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‘Sustainable Investing’ via the FDI route for sustainable development

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Abstract

This conceptual paper proposes to apply the principles of ‘Sustainable Investing’ (SI) on incoming Foreign Direct Investment (FDI) in order to achieve the goal of ‘Sustainable Development’ (SD). FDI can serve as a catalyst to attain faster economic growth rates in emerging economies. However, FDI led growth has resulted in degradation of the environment in most cases. Additionally, rising food and water insecurity, climate change and the growing economic disparity have emerged as the major threats in this millennium. Addressing these concerns in a holistic way by integrating Environmental, Social, and Governance (ESG) issues at the FDI stage itself (by means of applying the principles of SI) can be a potential solution to chart a trajectory of ‘sustainable growth’, in emerging economies. The paper presents a framework to incorporate the principles of SI to achieve sustainable growth. It discusses the existing approaches to SI, its advantages and existing trends in the world. It then takes a look at the evolving scenario in India which has an Environmental Sustainability Index (ESI) for various states, a ‘sustainable development fund’ and an ‘ESG Index’ along with voluntary reporting of Corporate Social Responsibility (CSR) activities. It emerges that although steps are being taken to move in a direction of SD, the response is rather poor by investors, companies and government alike. It is therefore imperative that certain measures are taken to integrate the concept of SI while designing regulatory framework and policies for increasing FDI. The paper suggests a way ahead by promoting the concept of Sustainable Investment (SI) in the initial stages of screening of FDI in terms of ESG standards in order to attain long term, inclusive and sustainable growth patterns.

Keywords: CSR; ESG; FDI; Sustainable Development (SD); Sustainable Investing (SI)

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1. Introduction

India is one of the fastest growing economies in the world today and the fifth largest economy based on Purchasing Power Parity (PPP)($4.046 trillion (2010 est.) As economic growth plays a major part improving the future of its people, emphasis should be laid on increasing the rate of economic growth. However, lack of adequate capital is a major factor which is limiting the growth of developing countries today. By moving towards an open economy, countries are now realizing the potential of Foreign Direct Investment (FDI) and Foreign Institutional Investment (FII) in their economies and are reaping the benefits of long term growth. However, in focusing on increasing only GDP and attracting FDI, countries have become "short term price takers rather than long term value makers". This has lead to a one dimensional growth with a focus on the economic aspects only and has resulted in externalities such as growth of inequality, increased environmental degradation etc. These concerns were adequately addressed in the report "*Our Common Future*" (also known as the Brundtland Report) published by UN World Commission on Environment and Development in 1987 and a middle path of 'Sustainable Development' (SD) was proposed. This which was strengthened at UN Conference for Environment and Development or the *Earth Summit* in Rio de Janeiro in 1992 which also recommended a balanced approach to growth taking into account social, economic, environmental and institutional dimensions. There is strong evidence which links increase in FDI to economic growth (increase in GDP) in various countries of the world. However the relationship between SD and FDI is not clearly understood. Research by World Wildlife Fund (WWF) reveals that, in a large number of cases, there is a high negative correlation between FDI and environment, especially in sectors such as mining and other natural resource based sectors that form a major proportion of investment inflows to under developed countries. On the other hand, the concept of SD hints at arriving at optimality both in economic progress and environmental protection. WWF-UK reports that "this is substantiated by a few cases where FDI has positive linkages: but which occurs only within an international regulatory framework that actively promotes SD" (p.2). The research questions which emerge from the above discussions in the context of India are: Can India achieves economic growth without compromising on sustainability? Can increase in FDI result in increasing SD? What measures must be taken to achieve this? It is evident that India must adopt the path of sustainable growth (by addressing aspects of pollution, resource conservation and environmental protection) while framing policies to attract FDI. The paper proposes a direction to move on the path of sustainable growth by using FDI as a means to achieve the end goal of SD. It also suggests that encouraging Sustainable and Responsible Investment (SRI) in the initial stages of promoting FDI by adopting high Environment, Social and (Corporate) Governance (ESG) standards would lead to long term, inclusive and sustainable growth patterns. It also explores the 'readiness' and 'preparedness' of India and feasibility of adopting suitable policy measures for increasing sustainable FDI in the country.

The paper is structured as follows. A brief literature review is undertaken on the relationship between FDI and SD and highlights the approach taken in this paper, to integrate FDI and SD in the current Indian context. The next section presents the determinants of FDI in India and discusses its drivers and concerns of investors in India. The paper then presents the current performance and growth potential for FDI in India. The next section attempts to integrate the concept of SD with SI and frames the problem with a 'control systems approach'. The section then goes on to discuss the concept, advantages and principles of SI and how companies are adopting the concept of 'corporate sustainability'. It then highlights and analyses the current trends in India in attaining sustainable growth. The paper concludes by suggesting policy recommendations for India in its search for sustainable development.

2. Literature review

Carlos Resende (2010) has tried to examine the existing evidence from India wherein he lists factors such as size of market, openness to trade, infrastructure, attractiveness to domestic market, and exchange rate instability and technology growth as the domestic determinants of FDI. He concludes by identifying that the size of domestic market, attractiveness of domestic market, and technology growth are statistically significant in determining FDI in India.

Work on SD has been undertaken by various worldwide agencies, in the last two decades. Literature survey on SD reveals that most of the work was initially focused on environmental aspects and has now been expanded to include the social goals. A study undertaken by WWF in 2000, comments that, "Problems arise because FDI is under-regulated and countries are damaging themselves to attract new investment". WWF believes that the most urgent areas for international negotiations on FDI are: "binding standards for MNC behaviour; prevention of harmful competition for FDI – including lowering environmental and core labour standards; co-operation on market governance of FDI; and active promotion of appropriate FDI to less-developed countries". It even recommended that any negotiations on investment liberalization rules (for example in the WTO for international agreements), should not proceed until these priorities have been determined and regulations are put in place. A study conducted by UNCTAD and Sustainable Business Institute at the European Business School (2004) concluded that environmental requirements do not obstruct FDI. "On the contrary, environmental management can help develop advantages for frontrunners, to improve the transfer of environmentally sound technology, to 'green' the supply chain, to avoid environmental risks and to raise environmental awareness of consumers and business partners". On the question of whether India is moving towards sustainable growth, Surender Kumar (2008) provides estimates of the growth rate of 'per capita comprehensive wealth'(over the period 1970-2006) for Indian economy where 'comprehensive wealth' includes "manufactured, human and natural capital along with knowledge base and institutions" and argues that "Sustainability requires that the productive base measured in terms of comprehensive wealth of a society should be increasing on per capita basis". His empirical application results indicate that that "Indian economy is barely sustainable" and the growth rate was about 4 percent as against the GDP growth rate of an average of 9% in recent years. In order to achieve sustainable growth, Roger Urwin and Claire Woods, promote principles and practices of 'Sustainable Investing'. They advocate an investment model based on principles which seek a broader mission, deeper thinking on investment and a longer-term framework for evaluating success. This approach(used in portfolio management by fund managers) combines the opportunities in the traditional areas of asset allocation and fund manager selection with extra-financial factors, including environmental, social and governance (ESG) issues. They also observe that "SI has not yet reached the top of the agenda for many institutional funds, but that opportunities exist for priorities to be realigned to better meet the long-term needs of the funds and beneficiaries".

2.1. An innovative approach

There have been a few studies which attempt to link the growth of FDI with SD. However these attempts have not been contextualized in the Indian framework. Research has shown that sustainable investing (ABN Amro Sustainable Development Fund launched in Mar 2007 was the first SI attempt in Indian equity market) by FII's (though limited) has given higher returns (than the benchmark) in the Indian equity markets. This suggests that similar results can be expected in FDI also. The author therefore propagates the view that India needs to adopt a SD strategy, in its quest for economic growth. Under this approach, FDI, if channeled under strict regulations can contribute positively to both economic and environmental growth. The question of how to integrate FDI with SD is therefore of paramount importance and is explored in this paper.

3. FDI in India

As per Planning Commission of India, "FDI refers to capital inflows from abroad that invest in the production capacity of the economy and are "usually preferred over other forms of external finance because they are non-debt creating, non-volatile and their returns depend on the performance of the projects financed by the investors. FDI investments include reinvested earnings, Greenfield investments (which generate fresh employment) as well as mergers and acquisitions (M&A) (which only results in transfer of ownership). According to OECD study (2002), FDI has many evident benefits and is described as a source of economic development, modernization, and employment generation, whereby the overall benefits (dependant on the policies of the host government) "…triggers technology spillovers, assists human capital formation, contributes to international trade integration and particularly exports, helps create a more competitive business environment, enhances enterprise development, increases total factor productivity and, improves the efficiency of resource use".

3.1 Determinants of FDI

A study on "FDI and its Impact on India" undertook a multi-variate regression by incorporating all the major expected determinants of FDI and using time series data, yielded the following equation:

$$FDI_t = -83110 + 0.011\,\Delta GDP_t + 0.02\,GDP_t + 66970\,DO_t + 633.5\,REER_t + u_t \qquad (1)$$

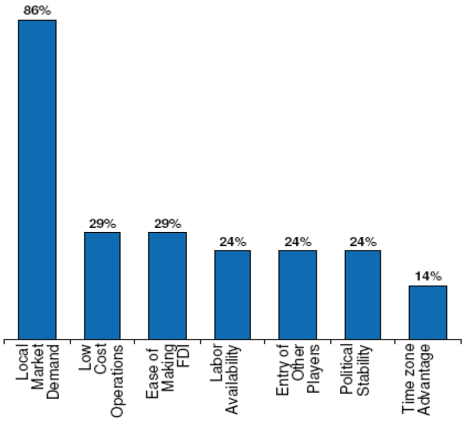
Where, FDI_t = Foreign Direct Investment in Period t; GDP_t = Gross Domestic Product in Period t $\Delta GDP_t = GDP_t - GDP_{t-1}$; DO_t = Degree of Openness in Period t, equal to ratio of Sum of Exports and Imports to GDP_t ; $REER_t$ = Real Effective Exchange Rate in Period t; u_t = Error Term.

The results reported an adjusted R^2 value of 0.783 which shows that the model explains about 80% of the variation. Coefficients of all variables were also positive which was in line with the expected signs and the 't' statistic values indicated that all coefficients were significant.

Apart from the above factors, future prospects of growth of the economy and host country policies also have a significant bearing on the quantity and quality of FDI inflows. Suitably designed policies influence the perception of the investing nation and an appropriate policy framework is therefore critical to attract investments in the country. Per capita GDP, growth rate, social and political stability, rule of law, transparency, investor friendly regulations, tax incentives, infrastructure, size of domestic markets, availability of skilled labour, communication facilities, quality of host country's institutions, cost of wages, competitiveness of workforce in terms of quality, productiveness, working conditions and trade specific skills etc. are other factors which determine the extent of FDI to varying degrees.

3.2 FDI: Drivers and concerns

In the specific case of India, a survey conducted by Booz & Co. and AMCHAM revealed that local demand is the key driver of FDI in India (Fig 1a). This suggests that 'market seeking investment' is the prime reason for growth of investment in India and gives a valid reason to predict that inflow of FDI will continue to grow in the future as the middle class becomes more affluent. The study also identified the top five drivers for FDI improvement in India (Fig 1b). If, concerns of investors viz. good Infrastructure, simplified processes, reducing bureaucracy, stable economic policies etc. are adequately addressed, I propose that introducing stringent environmental laws will not (negatively) affect inflow of FDI. Infact, sustainable and 'green' policies can be appropriately leveraged to attract FDI in India.



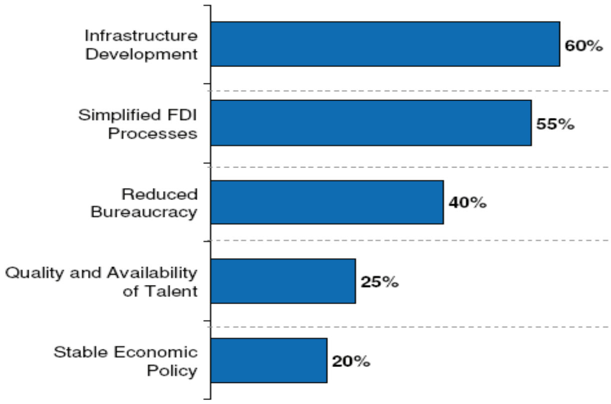


Fig. 1(a): Reasons for FDI investments (as a % of respondents)

Fig. 1(b): Top 5 drivers for FDI improvement (as a % of respondents)

(Source: Foreign Direct Investment in India: An AMCHAM and Booz & Company Study, FDI Summary Presentation, Delhi, 24 April 2009)

4. Growth potential and current performance

Table 1 gives the relative ranking of India based on inward FDI performance and inward FDI potential index for the last twenty years(World Investment report: 2010, UNCTAD). There is clear evidence that over the last three years, India's ranking in FDI performance index has improved significantly from 111 in 2007 to 63 in 2009 (Fig 8). This indicates that investor confidence has increased in possibly due to the favourable stance of the Indian government towards FDI.

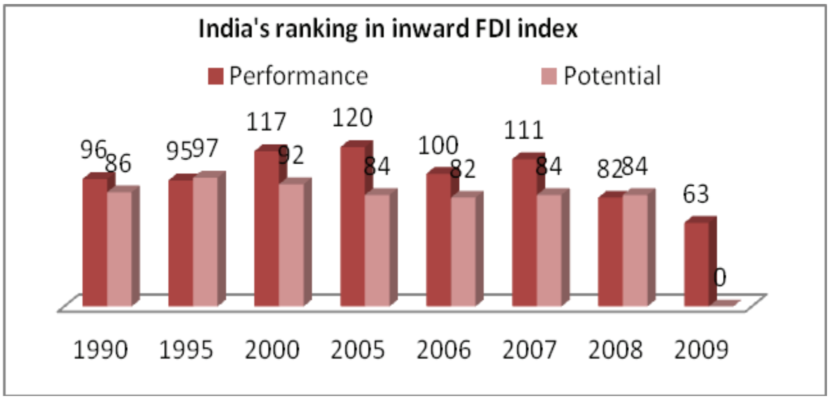


Fig 2: Inward FDI performance and potential index ranking for India Note: Ranking for FDI potential is not available for 2009

Table 1: Inward FDI performance and potential index ranking for India Note: Ranking covers 141 economies and is that of the latest year available. The potential index is based on 12 economic and policy variables.

Year	Inward FDI performance index	Inward FDIpotential index
1990	96	86
1995	95	97
2000	117	92
2005	120	84
2006	100	82
2007	111	84
2008	82	84
2009	63	-

Source: World Investment report: 2010 UNCTAD, Extracted from Annex table 25 (www.unctad.org/fdistatistics)

On the other hand it also indicates India's relatively poor ranking in absolute terms (out of 141 countries). The reasons for low inflow of FDI despite India's huge potential can be explained by table 3 which gives the relative ranking of countries in 'ease of doing business'. This clearly explains the reasons why investors choose to stay away from India. Unless these hurdles are removed, India will continue to lag behind, in attracting FDI. Table 2 gives the number of Greenfield projects in India in comparison to the world, from 2003-09. Fig 3 clearly indicates that India has only 15% of Greenfield projects which have come up in Asia in 2009, which presents a dismal picture for India in comparison to the world and Asia in particular.

Table 2: No. of Greenfield FDI projects, India

Year	India	World	Developing countries	Asia
2003	452	9450	4513	3371
2004	694	10242	4856	3757
2005	590	10551	4509	3479
2006	985	12248	5333	4296
2007	695	12210	5095	3889
2008	965	16147	7595	5603
2009	742	13727	6646	4734
2010 (Jan-Apr)	226	41044	1844	1321

Source: World Investment report: 2010 UNCTAD, Extracted from Annex table 18; The database includes new FDI projects and expansion of existing projects both announced and realized. As data on value of most of the projects is not available, only the number of cases can be used.

Table 3: Ranking of India on 'Ease of doing Business'

S.No.	Factor	Rank	S.No.	Factor	Rank
1	Ease of Doing Business	133	6	Paying Taxes	169
2	Starting a Business	169	7	Trading Across Borders	94
3	Dealing with Licenses	175	8	Enforcing Contracts	182
4	Employing Workers	104	9	Closing a Business	138
5	Registering Property	93			

Source: World Bank report on Ease of Doing Business 2010

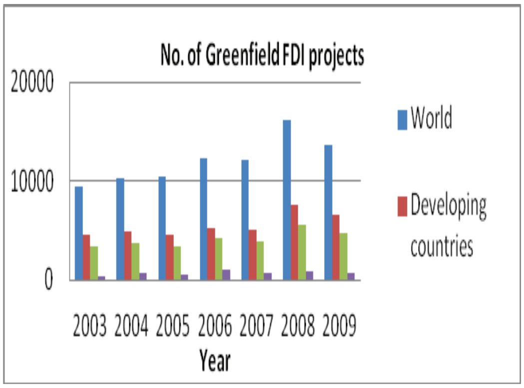


Fig. 3: Comparison of Greenfield FDI projects in India with other regions

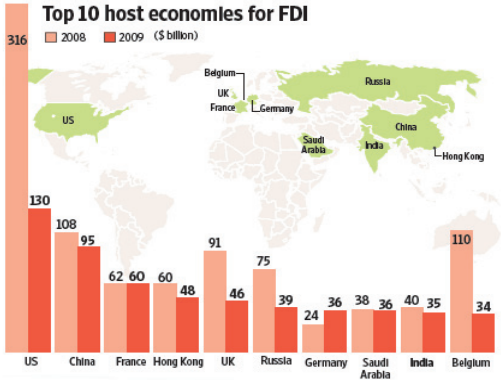
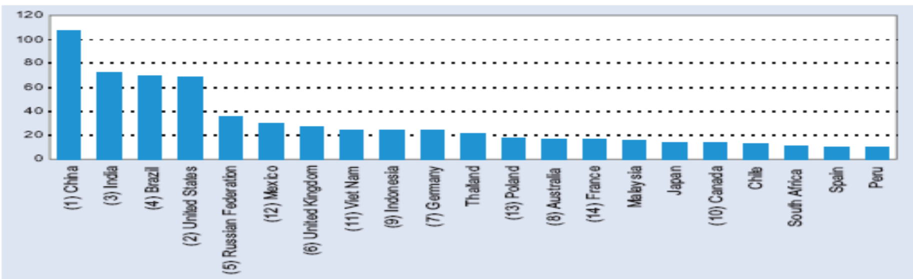


Fig. 4: World ranking of top 10 FDI destinations (2008-09) Note: Source: Report by Asit Ranjan Mishra in Livemint

Fig 4 indicates that in spite of a small no. of Greenfield projects, India has now emerged in the top 10 host economies for FDI. This is primarily because of the inorganic growth which comprises of M&A route which is presently followed by most of FDI inflows. Fig 5 shows the ranking of FDI destinations by TNC's. In line with the growing positive trends, India continues to emerge on the top of the pack as a preferred investment destination by TNC. Data from 'World Investment Prospects Survey 2010-2012' (UNCTAD) reveals that India has infact improved its position to second position (from third in 2009). This shows that the world realizes India's potential as an emerging market and FDI growth in India is likely to be strong in the coming years. This also presents us with the unique opportunity of tapping this source of investment for growing on the path of SD.



Source: UNCTAD survey.
Note: Rankings according to last year's survey are given in the parentheses before the name of each country. The countries without numbers were ranked outside the top 20 in the last year's survey.

Fig. 5. Ranking of investment destinations for FDI (2010-2012 period) for the number of times that the country is mentioned as a top priority for FDI by respondent TNCs

5. Integrating 'Sustainable Development' with 'Sustainable Investment'

This section introduces the concept of SD and SI and presents the existing trends in India and the world. It also integrates the concept and principles of SI and applies it to FDI.

5.1. Sustainable development and its framework

Sustainable Development is defined as "Development which meets the needs of the present without compromising the ability of future generations to meet their own needs". As per Brundtland Commission report, WECD (1987)This definition requires that future generations should at least get as much resources as we have, to meet their needs. There are various issues which are conceptually associated with attaining of SD. These are presented in a 'control systems approach'(Author's representation; followed in Control System Engineering models) in the figure 6.

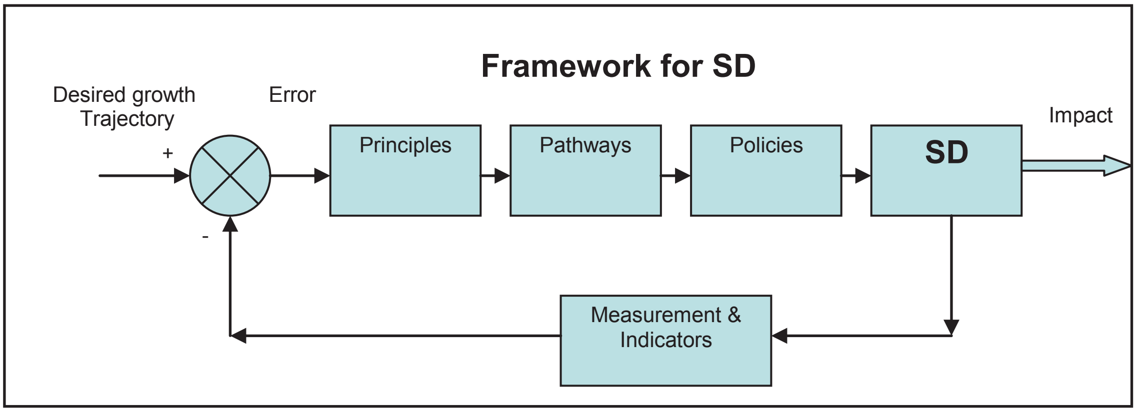


Fig. 6: Framework for attaining SD

5.1.1. Framework

An appropriate framework in the form of institutional mechanisms is required to move in the direction of desired growth trajectory. After the desired growth trajectory has been identified and formally adopted (amongst a given set of feasible alternatives) attention should be focused on the implementation aspect. This exercise involves internalization of the 'Principles' of SD which involve various dimensions and include 'intra generational' equity as its core idea. These principles can then be guiding factors which give rise to 'pathways' to achieve SD. These pathways then led us to specific policies which when applied to the overall system automatically led us to SD as they inherently encompass the principles of SD. An important aspect of completing the feedback loop is to have a system of measurement of SD and its impact on the economy (in terms of achieved growth trajectory) and comparing the same with the desired growth trajectory to generate an error term. This performance of the adopted polices can then be evaluated by a time series analysis (of the 'Error' term) of the continuous feedback loop. If the designed policies are effectively implemented, the error term will gradually become zero and the economy will grow on the desired path and will attain SD.

5.1.2 Dimensions

As shown in figure 7, SD can be categorized into three distinct dimensions viz. Economic, Social, and Environmental. However, this interconnectedness might not capture the interrelationship and cross-linkages between various elements. In order to emphasize the multi-dimensional nature of SD and to reflect the importance of integrating various dimensions of SD, Commission of Sustainable Development (CSD) under UN stewardship, modified the main 'indicator themes' which are: Poverty, Governance, Health, Education, Demographics, Natural hazards, Atmosphere, Land, Oceans, Seas and Coasts, Freshwater, Biodiversity, Economic Development, Global economic partnership, Consumption and production patterns(Indicators of Sustainable Development: Guidelines and Methodologies- Third Edition, Oct 2007, p-11). Such a classification explicitly identifies the concerns and captures them more accurately by further use of specific indictors.

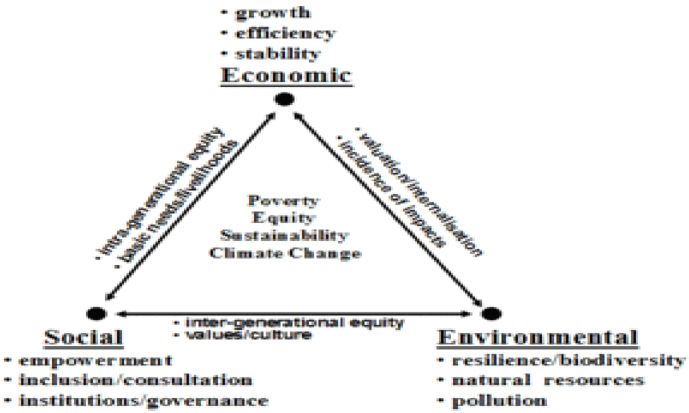


Fig.7. Sustainable development – key elements and interconnections as per Munasinghe 1992, 1994

5.1.3. Principles

There are a number of different sets of sustainable development principles that can be found in the literature. The major ones are The Wingspread Principles, British Columbia's Principles, The Habitat Agenda Principles, UN 'World Commission on Environment and Development' Principles etc. However, the basic thread of idea which is running through all these is a multidimensional approach and focus on intra and inter-generational equity. This ensures that externalities are minimized and costs are internalized in order to achieve a balance between growth and resource depletion.

5.1.4. Pathways

Pathways are the routes which we follow to reach the goal of SD. In the above context therefore, screening of new and existing projects for compliance with the principles of SD will automatically ensure that they move along the desired pathway. As the first and the most vital step of any project is availability of capital, it is critical that investment from internal capital, FII, FDI, loans and borrowings etc. should be channeled into projects which comply with strict standards only. If no deviation is permitted, the pathways will be well defined and the economy will eventually attain the goal of SD.

5.1.5. Policies

A host of policies will have to be defined once the goals and pathways are been identified. These may be in the form of attracting FDI and FII's (and other sources of capital), sector specific polices, differentiated polices (according to size of the project) etc. These policies would need to be converted into suitable regulations and laws and would then have to be promoted and implemented effectively.

5.1.6 . Measurement and indicators

Various criterions have emerged for measurement of SD, and they embed many factors. Some indices which attempts to measure SD are Environmental Sustainability Index (ESI), the Sustainable Development Index (SDI) and the Wellbeing Index (WI). The pertinent question however is, can we address the issue of SD in the first stage of investment itself that would ensure growth on the sustainable path, automatically? The emerging concept of 'Sustainable Investing' takes precisely this approach and applies a stringent set of conditions prior to investing in an entity. This issue is explored in greater detail in the forthcoming sections.

5.2. Approaches to sustainable investing

There are various approaches to sustainable investing which are discussed below:

5.2.1 Sustainable Investing (SI)

SI is an approach to investing which is driven by long term economic, environmental and social risks and opportunities facing the global economy. SI has a commitment to systematically integrate environment, social and economic factors into the financial analysis and valuation of assets and subsequent decision making of ownership.

5.2.2 Environment, Social and Governance (ESG) factors

ESG is a generic term used in capital markets and by investors to evaluate corporate behaviour and to determine the future financial performance of the company. These factors are a subset of the non-financial indicators that include sustainable ethical and corporate governance issues such as managing the carbon footprint and ensuring that systems are in place for accountability.

5.2.3 Sustainable and Responsible Investing (SRI)

SRI includes five distinctive investment styles viz. ethical, responsible, social, sustainable and clean tech investing. What are the advantages of SI and on what principles is it based? What are its benefits and how does it actually translate into a more attractive option for investing? I attempt to answer these questions in this section ahead.

5.3 Concept and Advantages of Sustainable Investing (SI)

'Sustainable Investing' is long-term investing that is inter-generationally efficient and fair. SI promotes a long-term investment strategy with greater 'breadth' and 'depth' to produce stronger investment performance both now and in the future. The long-term strategy focuses on a value creation proposition that promotes near-term achievement without compromising future achievement - referred to in the Urwin/Woods paper as "increased depth of strategy." The second component of integrating ESG factors and ownership responsibilities suggest investors need to act both effectively and fairly by controlling the negative externalities created by their investments. This is "increased breadth of mission." This second part of the sustainable investing model includes factors central to responsible investing codes established to address climate change and natural resource depletion. By investing sustainably, we consciously plan for both the present and the future and analysis suggests that SI delivers fairer results in a financially efficient structure that is both economically superior to traditional investment models and positive to society. SI is also emerging as a strategy for low risk growth amongst institutional investors.

Various investment strategies are now in place which identify companies based on their ESG factors prior to investing in their equity. Contrary to the expectation, 'that SI would lead to lower returns', there is considerable evidence that SI actually translates into a more attractive option for investors as it consistently generates higher returns as compared to the benchmark in the long run. In addition it leads to lowering of risk of the portfolio and hence leads to more consistent returns over a period of time. Although SRI was estimated at $3,790 Billion in 2005(SI in India, TERI Europe (2007)), the share of emerging markets was estimated at only 0.1%. However, ver 80% of asset owners and asset managers believe that social and environmental issues will grow in importance over the next few years (IFC, World Bank, SI (2009). The growing trend of investment via the SI route (estimated at 10% currently all over the world) is strong evidence to increasing relevance of the concept of SI today and its bright prospects in near future.

5.4. Principles of SI: Emerging trends in the world

5.4.1 Principles of Responsible Investing (PRI)

In 2006, United Nations in partnership with 'UNEP Finance Initiative' and the UN 'Global Compact' formed the 'Principles for Responsible Investment' (PRI) which is a voluntary framework that aims to incorporate issues of ESG in choosing portfolios for investment. (According to the website of PRI) The signatories to PRI believe that ESG issues can affect the performance of investment portfolios and applying these principles may better align investors with broader objectives of society. It is important to note that the core philosophy is not to look at maximizing returns only, but to include the concept of ESG in order to move in a direction of equitable and sustainable growth. PRI website claims that as of October 2010 over 800 investment institutions from 45 countries have become signatories to the declaration and consists of approximately US$18 trillion in assets under management (AUM).

5.4.2 Equator Principles:

The Equator Principles are the financial industry benchmarks for determining, assessing, and managing social and environmental risk for project financing greater than US$10million. Once adopted by banks and other financial institutions, the Equator Principles commit the adoptees to refrain from financing projects that fail to follow the processes defined by the Principles. These principles are also adopted by various fund investors all over the world and contribute significantly to growth of SI in equity via the route of FII thereby leading to SD in the country.

5.5 Attaining SD through SI by companies

Realizing the benefits of SD and in order to include social and environmental considerations into business practices, companies have adopted the concept of '*corporate sustainability'* by including CSR initiatives in their approach. This leads to an emphasis on integrating social efficiency and environmental efficiency along with achieving economic efficiency. In order to encourage businesses to adopt sustainable policies, and to report on their implementation, new initiatives have now evolved which provides a policy framework for organizing and developing corporate sustainability strategies. The UN 'Global Compact' is such a voluntary mechanism that is committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption. Other initiatives include 'Global Reporting Initiative' (GRI), which has a goal of mainstreaming of disclosure on ESG performance and are extensively used as a sustainability reporting framework. This framework sets out the principles and 'performance indicators' in the form of Sustainability Reporting Guidelines that organizations can use to measure and report their economic, environmental, and social performance. By doing so, business, as a primary driver of globalization, can help ensure that markets, commerce, technology and finance advance in ways that benefit economies and societies everywhere.

5.6 Current situation and trends in India

India fares poorly on various measured indexes of environment. It has a score of 48.3 (out of 100) and figures at 123rd (out of 163 countries) place in the 2010 Environmental Performance Index (EPI). Similarly the Environmental Sustainability Index (ESI) ranks India at 101st place (75th in non-OECD countries) with a score of only 45.2. On the measurement of SI, TERI/IFC Report on 'SI in India' (2009) puts the figure of total Assets Under Management (AUM) related to sustainability as $ 1.1 Billion which is only 0.67% of the total AUM in the country. As compared to India, EU has $3700 Trillion in AUM related to SI, which is 16.7 % of its total AUM(; Eurosif: 2008 European SRI study). 'eStandard Forum' scores India at 5.23/12 (rank 81) on the 'Business Indicator' index which renders it 'below standard' on the economic, legal, and political indicators. However, India does significantly better by scoring 58.33/100 in the financial Standards index. (Rank 16) which indicates that in recent years India has improved its financial sector's compliance in accordance with international best practices. There is also a growing trend of including sustainability issues in corporate strategy by leading TNC's in line with the shift in emerging international trends. These are mentioned in succeeding paragraphs.

5.6.1 CSR ratings

Although, undertaking CSR activities and its reporting are voluntary in India, major companies in India indulge in CSR activities. 'Karmayog CSR Rating 2009' published an annual list of top 500 companies and their activities and rated them in terms of various criteria viz. amount spent in CSR as a percentage of annual sales etc. It is also shocking to note that no Indian private or public company could manage to achieve level 5 (highest rating). A summary of CSR ratings is presented in the table 4. Table 5 presents the CSR rating separately for MNC and PSU companies in India. A quick glance indicates that 35 % of MNC are above level 3 while only 20% PSU's are above the same level. This indicates that the performance of MNC's is better on incorporating CSR activities which eventually contribute to growth of SD.

Table 4: Summary of CSR ratings of top 500 companies in India

Karamyog CSR rating 2009	No. of companies	%
Level 5 (Highest)	0	0
Level 4	13	3
Level 3	66	13
Level 2	146	29
Level 1	147	29
Level 0 (Lowest)	128	26
Total	500	100

Source: http://www.karmayog.org/csr2009/

Table 5. ‘Karmayog’ CSR ratings of top 37 MNCs and top 60 PSU’s in India

Karmayog CSR Rating 2009	MNC Cos.	%	PSU Cos.	%
Level 5 (highest)	0	0%	0	0%
Level 4	1	3%	0	0%
Level 3	12	32%	12	20%
Level 2	12	32%	29	48%
Level 1	8	22%	16	27%
Level 0 (lowest)	4	11%	3	5%
Total	37	100%	60	100%

5.6.2. ESI rankings

A comprehensive Environmental Sustainability Index (ESI) has been developed for Indian states by Centre for Development Finance (CDF) at the Institute for Financial Management and Research (IFMR). This relative ranking of ESI takes into account the following parameters: Population pressure, pressure on environment, environmental quality, impact on human health and ecosystem vitality and policy responses by the state. It tracks the environment performance of 28 states and projects their ability to protect the environment in future and has the potential to become a powerful policy tool for identifying state-specific priorities and challenges. Results for 2009 are shown in Fig 14 and indicate that states which are growing rapidly and are attracting high FDI viz. Maharashtra, Delhi, Gujarat etc are performing rather poorly on this scale.

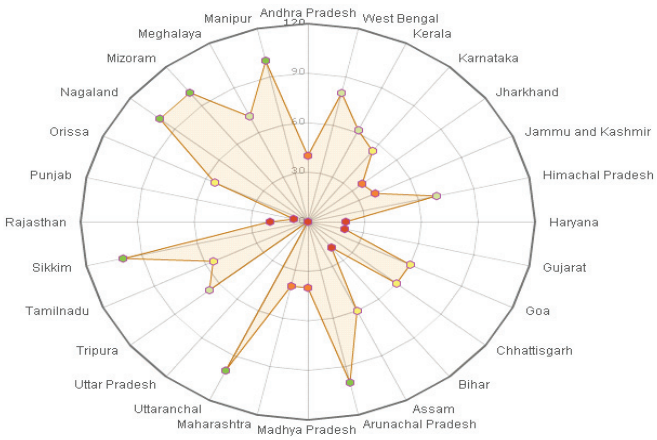


Fig. 8: ESI rankings of Indian states

5.6.3. SI in equity

ABN Amro Asset Management (India) Limited launched ‘ABN AMRO Sustainable Development Fund’ which was India’s first Socially Responsible Investing (SRI) fund on 06 Mar 2007. The fund chooses from a universe of companies which will be screened and scored by CRISIL, on an ESG template based on public disclosures made by these companies. The investment process adopted by ABN AMRO

Mutual Fund then conducts a rigorous financial analysis before investing in specific stocks. The fund has though has not performed very well and has few takers.

5.6.4. ESG index

On 30 Jan 2008, Standard and Poor's, CRISIL and KLD Research & Analytics, launched the S&P ESG India Index, which is an investable index of companies whose business strategies and performance demonstrate a high level of commitment to meeting ESG standards. This index comprises of 50 Indian companies that meet certain ESG criteria and have been drawn from the largest 500 companies listed on the National Stock Exchange (NSE). ESG factors have been extensively quantified and translated into a series of scores which measure the securities in the universe of publicly traded Indian companies. The relative ESG score determines each company's weight in the index. This ensures a selection of environmentally, socially and corporate governance responsible companies.

6. Recommendations and way ahead

The author is of the view that in order to move on the path of SD, India needs to have a long term horizon and instead of lowering our standards of regulations, we must take them to higher levels while formulating policies to attract FDI. Therefore we need to leverage the growth story of India and have to 'make FDI work for SD'. Further, if India has to attain long term, inclusive and sustainable growth patterns, it needs to promote the concept of SI in the initial stages of screening of FDI in terms of ESG standards. Considering that 'market preparedness' and 'market interest' are paramount to encourage SI, I propose a two stage strategy for India. The first stage involves increasing corporate and governmental awareness and introducing voluntary mechanisms for adoption by companies, while strengthening the governance and regulatory capacity. After a critical threshold is reached (which can be measured by specialized indicators), I propose to move to the next stage which is making the regulatory mechanisms mandatory and foolproof. A few of the suggested policy recommendations are presented below:

a) Create awareness for the case of SI for businesses for private, corporate and PSU's.
b) Encourage CSR and sustainability reporting and incentivize disclosures by means of tax breaks for good performance.
c) Establish sustainability indices and ratings and increase capacity to regulate and construct international environmental standards.
d) Frame ESG regulations for investment into the country based on ESG performance and develop mechanisms to monitor ESG disclosures.
e) Become a party to existing and emerging international voluntary agreements for SI and support environmental best practices by industry.
f) Support only high quality FDI. This will have a parallel effect of improving the sustainability performance of domestic industry as well.
g) Encourage 'higher business responsibility' over and above corporate responsibility.
h) Accelerate integration of sustainability into national competitiveness strategy by framing rules which focus on environmental management processes and transparency.
i) Promote investment and entrepreneurship in key areas such as clean energy generation and recycling industries.
j) Reward continuous improvement and facilitate 'race to the top' (rather than 'race to the bottom' by relaxing constraints for entry of FDI) in environmental standards.
k) Increase role of local community and civil society to deter irresponsible corporate behavior.

l) Synthesize and internalize international investment rules and multinational environmental agreements. Make CSR reporting, sustainability reporting, ESG disclosures etc. mandatory.
m) Adopt guidelines as GRI, UN Global Compact, UN PRI as a part of a national sustainable strategy.

Once these measures are incorporated, India can adopt stringent screening of FDI based on the principles of SI and can even look at starting a SD fund. As a starting point India can frame regulations to screen FDI which is routed through Mauritius and assess the impact of such a mechanism. It is forecasted that such a step will not affect the inflow of FDI as the benefits of investing and earning tax free returns will outweigh the perceived costs of SI and will prove to be beneficial both to India and the investors.

7. Conclusion

It is evident that SD is the need of the hour for the world. It is more so for emerging economies like India which need to grow economically as well as sustainably. Although the concept of SD and SI is evolving in the world, there continues to be a standoff between economic growth and SD. As the regulatory and enforcement mechanisms are still weak in most of the emerging economies, environment and social dimensions are typically causalities in the pursuit of economic growth. Hence, concern for SD (in India) is rather poor by investors, companies and government alike. In such a situation, India can make FDI work for SD by adopting a strategy and a stringent set of regulations which promote sustainable investment. Adopting the suggested policy recommendations will ensure long term and sustainable growth patterns and would lead to inclusive growth in India.

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References

Annual World Investment Reports.
Bajpai N and Dasgupta N (2004) Multinational Companies and Foreign Direct Investment in China and India. *CGSD Working Paper No. 2, Center on Globalization and Sustainable Development,* The Earth Institute, Columbia University.
Banga R (2003) Impact of government policies and investment- Agreements on FDI inflows. *ICRIER.*
Chakraborty C and Nunnenkamp P(2006) Economic Reforms, Foreign Direct Investment and its Economic Effects in India. *Kiel Working Paper No. 1272,* The Kiel Institute for the World Economy.
Department of Industrial Policy & Promotion (DIPP), Ministry of Commerce & Industry.
DIPP, Ministry of Commerce and industry, GoI (2010). Consolidated FDI Policy.
Discussion on CSD Brief (2000) Foreign Direct Investment and Sustainable Development. WWF-UK.
E standards, http://estandardsforum.org/india/standards, accessed on Apr 09, 2011.
Environment sustainability index for Indian states 2009, http://www.greenindiastandards.com/index.php, accessed on Apr 02, 2011.
Environmental Sustainability Index Benchmarking- A guide for Policy makers (2005) Yale Center for Environmental Law and Policy.
Global Reporting Initiative, http://www.globalreporting.org/Home, accessed on March 27, 2011.
http://www.moneycontrol.com/news/business/abn-amro-amc-launches-abn-amro-sustainable-development-fund_270277.html accessed on Apr 02, 2011.
Iain B and Larsson A (2005) A ‘Smart Growth’ strategy for Sustainable Development. Centre for European reforms.
Indian Economy, CIA World Factbook , http://www.theodora.com/wfbcurrent/india/india_economy.html, accessed on March 20,2011.
Indicators of Sustainable Development: Guidelines and Methodologies- Third Edition, Oct 2007, p-11
Karmayog CSR Rating of the largest 500 Indian Companies in India for the year 2009, http://www.karmayog.org/csr2009/ accessed on Apr 02, 2011.
Kehal HS (2004) Foreign Investment in Developing Countries. Palgrave.
Krosinsky and Robins (2008) Sustainable Investing-The art of long term performance. Earthscan.
Kumar R Sustainable Investment in India, TERI Europe.

Kumar S (2009) Is India on a Sustainable Development Path? Yokohama National University, Yokohama, Japan & TERI University, New Delhi, India.
Kundra A. (2009) India China – A comparative analysis of FDI policy and performance. Academic Foundation.
Mabey N and McNally R WWF-UK (1999).
NCAER (2009) FDI in India and its Growth Linkages.
OECD (2001) Policies to enhance Sustainable development.
OECD (2002) Foreign Direct Investment for Development: Maximizing benefits minimizing costs. Pp. 5, Paris.
Open Economy on Economy Watch, http://www.economywatch.com/economy-articles/open-economy.html, accessed on March 20,2011.
Planning Commission of India (2002) Report of the Steering Group on Foreign Direct Investment: Foreign Investment India. Pp.11, New Delhi.
Principles of Responsible Investing ,http://www.unpri.org/principles/ ,accessed on March 27,2011.
Quental N, Lourenco J and Silva F (2009) Sustainable Development Policy: Goals, Targets and Political Cycles. *Sustainable Development, Wiley Online Library.*
Rajana R S, Rongalab S, Ghosh R (2008) Attracting Foreign Direct Investment to India.
Report on currency and finance, Annual reports, RBI.
Resende Jr, C (2010) Determinants of Foreign Direct Investment in an Emerging Market Economy: Evidence from India. Bryant University.
Rozas V, Vadlamannati and Chaitanya K (2009) Direct Foreign Investments in India: Potential & Performance of FDI Inflows from US as Strategic Major Investor.*Applied Econometrics and International Development,* Vol- 9-2.
Siddy D (2005) Sustainable Investing. UKSIF Seminar, London.
Singh K (2005) Foreign Direct Investment in India: A Critical Analysis of FDI from 1991-2005. Centre for Civil Society, New Delhi, Research Internship Programme.
Statistics for Industrial Assistance (SIA-FDI Data Cell).
Sustainability reporting guidelines, Version 3.0, http://www.globalreporting.org/NR/rdonlyres/A1FB5501-B0DE-4B69-A900-27DD8A4C2839/0/G3_GuidelinesENG.pdf, accessed on March 27, 2011.
Sustainable Investing- Principles and Practices, http://www.towerswatson.com/united-states/research/3796, accessed on Apr 02, 2011.
Sustainable investing, http://www.ifc.org/ifcext/sustainability.nsf/Content/SustainableInvesting, accessed on Apr 09, 2011.
Sustainable Investment in the Middle East and North Africa Region Report.
United Nation Conference on Trade and Development (UNCTAD) –FDI statistics.
United Nations Conference on Trade and Development (UNCTAD) UN (2004) Making FDI Work for Sustainable Development.
United Nations Department of Economic and Social Affairs (UNDESA) Division for Sustainable Development (1999) Work Programme on Indicators of Sustainable Development of the Commission on Sustainable Development.
United Nations Environment Project Finance Initiative (2005) A Legal Framework for the Integration of Environmental, Social and Governance Issues into Institutional Investment.
United Nations Global Compact, http://www.unglobalcompact.org/AboutTheGC/index.html, accessed on March 27, 2011.
Urwin R and Watson T (2010). Sustainable Investing Practice: Simplified Complexity. Towers Watson Technical Paper No. 1656988.
World Business environment survey (WBES).
World Commission on Environment and Development (1987) Our Common Future. Oxford University Press.
World development indicators database, World Bank.
WWF-UK (2000) A Framework for Regulating International Investment.
World Investment report: 2010, UNCTAD