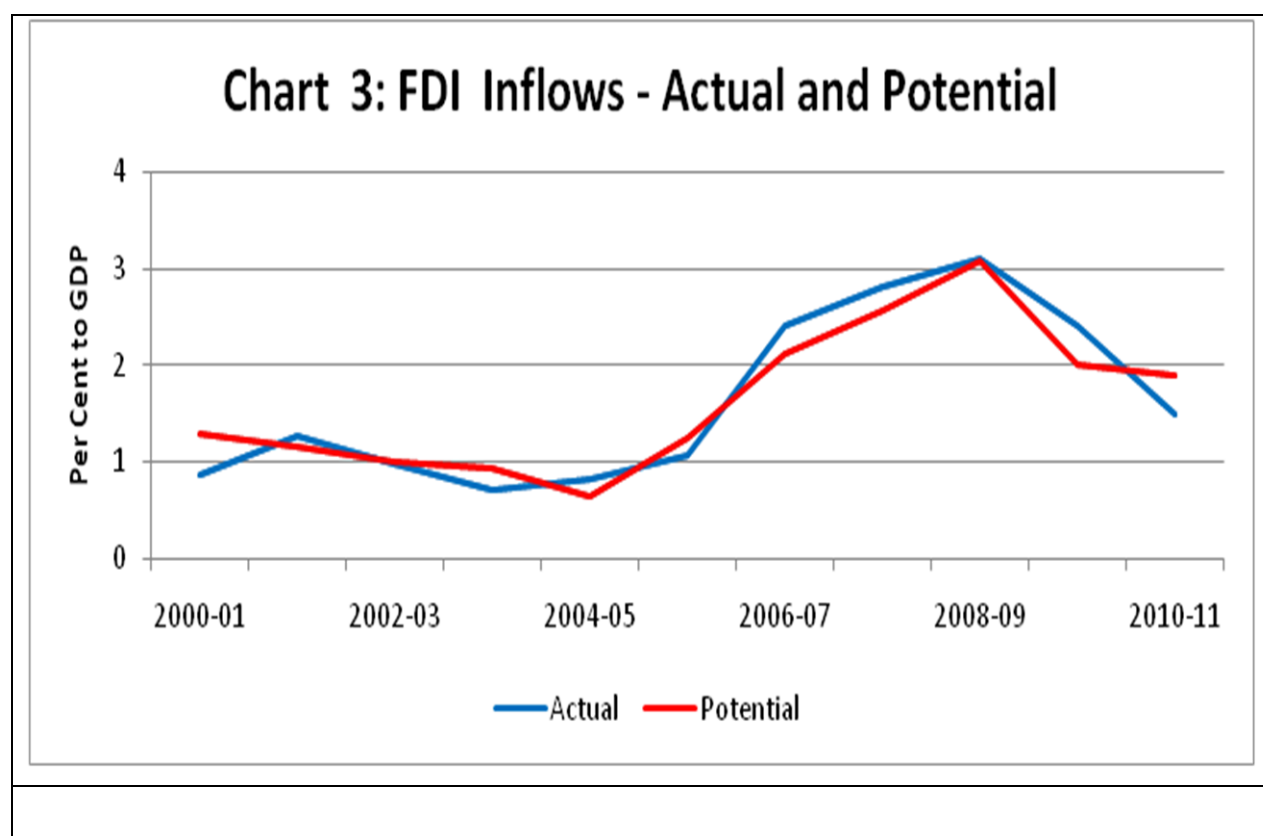
The Index denoting ‘Government Effectiveness (Gov. Effect) as expected has inverse relationship with FDI flows implying that policy certainty could be a major determinant of FDI inflows. As per our results, if Gov Effect Index rises by one point on the scale of -2.5 to 2.5, FDI to GDP ratio rises by 4 percentage points.

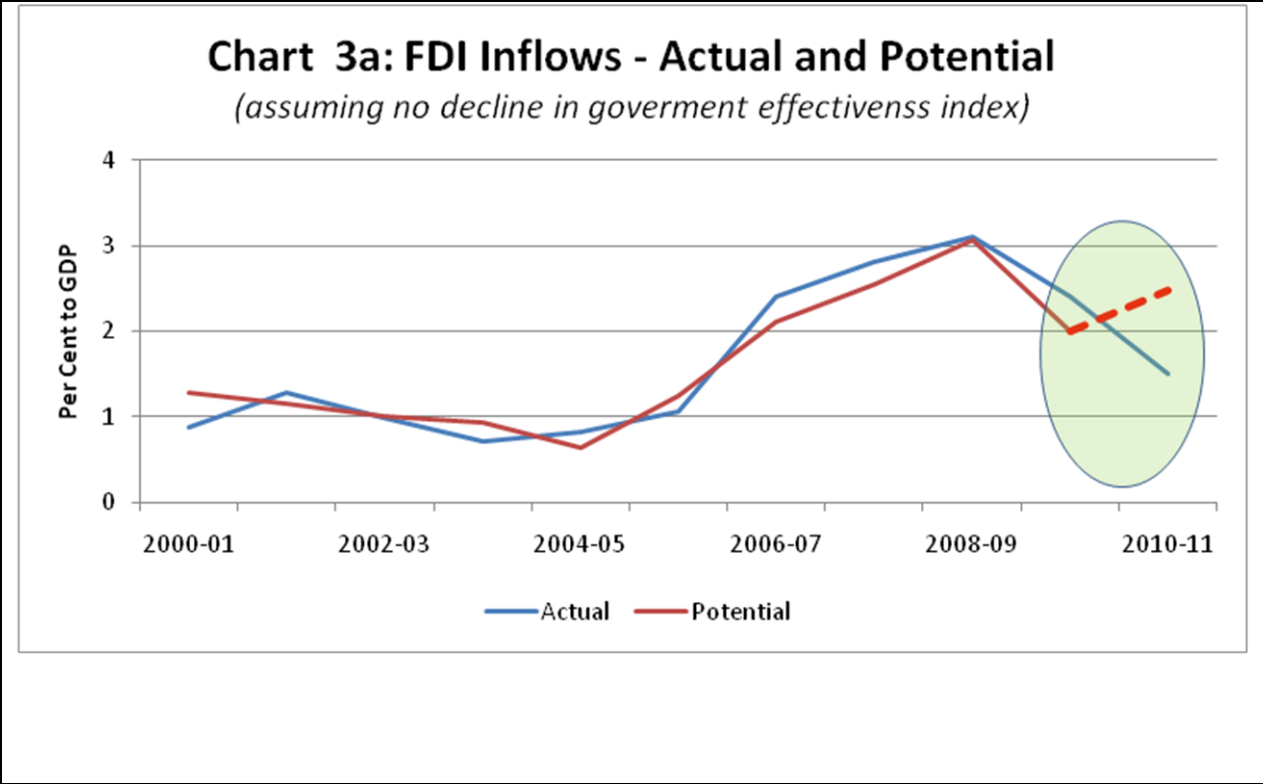
Thus, the panel results show that higher the degree of openness, expected growth of the economy, net international assets and size of FDI flows to EMEs, larger the size of FDI that

flows to the country. Similarly, higher the certainty of implementation of efficient and quality policies, higher would be the flow of FDI. On the other hand, higher labour cost is likely to discourage the flow of FDI to the country.

What caused dip in FDI flows to India during 2010-11?

Our empirical exercise portrays a range of factors that significantly impact the size of FDI flows. With a view to segregate the impact of non-economic factors including government policy, a contra factual scenario is generated for the year 2010-11 by updating values for all the explanatory variables except for the *Kaufmann Index*. Estimated potential and actual FDI levels are presented in the Chart 3 and contra factual scenario that assumes no deterioration in government effectiveness index has been presented in Chart 3a.





It could be observed from Chart 3 that actual FDI to India closely tracked the potential FDI path. The potential FDI level is the estimated level that should occur given the trends in underlying fundamentals. In the year 2010-11, the actual FDI flows at 1.5 per cent of GDP are marginally lower than the estimated level of 1.8 per cent of GDP. Chart 3a, presents a contra-factual scenario where potential level of FDI flows for the year 2010-11 is worked out by updating values of all the variables except ‘Govt. Effect’. The latter is retained at preceding year’s level. In could be observed that in case of contra-factual scenario, in the year 2010-11, gap between potential and actual level of FDI increased by more than 25 per cent. Since, the contra factual estimated for 2010-11 updated value of all other variables except *Govt. Effect*, the larger gap between potential and the actual in the year could be attributed to index of Government Effectiveness⁷.

⁷ While determining various drivers of FDI, apart from value of FDI, impact in terms of number of FDI proposals was also explored. It was found that results drawn in terms of value of FDI or in terms of number of proposals are consistent. It was observed that when value of FDI declined, number of large size investment proposals were also lower.

In other words, contra factual estimate of FDI for the year 2010-11 incorporates impact of all the economic variables, viz., growth differential, openness, net IIP, labour cost and size of 'FDI to all emerging economies' whereas it keeps qualitative variable '*Govt. Effect*' unaltered. Keeping '*Govt. Effect*' unaltered means that had there been no amplification in policy uncertainty over the preceding year's level, FDI inflows to India would have been more than 35 per cent higher than that was actually received.

Thus, empirical results corroborate our assertion made in the analytics presented above that the qualitative factors play an important role in attracting FDI flows, and slowdown in FDI flows in the absence of any deterioration in the macro economic variables could probably be on account of such qualitative factors.

Section 4: Conclusions

An analysis of the recent trends in FDI flows at the global level as well as across regions/countries suggests that India has generally attracted higher FDI flows in line with its robust domestic economic performance and gradual liberalisation of the FDI policy as part of the cautious capital account liberalisation process. Even during the recent global crisis, FDI inflows to India did not show as much moderation as was the case at the global level as well as in other EMEs. However, when the global FDI flows to EMEs recovered during 2010-11, FDI flows to India remained sluggish despite relatively better domestic economic performance ahead of global recovery. This has raised questions especially in the backdrop of the widening of the current account deficit beyond the sustainable level of about 3 per cent.

In order to analyse the factors behind such moderation, an empirical exercise was undertaken which did suggest the role of institutional factors (Government's to implement quality policy regime) in causing the slowdown in FDI inflows to India despite robustness of macroeconomic variables.

A panel exercise for 10 major EMEs showed that FDI is significantly influenced by openness, growth prospects, macroeconomic sustainability (International Investment Position), labour cost and policy environment.

A comparison of actual FDI flows to India vis-à-vis the potential level worked out on the basis of underlying macroeconomic fundamentals showed that actual FDI which has generally tracked the potential level till 2009-10, fell short of its potential by about 25 per cent during 2010-11. Further, counter factual scenario attempted to segregate economic and non-economic

factors seemed to suggest that this large divergence between actual and potential during 2010-11 was partly on account of rise in policy uncertainty .

Apart from the role of institutional factors, as compared to other EMEs, there are also certain sectors including agriculture where FDI is not allowed, while the sectoral caps in some sectors such as insurance and media are relatively low compared to the global patterns. In this context, it may be noted that the caps and restrictions are based on domestic considerations and there is no uniform standards that fits all countries. However, as the economy integrates further with the global economy and domestic economic and political conditions permit, there may be a need to relook at the sectoral caps (especially in insurance) and restrictions on FDI flows (especially in multi-brand retail). Further, given the international experience, it is argued that FDI in retail would help in reaping the benefits of organised supply chains and reduction in wastage in terms of better prices to both farmers and consumers. The main apprehensions in India, however, are that FDI in retail would expose the domestic retailers – especially the small family managed outlets - to unfair competition and thereby eventually leading to large-scale exit of domestic retailers and hence significant job losses. A balanced and objective view needs to be taken in this regard. Another important sector is the generation, transmission and distribution of electricity produced in atomic power, where FDI is not permitted at present, may merit a revisit. In this context, it may be noted that electricity distribution services is a preferred sector for FDI. According to UNCTAD four out of top ten cross-border deals during 2009 were in this segment, which led to increase in FDI in this sector even in the face of decline in overall FDI. Similarly, the demands for raising the present FDI limits of 26 per cent in the insurance sector may be reviewed taking into account the changing demographic patterns as well as the role of insurance companies in supplying the required long term finance in the economy.

Against this backdrop, it is pertinent to highlight the number of measures announced by the Government of India on April 1, 2011 to further liberalise the FDI policy to promote FDI inflows to India. These measures, inter alia included (i) allowing issuance of equity shares against non-cash transactions such as import of capital goods under the approval route, (ii) removal of the condition of prior approval in case of existing joint ventures/technical collaborations in the ‘same field’, (iii) providing the flexibility to companies to prescribe a conversion formula subject to FEMA/SEBI guidelines instead of specifying the price of convertible instruments upfront, (iv) simplifying the procedures for classification of companies

into two categories – ‘companies owned or controlled by foreign investors’ and ‘companies owned and controlled by Indian residents’ and (v) allowing FDI in the development and production of seeds and planting material without the stipulation of ‘under controlled conditions’. These measures are expected to boost India’s image as a preferred investment destination and attract FDI inflows to India in the near future.

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