Private Capital Flows:  
New and Additional Resources for Sustainable Development

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ABSTRACT
Private capital flows have the potential to take us far down the path to sustainable development—if we recognize and act upon the opportunities presented. This will only happen where public and private sectors work closely in partnership. The purpose of this paper is to help start this process. First, a roadmap to recent trends in private capital flows is presented: amounts, types, locations, sectors, and sources. Second, the environmental implications of the shift to private capital—good and bad—are explored. Finally, an action agenda is offered to the private and public actors whose joint efforts are critical for realizing the potential of private capital as an engine of sustainable development.

Agenda 21 calls for $125 billion per year in “new and additional financial resources” to go to developing countries to put them on a path to sustainable development (Chapter 33). The funds were to come on “grant or concessional terms” from developed countries. Private investment was only to be “encouraged.”

What has happened since Rio has been a surprise to almost everyone—more than $125 billion has gone from developed to developing countries every year, but from private, not public sources (see Figure 1 below). While Official Development Assistance (“ODA”) has declined from 0.34 percent of developed country GNP in 1992 to 0.27 percent in 1995 (Commission on Sustainable Development, 1997), private capital flows have grown to over 86 percent of the total capital flows to developing countries as of 1996 (World Bank 1997).

Private investment is not the same as ODA. It needs to earn a commercial return, often being paid by local sources. It goes when and where the markets drive it, rather than flowing in accord with government priorities. Relatively little information has been gathered on the environmental and social impacts of its recent increases in the developing world.

At the same time, private investment carries with it many benefits (CSD 1997). It can lead to increased local wealth. It is often
accompanied by new technologies and management techniques that can improve both productivity and environmental performance.

NATURE OF PRIVATE CAPITAL FLOWS TO DEVELOPING COUNTRIES: NOT MONOLITHIC

To many in the environmental community—as well as in much of the public sector—the “private sector” appears as one. It is not. The business world is made up of many different actors pursuing different versions of their commercial self interest. Understanding the major categories of differences is critical to capturing the opportunities presented by increased private capital flows.

AMOUNTS: SIX TIMES ODA IN 1996

As shown in Figure 1, while official assistance is stagnant and trending downward in real terms, private capital flows to developing countries have increased dramatically in the last five years.

The shift from foreign aid-based development to privately financed economic growth has occurred for a number of reasons. First, governments around the world have evolved toward a greater market orientation. Many governments are now working to privatize formerly public enterprises. In addition, most national governments now accept that liberalized trade and an openness to foreign investment are likely to produce better economic results than an internal focus with an economy based on import substitution.

![Figure 1](attachment:image.jpg)

**Figure 1** Agenda 21 Target and Capital Flows (1990-1996)

*The “private sector” is made up of many different actors pursuing different versions of their commercial self-interest. While official assistance is trending down in real terms, private capital flows to developing countries have increased dramatically in the last five years.*
TYPES: FDI, PORTFOLIO, AND DEBT

Discussion about global private capital flows often centers on “foreign direct investment.”

FDI — reflecting investments by foreign companies in overseas subsidiaries or joint ventures — is indeed an important dimension of private international finance and has been the largest portion of the capital flows to emerging markets over the past several years.

But, as shown in Figure 2 (next page), FDI is not the only way investment funds move internationally. To understand private capital flows, one also must consider portfolio equity investments and debt finance (commercial loans, bonds). FDI represented 45 percent of the total private capital flows to emerging markets in 1996 (World Bank 1997). Debt finance was an additional 33 percent of the total. Portfolio equity investments made up most of the balance or 19 percent of total international private investment going to the developing world.

ENVIRONMENTAL LINKAGES VARY ACROSS INVESTMENT TYPES

These different types of private international finance vary with regard to the depth and character of their links to environmental issues (Gentry et al. 1997). The most direct and significant linkages lie with FDI (and any associated commercial loans). FDI often goes into facilities (power stations, mines, manufacturing plants) that pose clear and immediate issues of pollution control, ecological protection, resource consumption and public health.

A more tenuous connection exists between environmental factors and portfolio investments in overseas companies’ shares. Nevertheless, environmental performance may affect—negatively or positively—the value of a portfolio equity investment. Pressure created for short-term profitability by foreign investors, for example, may create incentives to cut environmental corners. In addition, financial analysts and investors may not fully understand the links between eco-efficiency (Schmidheiny 1992) and improved competitiveness and financial performance (Schmidheiny and Zorraquin 1996; Gentry and Fernandez 1997). By failing to bid up the value of companies that are investing in environmental quality, they may create disincentives for attention to environmental performance. Finally, companies that sell in markets with eco-sensitive consumers or that have differentiated their products on the basis of “green” attributes may find that foreign investors, concerned about the value of their stake in the company, will be attentive to environmental performance.

These different types of private international finance vary with regard to the depth and character of their links to environmental issues. The most direct and significant linkages lie with FDI which often goes into facilities such as power stations, mines, and manufacturing plants that pose clear and immediate issues of pollution control, ecological protection, and public health.
Finally, the connection between debt and environmental performance varies widely. Commercial lending to private companies gives the bank a stake in the borrower’s financial success (or, more precisely, failure) and thus an incentive to consider environmental risks that is not dissimilar to that of a foreign direct investor. Other debt holders will be relatively more or less attentive to environmental performance depending on the nature of the instrument they hold (which affects how insulated they are from ups and downs in the company’s value), the centrality of environmental performance to the success of the enterprise in which they have invested, and other factors. Although governments are often among the worst polluters, investors in government-issued bonds are likely to be relatively uninterested in environmental concerns because the connection between governmental environmental performance and the ability to repay is remote (Gentry et al. 1997).

Given this diversity in foreign investment, some of the discussion that follows addresses private international finance (PIF) broadly. However, the major emphasis is on FDI. It represents the largest share of private capital flows currently going to emerging markets and the element of PIF that has the most direct links with the environment. Over time, however, more attention will need to be paid to portfolio flows of equity and debt as these represent much larger potential investment pools for improving environmental performance.

Investors may not fully understand the links between eco-efficiency and improved competitiveness and financial performance.
LOCATIONS: CONCENTRATED, BUT EXPANDING

It is important to start with the recognition that most of the flow of international capital is actually among OECD countries. Total world market capitalization is about 18 trillion dollars. Of this total, only 1.8 trillion is in developing countries and emerging markets (IFC 1996). As Figure 3 above demonstrates, nearly three-quarters of global FDI flows in recent years have gone to industrialized countries. Similar patterns exist for portfolio flows (Figure 4).

While North-to-North capital flows dwarf North-to-South flows, the developing world receives a significant and growing share of global flows. For example, in 1995, developing countries took in approximately 90 billion (38%) of the 240 billion dollar total of worldwide FDI (World Bank 1996).

While the total amount of private capital going to the developing world has increased dramatically, it too has been concentrated in a relatively small number of countries. Over the past seven years, the top twelve recipient countries have been: China, Mexico, Brazil, Malaysia, Indonesia, Thailand, Argentina, India, Russia, Turkey, Chile and Hungary. Of these, two are considered “low-income” countries (China and India). The other 10 are
“middle-income.” While small in absolute number, these countries include massive populations, vast stores of biodiversity and huge demands for energy.

The geographic concentration of PIF flows in general and FDI in particular is even more stark when examined by region, as shown in Figure 5 (next page). From 1990 to 1996, 60 percent of global FDI went to Asia (UNCTAD 1995). Latin America received 27 percent of the total. Another six percent went to the emerging democracies of Eastern and Central Europe. A mere six percent of the global FDI total went to Africa.

Within regions, FDI flows also tend to be quite focused. China received four of every 10 FDI dollars invested in Asia over the period from 1989 to 1994. This concentration of resources in China has grown over time, as Figure 6 (next page) demonstrates. Today, more than half of all FDI inflows to Asia go to China. In Latin America, foreign investors have devoted resources to a broader array of countries. Mexico and Argentina have been the largest recipients of foreign capital over the past several years. Argentina’s FDI inflows have been sharply down in the most recent period, however (Figure 7). This reflects a slowdown in the pace of privatization and perhaps the

Figure 4 World Portfolio Equity Investments by Destination, 1988-1994


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“tequila” effect that caused investors, burned by the Mexican peso crisis, to shun similar economies. The data from Central and Eastern Europe tells a similar story. Hungary has received the largest flow of FDI in recent years, but Hungary’s share has slipped in the most recent years as FDI flows have gone to a broader set of countries.

Such changes reflect an expansion of the number of developing
countries receiving international private investment. For example, the share of PIF going to the top 12 recipient countries mentioned above (expressed as a percentage of total PIF to the developing world), has declined from 87 percent in 1992 to 73 percent in 1996 (World Bank 1997). The Institute of International Finance reports that, over the past two years, the number of developing countries tapping the global capital markets increased from 25 to 56 (IIF 1997). Largely, this consists of expansion among middle-income countries, to which private capital flows nearly tripled between 1992 and 1996. While flows also nearly tripled to low income countries, they were much more concentrated in only two nation states — China and India.

While this expansion is good, the residual, geographic concentration of private capital flows raises serious questions about how certain areas—South Asia, Sub-Saharan Africa—should best position themselves to capture a greater proportion of PIF. In the near term at least, these regions lay the strongest claim to the foreign aid which is available, particularly where it can help improve their attractiveness to private investors.

Figure 7    FDI Inflows to Latin America by Country, 1988-1994

Source: Yale Center for Environmental Law and Policy, UNCTAD, World Investment Report 1995
SECTORS: MANUFACTURING AND SERVICES LEAD THE WAY

Aggregate data on which economic sectors and industries are receiving FDI is hard to come by. Nevertheless, some country-by-country data are available. In Brazil, for instance, a diverse set of industries are receiving infusions of foreign capital (Figure 8, below). In Mexico, a large portion of the FDI has gone into automobile factories, although a range of other sectors have also received substantial financial flows. In China, the largest portion of FDI has gone into industry. But significant amounts of foreign investment have also been devoted to the real estate market.

Interestingly, from an environmental point of view, the proportion of FDI going into traditional resource extraction activities is relatively small in many of the countries that are now receiving large amounts of international private capital as compared to investment in the manufacturing and services sectors.

Figure 8  FDI Stock Growth in Brazil by Sector, 1980-1993

Source: Yale Center for Environmental Law and Policy, Inter-American Development Bank, Institute for European-Latin American Relations
SOURCES: PRIMARILY DEVELOPED COUNTRIES,
GROWING SHARE FROM EMERGING MARKETS

The key investors also vary from region to region and country to country. In Brazil, for example, the European Union has traditionally been the largest source of FDI. The European Union still has the largest stock of foreign capital in Brazil. In recent years, however, the United States has surpassed the European Union as the dominant investor in Brazil. In Mexico, by contrast, both Japan and the European Union have grown in the share of FDI they contribute to the country. Despite the increase in FDI inflows from Europe, Japan, and other countries, the United States remains the dominant source of foreign capital for Mexico (Figure 9).

By far the largest source of FDI inflows to China is through Hong Kong. The United States, Japan, and Taiwan also represent significant shares of the foreign capital going into China (Figure 10, next page). The fact that more than two-thirds of the money invested in China comes from Taiwan and Hong Kong suggests that much of the foreign capital in China comes from overseas Chinese. Some observers speculate that a not inconsiderable fraction of this flow actually represents recycled funds generated by enterprises within China itself (World Bank 1996).
The source of FDI can affect the environmental performance of the investment. For example, multinational operating companies headquartered in North America or Western Europe have become extremely sensitive to environmental risks as a result of enforcement and liability experiences in their home jurisdictions. Many take the attitude that similar problems may befall their investments in emerging markets unless they evaluate and plan for them as part of the investment process. Hence, extensive environmental investigations and negotiation of contractual protections are increasingly the norm for these companies’ investments around the world.

At the other extreme, investors from countries which do not have a strong tradition of effective environmental protection programs tend to be less concerned about environmental risks beyond those already present in fact. So, if a recipient country has environmental requirements on the books, but never applies them in practice, foreign direct investors from these countries will take no special steps either. Such differences in the attitude of parent companies to environmental issues are playing themselves out in a number of areas such as the different approaches being taken by Asian and North American timbering companies to forestry operations in Brazil (Gentry et al. 1997).
ENVIRONMENTAL IMPACTS OF FOREIGN DIRECT INVESTMENT: NOT MONOLITHIC EITHER

Given that private capital flows show such diversity, it is not surprising that their environmental impacts vary widely as well—with both positive and negative effects. On the one hand, foreign investment generates economic growth and wealth. This prosperity makes bigger investments in environmental protection possible. But it also may lead to increased consumption of polluting goods such as automobiles. In addition, expanded industrial activity often leads to higher levels of emissions. In many circumstances, however, FDI-financed growth is accompanied by greater environmental commitments and better performance than domestically-financed economic expansion.

FDI flows, and private international finance more broadly, thus emerge as a dual-edged sword. On the one hand, the economic linkages implied by funding from the industrialized world for enterprises in the developing world create increased interdependence and the potential to link the economic fates of the North and the South. On the other hand, there will certainly be individual companies and sectors that will be “losers” from the economic restructuring that is likely to follow vastly expanded capital flows to the developing world. Those in the industrialized world whose economic position seems to have been worsened may well blame foreign direct investment and seek political intervention to protect the status quo. They may also cite lower environmental standards in developing countries as one of the reasons their enterprises became noncompetitive.

To the extent, moreover, that economic growth exacerbates pollution problems in the developing world in the short term, some environmental advocates will certainly blame private international finance. Of course, some of these pollution problems will be ameliorated as the developing world becomes more wealthy and can afford bigger investments in pollution prevention and control. In these circumstances, the challenge will be to see how quickly countries can be moved “over the hump” to the point where environmental harms are diminishing (Grossman and Krueger 1993).

This paper cannot do justice to the “mega-issue” of the long-term sustainability of economic development generally. It attempts, more narrowly, to review the environmental issues connected to FDI-driven economic growth.
TYPES OF FDI

The environmental character of industries that receive foreign investment and the environmental effect of private international finance more generally varies considerably depending on the type of investment and the goal of the investor (IDB/IRELA 1996). It is therefore useful to distinguish among three distinct types of FDI:

Market-Seeking FDI

Many foreign investors are seeking opportunities to sell in overseas markets. They are likely to be attracted by the potential for sales in the domestic markets of the countries in which they are investing. In this regard, markets that are large in size and growing will be most attractive—such as those in Southeast Asia and parts of South America.

Resource-Seeking FDI

Other investors’ overseas activities are aimed at access to critical resources that are not available in their own markets. In other cases, although the materials might be available at home, investors see the prospect of lower prices in setting up a facility abroad. Indeed, the prospect of obtaining cheap raw materials is one of the classic reasons for foreign investment. The prospect of obtaining low-cost skilled labor for manufacturing has been a driving force behind U.S. investment in Mexico, E.U. investment in Eastern Europe, and Japanese investment in countries such as Thailand, Malaysia, and the Philippines.

Production Platform-Seeking FDI

In still other cases, investors set up overseas facilities to serve specific export markets. Resources are devoted to setting up facilities that will provide a platform for production and sales in a regional market above and beyond the particular country sales that market-seeking PIF might have targeted. The emergence of Japanese auto factories in Britain and Mexico, providing platforms for sales in the European and North American markets are examples of this type of foreign investment.

COMPETITIVENESS AND ENVIRONMENTAL PROTECTION

One of the most important FDI dynamics is that of competition among jurisdictions for limited foreign funds. Competitiveness pressures arise within countries and between countries. In China, for example, the various provinces compete intensely for foreign
capital (Esty and Mendelsohn 1995). The effort to lure foreign investors often includes a tacit (or express) commitment to lax enforcement of environmental standards. Similarly, countries compete against each other to be attractive locales for foreign investors. In 1995, China saw a slowdown in its flow of foreign capital as investors perceived other Asian economies (Indonesia, Malaysia, the Philippines) as more hospitable hosts.

How competitiveness pressures play out in the realm of foreign investment also varies from industry to industry. In more “commodity”-like industries, where products are relatively undifferentiated and small cost differences can translate into large market share gains and losses (i.e., demand is relatively elastic), foreign investors can exert considerable pressure on recipient countries. In such industries, companies claim (quite correctly) that small differences in cost will dramatically affect their market position and profitability — and investment flows may be susceptible to influence based on the level of environmental standards. Thus, for example, a number of U.S.-based furniture makers have shifted operations out of California to Mexico, reportedly to take advantage of lower environmental costs (GAO 1990).

Where investors are competing to get into a market that is considered “hot,” (such as China), the local entrepreneurs who are seeking funds may bargain from a position of strength, playing off potential investors against each other. For example, in the competition to fund electricity generation projects in China, the demand for power plants is great but the eagerness of foreign investors to participate in China’s explosive economic growth is even greater. North American and European companies have therefore found themselves under pressure to eliminate environmental components from their proposed China power projects in order to cut costs and to win bids (Esty and Mendelsohn 1995).

Competitiveness pressures can also work in the opposite direction. In fact, in some markets, overseas investors push for higher environmental standards. Foreign investors in Costa Rican banana production have insisted upon environmental care, perceiving that their European customers want an environmentally-sound product (Gentry et al. 1997). A number of Asian lumber projects are similarly geared to the European market, where consumer sensitivity demands, in many cases, that the product meet at least minimum environmental conditions. Insistence on “sustainable forestry” and reasonable environmental performance in these circumstances may be driven by overseas buyers directly or market forces such as the Forest Stewardship Council’s timber labeling program that advises consumers about the environmental content of the products they are purchasing.
In other markets, competitiveness pressures translate into a desire to reduce waste and improve productivity, which often entails improved environmental performance (Schmidheiny 1992). Dupont, for example, has set a zero emissions goal for its worldwide operations, not as a result of regulatory pressures but rather to achieve maximal eco-efficiency.

POLLUTION HAVENS AND THE RACE TO THE BOTTOM

One of the most lively debates over the environmental consequences of foreign investment centers on concerns about “pollution havens” (Esty 1994; GATT 1992). Data on whether foreign investment goes to “dirty” or “clean” industries are sparse. As the charts presented in the first section of this paper suggest, foreign capital flows to a wide range of industries and companies in the developing world—some that are careful environmental stewards and others that are not.

Economists have traditionally found little empirical evidence that countries with low environmental standards attract dirty industries (Kalt 1988; Tobey 1990; Low & Yates 1992; Blazejczak 1993). Even in industries with high pollution control costs, companies often face significant deterrents to relocation including high fixed capital investments and the need to remain close to their markets (Grossman and Krueger 1993).

But there is some evidence that in industries with much higher than average pollution control costs, production may migrate overseas to areas with lower (and therefore cheaper) environmental requirements. Japan’s cement industry, for example, has all but vanished as Chinese producers have become the dominant suppliers to the Japanese market. Thus, it appears that one type of “resource-seeking” foreign investor will be attracted to the lower cost of operating in locales where environmental rules are lax.

TECHNOLOGY DIFFUSION

Another important dynamic unleashed by expanded FDI concerns technology diffusion. On the one hand, foreign investors often bring with them modern technologies that are environmental improvements over what is currently available in the country in which they are investing. Indeed, multinational enterprises frequently build state-of-the-art facilities with the latest (low-polluting) technologies. They also employ advanced environmental management systems and often conduct pollution prevention and control training programs. Thus, in many cases, FDI-based economic expansion offers the promise of significant environmental improvements.
The recognition that multinational enterprises often bring environmental benefits with them stands in sharp contrast with the traditional view of corporate titans as polluters who, if given the chance, will sell outdated technology to developing countries. There are, in fact, a few isolated examples where it appears that companies have dismantled outdated facilities in an industrialized country and moved them to a developing country (Bogg 1997). Anecdotal evidence suggests, furthermore, that certain kinds of enterprises, such as the town and village enterprises (TVEs) of rural China, are particularly likely to seek used (high-polluting) equipment from the industrialized world. The TVEs accept outdated equipment because they are undercapitalized and it is cheap.

The most egregious examples of this type of environmentally-deleterious technology arrangement appear, however, not to involve investors from OECD countries but rather those from Hong Kong, Singapore, or Taiwan (Esty and Mendelsohn 1995). In fact, most cases of “technology dumping” do not implicate FDI but rather involve simple sales of outdated equipment from overseas to companies in developing countries.

MULTINATIONAL ENTERPRISES AND ENVIRONMENTAL STANDARDS

The environmental impacts of FDI-funded facilities vary considerably. The environmental laws, regulations, and enforcement programs of the host country are often an important determinant of performance. In countries where standards or enforcement practices are relatively lax, domestic and some foreign investors may follow suit.

In many cases, however, multinational enterprises will still maintain quite high standards, consistent with the requirements imposed in their country of origin (Schmidheiny 1992). Multinational enterprises may find it advantageous to adhere to their home-based standards for several reasons. First, many companies find the efficiency of having a single set of management practices, pollution control technologies, and training programs geared to a common set of standards outweighs any cost advantage that might be obtained by scaling back on environmental investments at overseas facilities. Second, multinational enterprises often operate at a large scale and recognize that their visibility makes them an especially attractive target for local enforcement officials. Recognition of their high profile position leads many of these companies to be especially careful about their operations. Third, the prospect of liability for failing to meet appropriate standards often motivates better environmental performance.
performance than might be required by local circumstances. The
memory of the Bhopal disaster and the ensuing legal tangle that
Union Carbide suffered makes adherence to home-country environ-
mental requirements the policy of many multinational enterprises
(Schmidheiny and Gentry 1997).

Even greater problems may derive from the secondary effects of
FDI-funded facilities. For instance, some of the most serious envi-
ronmental harms arising in the Maquiladora zone along the U.S.-
Mexico border proved not to be a function of the multinational
enterprises operating there, but rather the rapid development of the
area without adequate environmental infrastructure (EPA/SEDUE
1992 at III-41-44). In many parts of the world, similar patterns of
new urban settlements with limited drinking water and waste dis-
posal infrastructure arising near factories supported by PIF can be
found. Are the ensuing environmental problems a function of
foreign investment or inadequate national policies? An argument
can be made either way.

In addition, while many multinational enterprises adhere to
reasonably sound environmental programs, their local suppliers and
service providers are less likely to do so. Few multinational compa-
nies track down what their waste haulers do with their refuse once it
leaves their facility—although a growing number are starting to ask
the question.

Finally, and as discussed above, where multinational investors
have not experienced strict environmental programs in their home
countries — or do not face substantial pressure from their export
customers — they are less likely to have extensive, internal environ-
mental programs in place.

FACTORS SHAPING THE ENVIRONMENTAL
PERFORMANCE OF FDI

What factors determine the environmental content of FDI flows?
Initial research into this question has found that where FDI im-
proves environmental performance it does so because the company
involved has concluded that it also means better business (Gentry et
al. 1997). The nature of these commercial benefits differs from
sector to sector and company to company. Steps taken to obtain one
type of benefit usually influence or are influenced by other types of
benefits as well.
Five major categories of commercial benefits which motivated corporate environmental improvements were identified in the Gentry et al. (1997) Latin American study:

**Improved access to export markets**
Improving trading prospects by better environmental performance was a theme that ran through many of the cases, particularly in the agriculture and manufacturing sectors. Some of the commercial benefits were driven by perceived consumer demands for environmentally responsible products. Other efforts were motivated by a desire not to be out of step as competitors improved their environmental performance. Finally, all of the commercial benefits were affected by the freer trade and the scrutiny this brought. The increased enforcement of environmental requirements in Mexico since the early 1990’s has its roots in the debate over the environmental impacts of the North American Free Trade Agreement (NAFTA) and European Union legislation on eco-labels has focused the attention of exporters on the environmental characteristics of their products.

**Increased productivity**
Pollution means waste. Waste often means higher costs. As the strategic implications of these simple statements are explored by companies operating in the industrialized world, their lessons are also brought to bear on their subsidiaries in emerging markets. Under the banner of “eco-efficiency,” foreign investors are looking to apply their new capital and management techniques to achieving a profitable balance between increased production efficiencies and pollution control costs. Of the cases studied, these effects were most noticeable in the privatization examples (Gentry 1996b). Given the inefficiencies in the government’s prior operations, many opportunities existed for improving the efficiency of raw material use while reducing environmental impacts.

**Maintenance of a “social license”**
**To operate and expand globally**
The multinational companies involved in many of the Latin American cases studied face a variety of pressures to be “good environmental actors.” These include: the desire to win government concessions in other countries; home country pressures not to

Some of the commercial benefits were driven by perceived consumer demands for environmentally responsible products. Other benefits were derived from the reduction of high cost polluting wastes. There was also a variety of pressures to be “good environmental actors.”
“export” pollution; and concerns over differential enforcement against international investors.

**Access to finance**

Investors in large facilities are increasingly aware of the need to consider environmental issues as part of their transaction review process (Gentry 1996a). This is particularly true for multinational operating companies. Experience in their home countries with major hidden costs (such as for the clean-up of contaminated sites), combined with the “social license” issues described above, mean that they conduct extensive, internal due diligence when undertaking an investment. Since much of the FDI is funded internally (from retained earnings), the companies themselves are often the primary financing parties that must be satisfied. Where larger investments are being made or political risks are high, government financing bodies may also be involved at the multilateral (World Bank), source country (U.S. Export-Import Bank) or recipient country (BNDES in Brazil) levels.

To meet their own political imperatives, an increasing number of these institutions are requiring that specified environmental standards be met — such as the “Green Protocol” applied by BNDES (Gentry et al. 1997; World Bank 1996a; ADB 1993; ExIm Bank 1995). Even when the companies seek commercial loans or new equity from external private sources, a minimum level of environmental due diligence is usually required. This may be as limited as ensuring that the facility is in compliance with the environmental laws of the country in which it is to operate. Given the relative absence of enforcement in many emerging markets, just having to answer the question is a powerful incentive to at least look at compliance. More extensive requirements may also apply, such as the disclosure of environmental liabilities required for the listing of new shares on the US stock exchange.

**Opportunities for “Environmental investments”**

Finally, some of the environmental improvements seen were a result of government-sponsored investments in environmental infrastructure. For example, privatization of the water and sewerage services in Buenos Aires led to rapid expansion of the water system, as well as substantial improvements in the quality of water supplied and the level of treatment of wastewater — all for rates lower than those previously charged by the government (Gentry et al. 1997).
Other countries are also expanding the level of private investment in water systems (Mody & Haarmeyer 1997), as well as other environmental infrastructure (such as waste treatment facilities).

BUILDING A BASE FOR POLICY: INTEGRATING INVESTMENT PROMOTION AND ENVIRONMENTAL IMPROVEMENT

The developing world needs both further private investment and further improvements in environmental performance. Both can be optimized by integrating environmental goals into investment attraction programs. This will require both environmental and development advocates to understand better the others’ motives, thus helping to identify areas of overlapping goals.

CHANGING INVESTOR DECISION MAKING: BUILDING ON COMMERCIAL INCENTIVES

Environmental advocates often ask, “Can we trust investors to do the right thing,” meaning acting altruistically to promote environmental protection. Not only is the answer no, but the wrong question is being asked. As described above, foreign direct investment is leading to significant improvements in environmental protection, not because it is the “right thing” to do, but because it is to the investors’ commercial advantage to do so.

The more useful question is, “Can we generally predict how private investors will act to further their commercial self-interest in ways which impact the environment?” While the details will vary among investors, the answer to this question is yes—lighting the way to steps policymakers can take to increase the environmental benefits associated with private capital flows still further (see below).

WILL INCREASED ATTENTION TO ENVIRONMENTAL FACTORS DRIVE INVESTORS AWAY?

Alternatively, development advocates will often ask, “If we pay more attention to environmental factors, won’t we drive investors away?” In fact, many development ministers base their opposition to increased attention to environmental issues on this belief.

Increasingly, the answer to this question is no. First, as the impacts of pollution on human health and productivity—particularly in the megacities of the developing world—become clearer, so too does the need to address economic and environmental issues together. Second, the studies described above suggest that greater attention to environmental factors will not drive investors away for a number of different reasons: (a) the choice of a location for invest-
ment is usually driven by factors other than environment, such as labor and market access considerations; (b) investors are more interested in having a clear and uniformly applied environmental regulatory framework so that they can predict their costs and returns, than they are in any particular level of environmental protection being required; and (c) poor, local environmental conditions can be a negative for foreign investors when deciding where to base some of their operations, such as regional headquarters.

The more important question then becomes, “How can we best optimize the achievement of our economic and environmental goals?” The answer is to increase the commercial advantages available to investors through improved environmental performance—building on the lessons from the work to date, as well as the changed roles for governments and other actors in the pursuit of environmental protection.

FITTING ENVIRONMENT INTO THE CHANGED ROLES FOR GOVERNMENT: ENABLERS AND OVERSEERS OF MARKET ACTIVITY

The shrinking of the state and the expansion of the private sector has changed the role of government in many developing countries. Instead of being the direct providers of goods and services, governments are now the enablers and overseers of private market activity.

This changed role has two major parts: establishing market frameworks and addressing market failures. Market frameworks include the basic property rights and economic conditions necessary to private investors and others to function. Market failures range from monopoly pricing to environmental externalities—“free” use of the public air and water for dumping or other harmful activities without internalizing the cost to society.

In order to optimize the achievement of economic and environmental goals, they must advance hand in hand. Governments need to build mechanisms for internalizing environmental costs into market frameworks, so that they encourage innovation and more efficient resource use, rather than just imposing costs on industries. Targets for such action can be taken from the cases described above: increasing access to export markets; improving productivity; maintaining a social license to operate; obtaining finance; and capturing environmental investment opportunities.

AN ACTION AGENDA: WORKING TOGETHER

Effectively building on these targets will require action by many different parties, including the following:
CUSTOMERS: BUILDING DEMAND

With the dominance of the export-led model of economic growth for developing countries, the attitudes of export customers are critical. While “green consumerism” is still confined to a relatively few areas of the world (such as northern and western Europe and parts of North America), even this relatively small demand is having substantial effects on environmental awareness. For example, the International Standard Organization’s (ISO) environmental management standard (ISO 14000) is being rapidly adopted by Japanese electronics and other Asian companies for fear of losing access to lucrative export markets.

For consumers to be an even more powerful force for environmental improvements, they need both information and price signals. The information needs are both general (why it is important to look for “environmentally responsible” products) and specific (why is one product more “environmentally responsible” than another). They can be met through action by NGOs, businesses, and governments. The price signals needed are those closing the gap between traditionally higher priced “green products” and their more damaging substitutes—an area for government action to promote internalization of environmental costs, as well as for businesses and NGOs to develop such products for sale.

FINANCIERS: SEEKING INFORMATION AND REFLECTING IT IN INVESTMENTS

Somewhat like consumers, there is great potential for the private financial community (banks, institutional investors) to pursue its self-interest in a manner which improves environmental performance. One step is to ask clients for information on material environmental issues. Just asking about compliance and liability risks, or opportunities for increased revenues stemming from environmental considerations will go a long way to promoting improved environmental performance.

Acting on material environmental factors is another. Clearly, environmental issues can have a major impact—positive or negative—on a company’s bottom line. Liabilities for accidents or spills can be huge. New products can be driven by environmental markets. Improved resource productivity and decreased emissions can be an indicator of quality management.

Were more private financiers to investigate and act on financially significant environmental factors, substantial additional pressure would be brought to bear on improving environmental performance. Ultimately, it is for the companies who view their environ-
ment of programs as a competitive advantage to make this showing to the private financial community (Gentry and Fernandez 1997).

NGOs: UNDERSTANDING, PRESSURING, AND SOLVING

While many NGOs understand how governments work and how businesses can be bad for the environment, fewer have yet to understand—or believe—why it can be to a company’s commercial advantage to improve environmental performance. As a result, many NGOs are stuck behind the “trust barrier” described above, rather than able to predict and influence how companies will act to further their commercial advantage.

Understanding business decision-making enables NGOs to act in one of two major ways. First, they can use that knowledge to increase the pressure for improved environmental performance still further through indirect (aimed at governments, consumers, financial sources) and direct (through shareholders rights and public protests) action. Second, they can identify the areas in which they share common goals with foreign direct investors—such as the provision of local environmental training or infrastructure—and on which they can work together.

In thinking about the role of environmental NGOs, it is important to remember that they are not monolithic either. Many organizations—particularly in industrialized countries—that have played critical roles pressuring governments and businesses to clean up their act on the environment, have also become sophisticated advocates of new corporate management techniques. Such NGOs are already partners with business in improving environmental performance. However, not all NGOs have or should choose this collaborative role. These NGOs will continue to be most effective by pressuring for change from outside. In addition, it needs to be recognized that environmental NGOs in developing countries will continue to play different roles than their industrialized country counterparts because of the differing political and cultural contexts in which they operate.

MULTINATIONAL OPERATING COMPANIES: INVESTING, INNOVATING, AND COOPERATING

The most useful action international foreign direct investors can take is to continue to invest in the emerging markets of the developing world. Doing so can not only contribute to local economic growth, but can also improve environmental performance in the ways described above.
Beyond further investment, foreign direct investors should take two further steps to link financial and environmental performance. First, they should continue to innovate in the design and use of more efficient and environmentally responsible products and operations. Whether as “cleaner technologies” or “sustainable products,” multinational companies are among those best positioned to lead the way in these developments. Second, they should cooperate with governmental, business, NGO, and other organizations to put in place the environmental frameworks necessary to support existing environmental management systems. Whether these efforts take the form of pressure on governments to adopt and implement clear and consistent environmental requirements, or joint initiatives on environmental infrastructure and training, the result will be increased environmental awareness and pressure for continued improvements.

GOVERNMENTS: BUILDING MARKETS, FACILITATING INFORMATION, SUPPORTING DEALS

The greatest challenges, however, lie within recipient country governments—overcoming the traditional view that economic growth and improved environmental performance are incompatible. Even though evidence is mounting that they can—and must—go hand in hand, the traditional hesitation to go beyond having nice looking requirements on the books, but never applying them in practice continues to be the norm. Only with greater recognition by recipient country Ministries of Finance, Development, or Economy that integration of economic and environmental goals optimizes social welfare will the major roadblock to substantial further progress be overcome.

Once that challenge is met, governments have a variety of options for building on existing commercial pressures to increase still further the environmental benefits of private capital flows. They involve building markets, providing information and supporting deals.

First, governments by making environmental factors financially significant build markets for further improvements in environmental performance. Such steps should be taken in both recipient and source countries. While the emphasis must be on selecting locally effective tools from the wide range of policy options available, examples building on the commercial advantages described above include:

- Expanding access to export markets: promote “green” exports from developing countries and their purchase in industrial...
ized countries; negotiate, in a transparent and inclusive manner, harmonized environmental (product or process) standards as part of regional trade agreements;

• **Improving competitiveness**: reduce subsidies or impose fees for energy and water use in order to reflect true costs;

• **Maintaining a social license to operate globally**: enforce existing environmental requirements; adopt performance-based standards for emissions, leaving flexibility in how they are met; work with companies to provide local environmental training and infrastructure (such as through the UNDP program on public private partnerships);

• **Obtaining finance**: condition national and bilateral development assistance on meeting standards for environmental reviews and performance;

• **Capturing environmental investment opportunities**: promote investments in environmental infrastructure (such as water or waste treatment facilities) and expand incentives for industrialized country investors to make them (such as through joint implementation type programs).

Second, while private investors ultimately will rely on the information they generate, governments can help facilitate the flow of information linking environmental and financial performance. This is particularly true for overcoming the gaps in financial and environmental information that face many international investors. Governments should set clear frameworks for disclosure of financial information in local stock markets and bank regulatory systems, including material environmental factors. They can support the development of measurement and reporting systems demonstrating the relationship between financial and environmental performance. Finally, they are well placed to help provide basic information on the environmental requirements and opportunities facing private investors.

Third, governments should seek to optimize economic and environmental goals by building environmental considerations into the deals they sponsor or support. For example, extensive environmental reviews and negotiations were built into the privatization of the Mexican steel industry—in order to achieve a higher sale price (Gentry et al. 1997). Involving private parties in the design of infra-
structure services—and not just in building to the specifications of government planners—will increase efficiency gains. Broader sectoral investment promotion programs such as those for agriculture or manufacturing should include environmental infrastructure or reflect the results of environmental reviews in order to anticipate and address environmental issues up front—rather than making expensive adjustments further down the road.

CONCLUSIONS

Private investment is and is likely to remain the major source of “new and additional” resources for developing countries. Because it is to their commercial advantage, an increasing number of international private investors have begun to build environmental improvements into their international operations.

More can be done—particularly if recipient country governments understand and build upon these existing commercial advantages. Integrating environmental factors into investment support programs does not drive investors away—except in isolated cases. Rather, an integrated approach offers great potential for optimizing the achievement of a country’s economic and environmental goals.

The action agenda described above is aimed at building on these existing incentives in an incremental fashion. Whether it will be sufficient to achieve a sustainable future remains to be seen—for example, more fundamental changes in production patterns may be necessary for “sustainable agriculture.” Even if more fundamental shifts are necessary, they will themselves be most “sustainable” if they are brought about through incentives that reinforce the factors already motivating private investors.

Improving economic and environmental performance—achieving a sustainable world—will require consideration of social issues as well. Integrating the goals of the environmental and human development communities continues to be a difficult—but critical—task. The ultimate objective is to do so while increasing the levels of private investment in the developing world still further.

The explosion of private capital flows to the developing world presents a tremendous opportunity to make real progress toward sustainable development. Governments need to understand the implications and potential of the shift away from foreign aid. They then need to act by building on the commercial incentives already present. Their clear target should be to harness the power of private investment to the achievement of a sustainable future.
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