

# Foreign Direct Investment and the Environment:

From Pollution Havens to Sustainable Development

A WWF-UK Report by Nick Mabey and Richard McNally August 1999

### **Executive Summary**

The past decade has witnessed a sea change in foreign investment policy as governments, particularly in developing and emerging nations, have removed many restrictions on financial flows in and out of their countries. The greater mobility of capital, coupled with extensive privatisation and greater globalisation in production, has resulted in a five-fold rise in private investment flows since 1990.

Foreign Direct Investment (FDI) - investment by foreign companies in overseas subsidiaries or joint ventures - has a traditional reliance on natural resource use and extraction, particularly agriculture, mineral and fuel production. Though this balance has shifted in recent years, the poorest countries still receive a disproportionate amount of investment flows into their natural resource sectors.

The past decade has also seen all trends of environmental degradation accelerate – for example, greenhouse gas emissions, deforestation, loss of biodiversity. Such patterns of environmental destruction have been driven by increased economic activity, of which FDI has become an increasingly significant contributor. Flows of natural resource based commodities and investment are predicted to rise faster than economic output over the next twenty years. It is therefore critical to understand the environmental effects of private investment and identify appropriate responses.

#### Current debates on FDI and the Environment

Currently, much of the debate on FDI and the environment centres around the 'pollution havens' hypothesis. This basically states that companies will move their operations to less developed countries in order to take advantage of less stringent environmental regulations. In addition, all countries may purposely undervalue their environment in order to attract new investment. Either way this leads to excessive (non-optimal) levels of pollution and environmental degradation.

Generally, statistical studies show that this effect cannot be clearly identified at the level of aggregate investment flows. However, this report provides ample empirical evidence that resource and pollution intensive industries do have a locational preference for, and an influence in creating, areas of low environmental standards.

This paper also argues that the pollution havens debate has produced an excessive focus on site-specific environmental impacts and emissions a few industrial pollutants. This has deflected discussion away from macro-level issues such as: the scale of economic activity relative to regulatory capacity and environmental limits; broad development/environment linkages; and the complex policy and institutional failures linked to competition for FDI both between and inside regional trading areas.

As a result of this skewed debate, FDI is often glibly characterised as environmentally beneficial. Encouraging negotiators of economic agreements to argue against the need to introduce specific environmental clauses into international investor protection and liberalisation treaties. However, the economic growth produced by FDI is often

fuelled at the expense of the natural and social environment, and the impact of FDI on host communities and countries is often mixed in environmentally sensitive sectors.

The purpose of this report is to move beyond the pollution havens discussion, and examine the broad interactions between FDI and the environment. This is done by drawing on a range of empirical evidence on the impact of FDI, and examining it inside a comprehensive economic and policy model of sustainability. This analysis motivates proposals for a range of regulatory and market instruments that could help FDI promote the transition to sustainability. The main conclusions of the report are set out below in two sections; the first summarising the analytical conclusions and the second outlining WWF=s policy proposals:

### Part I. Analysis

#### Sustainable resource use is as important as local environmental impacts of FDI

- X Economic theories of sustainability imply that economic growth and the proliferation of FDI will exacerbate existing unsustainable patterns of development unless matched by more efficient use of natural resources. FDI must operates inside absolute sustainability constraints based on the need to preserve vital ecosystem functions.
- X Given the inherent uncertainties and possible irreversibilities in making decisions about the environment, a precautionary approach to setting sustainability limits is necessary. Without limits in place even economically efficient use of resources is likely result in over-exploitation and overpollution of the environment.
- When increased flows of trade and the investment exacerbate the existing inefficient use of scarce natural resources, economic benefits will be coupled with environmental and social costs; particularly to the most disadvantaged. Therefore the long term welfare implications of increased investment will be mixed in many environmentally sensitive sectors.
- X The transition to sustainability requires policy changes that often go against immediate economic incentives for higher resource exploitation and pollution. Institutional responses will always lag behind economic pressures, especially in highly competitive global markets. As the source of many of these economic pressures, developed countries have a responsibility to: reduce unsustainable consumption levels; provide resources to support environmental governance in developing countries; and to ensure their companies operate responsibly abroad.

#### The sequencing of effective regulation, empowerment and liberalisation is vital

X The irreversibility of much environmental damage means that over-hasty liberalisation can result in long-run negative impacts if regulation in the host country cannot to respond to increased economic pressures. Therefore, the

- sequencing of building regulatory capacity and liberalisation is vital, and a precautionary approach taken in sensitive areas. Where host country regulatory capacity is lacking, developed countries have a responsibility to help improve this in advance of any negotiations to open up new sectors to their investors.
- X International financial institutions and export promotion agencies from source countries tend to operate in countries where governance is weak. They have a responsibility to review the investment they support for its environmental impacts, and reject or amend projects if necessary. The structure of current investment subsidies encourages capital intensive and damaging investment, and should be reformed to help promote more sustainable industries.
- X Poor and marginalised disproportionately suffer detrimental environmental impacts of investment, especially when there is poor host country governance. NGO's and other civil society groups, from both home and host countries, can play a vital role in articulating the interests of these groups. This requires greater transparency in public and private processes surrounding investment decisions, and increased access to justice both nationally and internationally.

#### Competition for FDI is clearly depressing environmental standards

- X The pollution havens effect must not be conveniently aggregated away as an insignificant determinant of total investment flows. There is clear evidence that, even though full environmental costs are not internalised, certain resource and pollution intensive industries have a locational preference for areas of low environmental standards. There is also evidence that host countries do not enforce domestic standards in order to attract and retain investors, and that international investors have often encouraged such behaviour.
- X In some sectors particularly areas of high technology there is support for the >pollution halos= hypothesis; where FDI raises environmental standards. However, for most industries factors such as age, size and community pressure are more important in raising standards than foreign involvement.
- X The traditional pollution havens debate must be expanded to include more complex factors determining investment location decisions such as choices between countries in the same trading region, and between different locations in the same country. The effect of FDI on environmental regulation must take into account both the competition for locating investment, and the credibility of threats to disinvest once established.
- X The most significant effect of policy competition between, and within, countries may not be an overt "race to the bottom", but the chilling effect on regulation and its enforcement. Currently, no country effectively internalises the environmental costs of economic activity. There are many examples of where competition for FDI has been cited as a reason for not introducing new environmental regulations or taxes. Dealing with this requires countries to coordinate together at different institutional levels in order to ensure environmental standards can be raised.

#### Part II. Solutions

#### Increased business responsibility is necessary for the transition to sustainability

- X Business and industry must take greater responsibility for their operations abroad, because increasing host country capacity to regulate or constructing international minimum standards is a long-run process. In the meantime individual companies must go beyond a position of basic "corporate responsibility", and become "active corporate citizens" who help raise environmental standards inside the markets and communities they operate in.
- X Ecolabelling is a powerful tool to promote more sustainable production practices in some consumer-sensitive natural resource sectors; such as forestry, fishing and tourism. However, binding minimum standards of environmental management and conduct across all sectors are also necessary to push standards upwards, and support high quality eco-labelling schemes.

#### International economic agreements must not undermine environmental laws

- X Official environmental assessments of the draft OECD Multilateral Agreement on Investment (MAI) showed how international investment rules can conflict with both multilateral environmental agreements (MEAs) and national environmental laws. Any future international rules on investor protection must avoid such conflicts, and respect recognised principles of environmental law; such as the polluter-pays-principle and precautionary principle.
- X The draft OECD-MAI undermined broader efforts to achieve sustainability by outlawing mandatory performance requirements on technology transfer, joint ownership and local content. Even though research shows these instruments can be powerful drivers for increasing the positive impact of FDI on the environmental performance of domestic businesses.
- X The draft OECD-MAI also conflicted with efforts to strengthen local control of resources, and reduced the ability of governments to gain a fair share of benefits from natural resource use. Any future investment agreements must support national and community sovereignty over natural resources, and give sufficient flexibility to national policy makers to maximise the benefits from sustainably developing their resource base.

#### New international regulation is needed to promote sustainable investment flows

While voluntary, consumer or financial-sector driven initiatives can do much to improve company behaviour, a mandatory minimum floor to environmental conduct must be introduced to prevent the best firms being undermined by unscrupulous competitors. These international rules should focus on environmental management processes, transparency and consultation. Such regulation, combined with voluntary approaches rewarding continuous improvement, will facilitate a "race to the top" in environmental standards.

- X More detailed regulation is needed in environmentally important nonconsumer commodities. For example: minerals, fossil fuels, basic agricultural commodities and bulk chemicals. These industries have low profit margins and little opportunity to differentiate their products based on environmental performance. Therefore, high standards of sectoral regulation - perhaps implemented through broad International Commodity Agreements - are necessary to supplement international rules for environmental management.
- X To support environmental best-practice by industry, governments must collaborate to eliminate costly and inefficient competition based on lowering or freezing environmental standards. This requires an overarching international framework for investment linking: agreeing accepted principles for environmental regulation of FDI, including the limits of national treatment; limitations on fiscal incentives for FDI; and increased international assistance in building and maintaining regulatory capacity.
- X However, top-down regulation by government is not sufficient to achieve sustainable and responsible investment. The role of local communities and civil society in both home and host countries must be strengthened to deter irresponsible corporate behaviour. This requires international support for: investor transparency and reporting of environmental impacts; capacity building of civil society groups; and citizen=s access to justice against abuses by multinationals in the firm=s home country.
- X Environmental sustainability can only be achieved inside a broader system of economic governance that respects and enhances basic human and workers=rights, and promotes good market governance. Priority should be placed on negotiating and strengthening international instruments to: promote fair competition; eliminate restrictive business practices; reduce bribery and corruption; and enforce core labour standards.

WWF's mission is to preserve biodiversity, reduce pollution and ensure the sustainable use of natural resources. The last decade has seen a rapid proliferation in FDI and related trade flows, but also unprecedented environmental destruction and depletion.

WWF believes international investment can bring substantial benefits, especially to developing countries, in terms of the transfer of resources (financial, technical and human). However, positive outcomes will only occur inside a international regulatory framework that promotes sustainable development and ensures environmental limits are preserved.

Earth Summit II in 2002, and the meetings of the UN General Assembly and Commission for Sustainable Development on trade and investment preceding it, present an opportunity to systematically examine the relationship between globalisation and sustainable development. This process provides an

appropriate, legitimate and existing forum for framework for regulating international investment.	negotiations	on a	broad

WWF believes that the most urgent regulatory issues surrounding FDI are the provision of a high standard rules for international corporate governance and behaviour, the prevention of harmful competition for FDI, and mechanisms for ensuring FDI actively promotes sustainable development.

Any negotiations on investment protection and liberalisation rules, such as those proposed inside the WTO, should not proceed until this broader framework of principles and regulation has been determined.

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#### 1: Introduction

The past two decades have witnessed a sea change in economic policy, as the majority of developing and emerging market economies have moved from relatively closed state-led growth strategies, to more open market orientated regimes. As a result, trade barriers have been dismantled, regional trading blocs established, and there has been a proliferation in private investment flows. The amount of Foreign Direct Investment (FDI) has increased from 150 billion U.S dollars in 1991, to over 350 billion U.S. dollars in 1998. FDI in overseas subsidiaries or joint ventures is distinguished from more volatile capital flows, such as portfolio investment and foreign bank lending. FDI has become an increasingly important ingredient of economic growth, and the sales of foreign affiliates of multinational corporations (MNCs) currently exceed the value of world trade in goods and services.

The surge in FDI flows has been particularly rapid in developing countries' which now recieve over 40 per cent of global FDI (Figure 1). However, these trends conceal distinct regional variations and concentrations. Unsurprisingly, investment has been concentrated in those industrialising economies where expected rates of return are higher, and perceived risks to investors lower. More than 70 per cent of FDI flows to ten recipients, all of which are middle-income countries<sup>1</sup>. China alone receives 40 per cent of these flows, attracting investors with a more open trading regime and rapidly growing market opportunities. On the other hand low-income countries accounted for a mere 6.5 per cent<sup>2</sup>. With a drop in official sources of financing global development finance is becoming increasingly scarce. Net official finance to Sub-Saharan Africa has fallen by about \$5 billion since 1990, a real decline of more than 50 percent<sup>3</sup>.

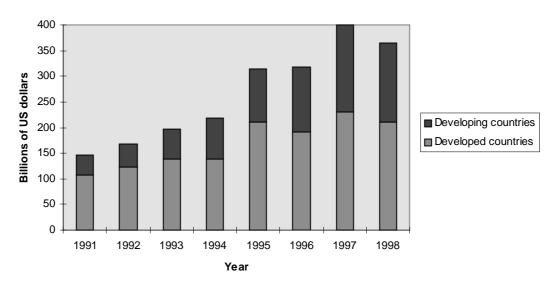


Figure 1: GLOBAL FDI FLOWS AND THE SHARE OF DEVELOPING COUNTRIES

Source: World Bank (1999a)

The growing importance of FDI as an engine for economic growth has caused considerable debate concerning the effects of FDI on the environment. Particularly as

FDI often goes directly into resource extraction, infrastructure and manufacturing operations. The relative importance of these sectors is often underestimated because in aggregate they seem to be a declining proportion of FDI flows; though they remain largest single category of FDI flowing into Africa<sup>4</sup> and the transition economies of Eastern Europe. In addition, most FDI in these sectors involves new "greenfield" investments that currently account for less than one-fifth of total FDI flows, the remainder being cross-border mergers and acquisitions. Therefore, environmentally sensitive industries still make up a high proportion of all FDI in new facilities.

WWF has a mission to preserve biodiversity, reduce pollution and ensure the sustainable use of natural resources. Drawing on existing evidence and WWF's own experience and research, this report attempts to advance the discussion of FDI and the environment, and presents some practical solutions to the problems identified.

WWF has also produced work looking at the more general impacts of liberalisation on economic growth, poverty and the environment<sup>5</sup>. However, this report takes a slightly narrower approach and primarily concentrates on the environmental impacts of FDI and the resulting implications for development and poverty reduction.

#### 1.1 Structure of the Report

This report is split into two main parts. The first examines the complex interaction between investment and the environment and attempts to draw some policy relevant conclusions from the - often conflicting - evidence. The second part outlines a suite of solutions to ensure foreign investment promotes, rather than undermines, environmentally sustainable development.

In the past, the debate over FDI and the environment has been dominated by discussions of "the pollution havens hypothesis", and so focused on the micro-impacts of firms' operations. The impact of FDI on the sustainability of countries' growth patterns and other macro-level issues have been largely ignored. However, as the world economy - fuelled by investment and trade - has been growing, the state of the global environment has been rapidly deteriorating. The review of the Rio agreements held in 1997 concluded that all unsustainable trends - for example, greenhouse gas emissions, deforestation, and loss of biodiversity - were worsening at a faster rate<sup>6</sup>.

The report therefore begins by examining the macro-environmental impact of FDI. Most policy makers in this area seem to adopt a "pollute now, clean up later" strategy, ignoring the significant irreversible costs which result from such an approach. For example, when FDI flows between countries at different stages of development and regulation, the scale or intensity of production of foreign firms (which are typically larger than domestic firms) may cause irreversible environmental and social damage by overwhelming insufficient government controls. Unfortunately, there seems to have been little empirical research in this area compared to the focus on pollution havens; apart from case studies on a few high profile industries such as mining.

The existence of permanent "transitional" impacts of liberalising investment highlights the need for the investor's home country to take more responsibility for the actions of their companies. Developed countries should also transfer greater resources

and expertise to developing countries in order to improve their environmental governance at the same time as promoting economic liberalisation.

The literature surrounding the "pollution havens" hypothesis is then examined, revealing the complexity of the debate around the micro-impacts of FDI. While difficult to clearly identify (and subject to significant methodological flaws) at the aggregate level, case studies at the sectoral and company level tend to support the claim that natural resource based and pollution intensive industries will take environmental costs into account when making locational decisions. Evidence also shows that a significant impact of economic liberalisation is to inhibit the raising of standards to socially optimal levels, leaving them "stuck-in-the-mud" and raising environmental damage above sustainable levels.

As competition for FDI has undermined the willingness of governments to raise environmental standards, research shows that it has been left to consumer, shareholder and community pressure to improve corporate behaviour. There is little evidence that FDI operates to higher environmental standards than domestic firms when these pressures are absent; unless environmental quality is already a core component of a firm's economic competitiveness or identity.

The bulk of investment flowing to many low-income countries is channelled into natural resource related sectors such as mining, commodity production and tourism. Many countries are dependent on revenues from these sectors for hard currency earnings, and so the economic and environmental performance of FDI will be a critical factor in their development. However, the broader benefits from FDI in these sectors seem to be smaller than similar investments in manufacturing or services, and external environmental and social costs tend to be higher. This implies that greater scrutiny of investment policy, incentives and regulation in these sectors is needed.

The remainder of the paper analyses in a comprehensive suite of solutions to the problems identified. The quality of FDI cannot be improved by one "magic bullet" solution, but requires a variety of measures to improve the accountability and transparency of investor behaviour, and to support improved governance in host countries. This requires a mixture of voluntary and regulatory approaches in both home and host countries, and a higher degree of international collaboration. However, the most important factor is implement achievable solutions in the short to medium term, so that regulation can begin to keep pace with the expansion of economic flows.

Improved voluntary codes of conduct must be supported by binding international standards which punish unscrupulous investors. More detailed agreements on minimum standards may be needed in environmentally sensitive sectors such as mining. International agreement is needed to increase the ability of civil society, in both home and host countries, to shape and monitor the use of investment. Finally, following the failed OECD-MAI negotiations a new approach is needed to international economic regulation. This must ensure that host governments have the capacity, tools and policy space to make best use of incoming investment; manage their natural resources sustainably; and reduce wasteful competition for FDI.

Moreover, a key change has to occur in the debate over FDI and the environment. In the past economic policy makers have taken a very defensive position, challenging environmentalists to prove the negative impacts of FDI. Such evidence is now available, and the focus of discussion must shift to what mechanisms are needed to ensure that the integration of the global economy through FDI helps improve the environment and actively promotes sustainable development.

Current debates on FDI are dominated by Governments and investors pursuing narrow economic interests at the expense of environmental and social welfare. This competition encourages economic development that is not matched by necessary regulation, and investors who do not exercise adequate responsibility. Such under-regulation of the globalisation process fatally undermines progress towards sustainable development.

## Part I: Analysis

# 2: FDI and Sustainable Development: Scale, Transition and Distribution

The debate on FDI and its impact on the environment has focused on the micro-level, particularly how environmental regulation affects a firm's decision to locate (the "pollution havens hypothesis"). However, less attention has been paid to macro-level issues of how increased economic activity, driven by liberalised investment and trade, impacts on the environment and a country's prospects for sustainable development.

Typically official statements on the environmental impacts of FDI (and trade liberalisation) are characterised by three main arguments<sup>7</sup>:

- Countries have environmental comparative advantages: each country will set its regulations based on domestic preferences and resources. Countries with low incomes, the ability to tolerate pollution or extensive resources should set standards low and attract pollution intensive and resource seeking FDI.
- FDI increases the demand for environmental quality: if host country demand for environmental quality increases as incomes rise, then eventually environmental damage will begin to fall (the environmental Kuznets curve argument). As FDI increases incomes it will contribute to this increased environmental demand.
- **FDI** is cleaner than domestic investment: FDI involves new technologies that are cleaner than domestic producers, therefore encouraging FDI will improve the environmental performance of a country.

Each of these arguments is examined in detail below. However, none of them address the over-riding issue of whether FDI is likely to encourage a country to develop sustainably. That is, in a way that avoids irreversible environmental damage and preserves the options of future generations to develop. This cannot be achieved merely by a general increase in environmental efficiency, but requires explicit consideration of the scale of environmental damaging activities relative to a country's – and the planet's - ecological capacity.

#### 2.1 Trends in Economic, Social and Environmental development

Economic theory shows that, in the absence of market failures, the expansion of investment and trade will improve aggregate global welfare. Trade intensification raises the welfare of all nations concerned, due to a more efficient exploitation of comparative advantages in each country; which are traditionally determined by the distribution of factors of production (land, labour, capital). Though modern trade theory also stresses the importance of other factors, such as: economies of scale, first-

mover advantages, consumer choice and public investment in human and infrastructure capital. Modern trade theory predicts productive efficiencies from trade, but is more ambiguous about whether all countries will gain, especially when movement of capital and technology are allowed. With the lowering of barriers international trade has grown rapidly; in 1995 it was worth over US\$6,100 billion<sup>8</sup>.

Countries gain from increased foreign investment by increasing their total productive capacity. FDI also potentially boosts the growth of a country by "crowding in" other investments with an overall increase in total (domestic + foreign) investment, as well as creating positive "spillover effects" from the transfer of technology, knowledge and skills into domestic firms. It can also stimulate economic growth through spurring competition, innovation and a country's export performance.

Private capital flows have become an increasingly important ingredient of economic growth. Foreign Direct Investment (FDI) - the major contributor to such flows - has risen sharply in the 1990s. The sales of foreign affiliates of multinational corporations (MNCs) exceeds the value of world trade in goods and services; one-third of all trade occurs intra-MNCs, another third between MNCs and non-affiliates<sup>9</sup>.

Liberalisation has certainly contributed to aggregate economic growth; world per capita output has grown from US\$614 to US\$4,908 in the past thirty years<sup>10</sup>. However, these economic trends mask accompanying social and environmental problems. Global poverty and inequality continues to rise: the number of people in absolute poverty has grown to 1.3 billion (though the proportion in poverty has fallen). Many of the less developed countries, especially in Sub-Saharan Africa, have become locked into economic stagnation fuelled by falling commodity prices, conflict and debt. Between 1960 and 1994 the ratio of the income of the richest 20 percent to the poorest 20 percent increased from 30:1 to 78:1<sup>11</sup>. Economic expansion based on neo-liberal economic policies has mainly benefited the richest groups in society.

Over the past 25 years environment degradation has accelerated: WWF estimates that global freshwater ecosystems have declined by 50 percent, marine ecosystems have deteriorated by 30 percent and forest cover reduced by 10 percent - much more in tropical areas<sup>12</sup>. Over this same period global energy use has increased by over 70 percent, bringing with it increased greenhouse gas emissions and changing weather patterns. The build-up of environmental problems has led to an unprecedented increase in environmental disasters: natural disasters accounted for 58% of total refugee flows in 1999 - including those caused by conflict<sup>13</sup>.

FDI is becoming increasingly important for economic growth. There is a clear expectation among both donor countries and recipients that private capital will be the main driver of development in the future <sup>14</sup>. However, increasing reliance on foreign investment does have significant implications for sustainable development, and the rules and regulations governing investment flows.

Growth stimulated by liberalisation can exacerbate existing market and policy failures with respect to the environment. Current trends in pollution and resource use are not sustainable, and are notmoving towards a more sustainable path. FDI is undeniably a

main driver of these negative trends, the question is whether policies aimed at FDI should be a component of moving the world onto a more sustainable growth path.

As the world economy has been growing - fuelled by investment and trade - the global environment has been rapidly deteriorating. Debates on how FDI and the environment interact have focused on the narrow impact of operations, while distracting attention away from the larger impact of FDI as an engine for unsustainable patterns of growth. However, it is crucial that the macro-level effects of investment (and trade) on the environment are fully understood.

#### 2.2 Environmental Advantage or Market and Policy Failures?

For each country the price associated with the use of natural resources will reflect three factors: endowments of the resource, social preferences towards the resource, and the extent to which state regulation accounts for the first two factors. If societal preferences are adequately reflected in regulation then a country will use their resources efficiently. However, as a result of market and policy failures these conditions are usually not met.

Most market failures are a result of incomplete markets, where institutions are unable to define and establish property rights. For example, companies do not own the air or water they pollute. A classic case of an incomplete market is an "negative externality". These exist when the consumption or production activities of one individual or firm negatively impact another persons' utility or a firm's production, without them having to provide compensation. For example, a firm pumping waste into a river reduces the satisfaction of swimmers downstream; a company clear-cutting a forest may reduce many tangible and intangible benefits from local villagers.

Externalities can also be international, for example: sulphur dioxide emissions from the UK cause acid rain which damaged forests in Germany and Norway; forest fires in Indonesia – often started by palm oil exporters – regularly cover a wide swath of SE Asia with damaging haze.

Since markets do not exist for many environmental assets it is difficult to ascertain their value. For example, forests contain a wealth of goods (e.g. timber, fuel wood, fodder, medicines, herbs and fruits), perform various functions (e.g. erosion control, carbon sequestration, micro-climatic regulation) and provide many non-use benefits. The price charged by Japanese companies to consumers for shrimps does not account for the costs to local communities of lost fish stocks, reduced soil fertility or the associated loss of livelihoods. The fact it is difficult to attach monetary values to many of these benefits means they are often neglected in the decision-making process. As a result of this underpricing, economic agents are attracted to natural resource industries by excess profits, which hasten over-exploitation in the area.

It is not only market failures that hasten the inefficient and unsustainable use of resources but also "policy failures". For example, mining operations in Asia South Pacific are subject to a potent mixture of perverse incentives - company tax breaks, low concession fees, subsidised inputs - in addition to market failures. Forestry is also

beset with policy failures: low stumpage fees (for example, in Indonesia only 20-33%; Malaysia 35-53%; and Canada 33-67% of economic levels<sup>15</sup>), agricultural subsidies, short length of contracts, generous fiscal or financial incentives, weak or inappropriate tenure, corruption and bribery and a lack of monitoring capacity.

The excessive use of natural resources and production of pollution stems from the fact that market failures are pervasive in the global economy. Environmental goods and services are undervalued, or treated as free, creating a distortion in economic incentives and overuse by economic agents (producers and consumers).

Under such circumstances enhanced international trade and investment exacerbate the existing inefficient allocation of scarce environmental resources. This may lead to situations where the overall welfare implications of increased FDI become ambiguous - particularly in the natural resource sector. Increasing economic production from FDI may be accompanied by net disinvestment in natural capital or disproportionate environmental and social costs; meaning that the investment has no net value to the economy. As most countries offer economic incentives to FDI such incomplete assessment of costs to the economy is likely to result in inefficient policy decisions.

In debates over FDI liberalisation the existence of national policy failures is usually not differentiated from the legitimate use of a country's environmental advantages to attract investors. The level of regulation is presented as being solely the concern of the host country government. However, liberalisation has been actively promoted by home nations – mostly the OECD countries – and so they must bear some responsibility for the costs accompanying economic expansion. The analysis of the pollution haven literature below demonstrates that competition for FDI is significant component in the failure of governments to internalise environmental costs.

Surprisingly, despite the wealth of literature on FDI and the environment there are few studies accounting for the full welfare costs of liberalisation and their impacts on a country's prospects for sustainable development. Where they exist most studies suggest that environmental externalities are not adequately internalised and resources are underpriced. While reducing costs for investors and consumers these failures damage host country citizens and the development prospects of future generations.

For example, a recent paper by the OECD on liberalisation failed to address the issues of resource use, or related components of sustainability such as environmental irreversibility, uncertainty, ecological limits and the rights of future generations (a critique is given in WWF-International 1998b).

Increased flows of trade and the investment can exacerbate the existing inefficient allocation of scarce natural resources. This implies that economic benefits will be coupled with environmental and social costs, particularly to the most disadvantaged, and that the long term welfare implications of increased FDI are often ambiguous; especially in environmentally sensitive sectors.

# 2.3 The Environmental Kuznet's Curve: Will Growth bring Environmental Sustainability?

It has become fashionable for policy makers to assume that economic growth and environmental quality are compatible in the long term, but that short term environmental and social costs are a prerequisite for long term prosperity. However, as growth continues unabated and all trends in environmental degradation are deteriorating at an accelerated rate, the arrival of such compatibility seems long delayed. As Keynes famously said - "in the long run we are all dead" - and this is particularly true for the environment.

This assertion that environmental degradation increases up to a certain level of income, after which it begins to improve, is known as the 'Environmental Kuznets Curve' (EKC). Examination of empirical studies which have investigated the hypothesis show its limited applicability. Only for local urban airborne pollutants has it been reliably demonstrated that emissions do decline after a level of around \$8000<sup>16</sup>. For some pollutants the inverted-U shape simply does not exist. In fact, municipal waste, CO<sub>2</sub> emissions and biodiversity loss increase monotonically with greater income. There are also numerous methodological and theoretical flaws in existing studies (see WWF 1994).

Even if the EKC holds, economic growth will not bring about the desired environmental improvements in local air quality for the vast majority of the world's population as the average income in developing countries was \$1,100 in 1997. It will take many years of accelerated environmental degradation, with potentially large catastrophic, irreversible effects, before they could reach this level - if they ever can.

#### 2.3.1 The relationship of the EKC to economic theories of sustainability

The EKC hypothesis is based on simple economic growth models that assume economic activity can expand in perpetuity due to technological progress and infinite substitution possibilities between natural and man-made capital. Adherence to such a view removes any need to address the issue of economic scale and its impact on the environment, leading to a "pollute now-clean up later" attitude. However, many species, complex ecosystems and ecosystem services have no man-made equivalent, and technological innovations may be unable to fix irreversible, unforeseen and potentially disastrous effects of pollution (for example, destruction of the ozone layer, impacts from persistent organic pollutants).

Economic theory shows that when environmental damage is irreversible and potential impacts are uncertain a precautionary approach should be taken environmental management to optimise current welfare <sup>17</sup>.

Irreversibility of environmental damage also means that even where market and policy failures are corrected, and natural resources allocated efficiently, sustainability is not necessarily ensured. Where sustainability is defined as preserving the ability to maintain the well being of future generations given a legacy of past and current environmental degradation. The theoretical literature clearly shows economic

efficiency is not a sufficient condition for sustainability, as it is fundamentally an issue of equity between generations<sup>18</sup>.

Depending on how natural resources (including the planet's ability to remove pollution) are owned between different generations there are different efficient depletion paths. Greater ownership claimed by the first generation unambiguously reduces welfare for the second generation, and visa-versa. However, achieving "efficiency" of resource use does not necessarily define a unique level of total consumption in each generation. Based on efficiency criteria alone, the present generation could consume all the Earth's resources, leaving future generations uncompensated 19.

True sustainability requires the definition of what options the present generation wishes to leave the next generation, which in turn defines the permissible level of irreversible environmental damage today. Once defined, these limits will set prices for commodity use and pollution if mechanisms exist to internalise their scarcity.

Present trends of accelerated economic growth at the expense of the environment could be interpreted as indicating a high level of indifference of the present generation towards future generations. On the other hand it could be that current political systems are not adequately reflecting the preferences of their citizens for bequeathing environmental assets to future generations.

Arguments around the EKC are really irrelevant when aiming to move countries onto a sustainable development path. The past trends which form the basis of EKC estimates are based on past unsustainable growth paths. Developing countries will not be able to grow that way, because resource prices will rise to reflect greater scarcity and environmental damage will depress production in critical areas.

To ensure ecological limits are preserved developing countries in particular will have to raise their environmental standards in the short run in order to 'tunnel through' the EKC. To achieve this requires the transfer of resources (financial, technological and capacity building) North-to-South. Besides being a moral imperative, developed countries free ride many of the global benefits from biodiversity protection in the South (e.g. existence values, carbon sequestration, pool of genetic resources) and consume the lion's share of global natural resources.

The countries of the OECD use over twice their fair per capita share of the most basic resources (grain, wood, fish, water, and fossil fuels) and the North Americans alone use five times the per capita share of Africans<sup>20</sup>. Additionally, industrialised world account for over 84 percent of gases currently causing climate change, and 70 percent of all carbon emissions. Current patterns of FDI (and trade) mean that OECD countries are effectively using the environmental capacity of other countries to fuel their own consumption patterns; whether this be in increased CO<sub>2</sub> emissions, water pollution, use of fisheries or consumption of tropical forestry products.

At the international level the Global Environment Fund (GEF) is available to developing countries to help them meet environmental targets established in some international agreements. The GEF's budget of \$666 million per annum approximates

to around 75 cents per person per year for each citizen in contributing countries. This is hardly an accurate reflection of the global value of the natural environment.

Sustainability limits need to be introduced on a number of different scales (local, regional, national and global). On a global scale potential constraints exist in the form of Multilateral Environmental Agreements (MEA's). There are over 180 MEAs, including: the Montreal Protocol on Substances which Deplete the Ozone Layer; the Kyoto Protocol setting limits on greenhouse gas emissions; and the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES). Unfortunately, the implementation of MEAs has lagged behind their proliferation; and as the recent Shrimp/Turtle case at the WTO highlighted, international environmental law is still subordinate to international economic rules<sup>21</sup>.

At the national level, policy makers continue to pledge their commitment to sustainability, as embodied in internationally agreed principles and treaties, but their rhetoric has not be backed by sufficient action. Many plans to promote sustainable development have been developed (e.g. Agenda 21, Biodiversity Action Plans, National Sustainable Development Strategies), however are under-emphasised in development priorities. In an increasingly global and competitive market introducing environmental measures becomes increasingly difficult due to fears about losing competitiveness and discouraging potential investors.

Economic growth and liberalisation continues to be a priority over sustainability concerns. The move from a "culture of growth", to one of sustainability requires deep-rooted changes to the production and consumption patterns, and the institutions which drive them. This requires fundamental revisions to existing models of development, and understanding that flawed concepts such as the EKC cannot automatically bring sustainability. These models neither reflect the agreed objectives of sustainable development, nor state-of-the-art environmental or growth economics<sup>22</sup>.

Given the scale of environmental destruction in the past 30 years, both developed and developing countries need to adopt a more precautionary approach to environmental decision-making.

The large gaps between rich and poor, both within and between countries, means that a convergence of environmental regulation will not automatically occur with achievable rises in incomes. In order for developing countries to achieve higher environmental standards they will require greater domestic political will and more generous financing from industrialised countries. Especially in the face of increased economic pressures on the environment which mainly originate in donor countries.

#### 2.4 "Transitional" Effects and Long-Run Environmental Damage

In the globalised economy countries cannot claim that they have no responsibility for the environmental impact of their economic activity. Reliance on national sovereignty must be supplemented by the maxim that "responsibility follows profit". Where FDI flows between countries at different stages of development and regulation, the scale or intensity of production of foreign firms (which are typically larger than domestic firms with more advanced technology and skills), may cause irreversible environmental effects by overwhelming weak government controls.

The Maquiladora zone on the US-Mexico border has witnessed serious environmental problems as a result of inadequate infrastructure and environmental regulation to control the rapid development and unplanned industrialisation through migration, urbanisation, and associated development in the area<sup>23</sup>. In another case a P&O proposed (an UK shipping company) to build a major container port on a protected area in India. An internal P&O report concluded that construction and subsequent development would have caused "irrevocable environmental damage to the surrounding coastline". Fortunately, due to the efforts of the local communities supported by WWF this development was eventually halted<sup>24</sup>.

Rapid development without adequate controls can also bring irreversible social and cultural disruption, removing traditional economic support mechanisms without replacing them with adequate substitutes. The EU 'Third Party' fishing agreement, which allows foreign vessels access to fishing grounds of the West African coast, has resulted in lower fish stocks for local artisan fishermen. Local consumption patterns have also had to adapt as people in West Africa, for whom fish was once part of their staple diet, now export most of their catch to European countries.

Foreign involvement in palm oil plantations in Sumatra, Indonesia caused the indigenous Kinali community to be displaced from parts of their lands, and their livelihoods as net exporters of rice taken away from them. Moreover, the growing infrastructure developed around the plantations fuelled the invasion of a host of other domestic and foreign companies into the area<sup>25</sup>.

#### 2.4.1 The role of official Export Credit Agencies and Multilateral Banks

Much FDI, in particular large-scale infrastructure projects, is supported either by government or multilateral co-financing, acting as risk insurer's or guarantors. This is particularly prevalent in countries where political risks are high, which also tend to be countries with low levels of environmental governance. However, the provision of an implicit or explicit subsidy to a private company does mean that environmental conditionalities can potentially be attached to such assistance.

For example, the World Bank requires assessment of all private sector projects financed through the International Finance Corporation and Multilateral Investment Guarantee Agency seen to pose a risk to the environment. This can lead to amendments to the project and/or assistance to develop the country's institutional capacity<sup>26</sup>. The World Bank also requires countries to prepare National Environmental Action Plans (NEAPs) as a precondition for financial assistance. However, an internal bank review found that in very few cases had these been successful in improving environmental institutions and regulation<sup>27</sup>.

Export credit agencies are playing an increasingly important role in providing assistance, in terms of finance or risk bearing, for firms interested in investing abroad.

The recent growth in financial commitments of these agencies has made them a larger source of finance than multilateral development banks<sup>28</sup>. However, most agencies work with little transparency and accountability, and with little or no input from environmental ministries. The only multilateral rules on the activities of export credit agencies are a set of non-binding guidelines agreed at the OECD<sup>29</sup>. These have generally been unsuccessful in driving up standards of environmental scrutiny to those of the best agencies; as was demonstrated by the different attitudes taken by export credit agencies to the controversial Three Gorges project in China

The current official subsidies extended to private investors are not consistently matched by support for environmental governance or serious environmental conditionality. By reducing the risks of long run capital investment these subsidies result in increased environmental pressures, and distort FDI towards more damaging capital intensive goods. For example, large power plants, steel mills, chemical plants, pulp and paper mills and mining equipment<sup>30</sup>.

#### 2.4.2 Structural and indirect impacts of FDI

FDI often has more profound and long lasting effects than anticipated. Initial investment choices, which have not taken into account environmental costs or limits, skew future development plans. Roads to mines bring settlers and increased development. Clear-cutting of forests reduces land values to a level where widespread oil palm plantations are an economically viable alternative to sustainable forestry. P&O's planned port would have brought irresistible economic pressure to industrially develop the port hinterland inside the protected "eco-fragile" area, and this was a major factor in the rejection of P&O's application.

Such "structural subsidies" can warp development choices for decades in the future even if the initial extent of environmental damage is properly assessed. Moving away from such unsustainable paths requires explicit limits on resource use and the acceptance of short run transition costs to a new sustainable equilibrium. Such costs are hard to justify, or bear, in a globalised economy.

These examples highlight some of the transitional effects that accompany over extensive or overly hasty liberalisation. These so-called "short run" effects actually produce long run impacts affecting trends in human, social and environmental capital stocks, which are vital for the balanced sustainable development of any country.

Even if foreign firms are able to make environmental improvements, these are often dwarfed by the external costs associated with the sheer scale at which they are allowed to operate. Although banana producers in Central America have made improvements to their operations in recent years, their scale of operation and use of chemically intensive monocultural cropping patterns continues to pose serious social, health and environmental costs (local and global air pollution, surface and groundwater pollution, soil erosion, and deforestation).

Improvements to a host country's regulatory system to enable it to cope with new patterns of investment, may simply involve better implementation of existing legislation on environmental impact assessment (EIA) or investor liability rules. But

attention should also focus on the functioning of meso-level institutions (regional, municipal, and local governments) as it is here where planning, resource use and private activities is directly controlled. Strengthening capacity in these areas is vital if the multiplier impacts of a specific project, in terms of urbanisation, migration and changes in subsistence resource use are to be adequately controlled.

The irreversibility of much environmental damage means that liberalisation can result in long-run negative impacts if host country regulation cannot respond to increased economic activity.

Official subsidies to investors distort international investment towards resource intensive long-run projects. To mitigate this bias source countries must ensure investments are reviewed for environmental and social impacts, and projects rejected or amended if necessary.

The sequencing of building regulatory capacity and liberalisation must be explicitly considered, and a precautionary approach taken in sensitive areas. Where host country regulatory capacity is lacking developed countries have a responsibility provide resources to improve this, in advance of providing subsidies to their investors of entering into negotiations to open up new sectors.

#### 2.5 Distributional Impacts of Large Investment Projects

The distribution of costs associated with large-scale investment projects, which are often funded through FDI, is often highly skewed. There are clearly 'pollution zones' of poor people, where firms perform worst, and where regulation is lacking or not properly enforced<sup>31</sup>. Policy makers have argued that this is a result of social preferences. However, these communities are rarely consulted as to these "choices" and often do not benefit from the investment.

Distributional issues around foreign investment are clearly shown by water use conflicts. Currently, one third of the world=s population lives in countries experiencing water stress and this number is rapidly growing. About 38% of global cropland is degraded, and productivity losses may reach 20% in some arid countries. Arid and semi-arid countries are experiencing the highest pressures, which will be exacerbated by continuing climatic change.

Competition for both land and water is increasing. In some Asian countries loss of crop land to industry and urban development has occurred at the rate of 1% per year. Irrigation has accounted for more than half the increase in global food production since the mid-1960s, but about 20% (50 million hectares) is suffering from soil degradation due to faulty practices. Agriculture uses 86.8% of water in developing countries, but only 46.1% in the developed world. As countries develop industrial and domestic use will expand, at the same time as more irrigated land is needed to feed rising populations. Given that humans already use around 50% of all the world=s available freshwater supplies, shortages and conflicts between uses are inevitable unless resource efficiency is improved<sup>32</sup>.

However, given international competition for investment (and trade) governments find it hard to internalise these costs if it is seen as making them uncompetitive relative to other destinations. For example, in heavy water using sectors attractive to FDI such as manufacturing, export agriculture, tourism and golf course development, incoming investors tend to have priority access to available water supplies.

This has devastating impacts on local communities and ecosystems when subsistence activities also compete for the water supply. As such subsistence activities do not show up in national accounts their displacement may actually increase conventionally measured growth, but at a high human cost.

Such patterns of development in fact tend to reflect the preferences of the country's elite for rapid industrialisation, at the expense of the weakest and least organised groups. In reality the poorest often to value nature very highly since they depend on it for their livelihood, and often live in the most ecologically fragile areas. Therefore, when considering the impact of foreign investment in a country a clear distinction should be made between it's impact on overall economic growth and development, and its ability to reduce poverty and increase the quality of life of those impacted by it indirectly or directly.

NGOs often play an essential role in raising the local concerns about the validity of the EIA process, as affected parties are unable to participate effectively due to low educational levels<sup>33</sup>. These links between environmental impacts and poverty highlight the need to carry out sustainability impact assessments of investment projects, examining socio-cultural, regulatory, and environmental impacts.

However, civil society groups need greater access to information about company and government decisions if they are to scrutinise them and protect the interests of marginalised groups and the environment. This requires that multilateral bodies and companies release EIAs and investment appraisals when conflicts arise, and that commercial confidentiality is not used as a smokescreen for bad decision-making. Citizens' also need the ability to bypass inadequate domestic regulatory regimes, as investors do through bilateral and regional investment agreements, and enforce laws and regulations in a company's home country. There have been some pioneering cases where this has happened in the UK and USA, but it is still an overly costly and uncertain procedure<sup>34</sup>.

NGO's, and other civil society groups, can play a vital role in articulating the voices of the marginalised, or dispossessed, who often suffer the detrimental environmental impacts of large-scale investments. This requires greater transparency in public and private processes surrounding investment decisions and increased access to justice both nationally and internationally.

#### 3: FDI in the Natural Resource Sector

The debate examining the interaction between FDI and the environment has tended to focus on pollution intensive industries, using pollution emission indices as a proxy for all environmental impacts. However, due to both market and policy failures and competition effects, natural resources are being excessively exploited. Foreign investors have also been able to expropriate overly generous economic rents from the extraction of these resources.

On closer inspection it is revealed that the bulk of investment flowing to low-income countries is channelled into their extractive sectors. Investment in such sectors does not provide the host country with the same benefits as say manufacturing or services the indirect spillover effects in particular may be negligible. This section assesses the implications for sustainable development of the country.

#### 3.1 FDI and Natural Resource Sectors: Facts and Figures

As Table 1 shows low income countries account for a mere 6.5 per cent of total FDI flows, with those countries that do not have important mineral or oil production receiving very little private investment<sup>35</sup>.

Table 1: FDI FLOWS TO DEVELOPING COUNTRIES AS A PERCENTAGE OF GDP

Country or country group	1991	1992	1993	1994	1995	1996	1997	1998 <sup>a</sup>
Middle-income	0.8	1.1	1.5	1.9	2.0	2.2	2.7	2.6
Excluding China	0.8	0.9	1.0	1.3	1.5	1.7	2.3	2.2
Top 10 countries	1.0	1.4	2.0	2.5	2.5	2.7	3.3	3.1
Excluding China	1.0	1.1	1.0	1.4	1.6	2.0	2.7	2.7
China	1.2	2.7	6.4	6.2	5.1	4.9	4.9	4.2
Low-income non-oil exporters								
Mineral producers	1.1	1.1	1.7	1.5	2.0	2.4	2.6	2.4
Others	0.2	0.2	0.3	0.4	0.6	0.7	0.9	0.9
Low- and middle- income oil	0.9	0.5	1.1	1.0	0.2	0.8	2.1	1.8
Exporters								

<sup>&</sup>lt;sup>a</sup>. Preliminary

Source: World Bank (1999)

The poorest countries receive a disproportionately high share of resource-seeking investment. In Africa, 95% of FDI comes from OECD countries; dominated by France, the UK, the United States and Germany. The largest share of these investments goes into the primary sector (for example, 52% for France and 53% for the United States)<sup>36</sup>. A similar pattern exists in the emerging economies of Eastern Europe as Joseph Stiglitz, the chief economist of the World Bank, concisely stated these issues at a conference on transition economies:

<sup>&</sup>quot;Let us be clear: it is not hard for a country rich in natural resources to find investors abroad willing to exploit those resources, especially if the price is right. Far more

difficult, however, is creating an industrial or service based economy. In 1994, foreign investment in manufacturing was a mere 7 per cent, compared with 57 percent in natural resources. By 1997, non-natural resource investment dropped to a mere 3 percent." ABCDE Conference, Valdivia; June 24, 1999.

Moreover, most FDI in resource extraction, pollution intensive industries and infrastructure involves new "greenfield" investments. However, new facilities currently account for only one fifth of total FDI flows, the rest being cross-border mergers and acquisitions<sup>37</sup>. Therefore, environmentally sensitive industries remain a significant proportion of new FDI on the ground.

Some commentators claim that the share of pollution intensive and resource seeking industries in FDI is falling, even though absolute volumes are rising. However, these interpretations are uncertain because the environmental impact of investment - or the importance of resource seeking industries - is difficult to infer from available aggregate statistics. For example, some analysts classify the textile sector as "dirty" and some as "clean". Secondary manufacturing investments associated with natural resources (minerals processing, canneries etc.) are usually not included, portfolio investment in resource companies which enables their expansion is often unaccounted for, and infrastructure investments are usually ignored despite their high environmental impacts.

The largest amount of FDI flowing into low income countries goes to exploit their natural resources – with profound impacts on the development paths of these countries. Active steps must be taken to promote appropriate investment outside these sectors.

# 3.2 FDI in the Natural Resource Sectors: Implication for Sustainable Development

The benefits of FDI to a source country can be numerous: it can increase their total productive capacity; "crowds in" other investments; as well as create creating positive "spillover effects" from the transfer of technology, knowledge and skills into domestic firms. It can also stimulate economic growth by spurring competition innovation and a country's export performance.

However, these benefits, particularly the indirect spillover effects are less clear-cut with investment in extractive industries. Although there is little empirical evidence to suggest this claim, several factors indicate that the indirect benefits of FDI will be less in extractive industries. For one, there is less technology transfer given the extreme capital-intensity of production; and domestic firms in poorer countries' face limited access to finance<sup>38</sup>. FDI in the extractive sector also has fewer backward and forward linkages. The capital intensity of production requires less input of materials and intermediate goods from local suppliers.

In many countries foreign investment operates virtually autonomously with few links to the national economy, except through tax revenues and some employment (and/or higher wages). This is particularly the case when output is geared for foreign markets;

for example agriculture, mining, oil extraction and the trend towards "resort tourism", with self-contained centres relying on imports and generating minor levels of local employment. Often isolated TNCs are hard to tax effectively given their ability to exploit transfer pricing and other methods to minimise their liabilities; recently 84% of developing countries surveyed by UNCTAD felt that TNCs were using these methods to avoid tax liabilities<sup>39</sup>

Tariff escalation (increasing tariffs with the value-added to the product), a practice prevalent in trade in the natural resource sector ensures that benefits from value-added production are reduced. This practice is a clear impediment to the development prospects of the host country, which is forced to specialise in lower valued products.

Extractive industries are also characterised by large economies of scale and historical dynamic competitive advantages, which acts as a barrier to new domestic entrants - more so than in the manufacturing sector. These competitive advantages are increasing due to the economies of scale of incoming MNCs in terms of globalised production processes, technology, brand strength and cash flows from mature domestic markets. In the absence of effective international competition regulations, the use of restrictive business practices and cartels by MNCs is a growing concern. Protected from competition, international firms are able to generate monopoly or oligopoly rents - which lead to higher profits, lower efficiency and a misallocation of the host countries scarce resources.

It is vital that countries and communities gain fair rents from their exploitation, and that the resources are managed in the long-run interest of the host country. This promotes efficient use as well as allowing reinvestment in higher value-added areas. Traditionally this was often achieved through mandatory joint ventures with national firms, but use of this instrument is now restricted by some Bilateral Investment Treaties (BITS), and may be limited in the upcoming review of the Trade-Related Investment Measures (TRIMS) at the WTO. Alternative ways of capturing rents through concession fees and taxes have often proved difficult to apply in many sectors such as oil, forestry and fisheries<sup>40</sup>.

Even when rents from natural resource use are collected, they will only form a basis for sustained economic transformation if reinvested in efficient enterprises which are competitive in local and foreign markets. However, resource rents are often used to fund imports of luxury goods or are invested abroad. Either due to corruption or because the economic structure of the country does not provide an attractive environment for investment outside the natural resource sector.

Researchers have attempted to look at the net investment from natural resource exploitation (notabally the World Resources Institute and the World Bank), but such resource accounting is only just beginning being implemented. The high cost of monitoring and lack of political will are often cited as the major barriers to this work.

Some commentators have argued that such investment patterns are simply a reflection of the countries "competitive advantages". That, those countries at an earlier stage of development should specialise in, and export, primary products and commodities, since they have an advantage in terms of cheap labour and environmental protection

(which is income-elastic). Investment should therefore be encouraged to allow them to exploit these advantages, to enable them to accumulate physical and human capital - eventually freeing them from their reliance on their natural resource base for economic growth. However, many developing countries continue to be dependent on primary (unprocessed) commodity exports for foreign revenue. Though some developing countries Asia have successfully diversified their exports to escape this dependence. Four-fifths of export earnings in Sub-Saharan Africa continue to accrue from commodity related goods<sup>41</sup>.

With the real price of commodities declining (see Table 2) this has affected the growth in developing countries - which stagnated around 1.9 percent in 1998. Sluggish world demand growth, coupled with expanding supply, suggests that prices will at best not fall further 42. Large-scale investors have flooded the market for certain commodities. By enjoying economies of scale and incurring few environmental costs they have been able to push small-scale domestic suppliers out of the market. The "banana wars" are a classic example of multinationals displacing local producers, to the detriment of the environment and long-term prospects of the domestic economy.

In many countries initiatives are growing to decentralise, and ensure greater local control of natural resources and development of economic capacity. Incoming investors are often in conflict with such initiatives due to their scale and market power. Especially in sensitive sectors such as tourism, where locals are likely to be excluded from benefiting from the economic value of their environment if they have to directly compete with outside investors.

Evidence, particularly from Africa, has shown that countries specialising in primary products or commodities have become locked into economic stagnation at a lower end of a growing inequality between nations. As the terms of trade continue to worsen these countries are forced to export higher volumes of commodity goods, and offer more lucrative incentives to outside investors simply to maintain the same level of foreign exchange.

Table 2: COMMODITY PRICES (IN CONSTANT 1990 US\$ PER UNIT MEASURE 1960-1995)

	1960	1970	1980	1990	1995
Coffee (kg)	2.85	2.69	3.62	1.27	1.2
Bananas (mt)	692	659	526	541	373
Maize (mt)	209	233	174	109	103
Fish, Meal (mt)	560	784	700	412	415
Jute (mt)	1,608	1,092	428	408	309
Rubber (kg)	3.77	1.62	1.98	0.86	1.33
Aluminium (mt)	2,430	2,215	2,022	1,639	1,514
Crude petroleum	X	X	59.9	41.7	32.9
Gas Europe	X	X	4.72	2.55	2.29

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Many of the adverse effects arising from specialisation in the natural resource sector are long-lived or irreversible, causing permanent damage to the environment. Environmental degradation reduces the ability of an economy to produce goods and services over time due to the reduction in natural resource inputs such as soil fertility, and ecosystem productivity more generally. About 20 percent (50 million hectares) of land is suffering from soil degradation, significantly reducing future productivity. The erosion of natural capital in the short-term can have pernicious long run impacts, affecting trends in human, social and environmental capital stocks which are vital for balanced sustainable development for any country.

It is disingenuous to assert that host countries should specialise in, or encourage investment in polluting or resource intensive production in order to secure development when the very process denies future generations the options to express demand for the environmental assets which have been degraded. These investment patterns are not based on actual endowments and social preferences but on fundamental issues such as relations of economic dependency.

Given the large-scale capital-intensity of production in the natural resource sectors the host country may receive few "spillover benefits", but a myriad of external costs. As a result, and due to the fact that these firms may be protected from competition, the misallocation of scarce resources may potentially leave the host country worse-off in the long term than if it had not received investments.

FDI in the natural resource sector poses distinct threats to achieving environmental sustainability. Incentives for FDI should not encourage concentration in natural resource sectors where large firms can appropriate economic rents and displace small-scale producers.

#### 4. Summary: The Macro-level Impacts of FDI

There is little recent systematic research into the macro-level impacts of increased FDI flows, and its distinct effects on long run sustainable development. The available case study material and WWF's experience research suggests some general findings:

- Environmental costs are not adequately internalised in any country. Given these policy failures increased economic activity will exacerbate existing distortions and in environmentally sensitive sectors is likely to cause major damage.
- Income gains from FDI will not automatically stimulate increased demand for environmental improvement before fundamental ecological limits are reached.
- FDI can fuel economic activity at a scale and pace that overwhelms host country regulatory capacity, resulting in inefficient and irreversible environmental damage.
- The size and distribution of the environmental costs of FDI are usually not adequately accounted for when policy decisions on liberalisation or investment incentives are made.
- FDI, especially in resource using sectors, often has very long run effects on both environmental quality and future development patterns in the host country.
- FDI in natural resource using sectors may not bring expected economic benefits to the host country, or put it on the path to a balanced industrial economy.
- Subsidies through investment guarantees or export credits put pressure on the environment by encouraging too much capital intensive investment.

As FDI grows it is important that home countries take greater responsibility for the impact of their firms' activities abroad. Though host countries must bear the primary responsibility for environmental regulation, the reality is many developing countries have yet to build adequate capacity to handle these external economic pressures.

The scale, pace, and sectoral composition of FDI, coupled with the dedicated subsidies it receives, differentiates its impact on the environment from domestic investment in many countries. These differences argue for new policy mechanisms to lessen the environmental impact of FDI, and strengthen host country regulatory capacity when needed.

However, the question that remains unexplored is whether competition for FDI is one of the reasons why environmental standards are below sustainable levels, or is this attributable to domestic political factors that exist in all countries?

# 5. The Environmental Quality of FDI: Beyond Pollution Havens and Halos.

Countries benefit from FDI by increasing their productive capacity, gaining "spillover effects" (e.g. technology transfer, training and skills to domestic firms) and developing their export sector. To obtain these benefits countries are justified in offering incentives to attract foreign investors. With competition for investment intensifying, this has raised fears of costly "bidding wars" between countries to attract potential investors. These "wars" may take the form of an upward spiral in investment incentives (financial or fiscal) or downward pressure on labour and/or environmental standards. Economically, offering incentives is the same as giving tax breaks for domestic savings or domestic investment in training and R&D.

The inefficiencies, instabilities and rent-seeking behaviour of such dynamics causes a net global loss relative to the optimal case<sup>43</sup>. A "prisoners dilemma" results: governments have a collective interest in removing such incentives; however, if an individual government refrains from offering incentives, then FDI will be channelled into the economy which does. It would be in the interests of all competing nations to work together and put limits on the incentives offered. However, the current difficulties EU countries are experiencing with similar rules, and the failure of OECD countries to agree procedures inside the MAI show the technical and political difficulties of building such agreements<sup>44</sup>.

The issue of economic incentives (financial and fiscal) is returned to in Section 8. This section focuses on the effects of competition on environmental standards, and examines the highly contentious "pollution havens" debate.

# 5.1 The Environmental Performance of Foreign Investors: The Pollution Havens Debate

Environmental regulation is essentially a means to internalise the external environmental costs of firms' economic activities. There is the concern that in order to attract investment, governments will undervalue their environment through lax or non-enforced regulation (the "pollution havens" hypothesis). As a result companies will shift operations to these countries to take advantage of lower production costs ("the industrial flight hypothesis"). Both lead to excessive (sub-optimal) pollution in the host country and a potential "race-to-the-bottom" in environmental standards.

A contrasting view – termed the "pollution halos" argument - is that foreign companies using better management practices will pull environmental, and other standards upwards (see section 4.4). Several different theoretical motivations for pollution halos have been suggested: shareholder and consumer pressure from home countries; the needed to harmonise quality standards inside global production chains; economies of scale from having global environmental standards; and that environmental performance is source of competitive advantage in some companies.

The resolution of this debate has significant policy implications, because if FDI does have a negative effect on environmental standards then international regulation will be needed.

#### 5.1.1 Determinants of the Pollution Havens debate

The pollution havens debate has lasted so long because it has strong theoretical underpinnings, classical economics would predict both industrial flight and a race to the bottom in the absence of international standards.

Unlike most environmental and liberalisation debates it has been the defenders of FDI flows who have had to provide empirical evidence against the pollution havens hypothesis. The most common rebuttal is that environmental costs make-up such a small proportion of total costs (compared labour and capital costs) that differences in environmental regulation will have little impact on a firms' locational decisions<sup>45</sup>.

However, developed countries and developing countries generally fail to properly price their environmental assets. With regulation universally low, and environmental costs representing only a small fraction of operating costs, firms' locational preferences will be less influenced by environmental standards. If external environmental costs were truly internalised the cost of compliance would increase significantly. Under such circumstances, variations in environmental regulation would become a more significant factor in a firm's choice of investment location.

Therefore, research cannot measure the impact of competition for FDI on environmental standards by searching for the existence of pollution havens. A more complex game exists where domestic pressure for higher environmental standards competes with the perceived risks of industrial flight, or gains from attracting new investment; depending on market dynamics of the country and sector involved.

Depending on the relative "market" power of voters and investors on host country politicians, competition could either result in industries agglomerating in particular "pollution havens", or in the globalisation of unsustainable levels of pollution and environmental damage.

The available environmental evidence shows that trends in environmental damage are unsustainable. The evidence from pollution haven studies does not support general industrial flight, but does shows that environmental regulation does influence some firms' locational decisions; primarily in resource and pollution intensive sectors.

On the surface it appears that an equilibrium exists between the extreme outcomes of the pollution havens hypothesis, with less than optimal environmental protection and some industrial relocation. However, the picture is more complex when looking at studies done below the aggregate level, where most research has concentrated. Work at the sectoral/industry level and examinations of individual companies reveals a more detailed picture. The locational dynamics and environmental performance of firms incorporates factors from both the pollution havens and pollution halos models, along with other political and economic factors.

The simple pollution havens hypothesis can be empirically supported, given that environmental costs are only partial internalised. However, a more complex model of firm behaviour provides better insights in available policy options.

#### 5.1.2 Evidence at the aggregate level

Most studies have identified the dirtiest industries - iron and steel, non-ferrous metals, industrial chemicals, pulp and paper and non-metallic minerals - and examined trends in the location of production, trade and investment flows with environmental regulation. Several studies have shown that the share of exports of polluting goods has been falling, while increasing in developing countries (Low and Yeats, 1992; Wheeler and Mani, 1997). Conversely, other studies have found no such correlations (Tobey 1990; Grossman and Kruger, 1992; Eskeland and Harrison, 1997). Although the findings have been mixed, the weight of evidence has tended to reject the hypothesis. A more disaggregated analysis, examining 24 "dirty industries", was carried out by Jenkins (1999). This concluded, rather tentatively, that stricter environmental regulation in Europe has contributed to the loss in competitiveness of many of these industries.

There are a number of limitations of using aggregate studies. First of all it is very difficult to separate the effects of environmental regulation from other variables such as exchange rates, and therefore provide definite conclusions. Secondly, the industries are determined based on direct - and often dubious - pollution emission indices, which are assumed to be a proxy for all environmental impacts. These obscure or ignore other impacts; for example on the natural resource base and the indirect effects caused by rapid and unplanned industrialisation. In addition they tend to neglect other environmental costs, such as monitoring and planning activities, productivity loss due to the opportunity costs of capital use and research and development.

Overall, the overly generalised and aggregated nature of the pollution havens debate has tended to obscure, rather than illuminate, the most important relationships between FDI and the environment. In order to obtain more conclusive evidence it is necessary to examine the different industries, on a case-by-case basis.

#### 5.1.3 Case studies: sectors and industries

Detailed Studies have been carried out for a number of different sectors, those examined here include tanning, nitrogen and phosphate fertiliser, iron and steel and extractive resources.

#### **Tanning Industry**

Tanning can be classified as a pollution-intensive industry as it is characterised by high levels of pollution abatement and high levels of toxic release. According to Rydin (1997), environmental protection costs in the European Tanning industry account for between 2 and 4 percent of total turnover.

Over the past few decades the tanning industry has gone through significant changes. The second half of the 1980s witnessed a wave of contraction of tanning industries in

Europe. This occurred at a time when strict environmental regulations were being introduced, particularly in Northern Europe. These additional environmental costs, compounded existing cost disadvantages resulting in the closing-down, or shifting of many tanning industries. The tanneries that have survived in Europe (which are predominantly Italian) are those which compete in high quality and cater for niche markets, and source semi-finished or finished products from abroad. Sourcing allows the producers to avoid much of the high water polluting treatment costs.

Stricter environmental regulation in Europe has contributed to the externalisation of the wet-processing, particularly wet-blue production to a wide range of countries: Brazil, Argentina, South Africa and Eastern Europe. Wet-blue is semi-finished leather which has gone through the initial tanning process where chromium has been applied. Whereas 80-90 percent of pollution occurs at this stage of production only 15 percent of value-added is generated at this stage.

In Brazil, where regulation is less strict, wet-blue now accounts for 72 percent of exports, increasing 275 percent in the last seven years. There has been a locational shift both directly by firms from other countries investing in Brazilian tanneries and buying a share of the wet-blue production; and indirectly in that the polluting production stages are taken over by firms in the South.

These trends in the tanning industry can to a large extent be explained by the combination of Brazilian and European tariffs, which encourage the export of wetblue from Brazil. The demand from Italy - the world's largest leather producer - for wet-blue has increased considerably over the past decade. By 1997 Italy purchased nearly one-third (by weight) of all leather exports from Brazil - the vast majority being wet-blue. Given the dominance of the Italian tanners in the EU and their increasing reliance on imports, it is likely that the existing EU tariff regime has been largely influenced by their interests.

The consequences of Brazil's increased reliance on the most polluting part of the tanning production chain is not only irreversible damage but also the build-up of economic costs. The clean-up costs will be considerable, and irreversible damage to the environment removes scarce resources to fuel development, now and into the future. Some may argue that the structural changes in the tanning industry are a necessary response to the economic realities of the international economy. However, these changes are having deleterious impacts on Brazil's environment, and the long-term development prospects for the industry and wider economy.

#### Sources:

Odegard, J.T (1999), "Leather tanning in Brazil", F.I.L Working Papers, No.19, University of Oslo, Oslo

Hesselberg, J (1999), "International competitiveness: The tanning industry in Poland, the Czech Republic, Brazil and Mexico", F.I.L Working Papers, No. 15, University of Oslo, Oslo

Knutsen, H.G (1999), "Leather tanning, environmental regulations and competitiveness in Europe: A comparative study of Germany, Italy and Portugal", F.I.L Working Papers, No 17, University of Oslo, Oslo

Environmental regulation in Europe has caused a locational shift both directly by firms from other countries investing in developing countries tanneries, and indirectly in that the polluting production stages are taken over by firms in the South. This highlights the importance, when examining the impact of FDI on the environment, to look at the different parts of the production process.

Italian companies possess the means, skills and technology, which countries like Brazil lack, to convert the hides into high quality leather. These competitive advantages have allowed them to capture "niche" markets, along with other European producers. The Brazilian tanneries which are increasingly specialising in low quality products are trapped between being unable to compete with better quality competitors and from lower cost producers from Asia.

As a result of this competition changes to environmental law in Brazil have been slow and weak. Local authorities are less willing to enforce more stringent regulation as it may cause a loss of jobs and tax revenues. Regulation has effectively become "stuck-in-the-mud" as competitiveness fears, and poor economic performances deflected minds away from environmental concerns.

#### Phospate and Nitrogen fertiliser industry

The global structure of the fertiliser industry has changed dramatically over the past two decades. Western Europe in particular has witnessed a marked decline in production - its share of production of phosphoric acid fell to 4.7 percent in 1998 (EFMA 1998).

The major environmental problems associated with the fertiliser industries differ. With nitrogen these relate to energy consumption, the emissions of nitrate oxides and the leaching of nitrates to water; for phosphate it is the disposal of wastes (particularly phosphogypsum) and the content of cadium in the phosphate rock. Technological developments in the 1970s and 1980s lead to a major modernising of the fertiliser sector. This allowed many of the environmental problems in the Nitrogen fertiliser industry to be combated, or reduced.

Stringent environmental regulation in Europe has not had a significant impact on its Nitrogen fertiliser industry. Much more important have been the availability of cheap labour and natural resources (including fossil fuels and mineral resources). As a response firms have had to either: close down production all together; exit the fertiliser market (e.g. ICI) to focus on speciality chemicals; secure the market in Europe; or expand globally (e.g. Norsk hydro, Kemira) to areas with access to natural resources (e.g. Caribbean, Russia), or where there is a large market (e.g. China).

The changes in the phosphate industry in the EU have been bleaker. Phosphate producers in Western Europe have traditionally sourced their raw materials (i.e. phosphate rock) from countries such as Morocco. However, once these countries began developing their own downstream industries they faced competitive disadvantages, initially in terms of transport and labour costs and economies of scale.

These problems were compounded with recession in the industry in the early 1980s, and later on by stricter environmental regulations across Europe.

As a result of EU regulations companies were no longer able to dispose of phosophogypsum in river estuaries or the sea. Many companies were forced to withdraw from the production of phosphoric acid (the process which produces phosophogypsum). Most recently, the closure of a plant of Societe Chemique Prayon-Rupel in Belgium in 1992; BASF in Antwerp in 1993; and Hydro Agri plant in Rotterdam is expected to close of at the end of this year all citing environmental regulation on phosphogypsum as their reason for closure. Since 1986 the annual capacity has more than halved, and the number of wet-phosphoric acid plants declined from 45 to 10 between 1980-1994.

The decline in capacity can partly be explained by tighter restrictions on fertiliser use, but also by increasing imports from countries were regulations are less stringent. The region now relies on imports from the former Soviet Union, Morocco, Tunisia and the US for much of its phosphate fertiliser supply. Domestic producers continue to be protected from competitors in certain phosphate markets and remain the principal suppliers of certain "niche" fertiliser products. However, demand for these is not sufficient to keep the industry afloat. Traditional European phosphate producers (e.g. Norsk Hydro) have been forced into joint ventures with groups from North Africa and the Middle East to allow them to relocate production in regions were the costs are much cheaper, so they can compete in other markets (in particular China).

#### **Sources:**

Bartzokas, A & Yarime, M (1999), The European Fertiliser Industry, A Research Project for the EU on Environmental Regulation, Globalisation of Production and Technological Change, United Nations University, Institute for New Technologies, Brussels

Demandt, I (1999), The World Phosphate Fertiliser Industry, A Research Project for the EU on Environmental Regulation, Globalisation of Production and Technological Change, United Nations University, Institute for New Technologies, Brussels

The experience of the European fertiliser sector highlights the importance of technology: where it is not available to reduce or treat emissions, discharges and waste, at least competitively, firms may have to shift location or outsource. Any competitive advantages which early producers enjoy tend not to be sufficient to offset increasing environmental costs (and other cost differentials). This is the case for both the phosphate fertiliser and tanning industry. However, in the case of Nitrogen fertiliser where technologies are more available there is less pressure for relocation.

For this industry the main driver for locational preference is access to cheap resources. This begs the question whether host countries desire to attract potential investors is "chilling" the upward movement in regulation in resource rich countries.

Iron	and	Steel

Traditionally the steel industry was a national asset, controlled by a single state firm. This reflects the importance of steel in the development process of a country. World steel production continues to increase - although a combination of the East-Asian crisis and a accompanying slump in demand and overproduction has caused a reduction of 7.5 percent in the first two months of 1999 (World Bank 1999b).

Since the 1970s the steel sector has undergone major changes. In Europe privatisation and rationalisation has led to "streamlining" of the industry. With declining domestic demand, exports of steel products have become increasingly important. However, with expansion of production in developing countries trade has become increasingly competitive. Over the past few decades firms in developing countries such China, Brazil and the Republic of Korea have become some of the largest players in the industry. China is now the world's largest steel producer, and with a growing domestic demand is likely to remain so for some time.

In developed countries, where the demand for bulk steel has dropped considerably, greater efforts have been focused on producing high quality steels, and steel tailored for clients' needs. The more sophisticated steel plants are capable of producing a wide range of "niche products". Most of the steel imports into the EU are in the form of bulk steel from Russia, East-Europe and Brazil. In developing and transistional economies there is a tendency to produce bulk, low price products to cater for the local market.

In the EU Iron and steel companies put around 10 percent of their total investment each year in environmental projects. However, the current approaches to improving environmental performance - end-of-pipe systems and re-cycling - may well be reaching their limit. This implies the need for more structural changes to the process and production chain to curb environmental impacts.

Cheap imports of steel have flooded the EU market, particularly from Central and Eastern Europe. Poland is a case in point. Prior to the 1990s, protection of the environment was often sidelined; and "pockets" of industry evolved around resource supplies causing severe ecological impacts. The combination of lower labour costs, supplies of raw materials and low environmental costs allowed Central and Eastern European countries to flood the Western European bulk steel market in the 1990s. However, in the case of Poland its potential accession to the EU and demands of importers are increasing pressure on them to clean up their production processes. However, by introducing stricter regulation they could be squeezed out of the market due to competition from Eastern Europe and Russia.

As construction and industrial requirements for steels has declined in Europe much of the future demand will come from developing countries. Steel producers in developed economies face two choices: to focus their attention on producing high quality, value-added products to export domestically and abroad and/or locate production capacity within the markets where there is growing demand. This restructuring of the industry is already happening, and will do so in earnest into the next decade.

#### Source:

Barton, J.R (1999), Environmental Regulations, Globalisation of Production and Technological Change in the Iron and Steel Sector, *Paper Presented at a conference on* 

The case of iron and steel shows that even for some of the largest polluters, differences in regulation have not affected firms' location decision. Steel producing nations usually have one dominant "flagbearing" firm, which has traditionally been protected for strategic reasons. The size of these firms allows them to enjoy increasing returns to scale in production, marketing, distribution, advertising and research and development. Given these competitive advantages, which the European, US and Japanese firms enjoy in particular (since they were first to develop efficient steel industries) they are able to offset extra environmental costs. These producers have also increasingly moved into value-added, speciality products where they can gain "niche markets", and can therefore compete on quality or design, rather than price.

Evidence generally points to the conclusion that sectoral restructuring and globalisation in the steel market is shaped by access to new markets. Although environmental regulations may not be an overriding factor in a firm's decision to move, given the increasingly competitive nature of the steel market firms will be vying for any possible competitive advantages when deciding where to locate - amongst these will be environmental considerations. The increasing importance of climate change as an issue will further increase the impact of environmental regulation as carbon dioxide emissions begin to extract a price on the open market.

#### **The Mining Sector**

The primary consideration for firms in the extractive industries is access to the resource base. The fact that potential investors are often able to choose between a number of different sites within the same region - implies that power lies with the investor to demand significant incentives. These can be either economic or involve a lowering of standards (environmental or labour).

Throughout the Asia-Pacific region intensifying competition for investment in the mining sector (copper, gold, iron ore, coal, aluminium) has led to a suite of incentives being offered to the investor. These include: granting foreign investors full ownership, cutting corporate tax rates and reducing royalty payments. In 1995, in the Philippines the government introduced Financial or Technical Assistance Agreements (FTAA) which provide generous concessions to foreign investors. This move received a favourable response from foreign mining companies, with the number of countries represented in the country increasing from 4 in 1994 to 20 in 1996.

In many cases countries have drastically relaxed environmental controls over mining operations in a range of areas. In Papua New Guinea (PNG) and Indonesia, for example, all mining operations operate under special conditions that impose minimal or no regulation and allow widespread contamination of the environment. Mining in Indonesia is carried out under special Contracts of Work (COW) which generally exempt mining corporations from environmental laws. In addition countries have provided either general or specific (project-by-project) exemptions from existing

environmental and other laws. In Papua New Guinea, the Philippines and Indonesia exemptions have been made to domestic law to accommodate major mining disasters.

Lax enforcement of regulations can emerge from deliberate national decisions, or from local decisions. As many natural resource industries operate far from centres of government there is both a weaker government infrastructure, lower oversight of decisions and greater opportunities for corruption than in other sectors.

The direct environmental and social impacts of these exemptions are considerable. For example, the Freeport mine (in Indonesia), which is partially owned by Rio Tinto, has caused large-scale destruction of the nearby forests and river ecology, as well as sparking off human rights abuses. In the Philippines 14 rivers were so polluted by copper waste, that where they fed into the sea they reduced fish yields by 50 percent. Destructive practices such as these are the rule rather than the exception amongst mining operations within the Asian Pacific region, many of which would not have occurred if the mining operations had to adhere to domestic regulations.

With competition for FDI within the minerals sector likely to intensify, especially as neighbouring countries (e.g. Vietnam, Salomon Islands) liberalise their investment policies, environmental standards and performance are unlikely to improve without new policy interventions. Even if standards do not deteriorate they are unlikely to improve considerably, since no country will be willing to disadvantage itself by introducing much stricter regulation that its competitors. Regulations are likely therefore to remain "chilled" unless collection action can be agreed upon.

#### **Source:**

Mining Policy Institute (1998), Trade Liberalisation, Mining Investment and the Impacts on the Environment and Related Social Issues, MPI, Sydney

In the mining sector the overriding decision where to locate will be based on access to the resource in question. However, once this is determined firms may thereafter consider and seek out investment incentives - such as lower environmental standards. Due to the undifferentiated nature, high elasticity of demand and intense competition for basic extractive resources; and the fact that production can incur considerable environmental costs (pollution and extraction), firms can benefit considerably from poor or lax environmental standards. For such products, small cuts in production costs can reap potentially large rewards in terms of market share. This is the case for most standardised intermediate goods purchased by other industries (e.g. chemicals, petroleum) which have a high price elasticity of demand

As well as evidence from research projects there is also anecdotal evidence of corporations, facing strict environmental and health standards at home, moving operations to developing countries. The US chemical giant Du Pont, for example, attempted to move outdated and dangerous equipment to a province in Western India from the US<sup>46</sup>. In another case hazardous technology banned from use in Norway was exported out of the country and used by corporations in India. Other examples include operations by Dow, Atochem, Kumaia Chemicals and Mitsubishi<sup>47</sup>.

One survey found that 26 percent of Maquiladora operators in Mexicali cited Mexico's lax environmental enforcement as an important reason for their location there<sup>48</sup>. The U.S. General Accounting Office found that between 11 and 28 wood furniture manufacturers in the Los Angeles region moved to Mexico between 1988-1990<sup>49</sup>. One of the major reasons for this shift was that in Mexico these firms faced no air pollution standards for the application of solvents.

The "North-South" nature of relocation may also be changing. In a recent case in Taiwan, a \$3.1 billion chemical plant faced high political protests over its environmental impacts prompting a proposal to move to Western Australia. The rationale being that "we do not expect environmental protest problems there" <sup>50</sup>.

#### 5.1.4 Conclusions from the evidence: prices and markets matter!

While aggregate studies do not tend to support the "pollution havens" hypothesis, case study research, anecdotal evidence, and surveys suggest that lower environmental regulations do influence locational preference for the most resource and pollution intensive industries.

The extent to which environmental regulation influences a firm's investment decision will depend on a number of factors:

- Environmental abatement costs.
- Capacity of the firm to absorb additional environmental costs. This depends on a firm's competitive advantages, and their ability to pass the extra costs on to the consumer (elasticity of demand, competition in their markets).
- Possibility to capture "new markets" (e.g. niche products, green products).
- The amount of protection afforded to the industry (tariffs, non-tariff barriers).
- The potential for new environmental technologies (developed internally or externally).

Industries consider locational decisions based on estimates of economic dynamics, not the static model of the pollution havens debate. Hence access to new markets, dynamic advantages, expectations of future regulation and technology all play a key role alongside direct environmental costs.

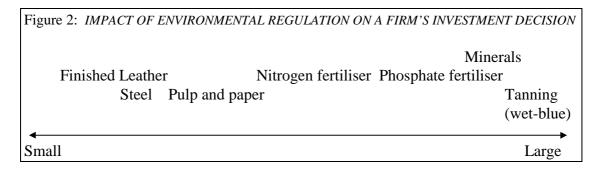
Industries characterised by high environmental abatement costs, with little opportunities to absorb costs or capture new markets, with few technological choices and limited protection are most likely to relocate in order to compete internationally. In such cases environmental costs may even be a primary consideration for a firm's investment decision.

It is more common that regulations are only considered once the so-called "fundamentals" have been met. These fundamentals generally relate to the size of the prospective market, natural endowments, and lower wages. They may also relate to

the availability of human and physical capital or existing infrastructure. It is common practice, particularly for long term projects, for the investor to pinpoint a number of different potential sites which meet their principal requirements, and then play each location off against the others, forcing them to offer significant incentives to finally locate. Amongst these can be a tacit or expressed lowering of environmental standards, which include provision of destructive infrastructure or low cost resources such as water and land.

The evidence has also shown the importance of not only at examining the evidence at the level of the sector but also at the different stages of production within each sector.

By categorising the different industries (or different stages of production of the industry) according to the five factors, it is possible to gain a clearer understanding of the impact, or likely impacts of environmental regulations on the investment decision of firms. Figure 2 classifies the different industries discussed above.



For each sector the factors will change over time, for example due to negotiations at the World Trade Organisation (WTO), the intensification of competition, or the introduction of new technologies and products. Examining likely changes can help predict future trends and the likely influence of proposed regulations.

This evidence also suggests that the most pronounced effect of increased competition for investment may not be a race-to-the-bottom in environmental standards, but environmental regulations becoming stuck-in-the-mud. This implies that competition and the fear of losing potential investors may keep regulation "chilled", not allowing them to reach their socially optimal levels.

The pollution havens debate must not be conveniently aggregated away, as there is clear empirical evidence that certain resource and pollution intensive industries have a locational preference for areas of low environmental standards.

Though environmental regulations may not be the primary influence on a firm's investment decision, they are important for pollution or resource intensive firms when choosing between countries in the same trading region, and between different locations in the same country.

There is also evidence that host countries have neglected or not enforced domestic standards in order to attract investors, and international investors have often encouraged such behaviour. The interaction between regulation and a

firm's decision to move is complex and dependent on a variety of factors, which requires in-depth sectoral studies to unravel.

#### 5.2 Stuck in the Mud: The Chilling Effect of Investment Liberalisation

It has been argued elsewhere that the primary impact of globalisation, rather than triggering a downward spiral in environmental standards, is to keep environmental policy initiatives "stuck-in-the-mud" (Zarsky 1994). Since each nation is reluctant to take unilateral actions which could potentially undermine their competitiveness and desirability as a investment location, the overall level of environmental standards will remain below their socially optimal levels. As a result markets are forced to become the key force to promote changes in environmental quality, as governments on their own are unwilling to make radical changes. This means that irreversible damage will continue as long as standards advance in a slow incremental fashion, driven by limited consumer, business and civil society pressure and incremental changes in technology.

Introducing optimal standards is difficult due to the inherent problem of representative democracy: that the interests of industry and workers are concentrated and well organised, whilst those who suffer the environmental effects are too dispersed to facilitate organisation and lobbying. Policy makers are subject to pressure in the form of advocacy, lobbying, biased research, campaign contributions from international business, from the public and press where domestic jobs are at stake, as well as by strong labour groups or regional bodies to maintain the "status quo".

The outrage at the modest climate change levy proposed by the UK Government in 1999 is testimony to this, and was fuelled by reports of large-scale job losses publicised by affected industry groups. However, all academic studies have actually shown the levy will bring long-term employment gains if properly designed, as well as ensuring environmental improvements<sup>51</sup>. This problem is worse in a global context, since it is the concentrated interests of domestic industries versus the interests of many outside the country to whom the government attaches little responsibility.

That there is little statistical evidence of this "chilling effect" is unsurprising, because evidence is needed of what has not happened. This issue must be investigated by historians and political scientists, not econometricians. There were clear indications that such a phenomenon was occurring in the sectors examined above. In the tanning industry, regulations in Brazil advanced in a slow incremental fashion as competitiveness fears (from Asia) and poor economic performances deflected minds away from environmental concerns. In the phosphate industry low cost producers in Morocco and Tunisia have been reluctant to enhance their standards partly out of fear this will make other destinations more attractive. In most natural resource sectors, where incremental changes in costs can deflect investment, standards continue to improve at a slow pace.

The effect is also seen in the failure of the European Union's carbon/energy tax; the US energy tax and Australia's greenhouse levy. Immediately after the US energy tax was announced a number of US companies demanded and received exemptions from the tax legislation. Further lobbying, particularly from the powerful National

Association of Manufacturers and the oil industry, finally defeated the proposal. They claimed that an energy tax would hurt the international competitiveness of US industry causing widespread job loss. However, estimates of how the tax would affect the competitiveness of even the most energy intensive industries found there to be small or negligible impacts<sup>52</sup>. Party contributions from the major oil and gas companies sector - Amoco, ARCO, BP America, Chevron, Exxon, Mobil, Shell oil, Texaco, Enron - reached \$20.8 million in the 1995/6 period, while the three big auto companies - Chrysler, Ford and GM - gave donations totalling \$2.3 million<sup>53</sup>.

Similarly, Shell and other large corporations threatened to reduce future investment in the Netherlands after the Government revealed plans for a carbon tax. In the UK the Paper Federation of Great Britain remarked that they might leave the UK, and Europe altogether, if a carbon tax was introduced<sup>54</sup>. Domestic and overseas firms have used the threat of shifting production abroad effectively.

These defeated proposals result not only in insufficient pollution abatement, but also distort economic incentives delaying the development of more efficient products and processes, and encouraging further investment in irreversible "dirty" capital - raising the future costs of converting to a cleaner economy. Controlling higher levels of emissions now tends to reduce future risks, and increases the flexibility of the economy to adapt to external changes at a lower economic and environmental cost<sup>55</sup>. It will also open up possibilities for the manufacturing and export of energy efficient goods and services. For example, the failure to introduce emission controls early on in the UK saw domestic companies lose out to German and Japanese manufacturers in SO<sub>2</sub> abatement equipment; strong domestic laws have given the US a competitive advantage in waste treatment<sup>56</sup>.

To overcome the "first mover disadvantage" requires some international harmonisation of standards, or the comfort that other will face some level of regulation. This process is already happening in regional trading blocs, such as the EU and NAFTA, but needs to be accelerated.

Though the traditional way of agreeing communal standards is through MEAs, their record to date has been mixed, especially for traded commodities. However, these instruments are often hamstrung by the difference in resources between North and South. Developing countries, at least initially, must be allowed greater flexibility, as embedded in the Rio Principle 17 on common but differentiated responsibilities, in implementing environmental standards. This would require greater transfers of resources North to South, to enable poorer countries to meet compliance costs.

Though this may be a feasible approach for some of the poorest countries, there seems no appetite for large-scale transfers from donor countries to more emerging economies. A more heterogeneous approach is needed – combining private sector, national and international instruments - to gradually pull up environmental standards and regulations closer to their optimal levels.

The most significant effect of different standards between and within countries may not be a race to the bottom, but the chilling effect on regulation and its enforcement. This is stopping regulations from reaching their socially optimal

levels. Dealing with this requires greater environmental regulation, both independently and collectively.

### 5.3 Other Dynamics between the Foreign Investor and Domestic Regulator

There are other dynamics between foreign firms and local regulators which can seriously impact the host country's environment. For one, foreign investors have stronger leverage than domestic companies because they can use the threat of disinvestment more credibly and effectively due to their existing international structure. They are therefore able to put pressure on the potential host country. In some circumstances foreign companies have targeted an area for investment, only so long as certain environmental obstacles are removed. For example, P&O put pressure on regional authorities in India to denotify one of India's three designated eco-fragile areas so it could go ahead with a port development<sup>57</sup>.

Such games happen at all levels of government and in all countries. In the UK the local council in Newbury after putting through the most controversial road scheme in the country broke their promise not to allow further development along the route because of the threat of disinvestment from a local firm.

The threat of disinvestment or movement of investment acts as a powerful tool particularly in developing countries eager for overseas capital. In the P&O case the state government was eager to stimulate industrial development with a new port and offered six potential sites. However, due to a lack of bidders it was encouraged by the company to allow feasibility studies to go ahead at a new environmentally protected site, or risk losing the investment all together.

Conversely where investors compete against one another, the local authorities are in position of strength to decide how the investment should proceed. In China, which is short of electricity, the authorities having been trying to maximise power generation per dollar invested. Companies, such as AES and ENRON, have found themselves under pressure to reduce environmental standards to win contracts<sup>58</sup>.

In some cases a company may already be established within a foreign country and although environmental regulations may not have been an initial concern, they can and do apply pressure on the host Government to lower regulations, or to prevent their enforcement. Cases include oil exploitation and drilling in Nigeria and mining by Freeport in Southeast Asia. Again the ability of foreign investors to switch production or capital between countries gives them greater power to obtain post-establishment concessions, though this power is reduced if the investment has high sunk costs.

It is not always a specific company flexing its financial muscle. In 1990 the EU placed tremendous pressure on the Namibian government to grant access for EU fishing vessels to their hake stock - the threat to hold up the disbursement of European Development funds. More recently, Spain threatened to block the partial accession of South Africa to the Lomé IV convention unless it followed through a fishing agreement with the EU.

To be meaningful, the traditional "pollution havens" debate must be expanded beyond international investment location decisions to include other dynamics which effect the impact of investors on the environment. The power of investors to alter environmental regulation must be differentiated into decisions in the phase before investments have been made, and the credibility of threats to disinvest once operations have been established.

#### 5.4 Pollution Halo's: Evidence and Extent

The 'pollution halos' argument is that foreign firms, who are subject to more stringent regulations at home, use newer, cleaner technologies and environmental management systems which they diffuse to the host country. It also asserts that multinational firms are more exposed to the environmental demands of governments, NGOs, shareholders and customers. Given the new resources that firms bring for improving efficiency, transferring knowledge and addressing existing pollution, this investment might pull-up industry standards.

There are clearly examples where foreign investors do bring environmental improvements to host countries. See for example, Blackman and Wu (1998), Zarsky (1999) and BIAC (1999). The evidence suggests that in some sectors, particularly the energy sector, where considerable economic savings can be acquired through superior technology, "pollution halos" may exist<sup>59</sup>.

However, there is also considerable evidence which does not lend support to the phenomenon. For example, studies by Dasgupta et al (1998) and Hettige et al (1996) have found that the newness of the facilities and the size of the plant (the bigger the better) were most important factors in their environmental performance. These studies also revealed that firms - both domestic and foreign - are incrementally improving their environmental performance as a result of effective national regulation and/or local community pressure. Two World Bank studies - Wheeler *et al* (1997) and Pargal and Wheeler (1995) - support these findings. They found that abatement is unaffected by foreign links, and that the key driver for change is the level of community pressure or informal regulation. This further highlights the importance of NGOs, and civil society at large, to articulate the demands and needs of the poorest and most marginalised communities.

However, as work on labour standards has also discovered, defining an investor's true environmental impact can be a difficult task. Companies may simply pass the environmental problem onto their suppliers, buyers or service providers within the host country. In some cases companies discontinue certain polluting activities and purchase them from local suppliers. In the chemicals industry for example, there has been a practice of buying certain intermediate chemicals locally rather than paying the high clean up costs of producing them<sup>60</sup>.

Even if investors abide by home standards abroad this does not necessarily ensure that environmental impacts are the same. For example, many US manufacturers 'pre-treat' their waste water and then since it is still slightly polluted, discharge it into a public sewer system for further treatment. Often in developing countries this second phase of treatment is unlikely, and the still somewhat polluted water goes directly into the nearby river source<sup>61</sup>.

Whilst market forces may be the primary determinant of investment decisions, the investment climate also plays a key role. Specifically, investors like predictability and consistency of rules<sup>62</sup>. Government officials in host countries, particularly in finance or investment promotion ministries, tend to take the view that higher environmental standards and increased operating costs will drive potential investors away. BIAC (1999) claims that clear and consistent regulatory policies can help promote both FDI and environmental protection. For some industries it will be in the interest of the host governments to address these concerns, and introduce clear environmental regulation that will provide a level playing field for them, and their domestic competitors. This would imply that greater collaboration between domestic authorities and foreign investors could help identify areas where improvements in regulation could be made.

Examination of the available empirical evidence shows, that in some sectors - particularly those which are energy intensive or require high technology - there is support for the 'pollution halos' hypothesis. However, for most industries factors such as age, size and community pressure have been more important in raising environmental standards than foreign investor involvement.

The problem of firms passing pollution onto suppliers, buyers or service providers, within the host country has been under-recognised in the literature on pollution halos and may be distorting the data on foreign company performance. Wider environmental impacts are also under researched.

Given the importance that foreign firms attach to clear and consistent regulatory frameworks, greater collaboration between the host country authorities and the investors (or the source country) can help identify areas where regulatory improvements could be made.

#### 5.5 Conclusions: FDI, Environment and Competition – the real issues

Though the debate over pollution havens and halos debate generated large amounts of interesting research, the fact that it has not been resolved shows it has been focused on the wrong issues. In fact, there is unlikely to be a definitive and aggregate answer to the question - do environmental regulations make firms relocate? The influence of environmental regulation on firm behaviour, and visa versa, is essentially a sector specific and time dependent problem.

A more policy relevant question is - whether competition for FDI is affecting environmental standards? To this the evidence above supports the following findings:

• Environmental costs – though currently low - have been a factor in firms' locational decisions. The effects is most pronounced in pollution intense and natural resource sectors, and when combined with factors such as stagnating home markets and increased international competition

- As global economic activity expands environmental damages will rise. A proportion of these costs will fall on companies, and pressures to account for environmental costs in location decisions are likely to rise.
- Competition for FDI has caused countries to lower, or not enforce, environmental regulations. Evidence shows that the threat of disinvestment is definitely chilling the evolution of high standards. This effect is probably greater than estimated because many "environmental subsidies" are indirect and hard to measure.
- The political economy of environment and investment is complex, with firms interacting with regulators at national, sub-national and local levels. At each stage the threat of disinvestment or relocation can force significant environmental concessions from authorities, the costs of which are rarely analysed.

The above conclusions present a serious challenge of how to balance environmental protection with increased flows of FDI. The classical way to approach such coordination problems is to set international standards, so that countries cannot lower standards under pressure from investors. However, outside highly integrated areas such as the European Union governments have generally shown themselves unwilling to limit their national flexibility in setting environmental regulations.

An alternative approach to creating a comprehensive agreement covering FDI and the environment is to use a mix of policies to raise the environmental performance of international investment, particularly in sensitive sectors. Raising environmental performance standards would hopefully reduce pressure investors could place on regulators. Weakening the chilling effect and laying the foundations for more permanent international regulatory solutions.

In this way FDI could become a positive force for increasing the environmental governance of both foreign and domestic companies through improved regulation, technology transfer and improved management.

#### 5.5.1 Improving the environmental performance of FDI

The evidence collected to investigate the pollution halos hypothesis does not identify a consistent trend of foreign investors having higher environmental standards because they are foreign. Rather the characteristics of these firms – size, sector, global production links, responsiveness to stakeholders – determine their better performance.

The environmental performance of FDI is also determined by host country factors which affect all industry, such as: effectiveness of regulation, host community pressure (higher in more affluent areas) and performance of sub-contractors. Access to environmental equipment is also a factor, as many countries - mainly in the developing world - put high tariffs on "green" goods (for example, up to 100% in India). Though manufactures of environmental equipment still see low or unenforced regulation as the biggest "barrier" to the entry of their products<sup>63</sup>.

Policy solutions must therefore have a broad scope. The point is not to create "green ghettos" of FDI with low apparent emissions of pollutants, but which contribute to unsustainable resource use; employ polluting sub-contractors; and rely on "subsidies" from uncontrolled infrastructure and urbanisation in order to operate.

Research in this area identifies the following factors as key for achieving high quality FDI that has positive spill-over effects into domestic industries (controlling for the effect of national regulation and industrial sector)<sup>64</sup>:

- Environmental performance is part of a company's core business or principles, or connected to its brand strength.
- Strong links into the domestic economy, especially through transfer of clean technology and managerial skills to sub-contractors.
- Pressure from shareholders and home country stakeholders to maintain and improve environmental standards.

All these facters can be encouraged by creative policies. For example, supporting the growth of environmentally sound markets through green export credits, government purchasing and ecolabelling; conditioning access to markets on entering into joint ventures with domestic companies and training local personnel; increasing the transparency and reliability of companies' environmental impacts abroad.

Though not a replacement for domestic regulation, it is important to realise the mixture of "push" and "pull" factors needed to raise standards. Creating an atmosphere of environmental excellence will facilitate the political, administrative and institutional changes needed to support moves towards long run sustainability.

Evidence shows that competition for FDI is depressing the evolution of environmental standards, and such pressures are likely to increase in the future. The development of comprehensive international regulations to safeguard against this will be time consuming and complex.

In the medium term this chilling effect can be reduced by raising the environmental performance of FDI above the legal minimum in the host country, and by facilitating diffusion of these standards to domestic firms. This can be achieved through a variety of market, voluntary and regulatory mechanisms.

### **Part II: Solutions**

The above analysis has identified specific areas where FDI, and its associated trade flows, creates environmental problems which would not occur if countries were dependent on domestic savings to fuel their development. These can be summarised into the following five points:

- X FDI can fuel economic development at a scale and pace that overwhelms host country regulatory capacity, resulting in inefficient and irreversible environmental destruction and even potentially a decline in overall country welfare.
- X Home country policies on subsidies FDI through export credits or aid flows produce a bias towards more environmental damaging investment. Investment agreements such as NAFTA and the OECD-MAI also limit the ability of host governments to pursue environmentally sustainable policies.
- X Some pollution intensive industries can be seen to be relocating to areas with lower regulatory standards, and will usually operate to lower standards than in their home countries when possible.
- X Natural resource seeking investors have a poor record of environmental management relative to global best practice. Often investors prevent host countries maximising returns from their resources, resulting in over-exploitation and unsustainable use.
- X Competition to attract FDI, or retain investments by international companies, has produced a chilling effect on global environmental standards in many areas.

Lack of adequate environmental governance in host countries is both a cause of these problems, and a result of competitive pressures to attract or retain FDI. Often the environmental costs of FDI fall on the poorest, who fail to benefit from the economic wealth it generates. Therefore, any solutions to the environmental impacts of FDI must also address the distribution of costs and benefits.

Solutions to these problems must be practical and focus on institutions with the capacity to change in the short term, before irreversible damage occurs. Though building capacity in host country governments to manage FDI and the environment is vital, this will often be a longer term process.

In the short to medium term standards must be raised through other means, such as: home country standards on investors; consumer and civil society pressure; and international codes on investor conduct. Facilitating these alternative mechanisms through international agreements will often be easier than building host country capacity, especially in least-developed, remote or conflict ridden areas.

The sections below describe work needed to achieve this in three important areas:

- X strengthened voluntary codes for environmental best practice by investors, and the promotion of voluntary eco-labelling in mass-market sectors such as forestry, fisheries and tourism;
- X reforming existing and planned investor protection and promotion agreements so that they do not undermine environmental regulation, or the fair and sustainable use of natural resources;
- X building a framework of international regulation and coordination to ensure FDI promotes sustainable development by preventing destructive competition, increasing economic benefits to host countries and protecting the rights of local communities and industries.

Practical solutions at all institutional levels (national, regional and international) are needed to maximise the positive contribution of FDI and minimise its negative impacts. Voluntary, market-based and regulatory components are all needed to ensure FDI promotes higher environmental quality and sustainable use of natural resources.

There is no magic bullet to ensuring sustainability in a globalised economy. A diverse set of complementary approaches is needed to balance growing economic pressures.

## 6. From Legal Compliance to Active Corporate Citizenship

Large multinational companies (MNC's) carry out the bulk of FDI, and have the knowledge and resources to operate to high environmental standards. The 500 largest businesses in the world control twenty five per cent of the planet's output in GDP terms. Similarly, among the world's 100 largest economies in 1995-96, 51 were businesses. These businesses are at the very core of global environmental concerns. In light of deteriorating environmental problems they must be expected to become "active citizens" in promoting sustainable development, taking responsibility for their role in the global economy and moving beyond legal compliance.

However, most MNCs consider that their only responsibility is to comply with host country regulations, and perhaps signing-up to a non-binding code of conduct. There are many such voluntary codes of environmental conduct, which range from inter-governmental agreements, to international and national business declarations, to industry or company based codes.

The most ambitious attempt to regulate the activities of multinational investors was the Code drawn up under the auspices of the UN Centre for Transnational Corporations (UNCTC), founded in 1974. However, this attempt to create a binding multilateral code ran into political opposition from OECD countries in the early 1980's and was eventually dropped. The UNCTC itself was downsized into an ineffectual department inside UNCTAD in 1993.

The most widely endorsed statement regarding MNC's and their behaviour towards the environment, is the chapter dedicated to business and industry in Agenda 21. Another inter-governmentally endorsed mechanism is the OECD "Guidelines on Multinational Enterprises", though they only currently apply inside OECD members. However, though 95% of FDI comes from OECD-based businesses, all OECD governments admit that the "Guidelines" have not greatly influenced companies <sup>65</sup>.

Voluntary initiatives by industry include international codes of environmental conduct such as the Business Charter for Sustainable Development of the International Chamber of Commerce (ICC) and the CERES principles. International sector-level codes exist in sectors such as chemicals, financial institutions, metals and tourism <sup>66</sup>.

However, voluntary guidelines seem to have had limited value in influencing the environmental behaviour of industrial sectors, even when they have been backed by governments <sup>67</sup>. Voluntary codes have tend to be most important to industry leaders; where they form a major part of the corporate identity, have a high level of buy-in from staff and are seen as contributing to overall business competitiveness. Where codes are imposed across a sector by industrial associations, or tagged on to existing management structures, they do not seem to make an appreciable difference.

The implementation of codes has also been limited by the lack of meaningful environmental reporting of both domestic and international operations. A recent study by UNEP showed that few companies, even when committed in principle to reporting,

are actually producing high quality environmental information which allows independent assessment of performance <sup>68</sup>. Even the existence of strong internal codes and audited reporting has not prevented companies such as Shell and BP being mired in controversy for some of their international operations. This is partly because in decentralised MNCs a central decision to follow a particular code will not automatically filter down to all day-to-day operations.

The limited impact of voluntary codes implies that there needs to be a floor of minimum standards for foreign investors, which would encourage a broad market transformation towards better environmental conduct. This floor would allow leading firms to push ahead with best practice voluntary codes, without fear of being undermined by unscrupulous competitors. Regulatory issues surrounding binding rules are discussed in Section 8.

To achieve sustainability companies must become active corporate citizens, and fill any gaps left by weak environmental governance in host countries. As a part of best practice behaviour companies should also support binding international rules to prevent corporate abuses.

#### 6.1 Defining Environmental Best Practice for Foreign Investors

The basic principles for environmental best practice by foreign investors are: to show they operate to high global standards; to work with local regulatory authorities; to actively engage with local stakeholders; to transfer environmentally sound practices and technology; and, to ensure that host countries receive a fair return from their investment, especially in natural resource sectors.

WWF has developed guidelines for helping identifying such best-practice corporate behaviour, which are used to screen a Agreen≅ investment fund based in the UK, but which invests internationally. These guidelines are shown in Box 1.

Operating to high global standards means that a company must be its own environmental regulator. This requires a precautionary approach, as a company should have the greatest knowledge of its own environmental impact. Employing both prior assessments of environmental impacts, and regular environmental audits to measure environmental performance. Policy statements must be converted into measurable performance targets, which are independently measured and audited and open to public scrutiny. The importance of equity considerations means that there is also increased pressure from the public to perform sustainability auditing, which encompasses both environmental and social concerns.

#### Box 1: WWF-UK "Best of Class" Guidelines

- ∃ Legal compliance
- ∃ A publicly available environmental policy
- ∃ Measures for environmental performance and targets for improvement
- ∃ External certification to standards such as EMAS, ISO 14001, FSC, SA 8000 etc.
- ∃ Public environmental and social reporting on performance against targets

 $\exists$ Environmental impact assessments of activities  $\exists$ Assessments of products and processes over their life cycle  $\exists$ **Best Environmental Option Assessments**  $\exists$ Examples of uses of the Precautionary Principle  $\exists$ A publicly available statement on human rights  $\exists$ Equal opportunities and community involvement  $\exists$ Commitment to minimising impacts on biodiversity  $\exists$ Continual improvement in environmental performance  $\exists$ Technology transfer mechanisms  $\exists$ A proactive and innovative approach to environmental issues Business in the Environment FTSE 100 Index decile rating (or non-UK equivalent)  $\exists$  $\exists$ Culture of Transparency  $\exists$ Association of Chartered Certified Accountants awards

Source: WWF-UK (1999d), *Investing in Companies of the Future*, The NPI/WWF Investment Fund Policy

As an active corporate citizen a company cannot just focus on the performance of its operations, but must ensure that all host country stakeholders - regulators, workers, local communities and civil society - are involved in this process. By working with these groups a company can help improve environmental governance in the host country, which will extend to other operations in that area.

MNCs can also positively influence the host country through their supply chain relationships with local firms. These positive externalities from FDI are often the main benefits that the host country expects to gain, and why they compete for investment. However, the transfer of environmentally sound technology and practices down the supply chain is not automatic <sup>69</sup>. Many companies ignore the working practices of their suppliers if product quality and performance is satisfactory. Alternatively operations may be very isolated from the host economy, only using small amounts of local labour and relying on imported machinery. This type of economic isolation is prevalent in natural resource extracting sectors and some tourism, especially cruises and segregated resorts <sup>70</sup>.

MNC=s should ensure that they source from host country suppliers where possible, and help suppliers achieve better environmental performance through capacity building and access to better technologies. In natural resource and tourism industries it will often be difficult to directly employ local suppliers given the nature of the business. Therefore, in the longer term host countries should be encouraged to develop ways of exploiting these natural resources with less reliance on foreign technology and capital. This is an issue of national development planning which is beyond the scope of most companies to influence. However, in agricultural investment much can be done to ensure small local producers are used by not centralising production in plantation systems.

To ensure host countries receive a fair return on their resources, MNC=s should actively engage in joint ventures with local companies, and ensure payment of fair resource rents and taxes. This includes stopping tax evasion through practices such as transfer pricing. Best-practice companies should lobby for international rules to prevent such restrictive business practices, and actively work to implement anti-corruption legislation.

Industrial organisations who support sustainable development goals (eg. the World Business Council for Sustainable Development) should argue against international restrictions on mandatory performance requirements in World Trade Organisation agreements and bilateral investment agreements; for example, bans on local content, joint ventures and technology transfer conditionality on investors.

Voluntary codes of conduct on international business have a role in defining and encouraging best practice behaviour, though without a surrounding mandatory framework effective implementation is likely to be confined to industry leaders. However, such codes can have also have a significant business advantages in terms of reputation, staff morale and avoidance of legal challenges.

#### 6.2 Ecolabelling in Resource Intensive Sectors

Multinational companies (MNC's) engaged in the resource and pollution intensive sectors often face significant competitive pressures in the marketplace, and a weak regulatory infrastructure due to the difficulty of monitoring remote operations in sectors such as fishing, forestry and agriculture. These factors combine to place significant commercial pressures on managers to raise profits by lowering environmental standards or flouting local regulations.

For many non-consumer sectors such as chemicals, mining, oil and gas exploration these pressures can only be resisted by internal codes of conduct, international regulation and strengthening of local regulatory capacity. Though these are more long term solutions and are examined more closely in Section 8.

However, in sectors where consumer pressures are potentially strong, eco-labelling can provide a strong commercial imperative to implement strong environmental and social management systems. At the global level eco-labelling is most likely to be successful in areas such as forestry, fisheries, some agricultural commodities and in eliminating specific inputs to consumer products; for example, CFCs or endocrine disrupting chemicals. Broad life-cycle eco-labels on products, which are prevalent in Europe, have not been very successful in countries at different levels of development.

The most widely recognised and successful commodity eco-labelling scheme is the Forest Stewardship Council. This is an independent organisation set up with the help of WWF, to provide voluntary international standards for sustainable forestry. The standard covers biodiversity management, replanting, and workers= conditions, as well as business interests to ensure it does not exclude small scale or poorer harvesters. The scheme contains in-built flexibility so it can respond to the local conditions. The importance of certification in forestry management is shown by the

growth in certified forests from 1 million hectares in 1995 to 12 million hectares in  $1998^{71}$ .

The growth in demand for FSC timber has often been driven by intermediate suppliers (construction firms, hardware stores, supermarkets) rather than direct consumer pressure. Commitments by such firms to purchase large quantities of certified timber give greater certainty for suppliers to invest in converting to audited sustainable forestry practices. Though labelling schemes already exist in the fisheries sector, on some tourism products and agricultural commodities such as cotton, these have yet to achieve significant market shares.

Developing countries, such as Brazil, Singapore and Malaysia, have complained that eco-labelling discriminates against their products since they may lose trade. Although there may be a greater need for transparency in the eco-labelling process, or more unified standards, evidence has shown that such schemes have little impact on trade patterns as efficient producers are able to respond to the new challenges <sup>72</sup>. Therefore, discussions in the WTO=s Committee on Trade and Environment and other relevant committees, such as that on Technical Barriers to Trade, must ensure that the interpretation and development of WTO rules do not hamper this potential.

The growing demands of the green consumer present considerable opportunities for foreign (or domestic) investors to convert to sustainable production practices for a range of consumer products. The market opportunities given by eco-labelling give these schemes advantages over corporate codes, and the potential to move beyond industry leaders to influence large proportions of markets. With a commercial driver the standards become a core business factor in a company's operations, not just a Agreen≅ add-on. The relative success of the FSC also shows the importance of demand-side measures in purchasing countries - supplier agreements, education, public policies, information packs - in producing sufficient demand to make a real impact on mainstream corporate behaviour.

Ecolabelling is a powerful tool to promote more sustainable production practices in consumer- sensitive natural resource sectors, such as forestry, fishing and tourism. However, binding minimum standards of environmental conduct are also necessary to push standards upwards, and allow eco-labelling to reach a significant market share.

# 7. Reforming International Investment Agreements: Removing Barriers to Sustainable Development

Compared to most national or regional investment flows, international investment is under-regulated. Most binding agreements at the international level are instruments for investor protection (compensation for expropriation), investor treatment (national treatment, outlawing performance requirements) or increasing the access of foreign investors to certain sectors (sectoral liberalisation, removal of technical barriers).

Outside regional economic agreements such as NAFTA and the European Union, the primary instruments for achieving these deregulatory objectives have been Bilateral Investment Treaties (BITs) signed between two sovereign states. In 1997 there were 1,517 BITs, up from around 500 in 1989. BITs have varying scope and complexity, and have been signed between countries at all levels of development: 48% between developed and developing or transition economies; 45% between developing countries themselves or with transition economies <sup>73</sup>.

Several areas of investment liberalisation and investor treatment are also dealt with in the General Agreement on Trade in Services (GATS) and the Trade Related Investment Measures agreement (TRIMs), administered by the WTO. Unlike most BITs the GATS and TRIMs agreements do not allow foreign investors to directly challenge states for failing to fulfill their treaty obligations.

The proposed OECD Multilateral Agreement on Investment would have combined the most Ainvestor-friendly≅ parts of these previous agreements, inside a framework aimed at total liberalisation (no new non-conforming laws) with direct investor-state dispute settlement <sup>74</sup>. Similar, if less far reaching, agreements have been proposed for the next round of WTO negotiations <sup>75</sup>.

These instruments aim to promote greater FDI by limiting the ability of sovereign governments to discriminate against, or limit the actions of, incoming investors, and by providing more investment protection than is available in national courts. In contrast, little effort has been made to construct international regulation in other areas where national governance systems might be limited. The most sophisticated system of treaties covers transfer pricing and double taxation issues. However, even given these instruments TNCs seem to be increasing efforts to avoid taxation through transfer pricing. In 1994 US tax authorities made \$3.5 billion in tax adjustments because of transfer pricing irregularities. In a recent UNCTAD survey 84% of developing countries surveyed felt that TNC affiliates in their countries were shifting income to avoid tax liabilities <sup>76</sup>.

The only other binding international regulatory instrument is the recent OECD agreement on combatting bribery and corruption, which entered force in February 1999. All other processes on business practices, environment and labour are either

voluntary or lack strong implementation mechanisms; for example, the UNCTAD Code on Controlling Restrictive Business Practices <sup>77</sup>.

As with any market, the lack of adequate international regulation over FDI will result in economic inefficiency and lower consumer and public welfare. Investors will tend to exploit different investment regimes to minimise tax bills, externalise social and environmental costs and distort markets through restrictive practices.

Current international agreements on FDI do not balance limitations on national sovereignty with enhanced international regulation. This undermines the pursuit of sustainable development, reducing the value of FDI to host economies and fostering inefficient investment and damaging management decisions.

### 7.1 International Investment Agreements: balancing policy flexibility and investor confidence

BITs and other investment agreements aim to promote greater investment flows by liberalising investor access and increasing investor confidence in the safety of their investments. Basic capital allocation theory argues that greater flows should increase total economic output by ensuring available capital is used most efficiently. However, the same theory also shows that investment promotion is not sufficient to raise efficiency in the absence of true competition and adequate regulation. Regional and WTO agreements have made limited attempts to address efficiency questions by limiting subsidies or policy competition between countries to attract investment.

#### 7.1.1 Causes and determinants of FDI flows

Studies tend to show that effective investment protection and liberalisation are necessary, but definitely not sufficient, to stimulate FDI flows. The destination of FDI is mainly driven by potential market growth and access to cheap factor inputs. This accounts for the dominance of China as a destination for FDI. There is some evidence that - despite having liberalised - African countries receive relatively low levels of FDI given their resource base and market size. This may be due to low investor confidence in local legal systems, because Africa lacks a strong regional investment source (cf. Hong Kong and China) or that economic growth projections are weak <sup>78</sup>.

The economic arguments for investor protection disciplines and liberalisation are therefore different. Investor protection aims to create an environment where investors have confidence they will receive an adequate return on their capital. Investor liberalisation treaties codify the level of access to the host economy, without giving any extra motivation for FDI to flow into a previously closed sector.

The rationale for governments to sign-up to international investment protection agreements is mixed. Governments lose potential advantages from policy flexibility, but may gain increased flows because investors will have increased confidence in their legal environment. However, the actual magnitudes of these two effects, and thus the size of any trade-off, is very hard to determine. Policy flexibility may be used wisely to promote economic development, or may result in inefficient protectionism. High

levels of investor protection may do nothing but increase the profits of investors who would have come anyway, lowering net economic benefits to the host country.

Investment liberalisation should be more straight forward, as it should increase the total productive capital in a country; raising growth levels and providing new or higher quality employment. However, despite the theoretical advantages of investment liberalisation many of the most developed countries limit the penetration of foreign investment into their economies. For example, exceptions to the OECD-MAI totalled over 1000 pages when negotiations collapsed in October 1998. The complexity of these issues is confirmed by the fact that regional economic areas tend to agree higher levels of liberalisation when their members are at similar, and higher, levels of development.

Investors themselves tend to prioritise market access agreements over investor protection disciplines, which is a marked change from the 1970s when the fear of nationalisation was strong. A recent meeting of European Union businesses showed an ambivalence for multilateral rules on expropriation, performance requirements and profit repatriation. On the other hand companies did want negotiations on increased market access - especially to other developed countries - transparent and consistent rules in the host country, and may value extensions in competition policy. Fears were also expressed that investment rules could limit existing access in developing countries, and reduce companies' negotiating power <sup>79</sup>.

Overall, investment promotion rules seem to restrict the rights of governments, while seemingly providing few obvious benefits in the way of increased incentives to investors. However, those companies responding to such surveys tend to have an existing business competence in dealing with the risks of FDI, and perhaps do not represent the views of companies who have yet to invest abroad and may value international protection more highly.

#### 7.1.2 Conflicts between liberalisation and policy flexibility

There are three possible explanations for the reluctance of most countries to liberalise completely and provide equal treatment to all investors: existing investors, whether domestic or foreign, may wish to limit competition; foreign investors have specific differences compared to domestic investors in some sectors (eg. cultural industries); open access to foreign investors may conflict with other policy objectives, such as building domestic industrial capacity.

The form of existing investment promotion agreements does not differentiate between these reasons, but sets a framework of legal parity (national treatment) where foreign investors cannot be treated less well than domestic ones, but may be treated better. There is no attempt to assess the economic parity between foreign and domestic investors, or whether competition would be Afair based on factors such as capitalisation, size, technology, brand name etc.

In order to accommodate issues of economic imbalance, or to preserve other national policy goals, investment agreements allow Aflexibility≅ in their provisions. This may be achieved in different ways, such as explicitly nominating those sectors to which the agreement applies, or specifying exceptions from its provisions <sup>80</sup>. The extent of these

flexibilities is decided by the relative bargaining power of countries in negotiations. There is no rational framework for comparison, though general exceptions for national security are usually included.

However, both theory and practice show that the extent of liberalisation must necessarily be limited by other policy goals, especially in the absence of adequate international and domestic regulation. Each sphere of sustainable development - economic, social and environmental - requires international markets to be limited to some extent. The needs of development, competition and human rights justify limits in the economic arena; maintenance of local cultural diversity and community economic control may necessitate limits in the social arena; potential irreversible impacts and maintenance of communal-use rights provide a rationale for limits in the environmental sphere (see UNCTAD 1997 (p.231) for discussion).

Limiting liberalisation, whether permanently or temporarily, is often unfairly dismissed as a Asecond-best≅ policy option compared to changing domestic policies; for example, improving domestic competitiveness, increasing skill levels or raising regulatory enforcement levels. However, it is often the only feasible policy option given the development level and fiscal capacity of many countries.

As limiting liberalisation incurs the cost of rejecting extra investment it will obviously not be taken lightly by any government. However, investment agreements - and their negotiators - often seem to assume that countries will always use policy flexibility unwisely. Arguing that even if there are potential development gains from restrictions on FDI such powers will be abused, and so should be restricted through international disciplines. However, over 90% of recent unilateral changes in investment laws have been liberalising, not restrictive <sup>81</sup>. Therefore, it is more likely that governments are abandoning necessary limits rather than imposing too many.

Existing agreements deal with these limits to investment liberalisation in an ad-hoc way, and give governments few rights to pursue non-liberal policies. In the OECD-MAI negotiations these conflicts aroused public opposition because the major extensions to investor protection intruded into many new areas of national decision-making <sup>82</sup>. The sections below detail the conflicts between the OECD-MAI and environmental sustainability.

Investor protection and liberalisation agreements must recognise the necessary limits to liberalisation in a systematic and coherent manner, which subordinates investor rights to legitimate national sovereignty and the achievement of sustainable development.

### 7.2 Learning from the OECD-MAI: Avoiding Conflicts between Investment Agreements and Environmental Laws

The OECD-MAI was analysed for its impact on environmental legislation by the OECD secretariat and national governments as part of a co-ordinated process initiated in December 1997. These reviews showed that there were significant conflicts between the OECD-MAI and both multilateral environmental agreements (MEAs) and

national environmental legislation, which had not been addressed in four years of negotiations <sup>83</sup>.

The OECD-MAI clashed with MEAs because they often aim to ensure that the benefits of environmental protection are spread evenly between Parties, and not allocated purely by market forces. The Rio principle of "common but differentiated responsibility" allocates obligations and benefits between countries on the basis of their level of economic development. These distinctions, which include financial resource and technology transfer obligations, can translate into discrimination between investors. Examples of OECD-MAI conflicts with MEAs include <sup>84</sup>:

- The Convention on Biological Diversity (CBD) mandates the use of Abenefitsharing agreements≅ under which the profits from exploiting genetic resources will be split between national governments and the - usually foreign -companies which directly exploit them. Experience of such agreements is that they tend to be constructed in a way that would have conflicted with MAI provisions.
- The United Nations Convention on the Law of the Sea (UNCLOS) empowers states with extensive sovereign discretion over the conservation and management of their territorial waters and Exclusive Economic Zone. Its rules anticipate developing coastal states being entitled to require compensation from foreign fishing fleets to support financing and technology related to the fishing industry. States may also require the use of local ports, personnel and the landing of fish in local markets, conflicting with OECD-MAI rules on non-discrimination and performance requirements.

The potential for such conflicts was recognised in both papers by the OECD secretariat and individual country analysis; for example, by the UK and South Korea. However, even at the time negotiations finished there were no proposals for dealing with these conflicts.

The OECD-MAI threatened legitimate national environmental regulation in three ways. National Treatment rules prevented discrimination against foreign investors in order to protect the environment (*de jure* discrimination); for example, requirements for higher environmental bonds; information on environmental performance abroad; and exclusion from environmentally sensitive sectors such as toxic waste disposal.

Secondly, National Treatment rules allowed investors to challenge regulations which while not openly discriminatory, have the effect of discriminating (*de facto* discrimination). This could affect regulation of new processes such as biotechnology, and evolving regulatory frameworks that require the use of the latest environmental technologies.

Thirdly, rules on expropriation exposed governments to challenges from investors which claim their profits have been taken away by the imposition of an environmental regulation. Such expropriation provisions already exist in NAFTA. For example, this led a US company, Metalclad, to sue the Mexican authorities for expropriation, because a toxic waste dump they purchased was not allowed to re-open after a further impact assessment revealed it lay over a vulnerable aquifer <sup>85</sup>.

Any international or national rules which aimed to spiral up environmental performance by requiring international investors to operate to minimum standards which may exceed local levels, would fall foul of similar international investment rules which interpreted Anational treatment rigidly.

It has been suggested that a general exception for environmental legislation, similar to Article XX of the GATT, could be included in any future investment agreement to remove such problems. However, experience with the GATT XX has shown its interpretation to be unclear and biased towards maintaining liberalised markets. New processes are needed to balance environmental and economic priorities, which are based on agreed international norms such as the polluter-pays-principle, precautionary principle and prior informed consent <sup>86</sup>.

Official environmental assessments of the OECD-MAI showed that such binding international investment rules could conflict with both MEAs and national environmental laws. Any future international rules on investor protection must avoid such conflicts and respect recognised principles of environmental law.

7.2.1 Conflicts between investment agreements and the sustainable use of natural resources

Many countries registered exceptions from the OECD-MAI over the control of natural resources <sup>87</sup>. These included provisions on second home ownership, land purchase, access to certain agricultural sectors and types of natural resources. The aim of many such policies is to improve environmental management by ensuring that countries and local people gain direct income and employment benefits from their natural resources. Similar laws are integral parts of many of conservation projects run by WWF and other agencies, but could have been challenged under the MAI as discriminatory.

As described above, it is particularly important for governments to be able to impose requirements on foreign investors to transfer environmentally sound technologies, use local suppliers and participate in joint ventures. Without such links into the domestic economy even the OECD has realised that it is unlikely that FDI will raise domestic environmental standards <sup>88</sup>. However, all these measures were on the list of outlawed performance requirements in the OECD-MAI. The TRIMs agreement also outlaws similar measures, and these may be expanded during its scheduled review in 2000.

Measures which restrict access to land or natural resources according to the number of years someone has resided in a particular place (a common way of defining community rights) were also potentially discriminatory under the OECD-MAI. There was some ambiguity about the legality of such residency requirements, but authorities in the US and some Nordic countries exempted such measures from the MAI to ensure they were not challenged.

Though the MAI explicitly included natural resource concessions (mining, forestry, fishing rights etc.) in its description of investment, the provisions tended to treat resources like any other investment. Norway strongly objected to the proposals saying that they conflicted with sovereign resource rights given under UN treaties <sup>89</sup>.

Under the OECD-MAI the sale of all natural resource concessions had to notified in advance to potential investors. It was unclear how this related to the re-allocation of resource rights from the State to local or communal ownership, which is a common part of conservation and development programmes. It was also unclear how post-colonial land reform projects would be carried out given the strict compensation rules in the MAI, especially if the land had been originally taken by force, or through corrupt practices, from their indigenous owners <sup>90</sup>.

The OECD-MAI and other investment related agreements are based on a naive view that host country environmental regulation is set optimally and enforced perfectly, and so there is no need to promote technology transfer or rising environmental standards. As discussed above, given the economic pressures working against effective regulation without positive rules to raise standards increasing FDI is likely to chill environmental regulation and promote unsustainable resource use.

The OECD-MAI would have undermined efforts to achieve sustainability by outlawing mandatory requirements for technology transfer, joint ownership and local content. Even though these can be powerful ways of improving the environmental performance of domestic business.

The OECD-MAI conflicted with policies to strengthen local or communal control of natural resources, and reduced the ability of governments to gain fair benefits from natural resource exploitation. Any future investment agreements must respect community rights over natural resources, and give sufficient policy flexibility to maximise benefits to host countries.

# 8. International Regulation of FDI: Setting a Framework for Sustainable Development

While reforming existing investment agreements and promoting better corporate practice though voluntary and market mechanisms are important, they are not sufficient to promtoe sustainable development. A coherent system of international rules is needed to regulate increased global investment flows. This does not imply a system of centralised regulation, though standards on core labour practices and environmental management should be a component. Rather, such an international framework would co-ordinate and support domestic regulatory efforts to ensure that:

- X competition for investment does not undermine national democratic decisions;
- X the scale of international economic activity is matched by adequate regulation at all levels;
- X investor behaviour is transparent to all stakeholders in both home and host countries, and appropriate mechanisms are available for enforcing good corporate governance.
- X fair benefits from FDI, especially in resource extracting sectors, flow to host countries and communities, and that local resource rights are respected.

Implementation of mechanisms to achieve these objectives will necessarily take place in different international institutions, which have different competencies for environmental, labour, human rights and economic issues. However, practical division of labour should not be an excuse for unbalanced evolution of the system. Currently, the liberalising component of the framework is overdeveloped, and other parts non-existent, ineffective or unenforced.

Therefore, the primary task for any international negotiations on investment is to define the overall framework, prioritise work on the weak and missing pieces, and identify their appropriate institutional home. Where no appropriate institution exists to perform a function one should be created, as has happened with Multilateral Environmental Agreements. This process should take precedence over any new liberalisation or investor protection efforts in the WTO or regional agreements.

This report does not aim to identify a definitive institutional home for each of the policy mechanisms described below, as the options are to numerous and contingent on political factors. For example, binding minimum standards could be integrated into investor protection agreements, or could stand alone but be linked to them through joint enforcement mechanisms. These are issues of institutional design, political tactics and feasibility, which - though vitally important - are beyond this analysis.

Unfortunately, most official discussions on how to integrate sustainable development goals into economic agreements are heavily biased towards "minimum regulation" solutions. There is a reluctance to address the actual changes needed, given the

increasing pace and scale of international economic pressures on the environment. Instead, policy makers tend to argue for theoretical solutions (eg. radically improved host country regulation) which do not require changes in economic institutions, but have little likelihood of immediate implementation.

This intellectual stance is deeply hypocritical because the institutions of liberalisation themselves are confused, overlapping and duplicating. For example, European TNCs are protected or governed by disciplines in national laws, the EU treaties, the WTO, bilateral agreements, and the OECD. Soon they will also be covered in the Lomé agreements, under the MFTZ and through emerging EU agreements with the US, MERCOSUR, APEC, Mexico and many others.

The OECD-MAI also had many unresolved conflicts with existing economic agreements - especially those in the WTO on intellectual property rights and performance requirements. However, negotiators of economic agreements generally take a "belt and braces" approach, in the hope that the most liberal or "investor friendly" rules will hold sway. The disputes bought under NAFTA show that companies will carefully pick the jurisdiction in which they bring cases in order to maximise their advantages.

The pace and scale of globalisation means that a diverse set of policy interventions, at many different institutional levels, are needed to achieve agreed environmental goals.

We cannot wait for the "ideal" system of global environmental governance to be negotiated, but must move forward on a number of overlapping fronts. Prioritising real environmental outcomes rather than institutional elegance.

### 8.1 Promoting Best-practice Investment: the Role of Binding Minimum Environmental Standards

While voluntary, consumer or financial-sector driven initiatives can do much to improve company behaviour, a mandatory minimum floor to environmental conduct is needed to prevent the best firms being undermined by unscrupulous competitors. Already, companies who have invested in environmental and social reporting systems are deeply aware that competitors who fail to disclose their performance attract less attention <sup>91</sup>. This perceived unfairness is slowing the wider introduction of better management methods and higher standards.

The fear of being uncompetitive, while not always based on economic fact, does reduce the willingness of companies to adopt best-practice and thus improve standards over the bulk of the sector. It also encourages whole sectors to lobby against higher standards in both home and host countries. Even though many, and perhaps even the majority, of companies would be willing and able to perform at the proposed level.

Binding standards would provide a floor to global corporate behaviour, and comfort to companies that wish to implement higher standards. These standards would constantly move upwards as best-practice evolves.

Minimum standards for foreign investors would help relieve pressures on host countries to compete through deregulation. They help make up inadequate regulatory mechanisms in the host country, and provide an alternative means of recourse for citizens and communities affected by corporate behaviour.

Some countries have expressed concern that mandatory standards would result in extraterritorial interference in their affairs, and may reduce their ability to attract FDI. These concerns reflect existing debates in the international trading system, where unilateral action to exclude goods based on their process and production methods has been subject to protectionist abuse. Such mis-use of GATT's environmental provisions has been condemned by environmentalists and trade officials alike <sup>92</sup>.

However, imposing internationally agreed standards on foreign investors does not result in any extra-territorial effect. Firstly, only investors are affected and not host country regulations or governments. Secondly the standards themselves would have to be negotiated internationally (either multilaterally in the UN, or plurilaterally in bodies like the OECD) and so would not be susceptible to unilateral changes by any one country. This is unlike the controversial Helms-Burton law unilaterally invoked by the United States to prevent its corporations abroad dealing with Cuba or Libya.

The analysis above has shown that, outside a few sectors, environmental standards are not a major driver of overall investment flows. Therefore, the impact of appropriate mandatory standards will be to reduce environmental externalities in the host country - increasing the value of FDI to their economy - while maintaining the overall volume of FDI. Higher standards in foreign firms are also likely to promote better standards of performance in domestic industry though technological and management diffusion, direct competition and supply-chain linkages.

Fears of "green protectionism" are overstated, and best dealt with by developing countries taking an active and engaged attitude to the formulation of such standards, and insisting on open and transparent processes of enforcement.

Though this report primarily concentrates on environmental performance, any codes of conduct will obviously also include standards on labour conditions, human rights and other aspects of general corporate behaviour. The links between more general rules for corporate behaviour and environmental issues are explored in Section 8.5.

- 8.1.1 How minimum standards help promote a race-to-the-top
  The process of improving investor performance in a sector involves a synergy of
  voluntary and regulatory approaches which together facilitate a "race to the top" in
  environmental standards which is driven by four processes:
- X **Eliminate worst practices**: A mandatory minimum floor to prevent worst practices.
- X Ensure average performance is monitored and transparent: binding rules for the transparency of investor behaviour through for example standards

for environmental management and reporting against voluntary commitments.

- X **Support best-practice performance**: home countries should give incentives to support firms operating at best-practice levels; for example, preferential access to export credits, and through the promotion of mass market eco-labels.
- X **Promote state-of-the-art performance**: voluntary initiatives by leading edge companies to define state-of-the-art practices, often in partnership with NGOs, should be officially recognised. This could involve information dissemination, training, award schemes and supporting niche eco-labelling schemes.

The process of environmental improvement is highly dynamic and standards should be continually evolving upwards. State-of-the-art companies will constantly redefine best-practice by demonstrating the limits of what is currently feasible. This could involve traditional pollution reduction and environmental management (so-called ecoefficiency), or a radical switch of their core business away from unsustainable practices. For example, moving from fossil fuel production to renewable energy sources; providing natural pest management rather than agro-chemicals; or moving from mining primary materials to recycling and resource efficiency.

State-of-the-art innovation should be recognised and rewarded where possible. However, official incentives will relatively marginal because these companies' actions are self-motivated. Seeing environmental and other standards as a core corporate driver and part of their basic competitive advantage (eg. 3M, the Body Shop). Government attention should therefore be given to promoting these examples and ensuring best-practice guidelines evolve to include state-of-the-art innovations.

Coordinated action by governments is more necessary to encourage the bulk of companies in a sector to move towards higher standards. Companies should be encouraged to move to best-practice by administrative incentives such as preferential access to aid contracts, export credits and investment insurance. Some countries already have negative environmental screens on schemes such as export credits, but a positive approach based on incentives is equally important. For examples, official support and promotion of eco-labelling schemes aimed at mass-market share (eg. the Forest Stewardship Council) through government procurement practices.

However, increasing standards across a wide range of companies requires more than just raising best practice, the performance of the median company must also improve. The first step in this process is to punish the worst corporate abuses through new legal safeguards on company behaviour. These legal safeguards would concentrate on basic core standards in labour, human rights, ensuring host country laws are observed and protection for the rights of host communities.

Better conduct over a broader set of issues could then be provided by making companies provide independent monitoring and transparency of their behaviour abroad. Including, how well they have performed relative to any voluntary commitment to environmental practice above statutory levels (for example, the OECD Guidelines on Multinational Enterprises or the CERES principles).

An alternative to using high standard multilateral codes of conduct as a benchmark is to monitor a company=s operations against the best of home or host country regulatory standards in a sub-set of areas (for example, emissions standards of toxic chemicals). This would prevent any double standards; where companies abroad operate in ways that would be unacceptable in their home country.

Such transparency will prevent laggards hiding behind better practice firms. Currently, it is common for the worst firms to dominate the Abusiness voice in political debates through the medium of industry associations (for example, the initial dominance of Exxon in the climate change debate). Therefore, despite the membership of many companies operating to higher standards, industry associations tend to lobby for the lowest common denominator in both mandatory performance. ABreaking the industry veil would allow stakeholders in both home and host countries (communities, workers, pension funds, individual shareholders) to differentiate between companies based on their global environmental performance, and would encourage progressive companies to raise their voices in political debate.

The first objective of mandatory international rules on investor environmental behaviour should be to develop generic standards which can be applied across all sectors, as these will be both easier to define and less dependent on local circumstances. However, there is also a need in some resource intensive and polluting sectors for more specific sectoral agreements, and these are outlined below.

Generic environmental standards will tend to concentrate on procedural and process orientated issues (eg. environmental assessment; adequate consultation with local communities; implementing prior informed consent; invoking the precautionary principle), and not detailed emission standards or guidelines on specific sustainable resource use.

As outlined above, many such generic codes for environmental performance and management exist at the international and national level. The precise content of an appropriate code is not hard to define technically. More problematic is how such a code is implemented in practice.

8.1.2 Implementing mandatory standards of environmental performance Implementation mechanisms can be defined at the international or national level, be linked to existing enforcement systems or be a stand alone mechanism. Whatever the option chosen, there are common issues of: who has standing to activate the procedure? How is the burden of proof allocated? What mechanisms exist for collecting evidence? Is there a right to appeal?

These issues are not dealt with in detail, though mechanisms exist in other areas which show such problems are surmountable (eg. the World Bank=s inspection panel; laws on the extra-territorial prosecution of sex offenders in many countries).

There are basically four ways of implementing a Abinding≅ code on foreign investors:

X Through access to host country courts.

- X Through access to home country courts.
- X Linking compliance to receiving the benefits of investor protection agreements.
- X Through an international tribunal system.

Access to host country courts provides a relatively straightforward forum for implementing a binding code, because rules of procedure exist and the gathering of evidence is simplified. However, this would only be a useful option if the code had higher standards - or more comprehensive coverage - than domestic law. In addition, one rationale for an international code is that local courts may not provide a fair hearing, or allow a case to be bought if it conflicts with the interests of the government or local elites. This is also the argument for including binding international arbitration to protect investor rights in investment protection agreements.

Currently in some circumstances, which differ between countries, companies can be sued in their home countries for breaking laws in the host country. Several cases have recently been bought in the UK courts for health and safety violations by UK multinationals abroad, though standing was only achieved by recourse to the highest appeal courts. The Brussels Treaty of the European Union explicitly allows companies to be sued in their home courts for violations elsewhere in the Community, and many countries interpret this to hold for actions outside the EU. Similar rights are also included inside the US Alien Torts Act <sup>93</sup>.

However, existing procedures tend to be labourious and often require significant time and expense for the plaintiff to prove standing in the home country. An international agreement could formalise and simplify such procedures, so that legitimate preconditions for bringing a case to home courts are clear. Their behaviour could then be judged against an international code, or the best of host or home country laws, depending on the standard set for TNC behaviour by the home country.

Home country courts could also be used in the absence of such an international agreement to pursue more straightforward claims such as a failure to comply with environmental reporting procedures on foreign operations, or failures to have adequate systems for environmental risk management in place.

Where an investor protection agreement exists - either bilaterally or regionally - compliance with a code could be made a condition for receiving the benefits of the treaty. This is an extension of the type of conditionality found in China=s BITs, which require compliance with host country laws. In practice this would allow a country to withdraw benefits (eg. violate MFN provisions by withholding incentives offered to other investors) in response to a breach of the code; in the knowledge that the company has no recourse to international arbitration. Alternatively, communities or NGOs could demonstrate to financial institutions and shareholders that their assets would not be protected in the event of a dispute. In the hope that market pressures would then force a change in investor behaviour.

The attractiveness of such a mechanism is that it could be relatively easily attached to existing frameworks. However, the sanctions are by their nature limited and conditional on host country actions. The mere threat of increased risk would have to provide sufficient impetus for compliance.

More ambitiously, new institutional arrangements could be constructed to challenge company compliance with a code. A tribunal system could be defined by international agreements to consider specific cases, and be convened either independently or in the home or host country. Such an institution would provide a mechanism to enforce investor responsibilities which is similar to those protecting investor rights under investment protection agreements; for example, the World Bank=s International Centre for Settlement of Investment Disputes (ICSID).

The tribunal would need the capability to investigate claims, call witnesses and arrange for non-binding mediation if possible. However, as a final sanction the tribunal could have the power to levy fines against the company until compliance has been reached; as ICSID currently does. Or, enforcement could be linked to agreed withdrawal of access to government benefits such as aid contracts, export promotion, export credits and official guarantees. To prevent evasion similar benefits would also have to be restricted by other Parties to the agreement if it was plurilateral.

Such a tribunal goes beyond the formal Anaming-and-shaming≅ procedure proposed by some countries as the implementation mechanism of the revised OECD MNE Guidelines. Some organisational aspects are sketched out in the proposed a code of conduct for EU multinationals passed by the European Parliament in January 1999 <sup>94</sup>.

Agreed minimum standards of behaviour for foreign investors are an essential component of any system aiming to raise global standards. Binding standards can be feasibly implemented through a variety of mechanisms, which are similar to investor protection institutions, and can have different levels of sanctions.

### 8.2 Beyond Minimum Standards: the Need for Binding Agreements in Environmentally Sensitive Sectors

Binding minimum standards of investor behaviour will help improve general environmental and other types of performance in many sectors when combined with increased transparency and positive incentives for best-practice behaviour. However, many market drivers for change - especially consumer pressures and eco-labelling - have limited application in some important environmentally sensitive sectors.

Environmentally important non-consumer commodities form an input, or part, of final consumer products and so lack consumer visibility. For example: minerals, fossil fuels, basic agricultural commodities (soya, oil palm, wheat) and bulk chemicals. These industries have low profit margins and little opportunity to differentiate their products based on environmental performance. Unlike sea-food, wood products, cotton goods and tourism which are more easily linked to environmental impacts.

In such environmentally sensitive sectors high international standards of sectoral regulation are necessary to supplement generic guidelines for good corporate environmental management.

These detailed regulatory guidelines would go well beyond procedural issues and set sectoral standards for products and processes. Though an element of differentiation would be allowed for developing countries and specific circumstances (eg. ecological factors), this must not undermine the overall aims of the agreement.

There are two approaches to negotiating detailed rules: place standards solely on foreign investors who have the capacity to reach them; or, construct rules which discipline both domestic and foreign investors but allow differentiation based on company characteristics – for example, size, capitalisation etc.

Environmentally the most desirable solution in these sectors is to negotiate an agreement that covers both domestic and foreign producers (as with the FSC guidelines). This would maximise the benefits of constructing a sectoral regime, and complement any generic code for environmental management on foreign investors.

The choice between the different approaches is one of political feasibility. A code which just covers foreign investors is likely to be easier to negotiate than common international standards for all producers, but in some sectors it is worth going to the extra trouble to construct detailed international standards.

#### 8.2.1 International Commodity Related Agreements

Any international agreement related to basic commodities would not concentrate solely on environmental issues, but would have to address broader concerns including technology transfer, price support, marketing and price stability.

The poorest countries depend heavily on commodities for export earnings. However, as the terms of trade for primary commodities have worsened countries have been forced to drawdown their natural capital simply to maintain current levels of economic growth and debt repayments. This has resulted in irreversible loss of soils, inefficient and harmful irrigation and the displacement of subsistence activities into marginal lands. The prospects for sustainable commodity production are unlikely unless measures are put in place to increase the value of commodities to producers.

WWF believes that International Commodity Agreements are a possible means to overcome these problems and promote sustainable development. If these agreements are properly designed they will bring real improvements to the environment and enhanced opportunities for poorer nations to 'catch up' with their richer counterparts.

An international commodity related agreement (ICA) is a multilateral agreement amongst countries trading in commodities to affect their terms of trade. Historically, emphasis in ICAs has been on stabilising prices. However, at present there are only two ICAs - on cocoa and natural rubber - which contain economic provisions. Most ICAs simply but aim to ensure international co-operation while promoting research and information sharing between producers - for example sugar, coffee and grain.

Other ICAs, particularly those relating to jute and tropical timber have been broadly described as development orientated. These aim to ensure export earning stabilisation and longer term objectives such as improved market access and supply reliability, increased diversification and industrialisation, enhanced competitiveness, and improved marketing, distribution and transportation.

Most agreements give some consideration to the environment. For example, the Cocoa Agreement contains an environmental fund used to promote and support environmentally sound production, handling, storage and processing of cocoa. The International Tropical Timber Agreement (ITTA) has environmental considerations at its core, but much of this agreement has not been implemented.

The major problem with ICAs has been preventing countries "free riding" on the agreement. That is, countries not part of the agreement that continue to externalise social and environmental costs, may be able to capture higher market share or benefit from higher and more stable prices.

Commodity agreements could be viewed as discriminatory and prohibited under WTO rules. Members should have the right under international law to be able to refuse corporations which do not adhere to existing commodity related environmental agreements access to their country=s resources. This would encourage other countries to sign up to the agreement to take advantage of the economic, developmental and environmental benefits it offers.

If the problem of free-riders is solved then it is unlikely whether price increases bought about by an ICA internalising environmental and other costs would change overall demand levels. Generally, price competition occurs between suppliers of similar products, and not so much between substitute goods. For example, competition between coffee producers may be highly price sensitive, but competition between coffee and tea producers for the beverage market is driven more by long-run consumer tastes and marketing. Therefore, slightly increasing the relative price of coffee will not reduce the overall market volume.

To be effective ICAs must be well coordinated with the domestic policies of the participating countries. A major failing in the past has been lack of control over production, the demise of agreements relating to tin and coffee was largely due to oversupply and low prices.

8.2.2 Environmental issues in International Commodity Agreements
International commodity agreements have tended to fall out of favour because of their
failure to maintain prices, and also the emergence of alternative market based
instruments for dealing with price instability. However, the use of market based
instruments is evolutionary and may not work inside the institutional and market
structures of many developing countries <sup>95</sup>.

Despite these past problems, ICAs have significant advantages in co-ordinating approaches to basic environmental and labour standards. This could give new

incentives to producer countries to pursue this option, rather than competing against each other in an unregulated market place or risking a unilateral imposition of standards on their exports.

ICA=s help overcome the 'first mover' disadvantage, by introducing standards collectively - at least in the interim. Effectively aiming to fix commodity prices in a way that reflects their full cost of production. Producers would have to agree on a set of environmental standards which is sufficiently detailed to allow adequate enforcement, but flexible enough to deal with true differences in national circumstances. Such an approach has proved feasible in the case of voluntary labels such as the FSC, but requires very careful process design.

To deal with these issues the environmental component of an ICA could be structured as a set of agreed detailed standards, with some flexibility on their implementation based on the capacity of the company and country involved. Therefore, large transnational companies would be expected to comply fully, whereas smaller producers - and those in developing countries - would have differentiated standards and a longer period for adjustment.

This differentiation would allow standards in dispersed local producers to be slowly raised to the level of large-scale operations, without prejudicing their competitiveness. A time-scale for convergence to broadly similar standards would be included in the agreement.

Though common standards could compromise countries Aenvironmental comparative advantages, this is a superior strategy to the highly inefficient use of scarce natural resources. An analogy can be drawn with investor protection agreements, where countries give up some sovereign powers that may potentially improve their returns from investment. However, the stability and certainty these restrictions bring are expected to be beneficial in improving overall investment flows. By agreeing to international environmental standards countries may have Atoo much environmental protection given local preferences. However, this must be balanced against the gains in reducing wasteful competition and ensuring importers do not switch to substitute goods considered less environmentally harmful.

To help finance adjustment a levy on each unit of production could be agreed in order to build a fund for instituting effective regulation of environmental and social issues. Such a fund would supplement the other sources of finance for building capacity in poorer countries. It would be essential to ensure the levy was not offset by other tax reductions to companies that increase their competitiveness. The agreement would therefore require transparency in effective tax and subsidy rates.

An alternative solution would be to repatriate import tariffs levied on commodity goods whose price does not incorporate full environmental costs. These would then be used to cover the costs of the investment required to raise environmental standards in commodity producing countries. For example they could be used to build institutional, human and regulatory capacity, for R&D in commodities, and to promote more sustainable production technologies.

Introducing ICAs will clearly not be a straightforward task, though will be easier in some sectors compared to others. They will need to be phased in gradually, both to allow industry and host countries to adapt to changing regulations. Most existing international commodity agreements, such as those in jute, olive oil, natural rubber, sugar and tropical timber, were negotiated under the auspices of UNCTAD. Clearly this would be an appropriate forum through which to negotiate future agreements.

Detailed agreements on environmental standards are needed in environmentally important non-consumer commodities, for example: minerals, fossil fuels, basic agricultural commodities and bulk chemicals. These standards should be built into broader international commodity agreements on: price stabilisation, marketing, technology transfer, labour and community rights.

## 8.3 Reducing Damaging Competition for Investment

The combination of higher voluntary standards from investors, mandatory minimum standards and perhaps detailed commodity-related agreements would help relieve pressure on governments to lower, limit or fail to enforce regulations in order to attract or keep investment. However, it is also possible to directly prevent countries from competing for FDI by lowering standards.

In both NAFTA and the European Union, mechanisms exist to ensure standards are not affected by competition. In the EU this is achieved by having community-wide minimum environmental standards; limiting policy competition is also the motivation for federal control of environmental standards in the USA. NAFTA has a non-binding clause (Article 1114) which sets out a process for inter-governmental consultations over any lowering of standards or non-enforcement of laws. The NAFTA environmental side agreement also contains an exhortation to minimum governance standards, and allows citizen challenges for non-enforcement of regulations, but not for lowering of standards. The EU system has been successful, in that environmental standards have risen, even though enforcement is still weak in many countries. The NAFTA approach has not yet been seen to produce much in terms of environmental enforcement or improvement.

The OECD MAI also contained a proposal to prevent countries lowering environmental or labour standards in order to attract investment. This was originally a non-binding exhortation, but towards the end of the negotiations a majority of OECD countries wished to have it as a binding condition. However, during negotiations the legal character of the clause was altered in a way that illuminates the strengths and weaknesses of this approach.

The original proposal covered the lowering of standards to attract "investment". It was intended to cover the wholesale revision of environmental and labour laws, and the creation of low standard "free-trade" zones. However, pressure from the USA and others resulted in a narrowing of the clause's scope so it only covered deregulation associated with a Aspecific investment" (see *Chair's text on Environment and Labour (DAFFE/MAI(98)10)*, OECD, January 1998).

The reworded clause would have stopped the Brazilian government lowering environmental standards when selling a <u>specific</u> parcel of Amazonian logging rights to a foreign company. However, it would not have prevented the scrapping of all environmental controls on logging in order to attract investors, or the blanket deregulation recently seen in the Asian mining sector. The restricted clause lost much of its environmental and social efficacy, and became an extension of "national treatment" for investors, which ensured they all received the same policy derogations.

The argument behind this rewording was that the concept of Alowering≅ could not be accurately defined, or was inappropriate in several circumstances. As a result, the clause would prevent legitimate changes in labour and environmental standards responding to shifts in scientific evidence, societal preferences or economic circumstances (see US non-paper DAFFE/MAI/DG3/RD(98)8).

That most negotiators accepted these arguments exposed a fundamental intellectual double standard in the legitimacy of international limits on national policy flexibility. OECD MAI negotiators had already agreed to ban all new non-conforming economic regulations which affect inward investment - whatever their potential benefits to the host country (so-called "standstill"). However, they rejected an analogous approach to limit changes in labour and environmental standards with the argument that it would place unacceptable limits on national policy flexibility.

The debate over "lowering of standards" in the OECD MAI was a reflection of its flawed process and lack of consistent objectives, but did raise important issues <sup>96</sup>. Arguments for and against restricting such policy flexibility are also similar to those relating to binding international codes of conduct for investors. However, in political terms they are more controversial because such restrictions directly affect legislative decisions, and also automatically apply to domestic constituencies in the host country.

However, policy incentives are only one way countries compete to attract FDI, it is also common to offer tax breaks, direct payments and "free" infrastructure. In developed countries there is a rising trend for state aid to be given to retain investment, though these payments could fall foul of some WTO disciplines. The OECD MAI also attempted to address the issue of fiscal incentives for investment. Unfortunately, Parties could not agree how to distinguish between Agood≅ and Abad≅ incentives, and left the issue for the future. The European Union is still discussing what constitutes legitimate tax competition for investment.

Financial and fiscal incentives can have important indirect environmental effects. Firstly, they reduce government proceeds, drawing resources away from regulatory bodies (eg. forestry and environment departments) who are managing the use of natural resources. Secondly, when resource taxes are lowered as an incentive (eg. stumpage fees, fishing fees) this gives perverse economic incentives, encouraging large scale damaging development at the expense of more sustainable alternatives.

The environmental consequences of competition by governments for FDI go beyond the narrow "no-lowering of standards" debate, and must ensure adequate revenues are collected, especially in natural resource sectors. There is no point retaining high standard laws when funds are not available to implement them, or when economic incentives are acting against good management.

## 8.3.1 The economics of investment incentives

The economics of investment incentives are far from straightforward, as they can potentially both improve and reduce the efficiency and value of FDI. Often, financial or fiscal incentives are seen as damaging, but improvements in host country Afundamentals = - eg. skills, infrastructure, balanced fiscal policy - as a positive effect of competition. However, there can be well-designed financial incentives, and inefficient over-investment in infrastructure to attract investors. This complexity underlies the difficulty in agreeing policy responses to limit their negative impacts.

Countries gain from increased foreign investment by increasing their total productive capacity. They also may gain "spillover" effects (positive externalities); for example, where new investment brings training and new technology into domestic firms. Gaining these rather intangible public benefits is often the main stated justification for subsidies to attract inward investors. Economically this is the same as giving tax breaks for domestic savings or domestic investment in training and R&D.

Evidence shows that the level of investment incentives is increasing, and despite the growth of total FDI volumes competition for each investment has intensified. This enhanced competition extends to all types of incentives including direct payments, tax holidays and deregulation in the form of Free Trade Areas with lowered labour and environmental laws. For example, a study in the USA showed incentives per job growing from \$4000 in the early 1980s to over \$168,000 in the early 1990s <sup>97</sup>.

The amount of subsidy needed to attract an investor depends on the relative market power of host countries and investors. When host countries are an attractive investment destination because of market potential (eg. China) or natural resources (eg. Canada), then they can maximise potential spillovers from investment by attaching conditionalities (performance requirements) which oblige investors to transfer technology or train local personnel.

When no such unique advantages exist, and many countries are equally attractive hosts inside a single trading region (eg. inside the EU), market power lies with the investor to demand significant incentives. In a competitive market between host countries, each will be prepared to subsidise investors until the cost outweighs the economic advantages from the investment. That is, direct economic gains in output, taxation revenues and employment, plus indirect spillover effects.

Investment subsidies aimed at raising economic output - if correctly applied - should be essentially self-funding through revenues gained. The economic result of high competition for FDI is that some of the benefits of an investment are transferred from the host economy to the investor. Concerns have been raised that reliance on subsidies reduces overall efficiency by promoting a rent-seeking and corrupt culture around FDI. Especially when "commercial confidentiality" shields the process of granting incentives.

Though direct economic benefits will be similar for all countries, the size of indirect spillover effects will differ depending on the composition and level of development of the host economy. Countries also differ in their perceptions of the size of indirect benefits, as they are very hard to quantify. Therefore, each country will be prepared to pay a different amount to attract the same investor.

Countries also differ in their ability to pay investors subsidies. Developed countries are can give up-front financial or infrastructure incentives, while developing countries with hard currency constraints must rely more on tax holidays, low concession fees and policy based subsidies such as low environmental and labour standards <sup>98</sup>.

Research in this area suggests that investment subsidies do not increase the total quantity of FDI, but they do affect its destination <sup>99</sup>. Therefore, in aggregate all countries would probably benefit from agreeing not to subsidise investors in order to gain direct economic benefits, but the existence of indirect effects complicates the situation. Though aggregate welfare may increase from limits on subsidies, its distribution will change, and those countries which gain most from spillover effects will suffer the greatest losses. This gives them little incentive to sign any agreement.

The first best-solution would be to only allow incentives related to spillover effects, as this would limit the amount of subsidy while not undermining economic efficiency objectives. However, this is easier said than done, as spillover effects are difficult to isolate and quantify.

There is no *a priori* pattern as to who gains most indirect benefits from a specific investment. Though it is often argued that developing countries will benefit most as they have fewer existing investments. However, the existence of positive returns to scale in some sectors and specific areas (eg. Silicon Valley) complicates this simple picture. A high technology firm may bring greater advantages to a developed country with a trained labour force and similar firms, but similar conditions exist in parts of India and Mexico. A manufacturer may bring new expertise to a developing economy, or may have more synergies with an industrial Acluster≅ in a developed country.

It seems unfair to stop a country from putting in place incentives which reflect the Areal≅ value of a particular investment to its economy, as this will restrict their development and lower the overall efficiency of investment. However, the difference in resources available to countries means that many in the developing world cannot afford to pay the level of incentives required. Or they are forced to commit to long tax holidays or devalued concession fees, which may eventually be uneconomic or have negative incentive effects by encouraging the unsustainable resource use.

Therefore, in practice any limits on overall incentive levels will have to take a broad brush approach. Limiting the worst forms, while retaining adequate flexibility for countries to encourage positive spillover effects (through R&D etc), and recognising the priorities of developing countries to promote industrial development or transformation in specific sectors through targeted subsidies.

As well as reducing the overall amount of benefits to a country from investment, subsidies also alter their distribution inside the host country. Attracting investment

through fiscal subsidies benefits those directly employed by the project, local communities and domestic suppliers, at the expense of general taxpayers. Though these costs should be recouped in turn through added output, increased taxes and better product quality. Investment in infrastructure can bring either costs or benefits to local communities depending on whether it is funded from general or local taxation, and on the size of environmental externalities.

Using lower environmental or social policies to attract investment places costs mainly on workers and local communities, while benefits - in the form of increased taxation revenues - accrue to the wider population. Using policy incentives also raises important questions of sustainability and accountability. The external costs of lower regulation are borne in terms of worse health (due to pollution, longer working hours, worse working conditions), lower wages and lower environmental quality (depleted resources, water pollution) many of which are irreversible. For example, chronic health problems cannot be remedied by higher incomes or future compensation. In economic terms these goods are not perfectly substitutable for money.

When goods are not perfect substitutes then peoples= willingness to pay for improved quality of life will be less than their willingness to accept compensation for reduced health or environmental damage <sup>100</sup>. Therefore, the income generated from an investment may not be adequate to compensate those affected by its environmental or social damage in the future. Resulting in a negative overall impact on the country=s development and an inefficient use of resources.

Investment subsidies reduce the benefits from FDI to the host country, but tend not to increase total FDI flows. There is no simple rule for defining a "good" or "bad" subsidy, as individual countries place different values on the same investment, and can benefit from using incentives.

However, developing countries tend to lose from open competition as they have fewer resources to attract FDI. The resulting use of competitive deregulation impacts the poorest communities and workers, who often also gain least economic benefits from increased investment and suffer the highest costs.

## 8.3.2 Policy instruments to control investment incentives

The complexity of arguments around investment incentives has lead to policy paralysis on international rules to limit their use. In the MAI debate many countries wished to limit competitive deregulation in the areas of environment and labour, but were opposed by other OECD members (notably Mexico and South Korea).

Developing countries have generally seen any limitations on the use of incentives as a ploy to prevent FDI flows into their countries. Transnational corporations who benefit from incentive wars also object to any disciplines, arguing they prevent healthy competition and overly restrain policy makers, especially in developing countries <sup>101</sup>.

There are also disagreements between developed countries on incentive limitation, with large interventionist blocks favouring only Agood≅ incentives (the EU), and smaller, free market countries wishing to limit all use of incentives (New Zealand).

Given the different interests displayed, any disciplines on incentives will have to focus on removing the worst problems - not trying to produce a perfect system. Countries will have to accept some "inefficient" limitations on their actions in return for overall gains in other areas. Given the overall goal of sustainable development, disciplines on incentives should aim to achieve the following goals:

- X prevent the lowering or chilling of environmental and labour standards to attract FDI;
- X reduce any corruption and anti-competitive practices associated with investment incentives;
- X ensure that both the overall cost of incentives, and the distribution of costs and benefits, is quantified and transparent;
- X limit incentives which cause negative externalities through inappropriate economic signals;
- X limit financial and fiscal incentives to specific development purposes; recognising the need for developing countries to strategically attract FDI.

The practicalities of limiting regulatory competition are discussed below. However, the broader debate on good governance of investment incentives is equally important. As these decisions will have indirect environmental and social impacts in terms of foregone public expenditure, perverse incentives and skewed development priorities.

Greater transparency and openness in how incentives are awarded, and their costs and benefits to taxpayers, consumers and communities would allow better democratic decision making in the host country. This would also help prevent the use of damaging fiscal incentives such as lowered concession fees for natural resources that promote unsustainable and inefficient management.

International agreement on the basic principles and rules for transparency and incentive assessment will be needed to prevent countries from free-riding.

Limits on the size and type of financial incentives may not be possible to agree at a global level due to development disparities between nations. It may be more practical for regional groupings to agree limits, as evidence suggests that this will not affect flows to the region. However, as tariff barriers fall between regional markets global regulation may be needed.

Countries will probably wish to be able to give incentives to encourage specific spillover effects, such as to stimulate the transfer of technology. However, these

# must be carefully defined and capped at a small proportion of total investment. Similar disciplines apply to state aid under WTO agreements.

## 8.3.3 Preventing competitive deregulation

Logically an agreement limiting regulatory competition should be easier to reach, because these incentives have smaller effects on investment flows, are badly targeted economically, and can be shown to disadvantage the poor and undermine movement towards sustainable development.

Objections to these restrictions raised in the MAI debate focused on the potential ambiguity of whether a regulatory change actually represented a "lowering" of standards. An example was used by the US of an investor being allowed to develop a section of a protected area in return for giving financial assistance to manage the park.

This is a legalistic interpretation of "no lowering of standards", which looks at changes in legislation not changes in environmental quality. In reality an environmental assessment could be carried out to gauge whether the overall environmental impact of the derogation was positive or negative. In most cases, such as case of P&O aiming to denotify a protected area in India, this assessment will be unambiguous in environmental terms <sup>102</sup>.

What a restriction on lowering (or non-enforcement) of laws would prevent is a tradeoff between environmental quality and economic growth which went below the level of existing standards. Therefore, it would not prevent an incoming investor emitting high levels of pollution if it paid to clean up a greater amount from other sources. Habitats could be destroyed if a biologically similar area was created elsewhere (as occurs with the European Habitats Directive).

However, environmental compensation should only be allowed if it has an equal impact on those affected. Local pollution in one area (eg. an export processing zone) could not increase even if another area was cleaned up because the local people and workers would not benefit from the compensating project. A main aim should be to limit the creation of pollution zones where the poor bear the brunt of environmental damage; a situation prevalent in developed countries such as the UK and US <sup>103</sup>.

Environmental rules could be relaxed where they conflict with other regulations in the field of health and safety. For example, derogations are sometimes given from mining water treatment rules because geologically a tailings dam in the area might burst and devastate downstream communities. But this is the exception not the rule. Of course, it is perfectly justifiable to revise laws if the science surrounding a regulation changes. However, the burden of proof to show this is the case must remain on the country that is deregulating.

Inside an overall restriction preventing deregulation policy makers should be able to find enough flexibility through imaginative use of environmental policy instruments to prevent ridiculous constraints on development policy. The existence of relatively objective standards for environmental quality removes many of the objections to binding international rules restricting deregulation. Though difficult environmental

trade-offs may exist between some environmental issues; for example, biodiversity and the building of hydro-electric dams to reduce greenhouse gas emissions.

Issues around labour standards are harder to determine, because legitimate moves towards greater labour market flexibility (eg. ending restrictive union practices) could be interpreted as a lowering of standards. Practically it is likely that disciplines on deregulation at the national level will probably have to be limited to a core set of international labour standards. However, there is no reason why international rules cannot specifically prevent national standards being lowered in areas such as export processing zones, even when these are above any international core standards.

To support environmental best-practice by industry, governments must collaborate to eliminate costly and inefficient competition based on lowering or freezing environmental standards. This will not unduly limit national policy flexibility if based around an assessment of actual environmental impacts, and not just changes to statutes or issuing of derogations.

# 8.4 From Top-Down to Bottom-Up: Improving International Governance by Strengthening the Role of Civil Society

Top-down regulation by national and international government is necessary, but not sufficient, to make FDI support sustainable development. Experience shows that active local community and civil society organisations - in both home and host countries - are vital to give a balance of environmental, social and economic interests, and their role is explicitly recognised inside Agenda 21.

However, civil society groups are often too under-resourced to adequately represent the interests of their constituencies. In many countries they are also actively suppressed, or denied access to justice and legal remedies. International agreements on FDI must recognise the role of civil society and NGOs, ensure they have access to an adequate legal frameworks at the national and international level. Including support and capacity building in order to be able to use such instruments.

8.4.1 The function of civil society in influencing foreign direct investment Civil society performs a set of functions which are neither covered by the state nor widely available (especially to poorer groups) inside commercial markets. Civil society organisations emerge distinctly when markets begin to dominate exchange transactions - changing and replacing traditional economic and social relations. The growth of civil society can be seen as a way in which societies build new institutions to ensure representation, security, access to resources and provision of services which the market or government are not providing. These services may previously have been provided by family, village or communal structures.

A comprehensive and strong set of civil society functions is vital for achieving sustainable development. Civil society improves the quality of development by erecting a "social market place" where non-market values can be articulated. This

shapes the outputs and distribution of the economic system, and protects people from the harshest excesses of market forces.

These functions are essential in issues of land and natural resource use. The poorest groups in society are frequently forced into marginal resource areas by more powerful economic actors. These commercial actors often use these appropriated resources unsustainably or inefficiently in order to supply international and urban markets. In the absence of mediating civil society institutions, subsistence or low income groups will be unable to compete in the economic or political market place against highly capitalised commercial resource users. Foreign investors are heavily represented in the resource sector and constantly experience conflicts over the legitimacy of access to resources; for example, the diversion of water away from subsistence agriculture to supply export agriculture or tourism developments.

WWF has worked with a wide variety of local groups, providing support and influence in such circumstances, including: forest communities in the Central African Republic threatened by foreign logging companies; indigenous fishing communities in Nicaragua under pressure from foreign trawler fleets; and, communities in Kenya whose land is being damaged by tourism development <sup>104</sup>.

Many different types of organisation can fulfill these functions including: unions, cooperatives, non-governmental organisations (in a narrow Anon-profit≅ sense), community groups, religious groups, political parties and Agrassroots≅ groupings. The constitution of the group is unimportant, what defines its role is its function in correcting market and government failures.

Civil society groups interact with foreign investors at several different levels:

- X representing the interests of local communities: protesting against particular investments; arguing for compensation for project impacts.
- X shaping host country development strategies: arguing for or against foreign entry into particular sectors; influencing national investment law and provision of subsidies.
- X influencing international institutions: advocating conditionality for investment guarantees; changing international investment regimes; monitoring official aid to the private sector.
- X working directly with international investors: defining guidelines for environmentally sensitive operations; drawing-up and monitoring codes of conduct on labour rights; helping facilitate relations with local communities or home country shareholders.

Civil society groups operate in a variety of modes, ranging from oppositional campaigns to direct partnerships with investors. Companies are increasingly recognising the need to work with these groups, at least at the community level, and that such relationships must involve more than just money <sup>105</sup>.

However, local groups are still frequently ignored by international investors unless international or home country NGOs intervene. In the case of P&O=s planned investment in Dahanu, the P&O-India office had stopped responding to local community groups until the company=s offices in Australia and the UK were approached by WWF and UK Members of Parliament.

Dialogue with a large investor also requires levels of technical and administrative capacity often beyond the reach of local organisations in either developed or developing countries. In the P&O case, the local groups could mobilise over 20,000 fisher people in demonstrations against the port, but could not afford an environmental and social impact assessment without assistance from WWF <sup>106</sup>.

Though corporate attitudes at the local level are slowly changing, a similar constructive attitude is not found in international fora. Indeed, business groups have even questioned the legitimacy of NGOs participating in discussions on international investment agreements <sup>107</sup>.

The attitude of investors to international civil society groups remains rather confused. Businesses regularly point out the important role NGOs play in highlighting environmental or social problems ("the severity or acuteness of a particular issue can create action. The non-governmental community is largely responsible for driving an issue up the >acuteness scale" WBCSD, 1999). However, business organisations have repeatedly rejected access for civil society groups to invoke official codes of corporate conduct, such as the OECD Guidelines on Multinational Enterprises <sup>108</sup>.

Civil society groups are also under political pressure in many countries. Often foreign investors may be in the difficult position of attempting to co-operate with a local community which is disenfranchised and discriminated against by local authorities. This is particularly common where indigenous communities are present in natural resource rich areas; a situation which WWF deals with in its conservation work <sup>109</sup>. Investors must have a clear view of the rights of local communities, an understanding that these cannot be removed by central government without very strong reasons, and adequate compensation that the company has a responsibility to see implemented.

There is also a legitimate concern from incoming investors that they should deal with the Aright\(\sigma\) civil society organisations. These concerns have strong commercial motivations because any compensation agreed with Arepresentatives\(\sigma\) of local communities must be adequate and reach those affected, or the investor could face continued protests and disruption. Larger NGOs can sometimes undermine grassroots groups in their dealings with investors. Some unions have criticised home country NGOs for agreeing codes of labour conduct with TNCs that do not give rights of association and representation. However, better coordination between civil society organisations is reducing such conflicts.

Civil society organisations in home and host countries play an important role in shaping the performance of FDI and government support for different types of

# investment. However, their positive influence is hampered by a lack of resources and influence, especially at the local level.

8.4.2 Civil Society and the formal regulation of international investment Civil society organisations are being forced into an ambiguous role in the regulation of international investment. Recognised as an important actor because of their power to disrupt investment and harm corporate reputations, they are increasingly being asked to form partnerships with TNCs; helping formulate, monitor and validate voluntary standards of corporate performance. On the other hand, the same companies lobby to deny civil society groups legal access to the influence, information and resources needed to enforce existing laws and protect their legitimate interests.

This is an unsustainable situation, which favours well-resourced and already influential groups, and pays no attention to the representative basis of different organisations. Civil society groups cannot become permanent watchdogs of corporate activity, as this will eventually compromise their effectiveness. Their appropriate role is to respond to problems with particular projects, to monitor the implementation of statutory and voluntary codes by other regulatory or private bodies (eg. private certifiers and accountancy firms), and to stimulate corporate best practice.

Civil society interests and activities should be empowered and supported by international regulation, not - as is increasingly the case - be seen as a substitute for it.

A coherent approach is needed which grants civil society groups access to specific international instruments (for example, enforcement of codes of conduct), and gives contingent standing with investors to have their interests as stakeholders recognised.

Access should to an extent recognise the different basis of civil society groups, if only to prevent frivolous cases and abuse by commercial interests masquerading as representatives of civil society. Civil society groups themselves will have to become more transparent about who they claim to represent, and how they are accountable to their constituency.

However, the legitimacy of a group's interests does not have to stem from a membership basis, but can be based on scientific, intellectual, moral, religious and other grounds. The diversity of civil society is one of its strengths, and should not be limited by arbitrary requirements to be "representative". Civil society groups do not attempt to replace representative democracy (where it exists) but enhance and support it.

Key instruments that should be available to civil society groups and citizens include:

*In codes of corporate conduct (both binding and voluntary)* 

- X Investors should have to consult host country groups on the impact of planned projects; giving access to independent assessments and support for additional analysis when needed.
- X Home country groups must be able to access full, timely and independently

- verified information about the foreign operations of companies.
- X Civil society groups must be able to use any implementation system (eg. a tribunal, review of conduct, Anaming and shaming≅) with a minimum test of standing to deter nuisance cases.

*In international investment promotion agreements* 

- X Information on investor=s corporate structure should be publicly available.
- X Information on investment laws, subsidies, exceptions, derogations etc. should be available to both citizens and inward investors.
- X Dispute proceedings should be transparent and open to citizens.
- X Access to home country courts by host nationals should be simplified, prerequirements made consistent between countries and access to any legal aid allowed.

*In international investment regulation* 

- X Home and host country citizens should be able to activate mechanisms outlawing lowering of regulatory standards to attract investment.
- X The costs and expected benefits of any investment subsidies should be publicly available.
- X All regulatory mechanisms relating to restrictive business practices, corruption and anti-competitive behaviour must accept complaints from civil society.

Some governments have objected to civil society groups being granted "rights" of access and standing in international agreements, arguing that this subverts democracy and the rights of nation states. However, the rules that apply to investors would be decided by governments, citizens would merely be able to ensure they are enforced.

The language of "rights" is actually irrelevant, because civil society must be part of the system for it to work effectively. Civil society provides an essential set of checks and balances to the system, making up for the absence of an international independent regulator to oversee the application of the rules. Therefore, in cases where both home and host country have an incentive to cheat (eg. "no lowering of standards") there must be the possibility of independent activation of the rules.

Moving away from rights-based language also clarifies how investors should be treated. Agreements give investors certain protections and privileges - equal treatment, compensation for expropriation. These are not abstract rights, but policy tools used to achieve broad societal goals by attracting quality investment. There is no reason why civil society access to instruments must be balanced by investor access, as has been argued by some business groups; for example, balancing citizens' access to codes of conduct with investor-state dispute mechanisms. Each function should be

assessed on how it contributes to the goals of sustainable development and poverty reduction, not as a quasi-constitutional issue.

Top-down regulation of FDI is not sufficient to achieve sustainable development. Active and empowered local communities and civil society - in both home and host countries - are an essential part of ensuring efficient and responsible investment.

International rules promoting and regulating investment must ensure public access to relevant information and regulatory mechanisms, and build the capacity of civil society groups so they can use them effectively.

# 8.5 Constructing Sustainable Markets: the Need for Good Economic and Social Governance

Sustainable development requires a balance of economic, social and environmental considerations. The above analysis of FDI and the environment demonstrates the vital interlinkages between the three components, and how traditional environmental policy and regulation - at any level - will never succeed in its aims unless there are complementary economic and social initiatives.

Environmental protection requires effective institutions to deliver public goods - whether these are clean air, good labour practices, education or fair competition. Experience shows that national level capacity in all these areas tends to evolve at a similar rate - reflecting general development levels. The role of international agreements and corporate regulation is to make up for any deficiencies in these systems, and help them develop to cope with international economic pressures.

In particular, sustainable use of natural resources relies on efficient market decisions inside a framework which correctly prices environmental goods and sets overall sustainability limits. Dysfunctional markets will give the wrong signals to market actors, skewing choices and potentially undermining long run sustainability.

WWF sees three key areas for international rules:

- X Competition policy and preventing restrictive business practices
- X Prevention of corruption and bribery
- X Core labour standards

There are many important issues in each area which are beyond the scope of this report. Below we outline their direct implications for environmental issues and the key design parameters for achieving environmental effectiveness.

8.5.1 Competition policy and eliminating restrictive business practices

Competition policy has the general aim of ensuring markets work efficiently. That is, no producer or consumer can alter market prices significantly, and all companies are earning normal profits relative to other sectors. This requires regulators ensure mergers and acquisitions do not give a company market dominance, and to break up any hard core cartels (price-fixing arrangements between different firms).

Competition authorities tend to focus less on a company's market share in a particular country, but whether it can influences prices or entry to the sector. If a market is contestable - that is, entry by competitors is easy and potential competitors exist - then dominant positions are less likely to be abused. However, where entry is difficult - for example, in network industries - market dominance must be carefully policed.

Companies may employ a variety of restrictive business practices to prevent new entry into a sector, including: acquisition of potential competitors; predatory (below cost) pricing; restrictive contracts with suppliers or outlets not to stock competitors' products; monopolisation of knowledge capital through patenting or acquisition of licencing rights which are not used; lobbying for high tariff barriers; lobbying for high regulatory costs in a sector to deter smaller entrants.

National competition policy often conflicts with industrial policy and the realities of economies of scale. Most OECD countries have exceptions in certain sectors that allow market dominance by firms who are considered key exporters <sup>110</sup>. This allows companies to achieve critical economies of scale in the home market, and can permit cross-subsidisation from home consumers to support aggressive export strategies. Most countries have also at some time used either tariff barriers, investment restrictions or state ownership to reduce competitive pressures in key sectors.

All these issues now have international dimensions as mergers and acquisitions make up four-fifths of FDI flows. Hard core cartels exist across national boundaries, and companies have been known to agree on spheres of influence in global markets; where each will be allowed to take a dominant position in certain groups of countries. The use of transfer pricing techniques allows TNCs to cross-subsidise subsidiaries in different countries, and non-price barriers to entry can exist internationally.

Despite the potential for international restrictive business practices, competition policy is usually implemented at the national level, if at all. Only around half of current WTO members ( $\approx$ 70) currently have competition policy in place at the national level. Internationally, limited co-operation agreements between competition and taxation authorities exist between some developed countries (eg. the EU and the USA). The European Union is the only regional economic area with a supra-national competition authority, and that only deals with trade-related competition issues <sup>111</sup>.

The WTO has been discussing issues around competition and trade since 1994. The European Union has identified an agreement on competition policy as a key goal for the next round of WTO negotiations. The main focus of discussions has been how the lack of enforced competition policy impacts trade flows, though there has also been some discussion on how trade measures affect competition. Likely issues for negotiation are: the introduction of basic standards for competition policy and

transparency; information sharing on hard core cartels; the impact of RBPs on outside markets and the foreclosure of markets to third countries <sup>112</sup>.

Some developing countries are concerned that international rules on competition policy may be used to force open markets that have been restricted for development reasons. Competition policy could be used to challenge restrictions on foreign entry or expansion, subsidies given to domestic producers and other discriminatory policies. This is a legitimate fear, and re-enforces the view that international competition policy should focus on corporate barriers to entry into markets, not governmental ones.

Effective international competition policy should protect developing countries against restrictive practices by large trans-national corporations. Competition policy procedures can also provide an empirical measure for assessing discrimination, which gives greater flexibility than legalistic formulations of national treatment. For example, support for domestic companies could be allowed unless it caused substantial market dominance by these firms, rather than just helping them achieve greater competitiveness. Instituting effective competition policy could provide a more flexible way to give foreign investors certainty and fair treatment than extending and re-enforcing traditional investment protection agreements <sup>113</sup>.

# 8.5.2 Competition Policy, RBPs and the Environment Competition policy and rules to limit the use of RBPs have important implications for environmental protection and sustainable resource use:

- X markets which are closed to new entrants may prevent the transfer of up-todate environmentally sound technology into these sectors;
- X monopoly resource extractors tend to be more wasteful and inefficient than those in competitive markets; for example, timber, mining, metal processing;
- X competition laws could threaten the ability of small enterprises or local communities to control their resources; especially in areas such as tourism;
- X competition laws could be used to challenge environmental regulations which de facto discriminate against some firms;
- X disciplines on transfer pricing would allow countries to receive greater revenues from exploiting their natural resources, thus potentially encouraging higher environmental standards and more sustainable extraction policies.

Most debate on the interaction between competition policy and the environment has focused on how environmental regulation may act as a barrier to trade, or how certain types of regulation may re-enforce existing market power or give opportunities for collusion between firms <sup>114</sup>. However, research tends to show that the biggest barrier to trade comes from a lack of environmental laws, not the way they are framed <sup>115</sup>.

Co-operative strategies that benefit the environment - for example, life cycle responsibility, sector-wide voluntary agreements - do promote collusion and can erect

barriers to entry. However, the correct way to deal with this is to have co-operation between environmental and competition authorities, not to allow environmental laws to be repeated challenged by companies.

A balance is needed between competition rules which allow innovation and new entry into markets in a way that improves environmental performance, and rules which would allow companies to challenge environmental regulation or the rights of local communities to benefit from their natural resource base. To avoid these problems the focus of international competition rules should be to prevent corporate restrictive practices. Governmental actions that could limit competition should be dealt with inside international agreements dealing with environment, investment and trade.

In particular, negotiations should ensure more effective international co-operation on transfer pricing for countries at a relatively low general level of development, but which have valuable natural resources which foreign investors wish to exploit. For example, the Government of Kazakhstan recently announced a crackdown on tax evasion through transfer pricing in its foreign-dominated large industries. The government considered that corporations had no incentive to display large profits inside the country, because financial institutions were undeveloped, therefore shifting profits outside the country to avoid tax was virtually cost free <sup>116</sup>.

The rise in complex transfer pricing shows that to be effective an international agreement on competition would have to be accompanied by real capacity building in developing countries. Consistent rules on company transparency and reporting are also needed in order to facilitate the exchange of information between regulators.

International competition rules aimed at reducing corporate RBPs could facilitate the diffusion of cleaner technologies, and when combined with disciplines on transfer pricing, improve the sustainable use of natural resources.

## 8.5.3 Bribery and Corruption

Bribery of public officials is widespread and often involves foreign investors aiming to facilitate their entry into a country, or gain access to valuable natural resources. There is widespread consensus that corruption causes economic and social underdevelopment. Corruption does not just affect the project or decision being directly influenced, but undermines all public governance by removing trust and confidence in public action and destroying the concept of public service.

Bribery and corruption affects all efforts at environmental protection. Natural resource use industries are prone to corruption given the large amounts of money related to concessions, and the remoteness of resources from centres of public administration.

WWF=s chief environmental concerns are:

- X bribery in screening procedures for inward investment leading to inadequate environmental and social assessment of impacts.
- X bribery of officials tasked with enforcing environmental regulation;

X corruption in the awarding of concessions leading to resources being undervalued, and/or companies with poor environmental records winning contracts against better competitors;

As with transfer pricing issues one of the most pernicious problems with corruption in natural resource sectors is the undervaluing of concession fees. This leads to lower government revenues, faster exploitation of resources and fewer funds to invest in regulation or environmental mitigation. Efforts are underway to combat this issue in some countries; for example, the World Bank is supporting efforts by the new government of Indonesia to reallocate 11 million hectares of forest concessions through a transparent bidding process, aiming to eliminate past corrupt practices <sup>117</sup>.

Home country governments used to take a rather laissez-faire attitude towards corruption by their investors, seeing it as a normal part of doing business abroad - especially in developing countries. For example, companies were routinely allowed to write off bribes against tax liabilities in home countries. However, this attitude is changing, driven by the US Foreign Corrupt Practices Act that made bribery of foreign officials a criminal offence. US investors then experienced competitive disadvantages by not being able to offer bribes, and strongly lobbied the US government to extend these disciplines internationally. This has lead to agreements between the Organisation of American States, and to the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, which entered into force in February 1999 <sup>118</sup>.

These international agreements generally call for countries to implement domestic legislation against corruption of their officials, and by their companies abroad. They usually contain basic principles for anti-corruption laws, accounting standards, extradition, and mutual legal assistance to ensure that jurisdictions work together on these issues. They represent a good model for international co-operation that avoids building supra-national institutions, but maximises co-ordination and consistency between jurisdictions.

Effective international rules and co-operation on corruption, coupled with capacity building in this area, would provide strong incentives for better environmental management and sustainable resource use. These rules should be a priority in any international negotiations.

### 8.5.4 Core Labour Standards

The impact of FDI on labour rights and conditions at work has always been a fundamental part of the debate on globalisation. The impact of competitive pressures has chilled labour standards in a similar manner to environmental regulation. The rapid growth of free-trade areas with few or no labour standards remains one of the most obvious examples of policy competition to attract investment.

Unlike the patchwork of international environmental agreements, the International Labour Organisation represents a single, competent global authority for defining and implementing labour standards and other employee related issues. In 1998 its

members agreed the *ILO Declaration on Fundamental Principles and Rights at Work and its Follow-up*, which for the first time defined a set of core labour standards and a mechanism for monitoring their application in member countries. This agreement was vital as it followed years of acrimonious debate on labour issues at the WTO.

The key aspect of the core labour standards for environmental issues is the right to freedom of association and the effective recognition of the right to collective bargaining <sup>119</sup>. Workers organisations have always been in the forefront in reducing local pollution. Firstly, inside factories and installations, but also reducing the pollution affecting local communities which supply labour to the installation. The right to organise will increase pressure on managers to reduce pollution levels.

While countries have resisted the use of WTO mechanisms to implement core labour standards, there seems more scope for these to be included in binding guidelines for MNE conduct and in any rules on investment incentives.

Environmental sustainability can only be achieved inside a broader system of economic governance that respects and enhances basic human and workers=rights, and promotes good market governance.

Priority should be placed on negotiating and strengthening international instruments to: enforce core labour standards; reduce bribery and corruption; promote fair competition and eliminate restrictive business practices.

## 9. Conclusions

The last decade has witnessed a proliferation in private investment flows, of which Foreign Direct Investment is the main contributor. FDI is an increasingly powerful stimulant to economic growth and therefore of growing importance to global environment protection. Unfortunately, to date much of this debate has focused around the pollution havens hypothesis, and the search for evidence that industries from the industrialised countries will move to countries with lower standards.

This emphasis on examining how environmental regulation effects a firm's decision to locate and its management practices, has deflected the discussion of FDI and its impact on the environment away from broader issues of how FDI contributes to overall sustainable development in host countries.

This report has identified five key interactions between FDI and the environment:

- X FDI can fuel economic development at a scale and pace that overwhelms host country regulatory capacity, resulting in inefficient and irreversible environmental destruction and even potentially a decline in overall welfare.
- X Home country policies in subsidising FDI through export credits and aid flows produce a bias towards more environmental damaging investment. Investment agreements such as NAFTA and the OECD-MAI also limit the ability of host governments to pursue environmentally sustainable policies.
- X Pollution intensive industries are relocating to areas with lower regulatory standards, and often operate to lower standards than in their home countries.
- X Natural resource seeking investors have a poor record of environmental management relative to global best practice. Often investors prevent host countries maximising returns from their resources, encouraging over-exploitation and unsustainable use.
- X Competition to attract FDI, or retain investments by international companies, has produced a chilling effect on global environmental standards.

Lack of adequate environmental governance in host countries is both a cause of these problems, and a result of competitive pressures to attract or retain FDI. Often the environmental costs of FDI fall on the poorest who fail to benefit from the economic wealth it generates. Therefore, any analysis of the environmental impacts of FDI must also address the distribution of costs and benefits.

Solutions to these problems must be practical and focus on institutions with the capacity to change in the short term, before irreversible damage occurs. Though building capacity in host country governments to manage FDI and the environment is vital, this will often be a longer term process. In the short to medium term standards must be raised through other means. Facilitating these alternative mechanisms through

international agreements will often be the easiest and most practical option, especially in least-developed, remote or conflict ridden areas.

Work is needed to achieve this in three important areas:

- X strengthened voluntary codes for environmental best practice by investors, and the official promotion of voluntary eco-labelling in mass-market sectors such as forestry, fisheries and tourism;
- X reforming existing and planned investor protection and promotion agreements so that they do not undermine environmental regulation, or the fair and sustainable use of natural resources:
- X building a framework of international regulation and co-ordination to ensure FDI promotes sustainable development by:

placing binding minimum environmental management standards on investors;

building detailed regulations for environmentally sensitive commodities inside international commodity agreements;

preventing destructive competition for FDI through either environmental or social deregulation or financial incentives;

increasing economic benefits to host countries by protecting the rights of local communities and industries.

Increasing the rights of civil society groups and local communities to monitor the quality of FDI, and hold investors accountable for their actions.

None of these new regulatory systems requires the creation of supra-national authorities but rather a strengthening of links between national systems, and stronger co-ordination measures to ensure destructive competition for investment flows does not undermine national environmental priorities.

The regulation of economic markets and their impact on the environment will support, but not replace, focused international environmental agreements and national environmental regulation. At the moment the expansion of global markets is rapidly outpacing accompanying regulatory systems. The balance must be redressed or inefficient, irreversible environmental damage will result undermining the economic basis of future development and efforts at poverty reduction.

WWF believes greater international investment can bring substantial benefits, especially to developing countries, in terms of the transfer of resources (financial, technical and human). However, this positive outcome will only occur inside a comprehensive regulatory framework that actively promotes sustainable development and ensures environmental limits are preserved.

The regulatory systems outlined in this paper could be implemented through many different institutions at the national, regional and international levels. However, it is important that there is a balanced evolution of instruments, and WWF does believe that this will happen through any proposed investment agreement at the WTO.

In contrast, Earth Summit II in 2002, and the meetings of the UN General Assembly and Commission for Sustainable Development on trade and investment preceding it, present an opportunity to systematically examine the relationship between globalisation and sustainable development. This process provides an appropriate, legitimate and existing forum for negotiations on a broad framework for regulating international investment.

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# **Bibliography**

Abicourco (1997), Boletim Statistico de Couro, Novo Hamburgo, Brazil.

Adams, J (1999), Foreign Direct Investment and the Environment: The Role of Voluntary Corporate Environmental Management, Paper Presented at an OECD Conference on Foreign Direct Investment and the Environment, 28-29 January, 1999; The Hague, Netherlands.

Barton, J.R. (1999), *Environmental Regulations, Globalisation of Production and Technological Change in the Iron and Steel Sector*, Paper Presented at a conference on Environmental Regulations, Globalisation of Production and Technological Change, University of East Anglia, 1-2 July 1999.

Bartzokas, A. & Yarime, M. (1999), *The European Fertiliser Industry*, Research Project for the EU on Environmental Regulation, Globalisation of Production and Technological Change, United Nations University, Institute for New Technologies, Brussels.

BIAC - Business and Industry Advisory Committee to the OECD (1999), *BIAC Discussion Paper on FDI and the Environment*, Paper presented at an OECD Conference on Foreign Direct Investment and the Environment, 28-29 January, 1999; The Hague, Netherlands.

BIAC (1998), *BIAC delegation statement*, OECD Workshop on the OECD Guidelines for Multinational Enterprises, Budapest; 16-18th November 1998.

BIAC and ICC - International Chamber of Commerce (1998), *Letter to the Financial Times*, January 15th, 1998.

Blackman, A. & Wu, X. (1998), Foreign Direct Investment in China's Power Sector: Trends, Benefits and Barriers, Discussion Paper 98-50, Washington D.C, Resources for the Future, September

Bretton Woods Project, (1998), *Drowning by Numbers*, Bretton Woods Project, London

Dasgupta, S, Hettige, H & Wheeler, D (1998), 'What Improves Environmental Preformance? Evidence from Mexican Industry', Policy Research Working Paper 1877, World Bank Development Research Group, January 1998.

Demandt, I. (1999), *The World Phosphate Fertiliser Industry*, Research Project for the EU on Environmental Regulation, Globalisation of Production and Technological Change, United Nations University, Institute for New Technologies, Brussels.

DFID (1997), *Eliminating World Poverty: A Challenge for the 21st Century*, UK Government White Paper on International Development, HMSO, London, 1997.

Economist (1999), "Down, but not out of hope", 351 (8117); pg. 76, *The Economist*, London.

EEA - European Environmental Agency (1997), *Environmental Agreements: Environmental Effectiveness*, Environmental Issues Series No. 3, Volume 1, Copenhagen; 1997.

Environment Select Committee (1996), World Trade and the Environment, HMSO, London.

Erkman, S (1996), "Industrial Ecology: A Historical View", *Journal of Cleaner Production*, December 1996

Eskeland, G.S. and Harrison, A.E. (1997), "Moving to greener pastures: multinationals and pollution-havens", *The World Bank Environment, Infrastructure and Agriculture Divisions: Policy Research Department*, World Bank, Washington.

Esty, D.C. & Gentry, B.S. (1997,. Foreign Investment, Globalisation and the Environment in OECD (1997), *Globalisation and the Environment: Preliminary Perspectives*, OECD, Paris.

Esty, D.C. & Mendelson, R. (1995), *Powering China: The Environmental Implications of China's Economic Growth*, New Haven, Yale Center for Environmental Law and Policy

European Commission (1999), *The EC Approach to Trade and Competition*, EC Paper circulated at consultation with NGOs 22nd June 1999.

European Commission (1998a), WTO New Round: Trade and Investment, Note to the 113 Committee by DG1 of the European Commission, Brussels; December 1998.

European Commission (1998b), *Minutes of the first meeting of the Investment Network*, European Commission DG1, Directorate M, 27 November 1998.

European Parliament (1999), European Parliament Report on EU standards for European Enterprises operating in Developing Countries: towards a European Code of Conduct, Committee on Development and Co-operation, European Parliament, Brussels; January 1999.

Financial Times (1999a), Kazakhs to move on tax evasion; 4th June 1999.

Financial Times (1999b), Indonesia tries forest tenders; 16th June 1999.

Financial Times (1999c), Global takeovers fuel investment surge; 30th June 1999.

Financial Times (1999d), *Taiwan looks at foreign site*; 2<sup>nd</sup> September 1999.

FoE-EWNI (1999), *Pollution Injustice: The geographic relation between household income and polluting factories*, Friends of the Earth - England, Wales and Northern Irelend, London, 1999.

Forum for the Future and FoE-EWNI (1998), *Ecological Tax Reform, Environmental Policy and Competitiveness of British Industry*, Forum for the Future, London

Gentry, B. S. (1999), Foreign Direct Investment and the Environment: Boon or Bane? Paper presented at an OECD Conference on Foreign Direct Investment and the Environment, 28-29th January, 1999; The Hague, Netherlands.

Goldenman, G (1999), *The Environmental Implications of Foreign Direct Investment: Policy and Institutional Issues*, Paper presented at an OECD Conference on Foreign Direct Investment and the Environment, 28-29th January, 1999; The Hague, Netherlands.

Greenpeace (1997), Oiling the Machine, Greenpeace Report, Washington D.C.

Grossman, G. and A. Kruger (1994). *Economic Growth and the Environment*, National Bureau of Economic Research Working Paper No.4634, Cambridge MA

Grossman, G. and A. Kruger (1992), *Environmental Impacts of a North American Free Trade Agreement*, National Bureau of Economic Research Working Paper No-3914, Cambridge MA

Guardian (1999), "Chemical Spill puts Sanctuary at Risk", The Guardian, London; February 20<sup>th</sup>,1999.

Hanemann, W. (1991), AWillingness-to-Pay and Willingness-to-Accept: how much can they differ?≅, *American Economic Review* 81(3): 635-47.

Hesselberg, J (1999), International competitiveness: The tanning industry in Poland, the Czech Republic, Brazil and Mexico, F.I.L Working Papers No. 15, University of Oslo, Oslo.

Hettige, H, Huq, M, Pargal, S and Wheeler, D (1996), "Determinants of Pollution Abatement in Developing Countries: Evidence from South and Southeast Asia", World Development, Vol 24(12): 1891-1904

Howarth, R.B. & Norgaard, R.B. (1993), "Intergenerational Transfers and the Social Discount Rate", *Environmental and Resource Economics*, 3(4); pp 337-358

Jaffe, A.B, Petersen, S.R and Portney, P.R (1995), "Environmental Regulation and the Competitiveness of US Manufacturing: What Does the Evidence Tell Us?", *Journal of Economic Literature*, Vol XXXIII, March; pp 132-163.

ICC - International Chamber of Commerce (1998), *Business and the Global Economy*, ICC Statement to the G8 Summit Birmingham 15-17th June, 1998.

ILO- International Labour Organisation (1998), *ILO Declaration on Fundamental Principles and Rights at Work and its Follow-up*, adopted by the International Labour Conference at its Eighty-sixth session, Geneva; 18 June 1998.

Jenkins,R (1999), Environmental regulation and international competitiveness - a framework for analysis, Paper presented at a conference on Environmental Regulations, Globalisation of Production and Technological Change, University of East Anglia, 1-2 July 1999.

Jha, V. (1998), *Environmental Regulation, Finance and TNC's*, Paper presented at the Trade, Investment and Environment Conference, Chatham House, London 29-30th October 1998.

Knutsen, H.G. (1999), Leather tanning, environmental regulations and competitiveness in Europe: A comparative study of Germany, Italy and Portugal, F.I.L Working Papers No 17, University of Oslo, Oslo.

Low, P. and Yeats, A. (1992), "Do dirty industries migrate", in P.Low (ed), *International Trade and the Environment*, World Bank Discussion Paper No.159, Washington, DC.

Mabey (1999), ADefending the Legacy of Rio: The Civil Society Campaign against the MAI≅, in Picciotto and Mayne (eds) *Regulating International Business*, Macmillan, London.

Mabey, N. Hall, S. Smith, C. & Gupta, S. (1997). Argument in the Greenhouse: The International Economics of Global Warming, Routledge, London

Mehta (1998), *Environmental Regulation and International Investment Agreements*, Paper presented at the Trade, Investment and Environment Conference, Chatham House, London 29th and 30<sup>th</sup>, October 1998.

MPI - Mining Policy Institute (1998), Trade Liberalisation, Mining Investment and the Impacts on the Environment and Related Social Issues, Sydney, MPI

Odegard, J.T (1999), *Leather tanning in Brazil*, F.I.L Working Papers No.19, University of Oslo, Oslo.

OECD (1999a), Statement of Intent on Officially Supported Export Credits and the Environment, OECD, Paris; at http://www.oecd.org/ech/act/xcred-en.htm.

OECD (1999b), Future Liberalisation of Trade in Environmental Goods and Services: Ensuring Environmental Protection as well as Economic Benefits, Joint Working Party on Trade and Environment, COM/TD/ENV(98)37/FINAL, Paris; March 1999.

OECD (1999c), Background Papers for the Review of the Guidelines for Multinational Enterprises, Committee on Investment and for Multinational Enterprises, OECD, Paris, 1999.

OECD (1998a), *The Multilateral Agreement on Investment*, 12th February 1998 [DAFFE/MAI/NM(98)2], OECD, Paris.

OECD (1998b), Open Markets Matter: the Benefits of Trade and Investment Liberalisation, OECD, Paris

OECD (1997a), FDI and the environment - An Overview of the Literature, [DAFFE(97)33], OECD, Paris.

OECD (1997b), Working Paper on Natural Resources and Concessions: Contribution by Norway, DAFFE/MAI/ST/RD(97)2/REV1, OECD, Paris; December 1997.

OECD (1997c), OECD Convention on Combatting Bribery of Foreign Public Officials in International Business Transactions, OECD, Paris; December 1997.

OECD (1996), *Competition Policy and the Environment*, Background Note to Competition Policy Roundtable, OCDE/GD(96)22, OECD, Paris.

Oman, Charles (1999), *Policy Competition and FDI: A study of competition among governments to attract FDI*, OECD Development Centre, Paris.

Pargal, Sheoli and David Wheeler (1995), *Informal Regulation of Industrial Pollution in Developing Countries: Evidence from Indonesia*, The World Bank Environment, Infrastructure and Agriculture Divisions: Policy Research Department, World Bank, Washington.

Red Cross (1999), World Disasters Report, Red Cross, Geneva; June 1999.

Reed, David ed. (1996), *Structural Adjustment, the Environment and Sustainable Development*, WWF Macroeconomics Programme Office, Earthscan, London.

Rydin, S (1997), Evaluation of job creation by LIFE projects in tanneries: Final Report, prepared by DTI Environment, Service Contact B4-3040/97/000018/MAR/B2.

Sanchez, R (1990), "Health and environmental risks of the Maquilidora in Mexicali", *Natural Resources Journal*, Vol. 30.

Shafik, N. & Bandyopadhay, S. (1992), *Economic Growth and Environmental Quality: Time Series and Cross Country Evidence*, Background Paper for the 1992 World Development Report and World Bank Series Paper No 904, World Bank, Washington D.C.

Sierra Club (1993). Analysis of the North American Free Trade Agreement and the North American Agreement on Environmental Cooperation, Washington DC.

Song, L (1996), Changing Global Comparative Advantage: Evidence from Asia and the Pacific, *Australian-Japanese Research Center*, Australian National University, Addison Wesley.

Stiglitz, J (1998), More Instruments and Broader Goals: Moving Toward the Post-Washington Consensus, The 1998 WIDER Annual Lecture, Helsinki, Finland, 7th January, 1998.

SustainAbility and UNEP (1998), *The Non-Reporting Report*, United Nations Environment Programme, Paris

Tobey, J (1990), "The effects of domestic environmental policies on patterns of world trade: an empirical test", *Kyklos*, 43(2).

Toman, M. & Pezzey, J. & Krautkraemer, J. (1994), *Neoclassical Economic Growth Theory and Sustainability*, Resources for the Future Discussion paper, ENR93-14-REV, Resources for the Future, Washington

Tshuma, Lawrence (1999), The implications of the MAI for natural resource and land use, in Picciotto and Mayne (eds) *Regulating International Business*, Macmillan, London.

UNCTAD (1999a), Foreign Direct Investment and Development, United Nations Conference on Trade and Development (UNCTAD) series on issues in international investment agreements, Geneva.

UNCTAD (1999b), International Investment Agreements: Concepts allowing for a certain flexibility in the interest of promoting growth and development, note by the UNCTAD Secretariat [TD/B/COM.2/EM.5/2]; 5 February 1999.

UNCTAD (1999c), *Transfer Pricing*, United Nations Conference on Trade and Development (UNCTAD) series on issues in international investment agreements, Geneva.

UNCTAD (1999d), Foreign Direct Investment and Africa: Performance and potential, UNCTAD, Geneva

UNCTAD (1998a), World Investment Report 1998: Trends and Determinants, United Nations, New York and Geneva.

UNCTAD (1998b), *Bilateral Investment Treaties in the mid-1990s*, United Nations, New York and Geneva.

UNCTAD (1998c), Report of the Expert Meeting to Examine the Effectiveness and Usefulness for Commodity-Dependent Countries of New Tools in Commodity Markets: Risk Management and Collateralised Finance, Geneva 4-6th May 1998, United Nations, New York and Geneva; June 1998.

UNCTAD (1998d), Foreign Direct Investment in Africa: Performance and Potential, United Nations, UNCTAD/ITE/Misc.5, New York and Geneva; September 1998.

UNCTAD (1997), World Investment Report 1997: Transnational Corporations, Market Structure and Competition Policy, United Nations, New York and Geneva.

UNCTAD (1996), *Incentives and Foreign Direct Investment*, Division on Transnational Corporations and Investment, Current Studies, Series A, No. 30, United Nations, New York and Geneva.

UN-ECOSOC - United Nations Economic and Social Council (1997), *Global Change and Sustainable Development: Critical Trends*, Report of the Secretary General, UN E/CN. 17/1887/3, Prepared for the Fifth Session of the Commission on Sustainable Development 7-25 April 1997, New York; January 1997

U.S Congress (1991), U.S.-Mexico Trade: Some U.S. wood furniture firms relocated from Los Angeles area to Mexico, U.S General Accounting Office, Washington D.C.; April 1991

WBCSD - World Business Council for Sustainable Development (1999), *Corporate Social Responsibility: Meeting Changing Expectations*, WBSCD report, Geneva.

WDM (1999), Making Investment Work for People: An International Framework for Regulating Corporations, World Development Movement, London; February 1999.

Wheat, A. (1996), *Toxic Bananas*, Multinational Monitor, 17(9), 1996.

Wheeler, D., R.S. Hartman and M. Huq (1997), *Why paper mills clean up:* determinants of pollution abatement in four Asian countries, The World Bank Environment, Infrastructure and Agriculture Divisions: Policy Research Department, World Bank, Washington

Wheeler, D. and & M. Mani (1997), *In Search of Pollution Havens? Dirty Industry in the World Economy*, 1960-1995, Paper presented at the OECD Conference on Foreign Direct Investment and the Environment, The Hague; 28-29th January, 1999.

World Bank (1999a), Global Development Finance, World Bank, Washington

World Bank (1999b), Global Commodity Markets: A comprehensive review and price forecast, *The World Bank Commodities Team*, 7(2), Washington.

World Bank (1997) World Development Indicators, World Bank, Washington D.C.

World Bank (1996). World Debt Tables: 1996, World Bank, Washington D.C.

World Resources Institute, United Nations Environmental Programme and the United Nations Development Programme (1997), World Resources 1996-1997, Oxford University Press

WTO - World Trade Organisation (1999), *Background Papers and Statements to the High Level Symposium on Trade and the Environment*, Geneva; 15-16th March 1999.

WTO (1998), World Trade Organisation Annual Report 1998, Geneva.

WWF-Germany (1998), Lipsticks from the Rainforest: Palm Oil, Crisis and Forest Loss in Indonesia: The Role of Germany, WWF-Germany, Frankfurt.

WWF-International (1998a). Living Planet Report 1998: Overconsumption is driving the rapid decline of the world's natural environments, WWF-International, Gland, Switzerland.

WWF-International (1998b). From Liberalisation to Sustainable Development: A Critique of the OECD Paper 'Open Markets Matter: the Benefits of Trade and Investment Liberalisation, WWF-International, Gland, Switzerland.

WWF-International (1998c), WWF Critique of OECD Secretariat Note: ARelationships between the MAI & Selected Multilateral Environmental Agreements≅ [DAFFE/MAI(98)1], WWF-International, Gland, Switzerland; January 1998.

WWF-International (1996a), *Dangerous Curves: Does the Environment Improve with Economic Growth?*, WWF-International, Gland, Switzerland.

WWF-International (1996b), *Indigenous Peoples and Conservation: WWF Statement of Principles*, WWF-I, Gland, Switzerland, 1996.

WWF-International, Oxfam, CIEL and CNI (1998), Dispute Settlement in the WTO: A crisis for sustainable development, WWF-International, Gland

WWF-UK (1999a), *The Economics of Sustainability*, WWF-UK Discussion Paper, Godalming, Surrey, UK.

WWF-UK (1999b), Investing in Companies of the Future: the NPI/WWF Investment Fund Policy, Godalming, Surrey, UK.

WWF-UK (1999c), Current International Processes on Regulating or Liberalising Investment Flows, WWF-UK Background Note, Godalming, UK; March 1999.

WWF-UK (1999d), A Draft Alternative Framework for a Multilateral Agreement on Investment, Draft 1.2, WWF-UK Research Paper, Godalming, UK; March 1999

WWF-UK (1999e), *International Investment Agreements and their Implications for Developing Countries*, paper presented to the UNCTAD/League of Arab States Regional Symposium: International Investment Agreements and their Implications for Arab Countries; Cairo 17-19 May 1999.

WWF-UK (1998a), Memorandum to the Environmental Audit Committee on the Environmental Protection and Sustainable Development Implications of the Multilateral Agreement on Investment, WWF-UK, Godalming, UK; September 1998.

WWF-UK (1998b), Can the OECD Guidelines Promote Responsible Behaviour? An Analysis of P&O=s Proposed Port in Dahanu, India, WWF-UK Research Report, Godalming, UK.

WWF-UK (1998c), Supplementary Memorandum of WWF-UK to the Environmental Audit Committee on the Multilateral Agreement on Investment. Environmental Exceptions in the MAI: Implications of the WTO Shrimp/Turtle Case, WWF-UK, Godalming, UK; October 1998.

WWF-UK (1998d), Selected Natural Resource Related Country Specific OECD-MAI Exceptions (as tabled April 22 1997), WWF-UK, Godalming, UK.

WWF-UK (1998e), Poverty and the Environment: Facing the Real Issues, WWF-UK, Godalming, UK; November 1998.

WWF-UK (1998f), The Economics of Precaution: The strengths and weaknesses of an economic interpretation of the precautionary principle, WWF-UK, Godalming, UK; April 1998.

WWF-UK (1997a). Briefing paper on the MAI, March 1997; Report on breaches of the OECD Guidelines for Multinational Enterprises by P&O (Australia) and P&O (UK), WWF-UK, Godalming, UK.

WWF-UK (1997b), *The Costs of Delay: Early Action Lessens Climate Change Costs*, A WWF Climate Change Report, WWF-UK, Godalming, UK.

Zarsky, L (1999), *Havens, Halos and Spaghetti: Untangling the Evidence about Foreign Direct Investment and the Environment*, Paper presented at an OECD Conference on Foreign Direct Investment and the Environment, 28th and 29th January, The Hague, Netherlands.

Zarsky, L. (1997). Stuck in the Mud, Nation States, Globalisation and the Environment in OECD (1997) *Globalisation and the Environment: Preliminary Perspectives*, OECD, Paris.

Ziman, J.E (1997) 'The Social and Environmental Costs of Oil Company Divestment from US Refineries', *Multinational Monitor*, 18(5), 1997.

## **Endnotes**

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<sup>1</sup> World Bank (1999a)
<sup>2</sup> World Bank (1999a)
<sup>3</sup> World Bank (1999a)
<sup>4</sup> UNCTAD (1998d)
<sup>5</sup> WWF-UK (1999e); Reed (1996)
<sup>6</sup> UN-ECOSEC (1997)
<sup>7</sup> OECD (1998b)
<sup>8</sup> World Bank (1997)
<sup>9</sup> UNCTAD (1995)
10 World Bank (1997)
<sup>11</sup> WRI, UNEP and UNDP (1997)
<sup>12</sup> WWF-International (1998a)
<sup>13</sup> Red Cross (1999)
<sup>14</sup> DFID (1997)
<sup>15</sup> Porter (1996) in Zarsky (1997)
<sup>16</sup> Grossman and Kruger (1994)
<sup>17</sup> WWF-UK (1998f)
<sup>18</sup> Toman, Pezzey and Krautkraemer (1994)
<sup>19</sup> Howarth and Noorgaard (1993)
<sup>20</sup> WWF-International (1998a)
<sup>21</sup> WWF-International, Oxfam, CIEL (1998)
<sup>22</sup> WWF-UK (1999b)
<sup>23</sup> Esty and Gentry (1997)
<sup>24</sup> WWF-UK (1998b)
<sup>25</sup> WWF-Germany (1998)
<sup>26</sup> Goldenman (1999)
<sup>27</sup> Goldenman (1999)
<sup>28</sup> Goldenman (1999)
<sup>29</sup> OECD (1999a)
30 OECD (1999b)
<sup>31</sup> Zarsky (1999)
<sup>32</sup> UN-ECOSOC (1997)
<sup>33</sup> WWF-UK (1998b)
<sup>34</sup> WDM (1997)
<sup>35</sup> World Bank (1999a)
<sup>36</sup> UNCTAD (1999d)
<sup>37</sup> UNCTAD (1998a)
<sup>38</sup> Song (1996)
<sup>39</sup> UNCTAD (1999c)
<sup>40</sup> Zarsky (1997)
<sup>41</sup> The Economist (1999)
<sup>42</sup> The Economist (1999)
<sup>43</sup> Oman (1999)
<sup>44</sup> OECD (1998)
<sup>45</sup> WTO (1998)
<sup>46</sup> Jha (1998)
<sup>47</sup> Jha (1998)
<sup>48</sup> Sanchez (1990)
<sup>49</sup> US Congress (1991)
<sup>50</sup> Financial Times (1999d)
<sup>51</sup> Forum for the Future and Friends of the Earth (1998)
<sup>52</sup> WWF-UK (1997b)
<sup>53</sup> Greenpeace (1997)
<sup>54</sup> Environmental Select Committee (1996)
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<sup>55</sup> WWF-UK (1997b)
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- <sup>59</sup> Zarsky (1999)
- <sup>60</sup> Jha (1998)
- <sup>61</sup> Esty and Gentry (1997)
- <sup>62</sup> Gentry (1999)
- <sup>63</sup> OECD (1999b)
- <sup>64</sup> OECD (1997a); Wheeler et al (1997)
- 65 OECD (1999c)
- 66 Adams (1999)
- <sup>67</sup> EEA (1997)
- <sup>68</sup> SustainAbility and UNEP (1998)
- <sup>69</sup> OECD (1997a)
- <sup>70</sup> UNCTAD (1999a)
- <sup>71</sup> WWF-International (1998)
- <sup>72</sup> Environment Select Committee (1996)
- <sup>73</sup> UNCTAD (1998b)
- <sup>74</sup> OECD (1998a)
- <sup>75</sup> European Commission (1998a)
- <sup>76</sup> UNCTAD (1999c)
- <sup>77</sup> WWF-UK (1999c)
- <sup>78</sup> UNCTAD (1998b)
- <sup>79</sup> European Commission (1998b)
- 80 UNCTAD (1999b)
- 81 UNCTAD (1998a)
- 82 Mabey (1999)
- 83 WWF-UK (1998a)
- <sup>84</sup> WWF-International (1998c)
- 85 WWF-UK (1998a)
- 86 WWF-UK (1998c)
- <sup>87</sup> WWF-UK (1998d)
- 88 OECD (1997a)
- 89 OECD (1997b)
- <sup>90</sup> Tshuma (1999)
- 91 WBCSD (1999)
- <sup>92</sup> WTO (1999)
- 93 European Parliament (1999)
- <sup>94</sup> European Parliament (1999)
- 95 UNCTAD (1998c)
- 96 Mabey (1999)
- <sup>97</sup> Oman (1999)
- 98 UNCTAD (1996)
- 99 UNCTAD (1998a)
- <sup>100</sup> Hanemann (1991)
- <sup>101</sup> BIAC and ICC (1998)
- <sup>102</sup> WWF-UK (1998b)
- <sup>103</sup> FOE-EWNI (1999)
- <sup>104</sup> WWF-UK (1998e)
- <sup>105</sup> WBCSD (1999)
- <sup>106</sup> WWF-UK (1998b)
- <sup>107</sup> ICC (1998)
- <sup>108</sup> BIAC (1998)
- <sup>109</sup> WWF-International (1996b)
- <sup>110</sup> UNCTAD (1997)
- <sup>111</sup> UNCTAD (1997)
- <sup>112</sup> European Commission (1999)

<sup>&</sup>lt;sup>56</sup> OECD (1999b)

<sup>&</sup>lt;sup>57</sup> WWF-UK (1998b)

<sup>&</sup>lt;sup>58</sup> Esty and Gentry (1997)

<sup>113</sup> WWF-UK (1999d)
114 Financial Times (1999a)
115 OECD (1999b)
116 OECD (1996)
117 Financial Times (1999b)
118 OECD (1997c)
119 ILO (1998)