

Getting Traction? Sustainable Development and the Governance of Investment

Recommended Citation

Lyuba Zarsky, "Getting Traction? Sustainable Development and the Governance of Investment", Special Reports, March 28, 2000, <https://nautilus.org/napsnet/napsnet-special-reports/getting-traction-sustainable-development-and-the-governance-of-investment-2/>

Lyuba Zarsky

CoDirector

Nautilus Institute

for Security and Sustainable Development

presented at

Conference on Sustainability, Trade and Investment:

Which Way Now for the WTO?

Royal Institute of International Affairs

London, Great Britain

March 27-28, 2000

The collapse of the OECD's negotiations over a Multilateral Agreement on Investment (MAI), as well as the WTO trade talks in Seattle, reflect deep-rooted structural problems with current approaches to global economic governance. In both cases, the opposition of environmental, human rights, development and labor groups was crucial in their undoing. Spanning both developed and developing countries, their opposition stemmed from two concerns:

- Content of the rules: The current neo-liberal paradigm of global economic governance and the international agreements it spawns ignore (and impair) social/environmental responsibilities and ethics, while conferring greater rights on global economic actors, especially OECD-based multinational corporations (MNCs) and financial institutions;
 - Institutional design: Emerging institutions of global economic governance, especially the WTO, are
-

evolving as monolithic organizational "frankensteins"-undemocratic, unaccountable, unjust to the poorest of the world, greedy to extend their jurisdiction over issues and nations, and not very nuanced in design or operations.

This paper explores new approaches to the global governance of investment which incorporate these concerns and could channel investment, especially foreign direct investment (FDI), towards more socially just and ecologically sustainable development. Part I outlines three sources of dysfunctionality in the current investment regime and argues that global norms are needed to get environmental standards out of being "stuck in the mud". Part II summarizes what is known-and unknown-about the relationship between openness to foreign direct investment and the environment. Part III considers ways of "getting traction", that is, of getting a grip on how to build a coherent, sustainability-enhancing governance framework for investment. It argues that such a framework needs to emerge at multiple levels-local, regional, global, sectoral-and that a central issue for the WTO is to define principles of deference both to other international organizations and to national governments.

I. The Need for Global "Sustainable Development" Governance of Investment

In the twilight of Seattle, the issue of global investment rules is up in the air. For nearly a decade, OECD governments have recognized the need for multilateral rules for investment, primarily to clarify investor rights and reduce beggar-thy-neighbor competition (OECD, 1996). With the demise of the MAI, the EU and Japan pressed for the inclusion of investment in the "Millennium Round". Reflecting a surge of foreign direct investment (FDI) into the United States-the U.S. share of global FDI rose from 17.9% to 30% between 1995 and 1998 (UNCTAD, 1999)-the United States was lukewarm to the idea. For the moment, the U.S. prefers bilateral over multilateral investment treaties.

While no global rules might be better than bad rules, the current state of affairs vis-à-vis the governance of investment does not bode well for sustainable development. This is so for three reasons. First, the lion's share-71.5 % in 1998-of FDI inflows are among rich, developed countries.¹ Of the share going to developing countries, East and South Asia receive over 40%. Africa, the poorest region of the world, receives the least, only 1.6% of global flows in 1998. While FDI can bring both positive and negative social and environmental impacts (see below), there is little doubt that investment, including foreign capital, is crucial to the integrated goals of sustainable development, viz, improvements in human economic and social welfare, ecological restoration, environmental infrastructure and social justice.

Besides the skewed allocation of global investment flows, the current "no rules" governance system is dysfunctional because of the intense competition it breeds among states and sub-national governments for FDI. Competition takes two forms: incentives and rules. The actual social, economic and environmental costs of this competition are still being studied. What is clear, however, is that the lack of supra-national (and in many cases national) investment rules breeds bad governance at the local level, including opaque decision-making, rent-seeking behavior, corruption and unaccountability (Oman, 2000). Good governance is the sine qua non of sustainable development.

Third, the current system is dysfunctional because of the effects of the competition on rule-making, including environmental standards for industry. Looking over their shoulder at competitors, especially for lucrative MNC investment, local and national policy makers face disincentives to substantially raise standards. They might not lower standards, they might even enforce them-but they are reluctant to unilaterally raise standards substantially and/or to widen the scope of corporate social responsibility. Standards might continue to rise due to other drivers, including demands of local communities. Overall, however, industry environmental standards and innovation-even "best practice"-are lower and slower than need to be to point towards sustainability.

This "stuck in the mud" problem of policymaking (Zarsky, 1997) gives great weight to private ordering: to a large extent, MNCs themselves determine their environmental performance. As a result, the environmental and social performance of FDI is in a wide band of positive and negative impacts. On the one hand, some companies are committed to "best practice", while others engage in technology dumping and "double standards". The global governance of investment is needed to both "raise the bar" in terms of "average" industry environmental performance and narrow the band between best and worst practice.

II. Investment Liberalization and Sustainable Development: What Do We Know?

The relationship between investment liberalization and the environment is a matter of hot debate. Environmentalists argue that gaps in national standards either draw the dirtiest OECD industries to developing countries or provide incentives for companies to lower their environmental and social performance. In either case, the result is the creation of "pollution havens" and a global "race to the bottom" in environmental standards. Proponents of neo-liberalism counter with claims that global market forces diffuse best management practices and that foreign companies, typically from the OECD, create "pollution halos" in developing countries. At stake is the shape and content of international and national rules and norms governing investment. Conceptual and Data Constraints

The impacts of FDI on sustainable development are not very well charted or understood. On the one hand, the conceptual and empirical apparatus of "sustainability" is still rudimentary. There exists no common understanding of what precisely is meant by sustainable development-or even the narrow concept of "environmental impacts". Nor are there standardized indicators which should be used to measure it. There is, moreover, no common understanding of how to order and prioritize different types of sustainability impacts: do the negative impacts of manufacturing growth on, say, climate change offset positive impacts on, say, local biodiversity? Does "sustainability" mean maintaining threshold measures of the amount and quality of environmental goods and services (e.g. forests, water, air) or making positive changes in the direction and speed of ecological restoration and improvement?

Beyond conceptual problems, there are severe data constraints. Many countries simply do not collect good data and among those that do, standardization is lacking. An effort by the Global Leaders for Tomorrow Environment Task Force of the World Economic Forum to construct a "Pilot Environmental Sustainability Index" concludes: "Serious limitations in the available data relevant to environmental sustainability drastically limit the ability of the world community to monitor the most basic pollution and natural resource trends" (World Economic Forum, 2000, p.1).

On the other hand, data concerning investment projects, especially plant-level data about environmental and social performance and about what drives investor decisions, is also scarce. Most public firm-related environmental data is about capital expenditures and regulatory compliance. Continuous performance monitoring is still rare, even in OECD countries, and public disclosure of performance data, such as worker exposure to toxic chemicals, continuous air and water emissions, and energy efficiency, is rarer still.

The conceptual and data gaps make robust studies about the overall sustainability impacts of FDI problematic. Empirical and case studies thus focus on micro-level environmental impacts of FDI: changes in the quality of a particular medium, like air or energy, or in the amount emitted of a particular pollutant, such as SO₂, or the energy intensity of a particular sector or even economy. Such studies provide important snapshots of the big picture. They stretch credibility, however, if they leap to a macro-level conclusion about whether, "on average" FDI is "good" or "bad" for the environment.

Gleaning insights from the evidence ²

Given these constraints and caveats, what does the evidence show about the relationship between FDI and sustainable development? The statistical studies reviewed here³ focus on two main issues: 1) whether and how gaps in environmental standards influence firm location decisions; and 2) what determines firm-level environmental performance; and more specifically, whether the fact of foreign ownership or financing affects environmental performance in developing or transitional economies. A number of studies also explore determinants of firm-level environmental performance without differentiating between foreign and domestic firms. Together, the two sets of performance-oriented studies shed light on whether environmental standards are rising in developing countries despite the lack of effective formal regulation at global or national levels.

Detailed case studies of FDI and environment linkages are relatively scarce. The most recent in-depth studies are found in Gentry (1998) and Earth Council (1998). The former examine FDI in the agricultural sector in Costa Rica (bananas) and Brazil (soybeans and pulp and paper); and in the manufacturing sector in Costa Rica and Mexico. The Earth Council studies examine environmental and human rights conflicts involving FDI, including in the "growth triangle" in Indonesia; offshore oil drilling in the Russian Far East; and gold mining in Suriname. In addition, a number of high-profile NGOs have targeted FDI projects for intensive study and criticism. These include oil exploration and drilling in the Amazon and Nigeria; the construction of a natural gas pipeline in Burma; the Freeport

gold mine in Indonesia; the exploitation of timber resources in Southeast Asia and the South Pacific; and manufacturing in the maquiladoras along the US-Mexican border.⁴

This review of both statistical and case studies focuses primarily on environmental performance and suggests there are four useful insights.

- **Little impact on industry location decisions**

Statistical studies have found that gaps in environmental standards and/or abatement costs, especially between developed and developing countries, have not made a significant difference to firm location decisions. Spending on pollution abatement and compliance with environmental regulation in general is apparently too small to affect decisions about location. Except for the dirtiest industries-paper, chemicals, primary metals-capital spending on pollution expenditures for US industries in the 1990s, for example, was less than 5 per cent of total capital expenditures (Jaffe et al., 1995).

- **Both "best practice" and "double standards": a wide band of performance impacts**

Rather than location, the key issue in the relationship between FDI and the environment is performance. The debate is fundamentally about whether "free markets" and investment liberalization bring enhance (global) performance by disseminating "best practice", or worsen it by encouraging "double standards".

The "best practice" hypothesis suggests that superior technology and management, as well as demands by "green consumers" at home, make FDI, especially by OECD firms, a transmission belt for better environmental performance in developing countries. The two underlying assumptions are first, that MNCs are generally committed to "best practice"; and second, that they do not change standards in different countries but have global standards throughout the company. The "double standards" view suggests that MNCs, including from the OECD, perform worse in developing countries than they do at home. The underlying assumption is that companies perform worse either because it reduces their internal costs of production or because external supporting infrastructure is lacking. Moreover, the assumption is that FDI does not necessarily transfer new technology but is a vehicle for "technology dumping".

The evidence shows that both are true and that FDI has a wide mix of positive and negative impacts. In some cases, FDI has generated widespread and severe ecological degradation; e.g. oil exploration and drilling in the Amazon and Nigeria. In other cases, e.g. in the energy sector in China, FDI has helped to transfer more advanced, cleaner technology which help to reduce air emissions. In some cases, FDI has both helped and hindered prospects for sustainable development. In Costa Rica, for example, concern about "green consumer" demands in Europe helped to reduce chemical use in the banana industry. On the other hand, the same consumer demand and surge in FDI in Costa Rican banana production promoted a land use pattern dominated by unsustainable large scale plantations.

Whether or not FDI brings "best practice" or "double standards" may depend to some degree on the particular sector-e.g. mining versus information technology-and on the nature of competition within a sector. Younger, dynamic firms like Intel, for example, are likely to rely exclusively on new state-of-the-art technology in the construction of new semiconductor "fabs", regardless of location. Older firms fighting to retain a toehold in the industry, like National Semiconductor, are more likely to transfer older, dirtier technology.

While there is ample case study evidence to support both claims, there is little statistical evidence

that foreign firms consistently perform better in developing countries than domestic firms, once firm-size is taken into account.

- **Other factors-regulation, social policy, community pressure-are more important**

The mix of demonstrated positive, negative and neutral effects of FDI mitigates against any overarching conclusion about its incremental effects on average. Indeed, a consistent finding of the statistical evidence is that factors other than foreign ownership are more important in improving firm-level environmental performance in developing countries. Most important is regulation, both formal, that is, undertaken by the government, and informal, that is, ways that communities can directly press firms to improve. If the goal is improvement in industrial environmental performance, than what is apparently needed is effective regulation utilizing both governments and communities to monitor, reward and sanction firms.

Direct community pressure on firms seems especially salient in countries where regulatory and judicial systems are weak. In Asia, for example, local communities utilise a variety of non-governmental mechanisms to press their concerns. Evidence suggests that richer, better educated communities do so more successfully than poorer, less educated ones. Even within the United States, there seems to be a strong positive correlation between measures of public health and environmental quality and measures of "empowered communities", such as levels of education, voter participation, access to health care, and tax fairness (Torras and Boyce, 1998). In developing countries as well, factors such as literacy and civil and political rights seem to have strong effects on environmental quality.

- **Incremental versus system wide impacts**

There is a large gulf between the evidence and the issues at stake in the debate. In general, the gulf can be characterised as a "micro-macro" problem and reveals the different environmental paradigms at play. Based on a "pollution prevention" paradigm, the statistical and some of the case studies utilise narrow measures of environmental performance ??often, just one particular pollutant. Environmentalists, however, are concerned not only about pollution but the "environmental management" of eco-systems as a whole, and more broadly about the "sustainable" and "just" development of societies at a global level. In some of the case studies, FDI is scrutinised not only as a contributor to local air and water emissions, but also as a macro-phenomenon contributing to the overall scale of ecological degradation, as well as impacts on local political economy, indigenous rights, and community health and welfare.

The "micro-macro" problem suggests that there is a large gap between even the best of the documented incremental improvements in firm or plant-level performance and the scale of ecological impact caused by broadly unsustainable production and consumption patterns at the global level. The wealth of northern consumers might be helping to make products marginally "greener," but-under current institutional and regulatory regimes-it is also creating a heavy burden on the earth. In this sense, the claim that liberalization of investment is "bad" for the environment is credible.

- **"Best practice" is not enough--standards are "stuck in the mud"**

The case studies provide substantial support for the "stuck in the mud" hypothesis. There is little evidence of a "race to the bottom" in terms of standards. However, there is ample evidence of widespread fear among local and national policymakers that enforcing or raising environmental standards will reduce their bargaining leverage for FDI in relation to competing sites. Case study

evidence spans both developing and developed countries. In Costa Rica, for example, non-enforcement of standards is widespread and directly related to investment promotion policies. One study of German firms found that many have threatened to relocate to lower-standard countries when they were negotiating their siting decisions (Bachtler, 1998, cited in OECD, 2000).

The depressing effects of fears about competitiveness affect national as well as local environmental policies. In Australia and the U.S., for example, a national carbon tax was defeated by widespread fears of detrimental impacts of the tax on competitiveness, including both exports and FDI inflows (Zarsky, 1997).

The systemic pervasiveness of the stuck-in-the-mud problem suggest that even the most optimistic scenario of a neo-liberal regime-*ie* the widespread diffusion of "best practice"-will deliver too little, too late in terms of sustainable development. With policymakers in developed countries facing disincentives to raise standards, the rate of managerial and technological innovations in "best practice" is slow. The logic of global market competition will continue to press for convergence of standards, and the lack of global regulation will continue to generate performance impacts in a wide band. To shift the entire band of convergence upward requires the global coordination of environmental standards based on new, performance-based approaches to regulation.

III. Getting Traction: New Approaches to Rules and Institutions

The first step in moving towards global "sustainable development" governance of investment is to define the objectives. Overarching goals are first, to increase the amount of (environmentally sound and socially beneficial) FDI going to developing countries; and second, to enhance the role of FDI as a vehicle for sustainable development in both developed and developing countries.

As a starting point, the preceding analysis has suggested three more specific (but still broad) objectives: 1) eliminate: the practice of "double standards" and "technology dumping" by OECD-based MNCs in developing and transition economies; 2) encourage the diffusion of "best practice" in terms of both corporate practice and environmental governance to developing and transition economies; and 3) create incentives (and eliminate disincentives) to continually raise local/national/global environmental standards.

"Core" Environment Standards: Performance and Process

What kinds of rules would point toward the achievement of these objectives? The answer is complex, especially in the context of global gaps in income, capacity, and development goals, and can be answered only via an intensive global policy dialogue. Some broad directions, however, are discernible both for the content of the rules and the institutional location of governance.

First, two types of "core" global environmental standards are needed: 1) international standards which set a floor for industrial pollution and resource harvesting; and 2) a set of environmental governance norms. Minimum pollution and sustainable resource harvesting standards already partially exist in a variety of forms: the World Bank has pollution guidelines, the Forest Stewardship Council has guidelines for sustainable forestry practices, etc.

Many environmental NGOs support the idea that MNCs should maintain the same standards overseas as they do at home. This principle should be refined further: MNCs should adhere to home country standards or international standards-whichever is higher.

Minimum standards encompass both performance and process standards. On the process side, a requirement for an environmental and social impact assessment should be mandatory for all large investment projects. All businesses could also be required to have an environment management system (EMS).

Standards for Environmental Governance: Disclosure and Public Participation

Environmental governance norms are the key to a performance-based approach to regulation which drives continuous improvement and rapid technological change. The key to good performance is accountability. The foundation of accountability is information, both measuring and monitoring environmental impact, verifying the credibility of

environmental information, and disclosing environmental information to people who can use it to drive improvements. This includes business, communities and the general public, as well as policymakers.

The role for governments is to establish a framework for mandatory disclosure of environmental and social performance information. Models might be disclosure of financial information, such as required financial reporting in the United States to the Security Exchange Commission. Mandatory disclosure requirements would encourage much better, continuous emissions monitoring. It would stimulate technological innovation and better management practice in a number of ways, including informal community pressure.

A second principle of accountability is stakeholder participation in environmental decisionmaking, including the setting of environmental policy. Given the very broad range of stakeholders concerned with environmental impact, this means in essence that stakeholders encompass the general public.

Global (or regional) norms could help to provide guidelines for stakeholder participation in investment planning decisions, including plant siting, land use, disaster preparedness, and actual emissions standards. The principle that local communities must be notified and public hearings held is already in place in some nations, such as the Philippines, and is gaining popularity in urban and municipal governance settings, such as the San Francisco Bay Delta.

Norms of disclosure and participation need to be specified at two levels, viz, those governing corporate/business obligations, and those governing government obligations at various levels. A model for the latter might be the so-called "Aarhus Convention" which emerged out of the European Environmental Ministerial Conference in Aarhus Denmark in 1998 defines three key governance principles for European nations (Petkova and Veil, 2000):

- **Access to Environmental Information:** The convention defines which kinds of environment-related information should be provided to the public as well as the channels and regularity of disclosure. Information that should be easily available includes data on the state of the environment, planned or operational policies and measures, and information on institutional mandates and performance. Annex 1 of the convention specifies the sectors covered, including energy, infrastructure, the chemical industry, extraction of minerals and water, and waste management.
- **Public Participation in Environmental Decision-Making:** The convention sets rules for public involvement in three kinds of decisions. Article 6 requires that specific development activities be subject to public review and consultation. Article 7 requires that public plans, programs, and policies related to the environment be approved through public consultation. Article 8 establishes more limited rights to public involvement in decisions on executive regulations, legislation, and generally applicable legally binding instruments.
- **Access to Judicial Remedy:** The convention mandates the establishment of procedures that are fair, equitable, timely, and not prohibitively expensive for the public (explicitly including NGOs) to seek justice for the nonperformance of public authorities and the noncompliance of private individuals or corporations.

Developing both minimum standards and governance norms in a regional context makes sense. Regional groupings tend to be more homogenous than global institutions and have fewer members, reducing the complexity of the bargaining process. Moreover, FDI choices seem to largely be made on a regional basis. Companies select broad regional investment sites on the basis of factors such as available markets and pick specific sites within regions via other factors, including bargaining with local authorities. Setting standards and norms in a regional setting would create a broad governance frame, reducing the potential for standards-inhibiting competition.

Environmental and social governance norms based on disclosure and public participation, as well as minimum standards, are also emerging at national and local levels within the OECD and beyond. In the U.S., for example, local communities in Massachusetts and California have enacted sanctions on corporations for violations of human rights, which included environmental degradation. Some analysts envision a much greater role for California as a leader in the setting of global norms for

both standards and governance (Collier, 1999; California Global Corporate Accountability Project, 2000).

For most corporations, the issue of disclosure of information about environmental and social performance remains highly contentious. Nonetheless, the concept that the public, especially local communities, has a "right-to-know" is gaining credence, even in developing countries. Advocacy campaigns in Europe and the US to enhance "corporate social responsibility and accountability" are based squarely on NGO demand for greater information about environmental, labor and human rights performance overseas and domestically.

An information- and performance-based approach to environmental governance requires substantial investment in developing an information infrastructure. Governments will need to commit to investment in gathering, ordering and standardizing environmental information about industry performance. Governments will need to standardize "sustainability" reporting requirements, perhaps along the lines of the Global Reporting Initiative of the Council on Environmentally Responsible Economies (CERES, 2000).

Institutional home(s) for the governance of investment

A central question is the institutional home for such rule-making and norm-building efforts. Is the WTO the right place? It is hard to imagine an effective global governance regime for investment in which the WTO plays no part. The power of trade (and potentially investment) sanctions makes it a powerful enforcement channel. The WTO would also likely play a role in specifying broad market disciplines.

However, it is equally difficult to imagine the WTO-with its narrow mandate, preoccupation with bargaining, and neo-liberal principles-being an effective forum for the kind of broad ranging policy dialogue that it is needed to flesh out the issues and most important, get buy-in from both developed and developing countries. Governing investment is in many ways more complicated than governing trade, since investment encompasses both domestic and foreign companies. Moreover, many aspects of the governance of investment are handled at sub-national (municipal and state/provincial) levels.

A governance regime thus needs to be built from two directions: top down-that is, the development of multilateral rules and norms; and bottom up-by specifying the jurisdiction of national/subnational governments. At the global level, a fruitful approach would be, as Von Moltke has suggested, to hold a policy dialogue in the context of building towards a stand-alone framework agreement (Von Moltke, 2000). Complementing the framework building effort would be multiple policy dialogues in a number of international institutional arenas, including UNCTAD, UNEP, the ILO, the WHO, and the Commission on Sustainable Development, as well as within Multilateral Environmental Agreements. These multiple dialogues could involve NGOs and business and could develop particular aspects of investment rules-environment, labor, health-into the framework building process. What is important is that the dialogue happens outside of a bargaining framework.

The single most important task for the WTO is not to squeeze investment under its own umbrella but to build a bridge both to other international and regional organizations, and to national and sub-national governments. On labor issues, for example, it should defer to the ILO. On environment issues, it should defer to MEAs. The actual content of deference to national governments is still to be spelled out. In the US, there is great passion, not just within the commercial interests concerned but within local governments and the general public, about the potential for the WTO to dismantle national and local environmental regulation. To date, the WTO has played the role more of a spoiler than a builder of sustainable development governance.

What the WTO must do, in short, is to develop principles of deference. This need is already urgent to deal effectively with the issues of trade and environment. The WTO has not been able to grapple with environmental logic or information in the resolution of trade-environment disputes. The introduction of investment will amplify the problem-and bring more people into the street.

Endnotes

1.The 1998 figure reverses a previous trend towards an increasing share for developing countries of FDI inflows. The reversal is largely due to the effects of the Asian financial crisis. However, the trend was moving slowly: in both 1996 and 1997, developed countries received about 59% of global FDI inflows.

2.This section based on Zarsky, 1999.

3. Anderson et al., 1997; Eskeland and Harrison,1997; Xing and Kolstad, 1997; Aden et al., 1998; Blackman and Wu,1998; Dasgupta et al.,1998; Eskeland and Harrison, 1997; Hettige et al.,1996; Afsah et al.,1996; Dasgupta et al., 1997; Pargal and Wheeler, 1996, Jaffe et al 1995.

4. Kane 1995; Sierra Club 1999; International Rivers Network 1999; Public Citizen 1999, Dixit 1995; Project Underground 1998.

References

Aden, J. , Kyu-Hong, A., and Rock, M. 1998. "What is Driving the Pollution Abatement Expenditure Behavior of Manufacturing Plants in Korea?" Draft, October 22.

Afseh, S., Laplante, B., Wheeler, D. 1996. Controlling Industrial Pollution: A New Paradigm Policy Research Working Paper #1672, World Bank. Available online:http://www.worldbank.org/nipr/work_paper/1672/index.htm

Anderson. C.L., Brooks, R. and Kagan, R. 1997. "Adversarial Legalism, Transactions Costs, and the Industrial Flight Hypothesis, Draft, June 10.

Blackman, A. and 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.

California Global Corporate Accountability Project. 2000. Collaborated project between The Nautilus Institute, Human Rights Advocates and The Natural Heritage Institute. <http://www.nautilus.org/cap/index.html>.

Coalition for Environmentally Responsible Economies (CERES). 2000. Global Reporting Initiative. Available online: <http://www.ceres.org/reporting/globalreporting.html>

Collier, R. 1999. California on the Global High Road, State Trade and Investment Strategy for the 21st Century, Working Paper 99-4, Institute of Governmental Studies, University of California, Berkeley.

Dasgupta, S., Laplante, B., and Mamingi, N. 1997. "Pollution and Capital Markets in Developing Countries," The World Bank, Development Research Group, October.

Dasgupta, S., Hettige, H. and Wheeler D. 1998. "What Improves Environmental Performance? Evidence from Mexican Industry, " Policy Research Working Paper 1877, World Bank Development

Research Group, January.

Dixit, K. 1995. "Asia's Amazon is Vanishing Too," Corporate Watch, July 7, available online at <http://www.igc.org/trac/corner/worldnews/other/other2>.

Earth Council. 1998. Earth Charter and Ombudsman Project (case studies and report directed by Nautilus Institute for Security and Sustainable Development), Earth Council, San Jose, Costa Rica, http://www.ecouncil.ac.cr/chair_ecombud.htm.

Eskeland, G. and Harrison, A. 1997. "Moving to Greener Pastures? Multinationals and The Pollution-Haven Hypothesis," World Bank, Public Economics Division, Policy Research Department, January.

Gentry, B. ed. 1998. Private Capital Flows and the Environment, Lessons from Latin America, Cheltenham, UK: Edward Elgar Publishing.

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. No. 12, pp. 1891-1904.

International Rivers Network. 1999. "Unocal: Making a Killing in Burma," <http://www.irn.org/burma/unocal.html>.

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

Organization for Economic Cooperation and Development (OECD). 1996. Towards Multilateral Investment Rules. Paris, France.

Oman, C. 2000. Policy Competition for Foreign Direct Investment, A Study of Competition Among Governments to Attract FDI, OECD Development Centre Studies, Paris: OECD.

Pargal S. and Wheeler D. 1996. "Informal Regulation of Industrial Pollution in Developing Countries: Evidence from Indonesia," Journal of Political Economy, vol. 104, no. 6, pp. 1314-1327).

Petkova, Elena, and Peter Veit. 2000. "Environmental Accountability Beyond the Nation-State: The Implications of the Aarhus Convention." WRI Environmental Governance Note. Forthcoming in April.

Project Underground 1998. Risky Business, The Grasberg Gold Mine, Berkeley, California, <http://www.moles.org>, May.

Torras, M., and J. Boyce. 1998. "Income, Inequality, and Pollution: A Reassessment of the Environmental Kuznets Curve." Ecological Economics. Volume 25, Pages 147 through 160.

United Nations Conference on Trade and Development (UNCTAD). 1999. "World Investment Report 1999: Foreign Direct Investment and the Challenge of Development." New York, New York, USA.

Von Moltke, K. 2000. An International Investment Regime? Issues of Sustainability.. International Institute for Sustainable Development. Winnipeg, Canada: Not published, (January).

World Economic Forum. 2000. Pilot Environmental Sustainability Index, An Initiative of the Global Leaders for Tomorrow Environment Task Force, Annual Meeting, Davos, Switzerland.

Xing, Y. and Kolstad C. 1997. "Do Lax Environmental Regulations Attract Foreign Investment?"

Working Paper in Economics #6-95R, Department of Economics, University of California, Santa Barbara, February.

Zarsky, L. 1997. "Stuck in the Mud? Nation-States, Globalisation and Environment," in OECD, *Globalisation and the Environment, Preliminary Perspectives*, Paris: OECD, pp. 27-52.

Zarsky L. 1999a. Havens, halos and spaghetti: untangling the evidence about foreign direct investment and the environment, in OECD: *Foreign Direct Investment and the Environment*, Paris: OECD:47-73.

Zarsky L. 1999b. International investment rules and the environment: Stuck in the mud? *Foreign Policy in Focus*, Vol. 4, No. 22 August (<http://www.foreignpolicy-infocus.org>).

View this online at: <https://nautilus.org/napsnet/napsnet-special-reports/getting-traction-sustainable-development-and-the-governance-of-investment-2/>

Nautilus Institute

608 San Miguel Ave., Berkeley, CA 94707-1535 | Phone: (510) 423-0372 | Email:

nautilus@nautilus.org