



Searching for the Holy Grail? Making FDI work for Sustainable Development

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The views expressed in the paper are those of the authors.

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*Petrol fields, exploitation area near Dagang, on the coast of
the Yellow Sea, Jiangsu Province, China*

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SEARCHING FOR THE HOLY GRAIL? MAKING FDI WORK FOR SUSTAINABLE DEVELOPMENT

I. Introduction

Global development and environment communities increasingly look--with hope or concern--at the growing level of foreign direct investment (FDI) flows to developing countries as an arena for advocacy.

Fears centre on the potential for greater FDI flows, under a neo-liberal investment regime, to accelerate environmental degradation and widen gaps between rich and poor. Hopes centre on the potential for FDI to be a “lead driver” for sustainable development, especially in the context of stagnating levels of overseas development assistance.

For the hopeful, the starting point is typically the assumption that FDI brings economic growth, income and employment, and technology transfer. If so, the objective of sustainable development advocates is to work to reduce the environmental and social impacts of FDI while increasing the quantity of FDI flows.

There is increasing evidence, however, that FDI may not consistently deliver on its core promise of economic growth. In larger developing and transition economies, FDI has worked generally to boost economic growth. But for many other developing countries, including the poorest, FDI inflows have correlated with *decreases* in national economic growth.

In this framework, advocates of sustainable development have a more daunting task: to search for projects, policies and global rules which improve *both* the development and environment performance of FDI. An understanding of the conditions and components--at the level of the company, the local government and global regime--which are likely to generate a consistently positive relationship between FDI flows and sustainable development is largely uncharted territory.

This paper takes a small step in that direction. Part Two describes FDI trends in developing countries; outlines arguments and evaluates evidence on the promise and perils of FDI for economic development and for environmental performance; and develops a broad set of indicators for what constitutes “sustainable investment”. Part Three presents summaries of six case studies of private sector-driven projects and industry initiatives which “point in the right direction” in terms of promoting local productive capacities and/or improving environmental performance. Part Four draws some lessons from the case studies and review of the evidence about “sustainable FDI”. In each case, the “triggering mechanism” was different, ranging from local pro-development policies to MNC embrace of best practice to industry-UNEP partnership.

Overall, the case studies and review of the evidence point to three conclusions and arenas for further research: 1) the importance of a coherent development strategy and effective policies to promote it; 2) the willingness of MNCs to set high internal standards throughout their global operations and to cooperate with partners in achieving sustainable development goals; and 3) the need to include “corporate citizenship standards” in investment regimes and to design investment rules to allow for policy diversity and institutional innovation at the national level.

II. The Promise of Foreign Direct Investment (FDI)

The promise of FDI as an engine for economic development has gained momentum over the last twenty years. In the 1970s, many developing countries were mistrustful of multinational corporations (MNCs), fearing a loss of sovereignty and preferring to borrow from banks to finance development projects. After the debt crisis of the 1980s, FDI became highly sought after, especially with the widespread embrace of export-oriented development strategies in the 1990s.

Competition for FDI, among both developing and developed countries, is intense. To attract it, developing countries were told in the 1980s to “get the prices right,” that is, to eliminate micro policies, such as energy and food subsidies, which create a cleavage between domestic and global prices. In the 1990s, the prescription preferred by the IMF was to “get the policies right”: developing countries should embrace macro-economic policies, especially financial market deregulation, which promote global integration.

Currently, the focus is on fashioning the right “enabling environment” for FDI: legal, regulatory and political institutions which provide transparency, protection and stability to foreign (and domestic) investors; and social infrastructure, such as education, which increase the skills of the local workforce. Developing countries which have such an “enabling environment” are, indeed, quite successful in attracting FDI, though usually with high attendant environmental costs. Most developing countries, however, especially the poorest, do not.

The promise of FDI for sustainable development is precisely that it could be a useful tool in *creating* an enabling environment for ecologically sound economic and social development. The potential of FDI, in other words, is to help nurture local conditions and capacities—productive, social, regulatory and institutional.

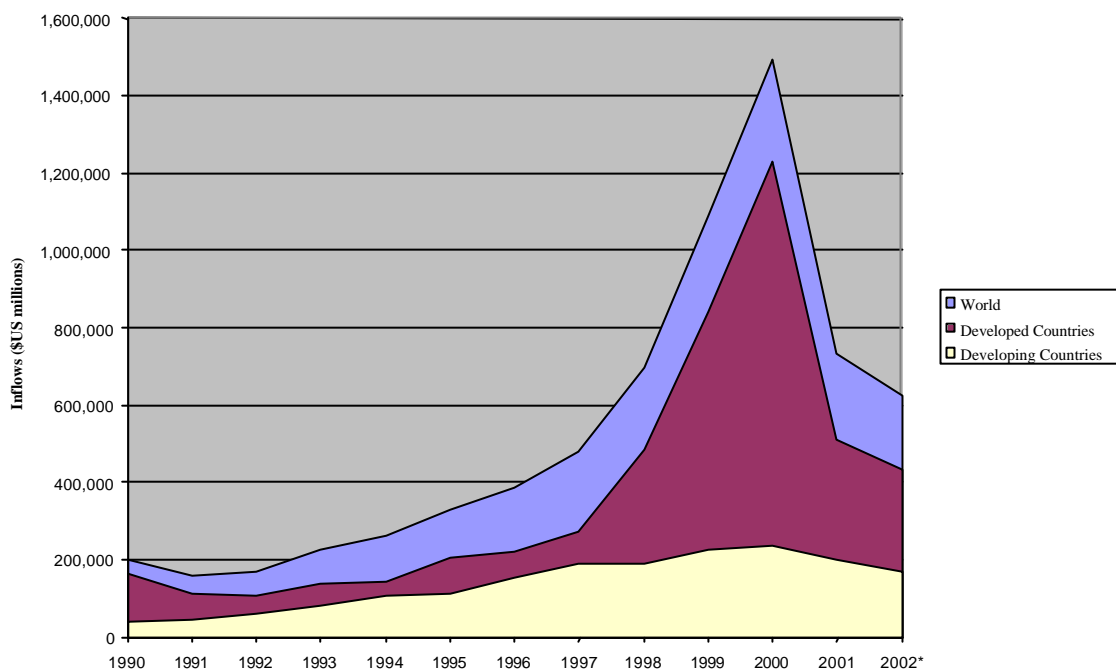
This section outlines trends in global FDI flows and explores links between FDI and economic development and FDI and the environment. The final section considers indicators for “sustainable FDI”.

1. Global FDI Trends

Global foreign direct investment inflows soared to unprecedented levels during the late 1990s. From 1970 to 1990, average annual global FDI inflows amounted to \$58 billion, or less than one half of one percent of global GDP. In 2000, global FDI inflows reached a total of \$1.5 trillion, or 4 percent of global GDP (Figure 1).

In the 1990s, annual global flows of multi-lateral and bilateral development aid (ODA) remained stagnant at \$54 billion. Many analysts began to hope that FDI would “dwarf” or replace ODA as the primary source of development capital. However, only a small part of global FDI inflows—about 30 percent on average between 1990 and 2001--went to developing countries. Indeed, the developing country share fell off sharply between 1997 and 2000, falling from 39 to 16 percent.

Figure 1: FDI Inflows in the World Economy, 1990 to 2002



Source:

*2002 data calculated by author based on a 0.85% estimated decline by *World Bank Global Economic Prospects, 2002*

Table 1. Ten Largest Developing Country Recipients of FDI inflows (\$US millions)			
Top 10	(1990-2000) ave	Top 10	2001
China*	43,428	China	69,680
Brazil	12,000	Mexico	24,731
Mexico	10,149	Brazil	22,457
Argentina	7,181	Bermuda	9,859
Singapore	7,058	Poland	8,830
Malaysia	4,722	Singapore	8,609
Bermuda	4,722	Chile	5,508
Poland	3,705	Czech Republic	4,916
Chile	3,307	Taiwan	4,109
South Korea	3,188	Thailand	3,759
Top 10 total:	99,460		162,458
Total for Developing Countries:			200,891
Top 10 share:	76 %		81%

*China figures include Hong Kong

Source: UNCTAD, *World Investment Report, 2002*

FDI inflows are highly concentrated in ten, mostly large developing countries, led by China, Brazil, and Mexico. Between 1990 and 2000, the “top ten” garnered 76 percent of the total FDI flowing into developing countries. The trend towards concentration seems to be intensifying: in 2001, the top ten share rose to 81 percent (Table 1).

Even though they are a small part of the world’s total, FDI inflows to developing countries may comprise a large part of total national investment and/or GDP in a particular country. Between 1996 and 1999, for example, FDI comprised about 10 percent of GDP in Bolivia, 26 percent in Lesotho, and 26 percent in Thailand.ⁱ

The promise of FDI as a replacement for ODA, however, largely remains to be fulfilled. For 55 of the world’s 70 poorest countries, ODA flows outstripped FDI in the late 1990s. For 42 poor countries, ODA flows were twice the size of FDI. Indeed, FDI “dwarfed” ODA in only seven of the poorest countries.ⁱⁱ

Most troubling, the dramatic global FDI surge of the past decade may itself prove to be unsustainable. Between 2000-2001, global FDI inflows declined sharply, falling by nearly 51 percent.ⁱⁱⁱ Data for 2002 suggest that this trend will persist. While steady growth in global FDI flows is a reasonable expectation, the FDI surge of the late 1990s increasingly appears to be a bubble.

Composition and Determinants of FDI

FDI inflows to developing countries increasingly target the tertiary (service) sector. In 1999, services accounted for 37.3 percent of FDI inflows, up from 20.7 percent in 1988. The manufacturing sector, though shrinking in relative terms in all regions except Africa, continues to account for the largest share (Table 2). In most regions, the share of FDI in the “primary”, mostly agriculture and mining, sector decreased in the 1990s. The exception is Latin America, where agriculture and mining received 9.6 percent of FDI in 1988, but 12 percent in 1999 (primarily in the mining sector).

The central players in FDI are multinational corporations (MNCs). Why does an MNC locate production in a particular developing country, either by purchasing an existing company (“mergers and acquisitions”) or by building new plant and equipment (“Greenfield investment”)?

Studies have found that the most unambiguous and consistent “pull” factor is the market size of the host economy. For the most part, MNCs invest in order to get access to large markets. There is also close to a consensus that macroeconomic stability is needed to attract FDI. Countries with volatile exchange rates and high and growing trade deficits tend to be negatively correlated with FDI.

Table 2. Sectoral Composition of FDI Inflows to Developing Countries				
		Primary <i>(percent of total inflows)</i>	Secondary	Tertiary
All Developing Countries	1988	13.7	65.0	20.7
	1999	5.4	54.5	37.3
Africa	1988	51.8	20.8	27.4
	1999	13.6	43.4	42.9
Asia	1988	13.1	68.9	17.1
	1999	3.5	60.2	33.6
Latin America	1988	9.6	65.8	24.6
	1999	12.0	32.8	52.2
Central and Eastern Europe	1988	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
	1999	2.5	43.5	50.1
World	1988	10.7	42.4	43.9
	1999	5.5	41.6	50.3

Source: UNCTAD, *World Investment Report, 2000*

Evidence on whether low (or high) labour costs attract FDI, on the other hand, is ambiguous. A review of sixteen studies found that, in six studies, low wages attracted FDI, while four studies found FDI to be correlated with higher wages and six found labour costs to be insignificant.^{iv} No statistical evidence has been found that environmental factors affect MNC location decisions.

2. Does FDI Promote Economic Development? Yes, No, Maybe

FDI can potentially bring substantial two broad kinds of economic benefits to developing countries and communities:

- *Economic growth*
 - increase in income;
 - increase in local employment;
 - increase in foreign exchange;
 - improvements in income distribution;

- *Productive capacities*
 - transfer of technology and management practices;
 - spillovers (stimulation of local suppliers and subcontractors);
 - externalities, including through agglomeration effects;
 - stimulation of domestic investment;
 - increases in productivity of domestic firms;
 - increased integration in global markets
 - decreased costs/increased rates of R&D and innovation.

FDI can also bring risks to host developing countries. Operating without global and often inadequate local regulatory oversight, MNCs have been the target of criticism for inflicting “direct harms”—pollution and natural resource degradation, toleration of worker abuse by subcontractors, inadequate protection of worker health and safety, and complicity in the violation of human rights.^v

But there is also the risk that FDI will thwart the economic development process itself. In a study for the International Institute for Economics, Theodore Moran cautions that “the possibility that FDI might lead to fundamental economic distortion and pervasive damage to the development prospects of the country is ever present.”^{vi}

Risks stem from the possibility that FDI will lower, rather than raise, domestic savings and investment, including via profit repatriation; “crowd out” domestic companies from capital markets; increase demands for foreign exchange; support local oligopolies and be anti-competitive; distort local politics and thwart regulation; and create instability through increasing financial volatility. Moreover, MNCs may seek to protect technology rents rather than transfer technology, reducing or eliminating hoped-for spillovers and externalities.

What is the more likely “face” of FDI? A host of studies over the past decade have examined the nature of economic benefits and the conditions under which they are—or are not—captured. Moran reports on the findings of three separate “net assessments” of the impact of FDI covering 183 *projects* in some 30 countries over the past 15 years. Two studies found that FDI had a positive impact in 55 to 75 percent of the projects they studied. But one study found that FDI had “a clearly negative impact on the economic welfare of the host” in an astonishing 75 percent of the projects studied.^{vii}

Macroeconomic *country* studies generally have found a positive impact of FDI. For example, a study by the Brookings Institution covering 58 countries in Latin America and Asia, as well as Africa, found that a dollar provided by FDI generates another dollar in domestic investment.^{viii} An IMF study found evidence of positive effects, including productivity increases through technology transfer, to be “overwhelming”.^{ix} Several *firm level* studies, on the other hand, found unequivocally that FDI did not accelerate economic growth or promote positive spillovers from foreign to domestic firms.^x

Many studies find that the impacts of FDI in developing countries may be positive *or* negative, depending on a variety of variables, mostly having to do with host country policies. One study found that the impact of FDI is significantly positive in “open” economies, and significantly negative in “closed” economies. Others have found that positive impacts depend on the effectiveness of domestic industry policies; and on tax, financial or macroeconomic policies. A World Bank study found that the impacts of FDI depend on the industry, as well as host country policies (see Appendix One).

Several studies suggest that, to capture the benefits of FDI, a country must *already have reached* some kind of “development threshold”. One found that FDI raises growth only in countries where the labour force has achieved a minimum level of education (Borensztein et al, 1998). Another found that “the positive impact of FDI on growth...vanishes when limited to lower-income developing countries.”^{xi} In its recent report on the role of FDI in development, the OECD concluded that the overall benefits, while “well-documented”, depend on “the appropriate host-country policies and a basic level of development”.^{xii}

What the “right policies” are, however, is a matter of some contention, as well as investigation. While it is slowly changing, the conventional wisdom is that developing countries should undertake policies which promote global integration, protect foreign investors, and minimise government intervention. Moran found, however, that while domestic content policies were not effective in promoting technology transfer, export performance requirements were very effective.^{xiii}

In a sweeping study of the industrialisation process in twelve emerging (or now “emerged”) developing countries, Alice Amsden argues that monitored performance requirements linked to industry subsidies—for both domestic and foreign firms—were the key to the rapid growth of local manufacturing capacities.^{xiv} Rather than “buy” foreign know-how, their development strategy aimed to “make” it, including through the strategic use of FDI. This kind of development model is today more constrained by WTO rules.

3. FDI and the Environment

In the last decade, a surge of regional and bilateral investment agreements have promoted the liberalisation of investment regimes. These agreements increase expand the rights of foreign investors but, with few exceptions, articulate no environmental or social responsibilities of either investors or governments. Many in the sustainable development community are concerned that, without an environmental framework, liberalisation will accelerate environmental degradation.^{xv}

The impacts of FDI on the environment can be traced through three routes:

- *Environmental performance* of MNCs;
- *Impacts of economic growth*
- *Impacts on national and global environmental regulation.*

Performance of MNCs

Two key strategic and management decisions of MNCs affect their environmental performance. First is the choice of technology, *viz.*, whether to invest in newer, cleaner “best available” or to “dump” older, dirtier technologies. In most industries, a range of technologies are in use. Efficiency and “clean-ness” may be a function as much of industry sector as of company choice: some industries are more technologically dynamic than others.

The second decision has to do with management practice, *viz.*, whether the corporate parent has embraced a strong EMS (environment management system) and enforced it throughout its overseas subsidiaries and supply chains. NGO advocacy campaigns have increasingly and effectively prodded companies into compliance with existing environmental regulation, and to adopt “voluntary initiatives” to go “beyond compliance” in global operations.

One of the promises of FDI for sustainable development is that MNCs, especially from the OECD, will help to drive up standards in developing countries by transferring both cleaner technology and better environmental management practices. Empirical studies, however, have failed to find evidence for such a trend. In statistical studies of Mexico (manufacturing) and Asia (pulp and paper), foreign firms and plants performed no better than domestic companies. Instead, environmental performance was found to depend on 1) the scale of the plant (bigger is better); and 2) the strength of local regulation, both government and “informal”.^{xvi}

Many developing countries lack the capacity and/or political will to enforce environmental oversight of industry. In this context, MNCs are able to “self-regulate” and have one of three choices: 1) follow local practice and norms; 2) adopt internal, company-wide standards, either an average or the highest of relevant home country standards; or 3) adopt international standards or “best practice” norms for corporate social responsibility.

In the petroleum and mineral sector, a host of case studies suggest that, on average, MNCs have tended to follow—or even to worsen—local practice.^{xvii} In all parts of the world, mining operations have generated severe environmental degradation and pollution, including the discharge of toxic substances into river systems, large volume waste disposal, the inadequate disposal of hazardous wastes, and the long run impacts of poorly planned mine closure.^{xviii} Multinational oil companies have been the target of protest and criticism for widespread pollution and human rights violations in the Amazon region, Nigeria, Indonesia and, increasingly, the Caspian region.^{xix}

In the high tech sector, American and European MNCs tend to adopt either company-wide standards or international “best practice” for environmental management and community consultation. Within the industry, however, there are “leaders” and “laggards”. The US chipmaker Intel, for example, adopts the highest relevant standard as the company-wide standard, including for subsidiaries. National Semiconductor, on the other hand, adopts an average US standard for its newer plants, and follows local practice for its older plants.^{xx}

The evidence suggests that, overall, MNCs perform no better than domestic companies. The environmental performance of a particular MNC in a particular locale depends on: 1) the strength of local regulation; 2) the industry it is in; and 3) the particular company culture with respect to environmental commitment and corporate social responsibility.

Economic Growth and the Environment

One of the potential benefits of FDI is that stimulates economic growth. Without adequate regulation, however, economic growth is likely to accelerate environmental degradation—even if MNCs are good performers-through scale effects. The experience of East Asia, often described as an “economic success story,” provides a tragic example. According to the Asian Development Bank, resource degradation and environmental pollution in both East and South Asia is so “pervasive, accelerating, and unabated” that it risks human health and livelihood.^{xxi}

While acknowledging that environmental impacts can worsen with an increase in the rate of growth, some economists argue that, over time, economic growth generates environmental improvements. The “Environmental Kuznets Curve” posits that environmental quality first worsens and then improves as per capita income (GDP) rises.^{xxii} Reasons include the

substitution of less polluting consumer goods; changes in the structure of industry; and greater political demands for environmental regulation. Early studies put the “turning point” at between US\$3000 and US\$5000.

If true, the EKC suggests that, to a large extent, the pursuit of economic growth is *itself* a sustainable development strategy. One major concern, however, is that the environmental and resource degradation at lower levels of income might result in *irreversible* losses. Examples include loss of biological and genetic diversity and potable water due to degradation or destruction of “old growth” forests; depletion or destruction of fish stocks due to coastal degradation; and human deaths resulting from severe air pollution. Given the number of people on the planet living today at very low levels of per capita income, the potential environmental losses which must be endured before the global “turnaround” are staggering.

A number of studies question the validity of the EKC hypothesis for developing countries on five counts:^{xxiii}

- *Evidence for an EKC is limited to a small number of localised pollutants, primarily sulphur and particulate matter;*
- *Evidence for the EKC relies mostly on data from developed nations.*
The handful of studies which rely on data from developing nations have found that evidence for an “inverted-U” relationship is ambiguous;
- *The “turning point” is significantly higher than original estimates and may recur.*
Recent studies have found turning points of \$14,730 and \$22,675 for sulphur, \$9800 for particulate matter, and \$35,000 for carbon dioxide. In one study, a second wave of environmental degradation occurred when per capita income reached \$10-15,000. .
- *Factors other than income important drivers of environmental quality.*
Many studies have found that political freedom and democracy, population density, industry structure, and historical events (such as the oil price shocks of the 1970s) are as or more important than income in determining environmental quality.
- *No evidence for the EKC has been found in historical studies.*
Most EKC studies utilise cross-sectional or panel data to estimate an average curve. A historical study of Malaysia found no evidence of an inverted-U shaped curve for six air and water pollutants.

Environmental Regulation: Stuck in the Mud?

Environmental and resource management is largely the preserve of nation-states. How does FDI affect national (and-sub-national) environmental regulation? There is evidence that MNCs themselves, wielding their substantial bargaining power, can help to drive local standards up—or down. In Chile in the 1970s and 1980s, foreign mining companies pressed for more coherent environmental regulation (see Case Study Seven, below). In the Russian Far East, on the other hand, oil MNCs involved in obtaining leases for exploration and drilling off of Sakhalin Island in the 1990s flouted and undermined Russia’s fledgling environmental laws.^{xxiv}

The asymmetric bargaining power of MNCs is most troublesome in the context of the intense competition for FDI in both developed and developing countries. Given the absence of global environmental standards, would-be host governments seeking to attract FDI are reluctant to make higher-than-average environmental demands on individual MNCs. They may even be tempted to offer lower-than-average environmental demands to enhance the attractiveness of an overall package.

Dubbed the “stuck in the mud” problem, the impact of intense global competition for FDI—absent common environmental norms—is thus to inhibit the rise of environmental standards.^{xxv} The problem afflicts both developed and developing countries: efforts in the 1990s to put a modest tax on carbon were roundly defeated in both the US and Australia by worries that investment would move offshore.

There is some evidence that, despite regulators’ fears, high environmental standards do not, in fact, deter investors and in some cases, are even preferred by investors. Moreover, with the rise of the global corporate social responsibility movement, MNC and host-government expectations may be changing. The rate of change, however, is slow. According to the OECD, MNC implementation of the Guidelines for Multinational Enterprises remains low. The practice in government-MNC negotiations over environmental management, apparently, is to not rock the boat.

Overall, an examination of all three of the channels linking FDI and the environment suggests there is no determinate trend: FDI can improve, worsen or have no impact on environmental quality. Other factors—government regulation, the rate of economic growth, company culture, the particular industry in which the FDI takes place, the rules that govern FDI—are key variables.

The lack of a consistent aggregate relationship between FDI and environmental quality is shown below. Figure 2 plots the results of a regression of FDI per unit of GDP (vertical axis) on an index of environmental quality (horizontal axis). The index is a subset of variables (Table 3) used by the World Economic Forum to create the Environmental Sustainability Index, which ranks nations on a scale of 1 (best) to 100 (worst). The scatter plot shows that high levels of FDI are correlated with poor, good, or medium ranges of environmental quality.

Figure 2. FDI and the Environment

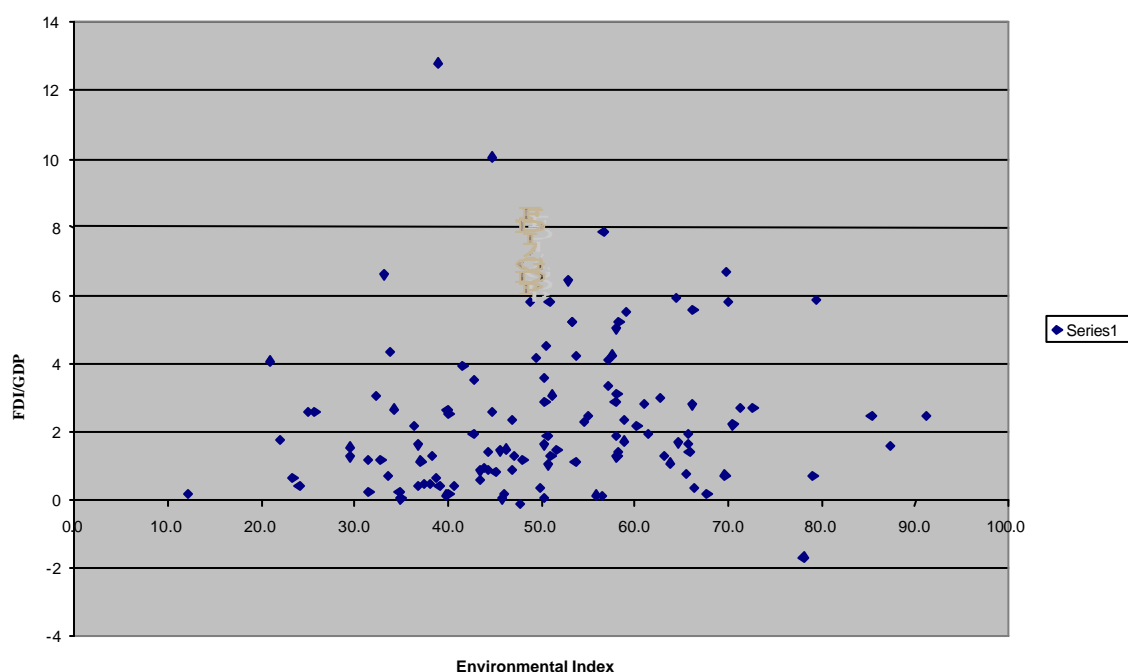


Table 3. Variables in Environmental Quality Index	
Air Quality	Urban SO2 concentration Urban NO2 concentration Urban TSP concentration
Water Quantity	Water availability per capits Water inflow availability per capita
Water Quality	Dissolved Oxygen concentration Phosphorus concentration Suspended solids Electrical conductivity
Biodiversity	Percentage of mammals threatened

Source: World Economic Forum, 2001

4. Mixed Record: The Mexican Experience

For Mexico, FDI was the prize of the NAFTA integration process.^{xxvi} The hope was that FDI inflows would greatly increase, stimulating economic growth and bringing social and environmental benefits by absorbing rural migrants—displaced from by agricultural liberalisation--into new, higher paying urban-based jobs, and by transferring cleaner technologies and better environmental management practices.

In the event, the results have been mixed. US FDI into Mexico has increased by a factor of ten since 1985, reaching \$24 billion in 2001, contributing to a massive influx of internal migrants to urban areas. Between 1980 and 2000, population more than doubled in FDI-laden areas, while the population of Mexico as a whole grew by less than forty percent.

What is less clear is that the lives of Mexico’s working and poor people have substantially improved. According to the OECD, the swollen urban population far exceeds the infrastructure capacity of host communities to manage sewage and waste, provide sufficient water, and protect air quality. Wages in foreign firms are lower than the mean wage in Mexican manufacturing as a whole--and have fallen in real terms by more than 10% since 1987.

Moreover, the large FDI inflows of the last decade may not be sustainable. From the middle of 2001 through the end of 2002, foreign-owned firms dismissed 287,000 workers (or one in five of all such workers).^{xxvii} Mexican analysts worry that US (and other foreign) firms are shying away from Mexico because of sluggish growth in the US--and because of emerging opportunities in China.

The environmental benefits of FDI have also been elusive. A 2000 World Bank study found no correlation between foreign-ownership and firm-level environmental compliance in Mexican industry. Rather, the key variable was the strength of state regulation.^{xxviii}

These trends mask some “best practices” that can serve as models for a more comprehensive sustainable investment strategy. Some foreign firms, including Dutch steel companies and U.S. chemical firms, have offered higher wages, better working conditions and/or better environmental standards. Some have also negotiated relationships with host communities for public infrastructure and social services.^{xxix}

Unfortunately, these sustainable development success stories are an exception rather than the rule. Between 1985 and 1999, rural soil erosion grew by 89 percent, municipal solid waste by 108 percent, and urban air pollution by 97 percent.^{xxx} The Mexican government estimates that the economic costs of environmental degradation have amounted to a staggering 10 percent of annual GDP, or \$36 billion per year. These costs dwarf economic growth, which amounted to only 2.6 percent on an annual basis.

Unless economic integration is coupled with strong environmental regulation and enforcement, pollution is likely to worsen. Since NAFTA took effect, however, real spending on the environment and has declined 45 percent, and plant-level environmental inspections have shown a similar drop.^{xxxi}

5. Indicators for “Sustainable FDI”?

Fulfilling the promise of FDI for sustainable development will not come as a result of simply increasing FDI flows alone, whether through “openness” or other means. It will require the incorporation of social values by MNCs, effective development policies at national and global levels, and the explicit embrace of environmental and social obligations in investment regimes.

A comprehensive framework to guide and evaluate FDI projects and government policies has not yet been developed. In broad terms, “sustainable FDI” projects and policies in developing countries should:

- Enhance local productive capacities;
- Strengthen social resilience and solidarity, including by reducing inequality;
- Improve environmental performance, both directly and by increasing capacities for regulation.

The aim is to develop projects and policies which produce positive results for all three goals, or at least do not retard one at the expense of another. The creation of measurable indicators would be a helpful step in promoting “sustainable FDI”. A Briefing Paper for the Earth Summit produced an initial set of indicators, which could be the starting point for discussion and elaboration (Table 4).^{xxxii}

Other efforts to provide guidance to business, especially MNCs, can usefully inform sustainable FDI indicators, including the environmental and social reporting framework of the Global Reporting Initiative; and the OECD Guidelines for Multinational Enterprises. Least developed to date are benchmarks and indicators for the development contribution of MNCs.

Table 4. Examples of Indicators for FDI and Sustainability		
	Type	Example of Indicator
Economic	Investment and Productivity	Net Foreign Direct Investment (FDI) Net Foreign Direct Investment (FDI) as % of GDP and of GFCP Net change in FDI global share Net resource transfer Ratio of aggregate Net Resource Transfers (long-term) to GNP (%) Local R & D expenditure from FDI Per cent of FDI in Greenfield investments
	Other Financial Factors	Ratio of Total Official Development Assistance (ODA) to GNP Ratio of external debt to GNP Ratio of debt service to exports of goods and services, including worker's remittances Per capita domestic saving and investment
Social	Labour standards and employment	Adoption of ILO labour standards and indicators Per cent employment in host economy created (directly/indirectly) by FDI
	Education	Enrolment ratios by level of education, public/private expenditure on education/training, expected number of years of formal schooling
Environmental	Environmental Best Practice	Adoption of environmental management system, environmental reporting, energy efficiency Green accounting e.g. “green” net national product (green NNP), genuine savings etc.
	Environmental Protection	Per cent of FDI into environmentally sensitive sectors Ratio of environmental protection expenditures to GDP Degree of implementation of Multi-lateral Environmental Agreements

Source: Earth Summit (2002) , Table 3.

III. Pointing in the Right Direction: Case Studies

The role of private FDI in promoting sustainable development is a new field of study. More importantly, however, it is a new and active field of practice. A myriad of initiatives are underway, many involving public-private partnerships.

This section reviews six case studies involving private direct investment in developing countries. All except one (Beijing Bergey) are drawn from published sources. Produced at different times with different data, methodologies and formats, the case studies do not necessarily reflect “best practice” in integrating *all* of the indicators developed above. Rather, they are organized to highlight good practice along two axes: 1) promoting local productive capacities; and 2) improving environmental performance.

1. Promoting Productive Capacities

From an economic development perspective, the most important potential benefit of FDI is to nurture the growth of local productive capacities. Routes to do so include increasing workforce skills and competencies; putting in place new technologies; stimulating local business through supplier relationships; and encouraging local innovation through new knowledge and market opportunities.

For FDI to promote productive capacities, much more is needed than simply the transfer of technological hardware. “While policy documents still coin it technology “transfer”, emphasises Bjorn Stigson, President of the World Business Council for Sustainable Development, “this process only succeeds through a cooperation between provider and receiving communities”^{xxxiii} According to Carlos Magarinos, Director-General of UNIDO, “A successful technology cooperation process includes elements such as needs assessment, clear national priorities for technology development, identification of appropriate forms of cooperation, an enabling environment and capacity building.”^{xxxiv}

The WBCSD and UNIDO recently published ten case studies of technology cooperation in developing countries.^{xxxv} Two of the case studies are summarized below. The third case study (Beijing Bergey) is unpublished and was developed by the authors.

Case Study One: DaimlerChrysler-- Sisal Fiber Project South Africa

Based in East London, DaimlerChrysler South Africa manufactures cars and vehicle components for domestic and international markets. With nearly 4000 employees and a state-of-the-art manufacturing facility, DaimlerChrysler is one of the biggest employers in the Eastern Cape region. The subsidiary is wholly-owned by DaimlerChrysler Germany, making the corporation one of the largest German investors in South Africa.

DaimlerChrysler SA is spearheading a project to “green” its supply chain by switching to natural fibres in vehicle components. Early in the 1990s, DaimlerChrysler (then Mercedes-Benz) declared a commitment to environmental sustainability, including by improving its products and processes. Company research identified a number of natural fibres—flax, hemp, coconut, cotton and sisal—as best in meeting both environmental and manufacturing requirements. A German firm, Johann Borgers GMBH & Co (Borgers), who developed the technology to process and manufacture flax and cotton fibres.

DaimlerChrysler SA's objective, however, was not to import natural fibres processed and manufactured in Germany, but to establish an entire local supply chain based on sisal. The South African supply chain would include:

- Sisal farming
- Processing of sisal fibres
- Manufacture of sisal components
- Release to DaimlerChrysler SA.

The “produce locally” decision was driven by South Africa's local content policies, which place a duty on imported components used in local manufacture of vehicles. Local content in exports of vehicles and components, on the other hand, earns credits which offset import duties. “Local content,” states the WBCSD case study, “is therefore critical to the business in South Africa, and has spurred the active involvement in technology transfer projects that promote the use of South African resources”.^{xxxvi}

The multifaceted project required multiple partners, initiatives, and agreements. DaimlerChrysler oversaw the technology transfer part of the project. Two well-established South African firms, Brits Textiles and NCI, were identified as recipients of the technology owned by Borgers.. Brits gave Borgers a one-time payment of \$80,000 for the processing and manufacture technology. NCI—which already had a technology agreement with Borgers--agreed to a 2 percent royalty on revenue generated to retain their technological support.

The technology transfer was successful, despite some bumps stemming from differences in business styles and communication cultures. For example, DaimlerChrysler's procurement team had to work with one supplier to “ensure that they would not continue to cut corners to save production costs”.^{xxxvii} The first sisal component was released for inclusion in the Mercedes-Benz C-Class vehicles in October 2001 and sisal-cotton mixtures are now used substantively in local production.

Both of the local South African companies have been strengthened as a result of the technology transfer. Thirty new jobs have been added. Brits textiles has entered a new business field and developed new industry contacts and opportunities. NCI has had an increase in turnover and a greater international exposure as a supplier in natural fibres. There have also been spin-off businesses from the initial project, including applications in buildings and civil engineering projects.

Less successful has been the effort to develop a reliable local supply of sisal. South African farms produce only 500 tons a year, leaving an import requirement of about 2,500 tons. There are 23 state-owned and one operating commercial sisal farms. Two other commercial farms ceased operations due to labour problems.

The problem is that the productivity of the state-owned farms is very low. DaimlerChrysler contracted with the Council for Scientific and Industrial Research to examine options for privatisation, as well as additional markets and applications for sisal fibres. However, as of 2002, local sisal harvesting remains the sticking point in the local supply chain. “As long as the farms under perform, and cannot supply reliable amounts,” concludes the study, “the success of the project is in jeopardy”.^{xxxviii}

Case Study Two: Lafarge DuJiangYan Cement Company

The French based Lafarge Group, a leading global producer of cement, operates 136 cement plants in 46 countries, employs over 40,000 people, and in 2001, generated sales of \$12 billion. Lafarge entered the Chinese market in 1994 and has invested around \$220 million in 13 joint or wholly owned ventures which employ nearly 2000 people.

Cement is one of “dirtiest” industrial sectors in terms of environmental impacts, including carbon dioxide emissions. A cement kiln requires large quantities of energy, often supplied by coal, to literally melt stone. CO₂ is also released in the chemical process by which limestone is calcinized into lime. According to one estimate, the cement industry single-handedly generates about 8 percent of global CO₂ emissions.^{xxxix}

The company applies “Lafarge Standards,” among the most stringent in the world, to all new plants and project upgrades. According to its Sustainability Report, Lafarge cut its CO₂ emissions per ton of cement by 13 percent from 1990 to 2000, and has made a public commitment to reduce its total emissions in industrialised countries by 15 percent by 2010.^{xl} The company’s environmental policy also calls for product innovation, systematic audits, training, and the “sparing use of natural resources”. As a WWF “Conservation Partner”, Lafarge supports the restoration of forests and quarries.

China’s development strategy is based on establishing a substantial and profitable position in targeted industries—including the building materials industry--in selected regional markets. With one third of global output, China is the world’s leading producer of cement. China consumes about 35 percent of the world’s cement, a figure expected to rise to 40 percent by 2010.

The city of ChengDu in Sichuan Province in China’s Southwest was selected as a growth centre for the cement industry. In 2001, the Province consumed 22 million tons of cement and demand is expected to grow by 10 percent each year over the next decade. In 1997, the Dujiang Yan Building Company approached Lafarge with a three-part development proposal: 1) a new cement plant with state-of-the art dry process technology; 2) a new quarry; and 3) a railway for transporting materials. A joint venture agreement establishing the Lafarge DujiangYan Cement Company—the first turnkey project in China’s building materials industry--was signed in September 1998.

The project entailed three separate contracts and partners for the quarry, the plant, and the railway. Finance for the \$159 million project was provided by the International Finance Corporation (35 percent), as well as Lafarge (49 percent) and the Chinese partner (16 percent). Each project was completed on budget and on time—the quarry in December, 2001, the railway in February 2002, and the plant in April, 2002. The plant and quarry together employ 338 people.

The joint venture company, together with the IFC, promoted high environmental standards, including an environmental impact assessment, a resettlement plan, public consultation, and an environmental management plan. In addition, Lafarge’s own best practices were transferred during the construction phase of each of the three projects, especially those relating to worker safety and the environment.

The project aimed specifically to transfer technology and build local management capacities, as well as promote downstream linkages. The equipment used to build the plant was the latest generation available on world markets. Ninety percent of the mechanical equipment and 75 percent of the electrical equipment used for construction in the three projects were sourced from China. Lafarge carried out intensive training programs, including a one-year program for all management and supervisory personnel.

Lafarge's insistence on high safety and environmental standards was the one of the most difficult challenges for the joint venture. "The Chinese contractors did not have high safety standards and were unfamiliar with the safety equipment used by Lafarge," concludes the case study. "Changing the behaviours of these employees so they adopted safety practices and used the appropriate equipment was a time consuming and challenging effort".^{xli}

Some of the factors which contributed to success were Lafarge's own financial strength and technical expertise, as well as the company's substantial prior experience in China. The fact that Lafarge had well-established procedures for quality control, safety, scheduling, etc also made for success. Good working relations with the local partner and the support of the Chinese Government were also important.

Case Study Three: Beijing Bergey Windpower Co.

Beijing Bergey Windpower Company is a small wind turbine manufacturing venture solely owned and operated by the US company Bergey Windpower Co. (BWC). Headquartered in Norman, Oklahoma, BWC manufactures a range of small wind turbines, including 1.0 and 1.5 kW units for off-grid, remote power applications; and larger 10Kw for on-grid utility bill reduction and off-grid applications such as village electrification, community water supply, and telecommunications. In the size range up to 10kW, BWC is the leading supplier in the world.

In 1997, CEO Mike Bergey saw a commercial opportunity when the Chinese State Development Planning Commission (SDPC)^{xlii} announced "Brightness Engineering," a large-scale initiative to electrify 8 million people in villages in China's western provinces. More than 80 million people who live in the highlands, deserts and other remote areas of China are not connected to the utility grid.

Bergey's pursuit of the SDPC led to the creation of a joint venture in 1998 between BWC (51 percent) and Xiangtan Electric Manufacturing Group Corporation, a state-run enterprise. Based near the city of Changsha in Hunan Province, the joint venture ramped up to produce 10kW wind turbines for village electrification, with investment capital provided by BWC.

The joint venture partnership was challenging. Work culture was very different in the two companies. According to Bergey, manufacturing the turbines requires a high level of precision but "the Chinese style is to cut costs—and corners".^{xliii} Another issue of contention involved technology transfer in the licensing agreement. The SPDC and Bergey's joint-venture partner wanted access to the design considerations and process in order to "reverse engineer" the technology. China has domestic manufacturers of wind power units but the technology is weak and they are not very reliable. BWC was happy to provide training and to source nearly all components from China—but wanted to protect its intellectual property in the design of the technology.

Despite these tensions, a technology agreement was worked out and the joint venture was primed to start manufacturing. However, the SDPC market did not materialise, largely due to internal bureaucratic manoeuvring, and no tenders for small scale windpower units were put forward. The “Brightness Engineering” project funding was delayed for four years and when it finally went forward in 2002 the projects favoured solar technology. Unable to find sufficient private sector buyers in the four year hiatus, the joint venture continued to loss money and was dissolved in 2001.

With a strong belief in the applicability of the small wind power units in the Chinese countryside, and the potential of China as a low-cost manufacturing site, BWC persisted in trying to establish manufacturing capacity in China. However, a second joint venture failed. In preparation for accession to the WTO, China liberalized FDI rules in 2000, including the rule that a foreign company had to be in a joint venture in order to sell at a retail level. Bergey set up a new manufacturing effort in Beijing, this time as a sole venture.

In its second year of operation, Beijing Bergey Windpower Co sold over 400 units, both 10kW and 1kW, employed 21 people, and generated a profit . The 10kW units were primarily sold to China’s “Alleviate Poorness” Ministry to electrify newly established villages in Xinjiang and Inner Mongolia and other nomadic regions.

The 1kW units are mostly exported to the United States, and then re-exported to Brazil, Mexico and other developing countries. Like much larger multinationals, Bergey has found that low wage costs make China an attractive manufacturing site. To attract quality employees, Beijing Bergey offers employees higher than average wages, and seeks out older employees who have been forced out of their government jobs by mandatory retirement laws.

BWC sources nearly all its inputs from China—except for the design components—and invested heavily in training its Chinese workforce. BWC is eager to promote manufacturing capacity in developing countries, and believes that “local manufacturing, under license or through a joint venture, is necessary if widespread utilisation is to be pursued.”

On the other hand, BWC is a private sector company. Its core business competency--what it has to sell--is the proprietary design technology that it has developed and keeps improving. While he recognises the tension, Mike Bergey feels that a “nexus” can be found which accommodates the interests of both the developing country government seeking to acquire proprietary technology and private companies who wish to protect it. BWC continually invests in research and development to improve existing products and develop new ones.

2. Improving Environmental Performance

One of the potential benefits of FDI to sustainable development is the transmission and diffusion to developing countries of higher environmental and safety management standards in industry. MNCs from OECD countries are typically subject to more intense NGO scrutiny and higher standards in their home countries.

Drawing from a case study undertaken for Canada’s International Development Research Centre, Case Study Four examines the role that higher MNC standards played in promoting better environmental performance in Chile’s mining sector.^{xliv}

One of the ways that companies based in OECD countries can work to promote better environmental and social practice is via supply chain management. In 2000, a group of tour operators, in partnership with the World Tourism Organization, UNESCO and UNEP launched the Tour Operators Initiative for Sustainable Tourism (TOI) to raise the environmental performance of suppliers and contractors to operators of tour packages, as well as the facilities owned by tour operators.

Tourism is one of the world's largest and fastest-growing industries. In 2001, international tourism receipts totalled \$462 billion, making it one of the largest categories of international trade.^{xlv} Moreover, international tourism is of increasing economic importance to developing countries. For the poorest countries, tourism receipts more than doubled between 1992 and 1998 and, except for three LDCs with oil exports, constitute the largest source of foreign exchange, far outstripping second-place raw cotton and third-place textiles.^{xlvi}

The environmental, cultural and social impacts of tourism can be widespread and devastating. According to its Statement of Commitment, members of the TOI "recognise and accept our responsibility to operate in ways that reduce environmental impacts, benefit host communities, safeguard the future livelihood of local people, and ensure the protection of destinations for future generations."^{xlvii}

The aim of the TOI is to develop and implement management tools for good practice in four key areas:

- Sustainability reporting
- Cooperation with destinations
- Supply chain management
- Internal management.

The Sustainable Tour Operators Initiative currently has 26 members, some of which are high-volume companies specialising in package tours and some of which are very small companies specialising in ecotours.^{xlviii} Members are actively involved in Working Groups on the four issue areas. In addition, TOI collaborated with the Global Reporting Initiative (GRI) to produce supplementary guidelines for sustainability reporting in the tourism sector.^{xlix} The TOI website has seventeen case studies, two of which are summarized below in case studies Five and Six.

Case Study Four: Foreign Companies and Environmental Performance in Chile

Mining is central to Chile's economy. During the 1990s, mining accounted for about 50 percent of Chilean exports and foreign investment, and 5-7 percent of its GNP. Chile's copper, its primary mineral export, accounts for over 30 percent of global production.

Many foreign companies became active in Chile in the 1900s, joining state-owned companies in mining, smelting and processing activities. In the early 1970s, however, all foreign mining companies were nationalised as part of the social revolution that swept social democrat Salvador Allende to power. Foreign mining companies were widely perceived in Chile, especially by trade union and centre and left political organizations, to be taking out of the country a disproportionate and unfair share of mineral rents.

After the assassination of Allende, the military government of General Augusto Pinochet eased foreign investment restrictions. Foreign companies purchased two Chilean mining companies. Disputada, one of Chile's oldest copper companies, was purchased by Exxon Minerals Chile in 1978 from ENAMI, a state-owned company.^l One of Chile's oldest mining companies, Disputada had (and has today) two mines, two processing plants, four tailings dams, and one smelter.

El Indio, which mines gold with copper as a by-product, was purchased by the US St. Joe Gold Company in 1975, and sold in 1981 to the Fluor Company.^{li} The El Indio deposit was discovered—at an altitude of 4000 meters—in 1960. In addition to both underground and open pit mines, the company includes a processing plant.

The mining companies began operations in a political context involving three key features. First, due to the prior history, the Chilean public was strongly biased against foreign companies in general and mining companies in particular. Second, Chile's environmental regulations were largely undeveloped and "lacked a coherent structure".^{lii} Neither of the two largest state-owned companies, ENAMI and CODELCO, had an environmental department or policy.

Following its parent, Exxon Minerals Chile, Disputada introduced an environmental policy framework, and an environmental management body to put it into practice, as soon as it began operations. The framework called on the company to "comply with environmental regulations or, if such regulations do not exist, to apply responsible standards." In practice, this meant that Disputada would comply with foreign standards. The framework also called for research on environmental impacts, an environmental audit—and for the company to "promote the development of appropriate environmental laws and regulations."^{liiii} El Indio likewise followed the expertise of its US parent, and put in place a code of environmental ethics.

The foreign companies were subjected to higher environmental scrutiny than the domestic, state-owned companies. To some extent, this bias persists. Environmental organizations and the public have questioned the environmental impact statements of foreign companies, while not extending such scrutiny to domestic companies. Moreover, Disputada, whose smelter is located within 100 km of Santiago, Chile's capital, was willing to engage the public.

The bias against foreign companies also was evident in different regulations. In 1985, a special decree required Disputada's Chagre smelter to comply with air-quality regulations. The five other smelters belonging to state-owned companies, did not have to comply with any environmental regulation.

Both Disputada and El Indio undertook significant additional investment beyond the cost of initial acquisition, including to upgrade technology and to protect the environment. About 20 percent of El Indio's total investment in mining activities between 1981-91 was related to environmental protection and industrial hygiene. There is no evidence that the additional investments reduced company competitiveness or market share. Indeed, given that the state-owned companies eventually adopted similar practices—though not until the 1990s—the foreign companies may have had "first mover" advantages.

Case Study Five: British Airways Holidays

British Airways Holidays (BAH), the airline's wholly-owned subsidiary, sells holidays in more than 75 countries around the world. Starting in 1993, BAH began assessing environmental impacts in the destinations of its holiday products. In the 1990s, the company undertook a Life Cycle Assessment (LCA) of tourism products in two of its major destinations, the Seychelles and St. Lucia. A second LCA is planned in St. Lucia in 2003.

Undertaking an LCA of a destination requires an extensive and intensive company commitment. BAH hired an external consultant, the UK Centre for Economic Development, and engaged the support of local tourist boards. The LCA had four steps: 1) identification of products; 2) quantification of inputs and outputs associated with the products; 3) review of environmental impacts; and 4) identification and evaluation of opportunities to reduce environmental impacts.

In St Lucia, the LCA showed that the greatest environmental impacts from tourism—including habitat loss, destruction of coral reefs, ecosystem disturbance, and water pollution—came from infrastructure development and inadequate waste management. The LCA results and recommendations were published and presented widely to organizations and hoteliers in St. Lucia and stimulated new national policies on waste management using funds from a tourism tax. New types of tourism such as nature and heritage tourism have also been developed.

The LCA recommended that BAH review the environmental performance of its suppliers, especially hotels. BAH is now developing a project to review procurement policy in tour operating.

There were significant challenges in implementing the LCA, including “convincing stakeholders that it really was needed even though it was not required by legislation.” Moreover, the study suffered from data gaps, especially data required to compare transport impacts from different tourism packages.

Case Study Six: Finnair Travel Services

Finnair Travel, a registered tour operator in Finland, sells package tours to about 300,000 Finnish tourists each year to destinations in Europe and the Mediterranean, Asia, the Americas and Africa. Finnair has developed a Policy and an Environmental Programme for Sustainable Tourism. With no hotels or transport companies of its own, the Programme aims to “provide incentives to contract partners to improve their environmental performance, primarily by introducing environmental criteria into their contracts.”

The company developed its own environmental classification system, using a star rating format. To obtain a contract with Finnair, a supplier must have at least “one star,” obtained by demonstrating that it has undertaken water and energy-saving measures and wastewater treatment. “Two stars” adds reliance on renewable energy sources and waste avoidance and recycling. “Three stars” adds the use of local, organic and fair trade products, biodegradable detergents, biological pest control, re-use of gray water and composting. Specific criteria differ for obtaining the classification differ in each destination depending on local conditions and laws.

Finnair says that environmental criteria “will be integrated into all new contracts made in 2001.” Moreover, Aurinkomarkat-Suntours and Top Club, who sell Finnair tourism packages, will soon introduce the environmental classification for their hotels and holiday apartments.

Finnair says the next steps are to integrate indicators for socio-cultural and economic sustainability, and to develop environmental criteria for transport companies. The company cautions, however, that “some of the legal aspects of using environmental criteria in contracts and especially using environmental classifications for accommodation suppliers still need close investigation.”

IV. Making FDI Work for Sustainable Development

Making FDI work for sustainable development is no small task, either in design or execution. There are multiple goals, multiple players—and multiple obstacles. To move in the direction of “sustainable FDI” requires not only more research but a high degree of commitment, open-mindedness, a willingness to cooperate, and a degree of humility. Perhaps the most pernicious obstacle would be to think that it is not difficult.

One thing that stands out from the case studies is that the “triggering mechanisms” for a successful FDI sustainable development project differed. In the DaimlerChrysler case, it was domestic industry policy—local content—in conjunction with a “best practice” MNC. In the LaFarge case, it was a joint venture, strongly supported by the Chinese government, along with internal company commitments. In the Bergey case, it was the persistence of a small, technologically dynamic company, along with commercial opportunities provided by the Chinese government. In Chile, it was government policy requiring better performance of foreign companies. And in the tourism case studies, it is the partnership between private sector companies and international organizations.

Some of these mechanisms, especially those relating to government industry and environmental policy, face scrutiny in investment agreements, especially if negotiated in the rubric of the WTO. Requiring higher standards of foreign than domestic companies, for example, may run afoul of “non-discrimination” clauses in investment agreements, even if the *intent* was to discriminate not on the basis of ownership (foreign versus domestic) but on the basis of environmental impacts (age of technology, management requirements, etc.) With the exception of the European Union, domestic and international institutions to determine whether discrimination was justified on environmental and social grounds are lacking.^{liv}

Several insights can be teased out of the case studies, as well as the examination of trends and evidence in Part Two. These insights can be grouped into implications for 1) national governments; 2) MNCs; and 3) global investment rules.

1. National Governments: The Centrality of a Development Strategy

A coherent development strategy and effective policies to promote it are central in utilising FDI to promote sustainable development. Economic “openness” and the liberalisation of investment, even with efforts to create “an enabling environment” and strong protections for foreign investors, do not guarantee either that FDI will materialise or that it will promote development or environment goals.

Moreover, developing countries differ widely in the way they can utilise FDI for sustainable development. In most of Africa, argues John Mugabe, a leading African analyst, FDI is not and will not be a leading driver. Instead, development strategies should aim to develop local scientific, social and financial capacities—and be aimed at expanding local markets. What is important is to harness FDI to *these* goals.^{lv}

Even with a coherent development strategy, numerous obstacles exist to successful technology cooperation. Some of these obstacles are bureaucratic and policy-driven, while others derive from the desire of MNCs to protect proprietary technologies and the rents they provide. National governments need to examine carefully and seek to reduce disincentives to technology transfer and capacity-building.

2. MNCs: The Importance of Cooperation and Good Practice

In each of the case studies, the company worked in close partnership with a variety of partners: municipal and regional governments; national governments; local businesses; research institutes; and multilateral ODA organizations. In many of them, the company defined its commercial opportunity by fitting in with development objectives set by governments or government-ODA partnerships. In others, the company helped to define the development or environment objective.

This willingness to “fit in” with a development program, and to cooperate with others is a rather different slant than defining investment options solely from the perspective of global sourcing or marketing strategies.

Bilateral and multilateral ODA organizations play a key role in sustainable development partnerships, especially in the poorest developing countries. Understanding how to align with ODA partners is an important skill for MNCs—and vice versa. As the Overseas Development Institute argues, the goal is to improve development performance “through company-led strategies” which align “business core competencies with those of potential partners from international donors, government and civil society”.^{lvi}

MNCs can play an important role in diffusing good practice in environmental and social management. To do so, companies need to embrace international “best practice” standards throughout their global operations and invest in training local workforces to enforce and monitor them.

3. Global Investment Rules: Corporate Citizenship Standards and Policy Diversity

There is substantial scope for voluntary initiatives by business to promote sustainable development through their internal governance and their willingness to cooperate with developing country governments. It is unlikely, however, that such efforts will go to scale without “raising the bar” for all MNCs through mandatory global standards for “good corporate citizenship”.

Mandatory standards would alleviate the “stuck in the mud” problem by establishing a set of common norms throughout the global economy. Potentially modelled on the OECD Guidelines for MNEs, these standards could embrace minimum environmental management principles, such as the requirement to have an EMS and a community consultation process, to provide public information, and to assess impacts over product and process life-cycles. They could also establish wider principles of transparency, good corporate governance, worker protections, and contributions to local economic development.

Investment agreements, bilateral, regional or global, could be an arena in which to insert mandatory corporate citizenship standards. The specific requirement for implementation of mandatory global corporate standards could vary by locale. Given lack of capacities, enforcement obligations could fall largely on home country governments, rather than host countries.

A second implication for investment rules is that it is important to maintain the space for policy experimentation and diversity. The economic literature and the case studies surveyed highlight the complexity, subtlety, and variety of experience in developing countries in channelling FDI toward increases in local productive capacities, as well as improvements in environmental performance. “One size doesn’t fit all” is an important starting point for the design of global or regional investment rules which promote sustainable development.

4. Need for More Research

This paper is one of only a handful which have begun to explore what constitutes “sustainable FDI” and how to promote it. There is need for much more investigation, especially on three key issues:

- 1) what constitutes “best practice” by local governments in negotiating with and cooperating with MNCs to promote sustainable development;
- 2) what obstacles MNCs face in technology cooperation with developing countries;
- 3) how investment rules can articulate broad common principles while allowing for policy diversity and institutional innovation at the national level.

Endnotes

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- ⁱ Overseas Development Institute (2002), Figure 9
- ⁱⁱ Vietnam, Angola, Lesotho, Ecuador, Turkmenistan, Azerbaijan and China.
- ⁱⁱⁱ For developed countries, the drop-off was 49 percent; for developing countries, it was 82 percent.
- ^{iv} Chakrabarti (2001)
- ^v See CAP (2002); Zarsky (2002b)
- ^{vi} Moran (1998), p. 2.
- ^{vii} Moran (1998) p. 3
- ^{viii} Bosworth and Collins (1999)
- ^{ix} Graham (1995).
- ^x Carkovic and Levine (2002); Aitken and Harrison (1999)
- ^{xi} Blomstrom et al (1994); quoted in OECD (2002)
- ^{xii} OECD (2002) p. 9
- ^{xiii} Moran (1998)
- ^{xiv} Amsden (2001) The twelve countries are China, India, Indonesia, South Korea, Malaysia, Taiwan and Thailand, Turkey, Argentina, Brazil, Chile and Mexico.
- ^{xv} Mabey and McNally (1999); Zarsky and Buffett (2003)
- ^{xvi} Dasgupta *et al* (1998); Hettige *et al* (1996)
- ^{xvii} See IRTK RECENT RELEASE
- ^{xviii} Sandbrook and Mehta (2002)
- ^{xix} CAP (2002) Chapter Two
- ^{xx} CAP (2002) Chapter Three
- ^{xxi} Asian Development Bank (2001) p. 2
- ^{xxii} A landmark article by Simon Kuznets in 1955 posited that inequality first rises, then falls with increases in per capita income. Development policymakers evoked the theory for decades to argue that inequality could be ignored in the short term. More recently, empirical evidence has faded, leading economists to conclude “there is no empirical tendency whatsoever in the inequality-development relationship” (Fields, 1995).
- ^{xxiii} All studies in this section referred to in this section are summarized by Stern (1998)
- ^{xxiv} Rosenberg and Mischenko (2002)
- ^{xxv} Zarsky (2002a)
- ^{xxvi} This section draws from Gallagher (2003).
- ^{xxvii} INEGI (2002)
- ^{xxviii} Dasgupta *et al* (1998)
- ^{xxix} Gentry (1998); Mercardo (2000); Garcia-Johnson (2000)
- ^{xxx} Gallagher (2003)
- ^{xxxi} INEGI (2002)
- ^{xxxii} Notably missing, with the exception of the adoption of ILO labor standards, is the protection of human rights by host governments as well as MNCs. See CAP (2002) and Zarsky (2002b).
- ^{xxxiii} WBCSD and UNIDO (2002) p. 3.
- ^{xxxiv} WBCSD and UNIDO (2002), p. 2.
- ^{xxxv} WBCSD and UNIDO (2002).
- ^{xxxvi} WBCSD and UNIDO (2002) p. 27
- ^{xxxvii} WBCSD and UNIDO (2002) p. 32
- ^{xxxviii} *Ibid.*
- ^{xxxix} BuildingGreen (1998)
- ^{xl} Lafarge (2002) p. 43
- ^{xli} WBCSD and UNIDO (2002), p. 38
- ^{xliv} Then the State Planning Commission.
- ^{xliv} Interview with Lyuba Zarsky, February 11, 2003.
- ^{xliv} See Lagos and Valesco (1999); summarized by Von Moltke (2002)
- ^{xliv} Frangialli (2002). Depending on the year, the volume of receipts from international tourism equals or outstrips the value of exports of oil and petroleum products, as well exports of cars and transport equipment.
- ^{xlvi} Frangialli (2002)
- ^{xlvi} Tour Operators Initiative, p.2

^{xlviii} An effort is also underway to develop and implement standards specifically for ecotourism . The World Tourism Organization and UNCTAD also recently launched the Sustainable Tourism-Eliminating Poverty (ST-EP) initiative (ST-EP 2003).

^{xlix} GRI (2002)

^l The full name is Compania Minera Disputada de las Condes.

^{li} Fluor sold El Indio in 1987 to the Alan Bond Group, who sold it in 1989 to the current owner, Canadian Lac Minerals Ltd.

^{lii} Lagos and Valesco (1999) p. 12

^{liii} Lagos and Valesco (1999)

^{liv} Von Moltke (2003)

^{lv} Mugabe (2002)

^{lvi} Overseas Development Institute (2002) p. 15

Appendix One

Does FDI Promote Economic Growth?

Study Author(s)	Year	Yes, No, Maybe	Key Variables
<i>Carkovic & Levine</i>	2002	No	Doesn't generate spillovers
<i>Lensink & Morrissey</i>	2001	Yes	Reduces costs of R&D and promotes innovation
<i>Loungani & Razin</i>	2001	Yes but...	Risks
<i>Hanson</i>	2001	No	Doesn't generate spillovers
<i>Willem te Velde</i>	2001	Maybe	Depends on industrial & macroeconomic policies
Lim	2001	Maybe	Depends on tax incentives, regulatory & legal impediments, macroeconomic instability
Marino	2000	Yes if...	Open trade and investment policies
Aitken & Harrison	1999	No	Reduces productivity of domestic firms; doesn't generate spillovers
<i>Mallampally & Sauvart</i>	1999	Maybe	Human resource development; information and other infrastructure
<i>Markussen & Venables</i>	1999	Yes	Raises productivity and exports of domestic firms; generates spillovers
Moran	1998	Maybe	Depends on policy variables controlled by host authorities
Borensztein et al	1998	Maybe	Depends on education level of workforce
de Melo	1999	Maybe	Depends on open-economy performance and domestic policy
Blomstrom & Kokko	1996	Maybe	Impacts depend on industry and host country policies
Graham	1995	Yes but ...	MNC's market power can generate negative impacts

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