

Regulating the Environmental Impact of Direct Investment in Developing Countries: The Need to Shift from a Command-and-Control Mechanism to a Multi-stakeholder Approach

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Abstract

Investment promotion occupies a prominent place in the development policies of developing and least developed countries. Yet it poses challenges to the achievement of sustainable development by undermining social development and exposing the environment to degradation. This article discusses the links between investment and the environment and the dilemma facing developing countries in their efforts to regulate the environmental impacts of investment more strictly. More specifically, it explains how countries' interest in remaining competitive in attracting investment affects the integrity of the environment. It also indicates a lack of institutional capacity to regulate investment, and the existence of a power imbalance between developing countries and companies (particularly multinationals) as factors jeopardizing the environment. It highlights the importance of effective policy measures to reap the benefits of investment and protect the environment at the same time. Finally, the article argues that countries need to introduce environmental regulatory systems that give room for different actors—governments, NGOs, the community, and business enterprises—to work together to control the environmental impacts of investment, presenting an alternative to the conventional command-and-control approach. It elaborates how stakeholders' involvement, and specifically that of companies, is vital to ease developing countries' anxiety about losing the inflow of

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direct investment due to strict environmental regulation.

Key Terms: Direct investment, developing countries, environmental impact, environmental Protection

Introduction

Developing and Least-developed countries' urgent need to alleviate poverty requires the mobilization of resources towards achieving this goal. In these countries, limitation in the availability of financial and other resources affects development and economic growth. Countries encourage inflow of foreign capital with the view that it is one of the means to triumph over shortage of capital, foreign exchange, and skill – all are important inputs for development.¹ Induced by these and other benefits that investment is believed to bring for domestic development, both developing and least-developed countries put its promotion at the centre of their development strategies. Accordingly, China, Brazil, Singapore, India, Chile, Hong Kong, British Virgin Islands, Indonesia, and Colombia have been able to become among the top 20 recipient economies.² As countries promote inflow of investment, the surge in foreign direct investment (hereinafter FDI) is increasing. The global flow of FDI, which was \$207 billion in 1990, grew to \$1,472 billion on

¹ Moran, T. H., *Foreign Direct Investment and Development: The New Policy Agenda for Developing Countries and Economies in Transition*, Institute for International Economics, Washington, D.C, 1998 [hereinafter Moran].

² In 2012, there was greater FDI flow to developing economies than to developed countries. During this year, nine developing economies ranked among the 20 largest recipients in the world. See UNCTAD, *World Investment Report 2013: Global Value Chains: Investment and Trade for Development*, United Nations, New York and Geneva, 2013, pp. 2-3, [hereinafter UNCTAD, *World Investment Report 2013*].

average between 2005 and 2007.³ Its flow was affected by the economic and financial crises that the world has been witnessing. The crises curtailed multinational companies' access to financial resources and market opportunity, leading the global flow of FDI to decline in 2008 and 2009.⁴ However, the economy began to recover, and in 2012 the global flow of FDI rose to \$1.45 trillion.⁵ It is expected to reach \$1.6 trillion in 2014 and \$1.8 trillion in 2015.⁶ More specifically, FDI flow to developing economies reached more than \$700 billion in 2012.⁷

The benefits that governments hope to acquire from inflow of direct investment may not be as desired. This is attributable to a number of factors. The skepticism about the role FDI plays in a host state's development relates to the existence of differences in the interests of foreign investors and host governments.⁸ While foreign companies' interest involves profit maximization, competitiveness and access to international markets, host governments are concerned about economic development. In countries that lack effective policies to create common ground for the two interests, FDI may

³ UNCTAD, *World Investment Report 2011: Non-Equity Modes of International Production and Development*, United Nations, Geneva, 2011, pp. 24-25, [hereinafter UNCTAD, *World Investment Report 2011*].

⁴ UNCTAD, *World Investment Report 2013*, *supra* note 2, pp. 19- 32.

⁵ *Id.*, p. ix.

⁶ *Ibid.*

⁷ See *Ibid.* It is important to note, however, that there is weak FDI flow to least developed countries, Africa, landlocked developing countries and small island developing countries, while its flow to East and Southeast Asia and Latin America is strong. UNCTAD, *World Investment Report 2011*, *supra* note 3, pp. 40-87.

⁸ Kehl, J. R., *Foreign Investment and Domestic Development: Multinationals and the State*, Lynne Rienner Publishers, 2009, pp.1-2, [hereinafter Kehl].

not contribute positively to development.⁹ Apart from this, the unequal negotiating power between least developed countries and investing companies, a lack of institutional capacity to negotiate mutually beneficial investment arrangements, and weak political commitment diminish the contributory role of FDI for domestic development.¹⁰ Host countries' ambition to achieve development may lead them to accept and submit to the conditions set by foreign companies.

In recent decades, the world has been witnessing multiple facets of environmental degradation, including greenhouse gas emissions, deforestation and loss of biodiversity.¹¹ Such patterns of environmental destructions have partly been created and further exacerbated by economic activities.¹² Direct investment, as an engine for economic growth, involves resource utilization and extraction as well as manufacturing operations. This triggers considerable debate about the impact of investment on the environment. FDI, as one form of economic activity, has contributed significantly to the environmental

⁹ *Ibid.* See also Moran, *supra* note 1.

¹⁰ Zarsky, L., *International Investment for Sustainable Development: Balancing Rights and Rewards*, Earthscan, London, 2005, p. 28 [hereinafter Zarsky].

¹¹ OECD, *The Impact of Foreign Direct Investment on Wages and Working Conditions*, OECD-ILO Conference on Corporate Social Responsibility, OECD Conference Centre, Paris, 2008, www.oecd.org, [hereinafter OECD, The Impact of Foreign Direct Investment]; UNEP, *Global Environmental Outlook 2000*, UNEP, Nairobi, 1999, [hereinafter UNEP, *Global Environmental Outlook 2000*]; UNEP, *Global Environmental Outlook GEO4*, Environment for Development, UNEP, Nairobi, 2007, [hereinafter UNEP, *Global Environmental Outlook GEO4*]; Ekins, P., *Economic Growth and Environmental Sustainability: The Prospects for Green Growth*, Routledge, 2000, pp. 8-9, [hereinafter Ekins].

¹² Our Common Future 1987, Chapter one, Par. 9; Prizzia, R., The Impact of Development and Privatization on Environmental Protection: An International Perspective. *Environment, Development and Sustainability*, Vol. 4, 2002, [hereinafter Prizzia]; Ekins, *supra* note 7, pp. 6-20.

destruction the world has been experiencing.¹³ Because of inadequate international and national environmental standards and the non-enforcement of regulations, the actual contribution that investment brings for sustainable development is seriously in question.

Needless to say, if well regulated, investment can positively contribute to the achievement of sustainable development. States hosting direct investment need to introduce policies and legal measures with a view to minimizing its negative impact on the environment and maximizing its positive contribution to sustainable development.¹⁴ National minimum environmental standards and voluntary codes of conduct are among the possibilities that states should consider. There should be also adequate room for input from the public and civil society. Civil society's role in this regard is multifaceted, as it represents the interests of local communities, shapes host countries' development strategies, and helps to change international investment regimes and influence compliance with codes of conduct.¹⁵

This article aims to discuss the links between investment and the environment, and the dilemma facing developing countries in their efforts to regulate the environmental impact of investment. Accordingly, after discussing the nexus between investment and development, it offers a brief discussion of the opportunities that investment brings for environmental

¹³ Mabey, N. and McNally, R., *Foreign Direct Investment and the Environment: From Pollution Havens to Sustainable Development*, A WWF-UK Report, 1999, p. 3, [hereinafter Mabey & McNally].

¹⁴ Gentry, B., *Foreign Direct Investment and the Environment: Boon or Bane?*, in OECD, *Foreign Direct Investment and the Environment*, OECD Proceedings, OECD, Paris, 1999, [hereinafter Gentry].

¹⁵ *Id.*, pp. 34-35.

protection, and the challenges it poses as well. The last section focuses on explaining the respective responsibilities of the various stakeholders in environmental regulation of direct investment. It elaborates on how this is vital to achieve environmental protection without compromising host states' interest in enhancing investment and thereby achieving development.

1. Attracting Investment: A Means to Achieve Development

The promotion of investment occupies a significant place in the development strategies of most developing countries. It can be said that it is an engine for economic growth and development. Through promoting investment, countries strive to acquire a number of benefits, such as new and better technologies, skills and employment opportunities.¹⁶ The know-how and skills provided by direct investment can be transferred to domestic firms and, through this, investment can improve a host country's stock of knowledge. Technological transfers and spillovers to local firms may improve domestic production.

These may contribute to transform the host country's economy. Inflow of investment may increase the demand for labor. Foreign direct investment presents the prospect of integration into the international trading system; increases access to international markets; contributes to national revenue generation and infrastructure development; and helps to create a more competitive business environment.¹⁷ The cumulative effect of all of these can

¹⁶ *Id.*, p. 21; Moran, *supra* note 1; Gallagher, K. P. and Zarsky, L., No Miracle Drug: Foreign Direct Investment and Sustainable Development, in Zarsky, L. (ed.), *International Investment for Sustainable Development: Balancing Rights and Rewards*, Earthscan, London, 2005, [hereinafter Gallagher & Zarsky].

¹⁷ OECD, *Foreign Direct Investment, Development and Corporate Responsibility*, OECD Proceeding, OECD, Paris, 2000, [hereinafter OECD, *Foreign Direct Investment*]; Moosa, I. A., *Foreign Direct Investment: Theory, Evidence and Practice*, Palgrave, New York, 2002,

be economic growth and the development of host states. Investment by foreign companies may also improve host states' environmental and social conditions through, for example, transferring cleaner technology and encouraging domestic firms to adopt better environmental management practices. Inspired by these and other advantages, developing and least developed countries open their doors to both domestic and foreign investors; they liberalize investment regimes and create policies designed to attract as much investment as possible into their jurisdictions.¹⁸

Nevertheless, there are doubts about the ways in which investment fosters domestic development. Moran notes:

“There is a common assumption that if international companies conduct their activities with the same good citizenship standards abroad that they do at home, their contribution to the host economy can only be positive. But this reasoning hinges, implicitly, on the presence of highly competitive conditions that are fundamentally at odds with both theory and evidence about FDI behaviour. [...] [T]he possibility that FDI might lead to fundamental economic distortion and pervasive damage to the development prospects of the country is ever present.”¹⁹

The risks associated with FDI may outweigh the benefits acquired from it. Possible negative impacts on host counties' economies and citizens are

pp. 68-95, [hereinafter Moosa]; Jones, J. and Wren, C., *Foreign Direct Investment and the Regional Economy*, Ashgate Publishing, Hampshire, 2006, pp. 72-76, [hereinafter Jones & Wren].

¹⁸ UNDP, *World Investment Report. FDI Policies for Development: National and International Perspectives*, UNDP, Geneva, 2003, pp. 86-91, [hereinafter UNDP]; Mabey & McNally, *supra* note 13, p. 11.

¹⁹ Moran, *supra* note 1, p. 2.

highlighted.²⁰ First, FDI may impinge on a host state's balance of payments through increasing imports, as host states grant foreign investors incentives such as tax allowances, thereby reducing government revenues. Second, FDI can have a potential negative impact on domestic investment and industrial growth. FDI liberalization may make domestic firms less competitive and lead them to impoverishment. In other words, it may cause the crowding out of domestic investment where local firms cannot compete with foreign companies. Local firms may not be capable of competing with foreign companies which are better equipped financially and with skilled personnel. Thus entry costs may increase or local companies' competitiveness may be otherwise affected. And the crowding out of domestic investment may affect a host country's economy in the long run. In countries where the population is highly engaged in small-scale or peasant agriculture, the outcome might be migration to urban areas where there is no stable employment. Third, FDI may endanger national sovereignty by increasing dependency and external influence. It may limit domestic control over resources. Fourth, the social and environmental costs of FDI can be high. Foreign investment may lead to widespread environmental degradation and exploitation of low-paid workers. Irrespective of all these concerns, FDI continues to have a prominent place in the development strategies of developing countries.²¹

Countries introduce different policies and strategies aimed at promoting the

²⁰ *Id.*, pp. 10-22; Kahai, S., The Role of Foreign Direct Investment and Its Determinants, in Kehal, H. (ed.), *Foreign Investment in Developing Countries*, Palgrave Macmillan, New York, 2004, [hereinafter Kahai]; Moosa, *supra* note 17, pp. 68-98; Mabey & McNally, *supra* note 13; OECD, The Impact of Foreign Direct Investment, *supra* note 11.

²¹ Kumar, N. and Prandhan, J. P. in Graham, E. M., *Multinationals and Foreign Investment in Economic Development*, Palgrave Macmillan, New York, 2005, pp. 42-52, [hereinafter Kumar & Prandhan]; Kehal, H., *Foreign Investment in Developing Countries*, Palgrave MacMillan, New York, 2004, pp. 11-18, [hereinafter Kahai].

inflow of investment and maximizing the benefits that it provides for development. Some of these policies aim at bringing macroeconomic stability, infrastructure improvement, and transparency within the political and regulatory environment. Some countries pursue policies that liberalize the FDI regime, exempt investors from paying taxes for a specified period, and allow profit repatriation.²² For instance, according to the World Investment Report 2011, in 2010 some 149 policy measures affecting foreign investment were adopted by 74 countries.²³ Among these measures, 101 relate to investment liberalization and promotion.²⁴ In addition, countries conclude bilateral investment agreements (BITs) with major capital exporting countries. BITs normally extend rights and protections to foreign investors.²⁵ More specifically, however, there is strong support in favor of the argument that countries should make appropriate decisions about the nature of the policy measures they take in order to fully benefit from investment.²⁶ As the Organization for Economic Co-operation and Development (OECD) report notes:

“[N]ational policies and international investment architecture matter for attracting FDI to a larger number of developing countries and for reaping the full benefits of FDI for development. [...] [H]ost countries [...] need to establish a transparent, broad and effective enabling policy environment for investment and to build the human and institutional capacities to

²² Kahal, *supra* note 21.

²³ UNCTAD, *World Investment Report 2011*, *supra* note 3, p. 94.

²⁴ *Ibid.*

²⁵ The number of BITs signed by the end of 2002 was 2181. See UNDP, *World Investment Report. FDI Policies for Development: National and International Perspectives*, UNDP, Geneva, 2003, p. xvi, [hereinafter UNDP, *World Investment Report 2003*].

²⁶ Zarsky, *supra* note 10, p. 26.

implement them.”²⁷

Components of good governance such as transparency, credibility, accountability and participation are important tools to encourage investment. Eliminating barriers that affect entrepreneurship, competition and trade, restrictions on foreign investment, and administrative barriers to entry and exit is said to be important to enhance investment.²⁸

2. Opportunities and Challenges of Direct Investment for Environmental Sustainability

The growth of investment engenders considerable debate among policymakers and activists concerning the implications that this trend has for the environment. The main anxiety relates to the issue of how a particular investment will affect a host country's environment.²⁹ Investment often involves activities with potential environmental impacts, including resource extraction and infrastructure or manufacturing operations. In countries without effective regulatory frameworks, investment may cause devastating environmental problems, such as loss of biodiversity, resource depletion, pollution, and soil degradation.³⁰ Particularly, investments in resource extraction industries such as mining and logging can lead to serious and sometimes irreversible environmental degradation. Apart from its direct

²⁷ OECD, *Foreign Direct Investment for Development: Maximising Benefits, Minimising Costs*, OECD Publications, Paris, 2002, pp. 37-40, [hereinafter OECD, *Foreign Direct Investment for Development*].

²⁸ *Ibid.*

²⁹ Gray, K. R., *Foreign Direct Investment and Environmental Impacts- Is the Debate Over?*, *RECIEL*, Vol. 11, No. 3, 2002, [hereinafter Gray]; Gentry, *supra* note 14; Zarsky, L., Havens, Halos and Spaghetti: Untangling the Evidence about Foreign Direct Investment and the Environment, in OECD, *Foreign Direct Investment and the Environment*, OECD, Paris, 1999, [hereinafter Zarsky *et al.*].

³⁰ Mabey & McNally, *supra* note 13; Zarsky *et al.*, *supra* note 29, p. 50.

impact on the environment, investment may jeopardize indigenous rights and community health.³¹

The second issue of debate relates to competition among countries to attract investment and the resulting implications for the environment. With a view to remaining competitive in attracting investment, states tend to become reluctant to regulate the environmental impacts of investment strictly.³² Countries' ambition for investment may lead their governments to undervalue their environment and engage in a "race to the bottom." There is a perceived attitude that environmental regulation impedes economic growth.³³ The traditional assumption holds that jurisdictions with stringent environmental standards are at a disadvantage in competing with those whose standards are less stringent. The assumption is based partly on the conviction that compliance with environmental regulations will add production costs for companies and affect their overall income.³⁴ To minimize these costs and remain competitive in the market, companies may prefer to invest in or

³¹ *Ibid.*

³² Oman, C., *Policy Competition for Foreign Direct Investment: A Study of Competition for Foreign Direct Investment*, OECD, Paris, 2000, pp. 91-94, [hereinafter Oman]; Prizzia, R., The Impact of Development and Privatization on Environmental Protection: An International Perspective, *Environment, Development and Sustainability*, Vol. 4, 2002, [hereinafter Prizzia].

³³ Feiock, R. C. and Stream, C., Environmental Protection Versus Economic Development: A False Trade-Off? *Public Administration Review*, Vol. 61, No. 3, 2001, pp. 313-314, [hereinafter Feiock & Stream].

³⁴ Environmental regulation may impose duties that can potentially increase costs for industrial firms, such as "absorbing some or all of the costs of installing pollution abatement equipment, disposing of hazardous waste, and cleaning up after industrial accidents." Williams, E., Macdonald, K., and Kind, V., Unravelling the Competitiveness Debate, *European Environment*, Vol. 12, 2002, p. 284, [hereinafter Williams *et al.*]; Feiock & Stream, *supra* note 33, pp. 314-315.

relocate to states with less stringent environmental standards.³⁵ Based on this assumption, states may make relentless efforts to reduce the costs of doing business, attempting to ensure a continuous flow of investment. One of the actions they take in this regard is to reduce regulatory stringency.³⁶ This, however, may lead to massive pollution and environmental degradation.

In response to differences in regulatory stringency, firms may relocate or expand to jurisdictions with lax environmental regulation, leading those places to become “pollution havens” for “dirty” industries.³⁷ Resource and pollution intensive industries or companies that are required to comply with strict pollution control requirements may move to places where compliance costs are lower.³⁸ These companies may also take such costs as pollution abatement into account when they make decisions about where to invest. As most developing countries are desperate to secure a continuous flow of investment, the possibility of setting or implementing strong environmental standards will be constrained. This issue will be discussed further in the next section.

On the positive side, investment may bring opportunities to strengthen environmental protection. Depending on various circumstances, the contributions of investment can be beneficial in this regard. Companies may promote basic environmental goals by creating awareness about environmental factors, bringing efficiency in resource use, and addressing

³⁵ Gray, *supra* note 29, pp. 307-308.

³⁶ *Id.*, pp. 308-309; Woods, N. D., Interstate Competition and Environmental Regulation: A Test of the Race-to-the-Bottom Thesis, *Social Science Quarterly*, Vol. 87, No. 1, 2006, pp. 175-176, [hereinafter Woods].

³⁷ Zarsky *et al.*, *supra* note 29, p. 53.

³⁸ Mabey & McNally, *supra* note 13.

existing environmental problems. As Araya notes: “[T]he prospects of clean technology diffusion, by way of direct transfer and spillovers, is a key motivation for host-nations—especially in developing countries—to attract FDI.”³⁹ FDI may “help to drive up standards in developing countries by transferring both cleaner technology and/or better environmental management practices.”⁴⁰ This, however, depends on a firm’s technology choices. The presence of foreign firms in host states may improve environmental protection standards if they employ better techniques that reduce pollution and minimize resource depletion, or if they implement effective environmental management systems.⁴¹ Spillover depends on local firms’ keenness to adopt or imitate clean technologies, as well as the availability of skilled labor. In some cases, it may require collaboration between foreign investors and local firms, for example, to arrange training programs. Multinational companies (hereinafter MNCs) sometimes facilitate spillover through requiring their local suppliers to apply better and more environmentally friendly technologies and management practices.⁴² Apart from this, foreign direct investors may prompt host governments to implement environmental regulation in a predictable, transparent and consistent manner, including against local firms.⁴³

Nevertheless, there is no consistency in research findings about the existence

³⁹ Araya, M., FDI and the Environment: What Empirical Evidence Does and Does Not Tell Us?, in Zarsky, L., *International Investment for Sustainable Development: Balancing Rights and Rewards*, Earthscan, London, 2005, p. 54, [hereinafter Araya].

⁴⁰ Zarsky, *supra* note 10, p. 27.

⁴¹ Araya, *supra* note 39, p. 59.

⁴² Gentry, *supra* note 14, p. 36; Zarsky *et al.*, *supra* note 29, p. 57.

⁴³ Gentry, *supra* note 14, p. 40.

of a positive link between foreign firms and environmental performance in host states. Some of the literature suggests that FDI promotes better environmental management practices, but some suggests otherwise.⁴⁴ As Gentry argues, “FDI is neither a boon nor a bane for the environment; it is both. Because of the huge differences among the locations, sectors and investors involved in FDI, examples can be found to support both positions.”⁴⁵

At a minimum it can be said that the presence of foreign firms will not improve the environmental performance of host states automatically. This depends on a number of factors. In order to avoid the risk and optimize the benefits of FDI for environmental protection, a host state’s policies and institutional capacities play a significant role as “government regulation, the rate of economic growth, company culture, the particular industry in which the FDI takes place and the rules that govern FDI are key variables.”⁴⁶

3. Regulating the Environmental Impact of Investment: Host Countries’ Anxiety about Losing Investment

There has been heated debate about whether countries remain competitive in

⁴⁴ Lagos, G. and Velasco, P., *Environmental Policies and Practices in Chilean Mining*, in Warhurst, A. (ed.), *Mining and the Environment: Case Studies from the Americas*, IDRC, 1999; and Gentry, B. (ed.), *Private Capital Flows and the Environment: Lessons from Latin America*, Edward Elgar, 1998 - indicate cases where FDI promotes better environmental management in host states. On the other hand, Dasgupta, S., Hettige, H. and Wheeler, D., *What Improves Environmental Performance? Evidence from Mexican Industry*, Policy Research Working Paper 1877, World Bank, Washington, D.C., 1997; and Hettige, H., M. Huq, S. Pargal and D. Wheeler, Determinants of pollution abatement in developing countries: Evidence from South and Southeast Asia, *World Development*, Vol. 24, No. 12, 1996 - did not find any significant change in relation to environmental management due to the existence of foreign capital.

⁴⁵ Gentry, *supra* note 14, p. 21.

⁴⁶ Zarsky, *supra* note 10, p. 31.

attracting investment if they strictly regulate the environment. As noted in the previous section, countries seeking investment are also concerned to gain competitive advantage over others. The assumption that companies prefer to invest in countries with lax environmental regulation restricts developing countries from introducing strict environmental regulation. The traditional view on the nexus between environmental regulation and industrial competitiveness asserts that strict regulation leads inevitably to less competitiveness through impeding firms' productivity and reducing profit. Environmental regulations such as technology standards, environmental taxes, or tradable emission permits increase production costs, as they require firms to allocate additional resources in order to reduce pollution.⁴⁷ Nevertheless, the literature challenges this underlying assumption. Michael Porter and Claas van der Linde developed a theory known as the Porter Hypothesis that stresses the correlation between environmental regulation and firms' productivity.⁴⁸ They argue:

“[P]roperly designed environmental standards can trigger innovation that may partially or more than fully offset the costs of complying with them. Such ‘innovation offsets,’ as we call them, can not only lower the net cost of meeting environmental regulations, but can even lead to absolute advantages over firms in foreign countries not subject to similar regulations. Innovation offsets will be common because reducing pollution is often coincident with

⁴⁷ Ambec, S., Cohen, M. A. and Paul Lanoie, S. E., The Porter Hypothesis at 20: Can Environmental Regulation Enhance Innovation and Competitiveness?, *Scientific Series*, 2010, p. 2, [hereinafter Ambec *et al.*].

⁴⁸ Porter, M. E. and Van der Linde, C. N. D., Toward a New Conception of the Environment-Competitiveness Relationship, *Journal of Economic Perspectives*, Vol. 9, No. 4, 1995, [hereinafter Porter & Van der Linde].

improving the productivity with which resources are used. In short, firms can actually benefit from properly crafted environmental regulations that are more stringent (or are imposed earlier) than those faced by their competitors in other countries. By stimulating innovation, strict environmental regulations can actually enhance competitiveness.”⁴⁹

According to Porter and Van der Linde, pollution is often a waste of resources. Through reducing pollution, it is possible to make use of resources more effectively and cut costs. This can ultimately improve the overall productivity and performance of a firm. If a state employs stringent and properly designed environmental regulation, firms will be stimulated to innovate technologies that can reduce pollution and resource inefficiencies.⁵⁰

In other words, regulation puts pressure on companies to innovate and come up with better technologies that reduce environmental footprints. Porter and Van der Linde note that regulation, in addition to leveling playing fields for companies, can potentially raise corporate awareness and reduce uncertainties about the need to give attention to the environment.⁵¹ Apart from this, since regulation improves production process and/or product quality, firms will be able to offset regulatory costs and become more competitive than those not subject to the same standards. In short, well-designed environmental regulations can lead to a “win-win situation,” both protecting the environment and enhancing profit and competitiveness.

However, there is a lack of conclusive empirical evidence that confirms the validity of the Porter Hypothesis. While some of the literature concludes that

⁴⁹ *Id.*, p. 98.

⁵⁰ Porter and Van der Linde stated that innovation is not limited to technological change but includes “a product’s or service’s design, the segments it serves, how it is produced, how it is marketed and how it is supported.” *Ibid.*

⁵¹ Ambec *et al.*, *supra* note 47, p. 2.

environmental regulations indeed increase both environmental and business performance, others argue to the contrary. Lanoie *et al.* conducted research on 17 Quebec manufacturing industries and concluded that environmental regulation has had a significant positive impact on productivity, especially for those industries most exposed to outside competition.⁵² On the other hand, the findings of a survey of more than 4000 manufacturing companies located in seven industrialized countries, conducted to investigate the effect of environmental regulation on innovation and industrial productivity, suggest that though environmental regulation spurs innovation, which enhances business performance, innovation cannot fully offset the costs of complying with environmental policies.⁵³ Similarly, Rassier and Earnhart found out that clear water regulation lowered the profitability of 73 United States chemical firms.⁵⁴

Kriechel and Ziesemer associate ‘anti-Porter’ results with three factors: (i) the research was conducted on small firms in terms of low numbers of employees and with no management problems as well as international strategic competition; (ii) the methods applied were short-run; or (iii) the environmental policies employed by the firms were command-and-control.⁵⁵

⁵² Lanoie, P., Party, M. and Lajeunesse, R., Environmental Regulation and Productivity: New Findings on the Porter Hypothesis, *Scientific Serious*, 2001, [hereinafter Lanoie *et al.*, 2001].

⁵³ Lanoie, P., Lucchetti, J., Johnstone, N. and Ambec, S., Environmental Policy, Innovation and Performance: New Insights on the Porter Hypothesis, *Scientific Series*, 2007, [hereinafter Lanoie *et al.*, 2007].

⁵⁴ Rassier, D. G. and Earnhart, D., The Effect of Clean Water Regulation on Profitability: Testing the Porter Hypothesis, *Land Economics*, Vol. 86, No. 2, 2010, [hereinafter Rassier and Earnhart].

⁵⁵ Kriechel, B. and Ziesemer, T., *The Environmental Porter Hypothesis: Theory, Evidence and a Model of Timing of Adoption*, United Nations University - Maastricht Economic and

The Porter Hypothesis is premised on the following: (i) environmental regulation may not have immediate effect on firm productivity and performance; (ii) the positive effect of regulation on productivity is more observable on firms that are initially more polluting; and (iii) firms exposed to foreign competition are more likely to be stimulated to innovate and reduce costs.⁵⁶ In addition to this, the hypothesis states that market-based and flexible instruments, such as emissions taxes or tradable allowances, may encourage innovation and productivity more than command-and-control regulation.⁵⁷ A regulation should not only be stringent but also effective enough to lead firms to innovate and improve productivity.

Some argue that the cost that companies incur to comply with regulations is not significant when compared with a company's overall production costs.⁵⁸ Companies will not move to other jurisdictions based on regulatory variations alone. This view is supported by others who point out that environmental regulation does not play a major role in companies' investment decisions. As Zarsky suggests:

“[T]he effects of environmental regulation might be small or irrelevant compared to other determinants of industry location, such as transport costs and wage rates; and other determinants of environmental performance, including governmental regulation, income and community pressure, might

Social Research and Training Centre on Innovation and Technology, 2007, [hereinafter Kriechele & Ziesemer].

⁵⁶ Porter, G., Trade Competition and Pollution Standards: “Race to the Bottom” or “Stuck at the Bottom”? *Journal of Environment & Development*, Vol. 8, No. 2, 1999, p. 133, [hereinafter Porter].

⁵⁷ Ambec *et al.*, *supra* note 47, p. 2.

⁵⁸ Woods, *supra* note 36, p. 176; Brunnermeier, S. B. and Levinson, A., Examining the Evidence on Environmental Regulations and Industry Location, *Journal of Environment & Development*, Vol. 13, No. 1, 2004, p. 7, [hereinafter Brunnermeier & Levinson].

matter much more than foreign ownership or links to OECD markets.”⁵⁹

The decision to invest in a certain state is more influenced by taxation, domestic market conditions and foreign exchange restrictions.⁶⁰ The availability of large markets; prospects for market growth; and per capita incomes of host states are among the determinant factors in a company’s decision about location.⁶¹ These factors provide better opportunities for enterprises to exploit their ownership advantages and create possibilities for economies of scale.⁶² A country with abundant natural resource and low labor costs has an advantage in catching the attention of foreign investors. Apart from low costs, companies will take into account the productivity and availability of both natural and human resources.

The levels of infrastructure development, including quality highways, railways, seaports and airports as well as telecommunication services, are other determinant factors in location decisions.⁶³ “FDI is most likely to flow to those areas with good accessibility and lower transportation costs.”⁶⁴ Openness to international trade and access to international markets have particular importance for export-oriented investments. Furthermore, home states’ FDI policies, the transparency and effectiveness of the legal framework, political stability, and availability of reliable investment

⁵⁹ Zarsky & *et al*, *supra* note 29, p. 54.

⁶⁰ Gray, *supra* note 29, p. 308; Gentry, *supra* note 14, p. 32.

⁶¹ UNCTAD, *World Investment Report 1998: Trends and Determinants*, United Nations, New York and Geneva, 1998, [hereinafter UNCTAD, *World Investment Report 1998*]; OECD, *Foreign Direct Investment for Development*, *supra* note 27, pp. 37-40.

⁶² OECD, *Foreign Direct Investment for Development*, *supra* note 27, p. 38.

⁶³ *Ibid.*

⁶⁴ *Ibid.*

protection are significant factors in attracting FDI.⁶⁵ This does not mean, however, that all these factors can equally influence location decisions irrespective of the nature of the investment. For instance, resource-seeking firms particularly focus on the availability of skilled and inexpensive labor.⁶⁶

4. Reconciling Environmental Protection and Economic Development in Relation to Direct Investment

The issue of how a country should deal with the twin goals of environmental protection and economic development attracts the attention of many scholars. Some argue that a country should give priority to economic development over environmental protection.⁶⁷ Since a state's ability to solve environmental problems increases as it reaches a certain level of development, resources should be channeled first into achieving economic development.⁶⁸ The focus must be on designing policies aimed at bringing the maximum utilization of resources and economic prosperity. According to this view, ecological preservation presupposes growth, and it is only when a country achieves a

⁶⁵ UNCTAD, *World Investment Report 1998*, *supra* note 61; World Bank, *Global Economic Prospects and the Developing Countries 2003*, World Bank, Washington, DC, 2003, p. 66, [hereinafter World Bank, *Global Economic Prospects 2003*].

⁶⁶ UNDP, *World Investment Report 2003*, *supra* note 25, p. 85.

⁶⁷ Panayotou, T., *Empirical Tests and Policy Analysis of Environmental Degradation at Different Stages of Economic Development*, Working Paper WP238 Technology and Employment Programme, International Labor Office, Geneva, 1993; Grossman, G. and Krueger, A., *Environmental Impacts of a North American Free Trade Agreement, The U.S. Mexico Free Trade Agreement*, 1993; for arguments on the nexus between economic development and environmental protection see Panayotou, T., *Economic Growth and the Environment*, Harvard University and Cyprus International Institute of Management, Paper prepared for and presented at the Spring Seminar of the United Nations Economic Commission for Europe, Geneva, March 3, 2003, [hereinafter Panayotou], available at <http://www.unece.org/fileadmin/DAM/ead/sem/sem2003/papers/panayotou.pdf> [accessed 13/9/2013].

⁶⁸ See Panayotou, *supra* note 67; Grossman, G and Krueger, A., *Economic Growth and the Environment*, *Quarterly Journal of Economics*, Vol. 110, 1995, pp. 353-377.

certain level of economic development that it can protect the environment.⁶⁹ However, pursuing a policy that prioritizes economic development over environmental protection is not in line with the principle of sustainable development. This principle requires a country's aspiration to achieve economic development to be reconciled with environmental protection interests.⁷⁰ It is based on the assumption that the two goals can be achieved simultaneously. The questions that must be addressed include how a country can reconcile and achieve both interests; what should be done to protect the environment from the impacts of development; and what policies a country should adopt in order to enhance development without compromising its interest in protecting the environment.

The environment is at risk due to the urgent need to alleviate poverty in developing and least developed countries, on the one hand, and the acute shortage of resources, on the other, coupled with governments' capacity to regulate investment. States may fail to give equal attention to both environmental concerns and economic development. Yet as Dernbach argues: "[B]y ignoring the environment, governments make it harder, more costly, or even impossible to do the other things they have committed to doing: providing peace and security for their citizens, fostering economic development, and providing conditions for social

⁶⁹ *Ibid.*

⁷⁰ Redclift, M., *Sustainable Development: Exploring the Contradictions*, Methuen & Co. Ltd., London, 1987, p. 59; Haq, M. U., *Reflections on Human Development*, Oxford University Press, Oxford, 1995, p. 79; Dernbach, J. C., *Sustainable Development: Now More than Ever*, *Environmental Law Reporter*, Vol. 32, 2001, pp. 1002-1003.

development and human rights.”⁷¹

The repercussions for the environment will be intense and irreversible if a state fails to regulate the environmental impacts of investment in an effort to guarantee a continuous flow of investment. As there are limits to the carrying capacity of Mother Earth, as well as natural resources, economic growth and development are not necessarily sustainable, even if both are achieved. If states fail to give the required attention to the environment, the continued existence of life on Earth becomes uncertain. Since every human activity, in one way or another, depends on the environment, the quest for human development requires preservation of the environment. The issues raised here are how host countries can attract and benefit from investment without needing to compromise their interest in protecting the environment, and what sort of environmental regulations should be introduced in order to balance these two interests.

Activists of early environmental movements paid special attention to identify the root- causes of prevalent environmental problems.⁷² There was considerable debate about whether the goals of economic development and environmental protection were reconcilable.⁷³ Some environmentalists proposed de-industrialization as a solution.⁷⁴ With the assumption that there is a zero sum relationship between the two interests, any expenses incurred to

⁷¹ Dernbach, J. C., *Achieving Sustainable Development: the Centrality and Multiple Facets of Integrated Decision making*, *Indiana Journal of Global Legal Studies*, 2003, p. 252, [hereinafter Dernbach].

⁷² Adams, W. M., *Green Development: Environment and Sustainability in the Third World*, London, Routledge, 2001, 2nd ed., pp. 12-13; Elliott, J. A., *An Introduction to Sustainable Development*, London, Routledge, 2006, 3rd ed., p. 27, [hereinafter Adams].

⁷³ Fiorino, D. J., *The New Environmental Regulation*, The MIT Press, Cambridge, 2006, pp. 15-16, [hereinafter Fiorino].

⁷⁴ Adams, *supra* note 72, pp. 148-149.

preserve the environment were seen to have a corresponding impact on economic competitiveness and growth.⁷⁵ It was only with the emergence of the principle of sustainable development⁷⁶ that many started to believe in the possibility of achieving the two goals simultaneously. Building on the sustainable development principle, scholars came up with valuable ideas and theories on how to minimize and avert the impact of development on the environment. Ecological modernization is one such theory. This theory emerged in the 1980s and 1990s in the writings of scholars in the social sciences, especially political science and sociology.⁷⁷

4.1. Ecological Modernization

Ecological modernization mainly focuses on environmental reform processes such as restructuring of processes of production and consumption. It takes policies that encourage the adoption of certain techniques and principles as important requirements in the transition towards sustainable development.⁷⁸ For instance, the precautionary principle demands that governments take appropriate action with a view to minimizing or averting potential harm to the

⁷⁵ Kirkby, J., O'Keefe, P., and Timberlake, L., *Sustainable Development*, Earthscan, London, 1995 [hereinafter Kirkby *et al.*].

⁷⁶ Sustainable development is defined as "development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs." See *Report of the World Commission on Environment and Development: Our Common Future*, U.N. GA Res. A/42/427, 1987.

⁷⁷ Hajer, M. A., Ecological modernisation as cultural politics, pp. 246–268, in Lash, S., Szczyński, B. and Wynne, B., (eds.) *Risk, Environment and Modernity: Towards a new ecology*, Sage, London, 1996, [hereinafter Hajer].

⁷⁸ Pepper, D., Ecological modernisation or the 'ideal model' of sustainable development? Questions prompted at Europe's periphery, *Environmental Politics*, Vol. 8, No. 4, 1999, p. 3, [hereinafter Pepper]; Christoff, P., Ecological modernisation, Ecological modernities, in Stephens, P. H. G., Barry, J. and Dobson, A., *Contemporary Environmental Politics from Margins to Mainstream*, Routledge, 2006, pp. 184–185, [hereinafter Christoff].

environment before they actualize.⁷⁹ The theory of ecological modernization favors those policies that are believed to enable governments and companies to anticipate environmental risks before they materialize. This theory proposes the application of “economical rationality” criteria in the process of social reform of the practices of consumption. This approach may not necessarily imply reduction of consumption, but deals with “what consumption is environmentally sustainable and how can we turn unsustainable consumption practices into environmentally more sound ones.”⁸⁰ The processes of transformation into a sustainable way of consumption start with the assessment of existing institutions and lifestyles. Ecological modernization asserts the possibility of achieving economic growth and environmental protection simultaneously. Economic development and ecological quality are interdependent and compatible; “[e]conomic growth can be environmentally efficient, thus generating an apparent ‘win-win’ situation in which the benefits of contemporary industrial society are retained while its burdens on the environment are progressively dispelled.”⁸¹ The key idea is that it is possible to achieve ecologically sustainable economic development through the means of environmental technologies, transformation of modern institutions, and changes in values and practices.⁸² These and other strategies enable the reconciliation of economic growth with

⁷⁹ Harremoes, P et al., *The Precautionary Principle in the 20th Century: Late Lessons From Early Warnings*, Earthscan Publications, London, 2002, p. 4, [hereinafter Harremoes et al.].

⁸⁰ Mol, A. and Spaargaren, G., *Ecological Modernization and Consumption: A Reply*, *Society & Natural Resources*, Vol. 17, No. 3, 2004, p. 264, [hereinafter Mol & Spaargaren]

⁸¹ Connelly, J. and Smith, G., *Politics and the Environment: From theory to practice*, Second ed., Routledge, New York, 2003, p. 5, [hereinafter Connelly & Smith]. See also, Mol, A. and Spaargaren, G., *Ecological modernisation theory in debate: A review*, *Environmental Politics*, Vol. 9, No. 1, 2000, p. 22, [hereinafter Mol & Spaargaren].

⁸² Gibbs, D., *Local Economic Development and the Environment*, Routledge, New York, 2002, pp. 7-8, [hereinafter Gibbs].

the requirements of ecological sustainability. Improved environmental technologies may help to minimize resource inefficiency. Because of this, ecological modernization theorists see environmental protection as a source of growth. As Paper points out:

“[Ecological modernization] discourse sees environmental protection not as an impediment to capital accumulation but as a potential source of further accumulation; economic benefits and competitive advantage being said to accrue from preserving genetic diversity and from anticipatory environmental protection rather than paying out to clean up a mess. In this positive-sum game, technological and managerial experts, business and industry all become key actors in fulfilling the environmental agenda, rather than its enemy.”⁸³

The business sector can benefit from policy approaches offered by ecological modernization.⁸⁴ Firms that adopt clean technologies can save costs in production. They can also benefit from market opportunities in pollution-control equipment and other green production.⁸⁵

The theory gives recognition to the important role innovators, entrepreneurs and other economic agents play in environmental reform processes.⁸⁶ Although the role of the state remains central in environmental reforms and management, actors other than the state, including the business sector and environmental NGOs, play a fundamental role in bringing behavioral changes.

⁸³ Papper, *supra* note 78, pp. 2-3.

⁸⁴ Gibbs, *supra* note 82, pp. 9-10.

⁸⁵ *Ibid.*

⁸⁶ Papper, *supra* note 78, pp. 3-5. See also, Mol, A. P., Ecological modernization as a social theory of environmental reform, in Redclift, M. and Woodgate, G., *The International Handbook of Environmental Sociology, Second ed.*, 2010, p. 68, [hereinafter Mol, 2010].

In relation to the role states should play in environmental reform and management, Mol argues that “... the role of the state in environmental policy is changing, or will have to change, from curative and reactive to preventive, from ‘closed’ policy making to participative policy making, from centralized to decentralized, and from dirigistic to contextually ‘steering.’”⁸⁷

The theory favors more decentralized, flexible and consensual styles of national environmental governance, rather than top-down hierarchical command-and-control regulation.⁸⁸ It places great emphases on the roles different actors have in integrating environmental considerations within economic and social decision-making processes.⁸⁹ This gives opportunities for non-state actors to engage in environmental protection initiatives through, for example, the adoption of voluntary environmental protection standards. This relatively new form of environmental governance and regulation creates partnerships between the state and private enterprises, the state and citizens, and citizens and business, all working towards a sustainable economy and environment.⁹⁰

The theory of ecological modernization provides valuable insights about how to bring proper balance between a country’s interests in protecting the environment and enhancing investment. As the theory holds, it is important to introduce a framework within which governments and private actors share responsibility for protection of the environment and thereby minimize impacts in host countries. From this perspective, Goldenman argues that “the rapid

⁸⁷ Mol, A. P., Ecological modernization: industrial transformations and environmental reform, in Redclift, M. and Woodgate, G., *The International Handbook of Environmental Sociology*, Edward Elgar Publishing Limited, 1997, p. 141, [hereinafter Mol, 1997].

⁸⁸ Mol, 2010, *supra* note 86, p. 68.

⁸⁹ Christoff, *supra* note 78.

⁹⁰ Adams, *supra* note 72, p. 112.

pace of globalization, the competition for FDI, and the sheer size of many multinational enterprises can make it difficult for a host country acting alone to set in place adequate environmental controls over incoming FDI.”⁹¹ Traditionally, the responsibility to steer socially undesirable behavior rests with governments, but this has been found to be ineffective.⁹² Pressure and changes brought by other organizations on environmentally harmful behavior are being noticed.⁹³ The motivation that business entities show towards implementing voluntary environmental standards and programs creates the opportunity for a new form of governance in the realm of sustainable development. A system of governance that suits this growing demand involves different actors working together for the same goal.⁹⁴ A country, rather than sticking to the conventional command-and-control approach, needs to introduce environmental regulatory mechanisms, which give more room for non-governmental actors to participate in the process of managing the environmental impacts of investment.⁹⁵ Involving actors other than the government in environmental regulatory actions can ease developing countries’ anxiety about losing inflow of direct investment. But the question of what role each actor should play in averting and controlling investment-related environmental problems remains.

⁹¹ Goldenman, G., *The Environmental Implications of Foreign Direct Investment: Policy and Institutional Issues*, in OECD, *Foreign Direct Investment and the Environment*, OECD, Paris, 1999, p. 85, [hereinafter Goldenman].

⁹² Wapner, P. K., *Environmental Activism and World Civic Politics*, State University of New York Press, 1996, pp. 17-18, [hereinafter Wapner].

⁹³ *Ibid.*

⁹⁴ Delmas, M. A. and Young, O. R., *Governance for the Environment: New Perspectives*, Cambridge University Press, 2009, pp. 6-9, [hereinafter Delmas & Young].

⁹⁵ *Ibid.*

4.2. The Role of the State in Ensuring Environmentally Sound Investment

The first action towards regulating the environmental impacts of investment is expected to come from countries hosting investment. States must introduce appropriate policy frameworks and strengthen their institutional capacity both at national and local levels in order to ensure the contribution of investment for sustainable development. It is the responsibility of the state to establish a broad development policy with social, ecological and economic objectives. The principle of integrated decision-making requires that states pay equal attention to and consider each goal (i.e., environmental protection, economic development and social development) in development related decision-making processes. The Rio Declaration reinforced this principle in its statement: “[I]n order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.”⁹⁶ Such integration must be achieved “through appropriate legal and regulatory policies, instruments and enforcement mechanisms.”⁹⁷

Since the problems of environmental degradation and poverty are interrelated, during early stage of policy drafting it is essential to consider both interests together.⁹⁸ This helps to minimize potential environmental harms and to relate environmental protection measures to the intended

⁹⁶ Rio Declaration, principle 4. In the same vein, Agenda 21, under Par. 8.4, states that national governments need to “integrate environmental and development decision-making processes.”

⁹⁷ Agenda 21, Paragraph 8.16.

⁹⁸ Gentry, *supra* note 14. See also, Johnston, D., Foreign Direct Investment and the Environment: Challenges and Opportunities, Secretor-General, OECD, in OECD, *Foreign Direct Investment and the Environment*, OECD Proceedings, OECD, Paris, 1999, pp. 9-13.

development project. Sustainable development demands not only that environmental and social goals be integrated into a country's economic development policies but also that the goals in a particular decision-making processes be considered simultaneously. This requirement helps to bring environmental and/or social issues to the attention of the decision maker.

Governments are advised to perform three important tasks in regulating the environmental impacts of investment. They must: (i) determine what society's goals should be; (ii) decide what specific steps should be taken to achieve them; and (iii) ensure that large numbers of companies are complying with the requirements set in the regulations.⁹⁹ It is possible to use different approaches to determine the environmental goals of the society in question. Government can use market-based mechanisms, employ environmental regulations and/or engage the public.¹⁰⁰ They can adopt a mixture of these approaches to safeguard the environment against harms caused by economic activities. There are several different categories of market-based approaches, ranging from subsidy reduction, environmental taxes, and user fees to target subsidies.¹⁰¹ These policy tools help to reduce environmental impacts generated by economic activities, including private investment.¹⁰² For example, removing subsidies from environmentally damaging activities may help to reduce environmental harms. When individuals use resources and pay little or nothing for the rights to do so, it may lead to overexploitation of resources.

⁹⁹ Fiorino, *supra* note 73, pp. 190-191.

¹⁰⁰ World Bank, *Five Years after Rio: Innovations in Environmental Policy*, World Bank, Washington, D.C., 1997, pp. 5-14, [hereinafter World Bank].

¹⁰¹ *Ibid.*

¹⁰² *Ibid.*

The literatures highlight the need to put in place stronger and more comprehensive regulatory standards in order to bring about improved environmental performance.¹⁰³ Regulatory frameworks must be predictable and applied consistently to all investors without discrimination. In relation to this, it is desirable to preserve some discretionary power about how to achieve those standards with regulated companies. This can enhance the role of regulation in bringing about a win-win solution through “granting firms the flexibility to discover least-cost solutions, keeping the transaction costs of permitting and documentation to a minimum, and promoting the integration of environmental decision making into long-term business planning.”¹⁰⁴ Companies may agree to more stringent performance standards if they have the discretion to decide how to meet those standards.

Rules define the basic framework within which investors must operate when producing and selling their goods and services. Regulations need to be designed to encourage behavior by providing positive as well as negative incentives.¹⁰⁵ The methods that a government applies to enforce regulations should not be limited to penalties and sanctions. The assertion that industries will only act in line with a society’s interest where there is a legal sanction does not always hold true as firms now show efforts to go beyond legal compliance.¹⁰⁶ Positive reinforcement mechanisms, such as giving recognition and different treatment such as tax exemption for good performance, help to avoid adversarial relationships between the government and regulated companies, and build regulatory environments that promote

¹⁰³ Gentry, *supra* note 14; Fiorino, *supra* note 73.

¹⁰⁴ Fiorino, *supra* note 73, pp. 222-223.

¹⁰⁵ *Id.*, pp. 193-194.

¹⁰⁶ *Ibid.*

solutions through cooperation, responsibility sharing, and collaboration.¹⁰⁷ Collaboration plays a significant role in promoting dialogue, trust and mutual learning. Similarly, strategies based on learning are preferred over bureaucratic control. Incentives encourage actors to evaluate and improve their performance.

The capacity of a state to formulate, implement and enforce effective environmental regulations on any form of investment, whether domestic or foreign, is important.¹⁰⁸ The legal authority and enforcement capacity of a government is essential to hold firms accountable where they fail to meet standards. Depending on circumstances, a government may need to use coercive action against companies that fail to obey regulations. Some firms that seek short-term advantages may become reluctant to comply with regulations. In such cases, the government may need to hold them responsible for the harm they cause to the environment.

As noted above, efforts to balance development objectives with environmental protection goals require cooperation between the government, the business sector and NGOs. There are multiple actors, such as communities and NGOs, which exert pressure on firms to act responsibly towards the environment. “Regulatory pressure from government is necessary, but it is not the only influence on firms.”¹⁰⁹ For example, activists pressure industries to improve their environmental performances. NGOs historically have played a significant role in changing behaviors towards the environment. “They constitute an independent voice for bringing environmental issues to public

¹⁰⁷ *Id.*, p. 223.

¹⁰⁸ Zarsky *et al.*, *supra* note 29, p. 49.

¹⁰⁹ Fiorino, *supra* note 73, p. 193.

attention and holding government as well as industry accountable.”¹¹⁰ A government needs to establish and maintain an enabling framework that allows other actors to play their parts in investment regulation.

4.3. Corporate Self-Regulation

Currently, large firms, especially multinational corporations (hereinafter MNCs), are adopting codes of conduct in order to minimize the environmental and social impacts of their undertakings. Codes of conduct, mostly issued by individual corporations, industry associations, or international organizations, incorporate environmental and labor standards and a commitment to protect human rights as well as to refrain from bribery.¹¹¹ Corporate initiatives towards self-regulation of environmental and social impacts are often expressed in the form of corporate social responsibility (hereinafter CSR) initiatives. CSR refers to “greater responsiveness on the part of companies to societal and stakeholder concerns; integration of social and environmental considerations in business operations; voluntary initiatives that go beyond both philanthropy and standards embodied in law; and ‘doing no harm.’”¹¹²

The presence of MNCs in developing countries inspires both hope and fear. MNCs can create employment opportunities and help generate government revenues. However, in most circumstances, governments in these countries have limited capacity to regulate investment. They refrain from regulating

¹¹⁰ *Id.*, p.192.

¹¹¹ For example, the OECD Guidelines for Multinational Enterprises; Sustainable Reporting Guidelines; United Nations Global Compact Principles.

¹¹² Utting, P. and Marques, J. C., *Corporate Social Responsibility and Regulatory Governance: Towards Inclusive Development?*, UNRISD, Palgrave Macmillan, 2010, p. 2, [hereinafter Utting & Marques].

MNCs for fear of losing their investment to other countries, even where they have the capacity. However, if companies accept responsibility about the environment and implement similar rules and procedures across their affiliates, their contributory role for national development will be elevated. The adoption of voluntary standards can help to allay the anxiety that companies will move to countries with lower standards in order to avoid tough environmental regulation.

Different from environmental regulations, voluntary environmental programs offer flexibility in addressing environmental problems. Participants are free to decide about the methods that they apply to meet the goals. Compared with traditional command-and-control regulation, voluntary environmental initiatives are more cost-effective, “because they provide firms with the flexibility to tailor their pollution control strategies to meet the needs of their operations.”¹¹³ Apart from this, the initiatives are advantageous for government authorities as they help to create a sense of shared responsibility among different actors. As Fiorino notes, they “allow policy makers to adapt more quickly to new issues than a conventional regulatory approach would [...] when combined with either the right sticks or carrots [...] and designed properly, they offer a valuable and effective addition to conventional regulation.”¹¹⁴ The method becomes more effective if used in combination with other instruments.

Firms that implement voluntary CSR can be advantageous from different

¹¹³ Khanna, M. and Brouhle, K., The effectiveness of voluntary environmental initiatives, in Delmas, M. A. and Young, O. R., *Governance for the Environment: New Perspectives*, Cambridge University Press, 2009, p. 145, [hereinafter Khanna & Brouhle].

¹¹⁴ Fiorino, *supra* note 73, p. 126.

perspectives.¹¹⁵ Better environmental performance, with improved quality control of final products, efficient use of resources, and waste minimization can lead to increased profitability.¹¹⁶ Environmentally responsible business practices create opportunities to reduce costs and increase market share. Firms that implement environmental management systems can have better access to export markets. They can improve their public relations, image and reputation. A company's widespread acceptance and the possibility of winning more customers can increase with improved environmental responsibility.¹¹⁷ Firms with good environmental performance can establish good relationship with the community within which they operate. Compliance with voluntary environmental responsibility programs also helps companies to check their own actions and avoid future liability.¹¹⁸

However, voluntary environmental programs should not completely replace government policies and regulations. Self-regulatory efforts can only supplement a state's actions in regulating investment. "Self-regulation is not a panacea [...] it is at most just a partial solution, and that only if accompanied by robust disclosure and enforcement backed by social actors and governments."¹¹⁹ The effectiveness of self-regulation depends on the possibility of overcoming problems associated with compliance, and this calls for the involvement of the state and other actors. Some voluntary programs require that companies go beyond compliance with government regulatory

¹¹⁵ *Id.*, p. 16; Utting and Marques, *supra* note 112, p. 2; Huber, J., Towards Industrial Ecology: Sustainable Development as a Concept of Ecological Modernization, *Journal of Environmental Policy and Planning*, Vol. 2, No. 4, 2000, [hereinafter Huber].

¹¹⁶ *Ibid.*

¹¹⁷ Huber, *supra* note 115.

¹¹⁸ Khanna and Brouhle, *supra* note 113, p. 145.

¹¹⁹ Brown, D. L. and Woods, N., *Making Global Self-Regulation Effective in Developing Countries*, Oxford University Press, New York, 2007, p. 5, [hereinafter Brown & Woods].

requirements, but host country regulations remain important as they set minimum social and environmental protection standards.

Although CSR initiatives are voluntary in their nature, there are factors that induce firms to comply with their requirements.¹²⁰ Most CSR instruments demand that firms act in accordance with the law.¹²¹ Apart from this, the community, consumers, and activists can influence companies to undertake self-regulatory activities. Firms may improve their environmental performance as a response to the demands of these actors. Information disclosure to stakeholders (regulators, impacted communities, and the public) about environmental practices and performance by firms serves as a compliance mechanism.¹²² Based on released information, the public can, for example, bring legal action before a court of law or other law enforcing institutions. In order to protect their reputation, firms evaluate and improve

¹²⁰ European Commission, *Promoting a European Framework for Corporate Social Responsibility, Green Paper, COM(2001)366*, 18 July 2001, p. 7; Donaldson, T. and Preston, L. E., *The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications, Academy of Management Review*, 1995, Vol. 20, pp. 65–91; Buhmann, K., *Corporate social responsibility: What role for law? Some aspects of law and CSR, Corporate Governance*, 2006, Vol. 6, No. 2, pp. 188–202, [hereinafter Buhmann]; Porter, M. E. and Kramer, M. R., *The Link Between Competitive Advantage and Corporate Social Responsibility, Harvard Business Review*, 2006, p. 82, [hereinafter Porter and Kramer]; Hopkins, M., *The Planetary Bargain: Corporate Social Responsibility Matters*, Earthscan, 2003.

¹²¹ Hopkins, M., *Corporate Social Responsibility: An Issue Paper*, Working Paper No. 27, Policy Integration Department, World Commission on the Social Dimension of Globalization, ILO, 2004, p. 6.

¹²² Porter and Kramer, *supra* note 120, p. 82; Heal, G., *Corporate Social Responsibility: An Economic and Financial Framework*, paper presented at the 2004 Annual Conference of the Monte Paschi Vita, organized around the topics of corporate governance and corporate social responsibility, 2004, p. 13. Heal notes that “the role of [CSR] is to anticipate and minimize conflicts between corporations and society and its representative, aligning private and social costs if differences are the source of the conflict, or minimizing distributional conflicts [...] avoidance or reduction of conflicts is indeed a major contribution of effective corporate CSR programs.”

their behavior towards the environment and the society.¹²³ The government can strengthen the effectiveness of voluntary environmental performance programs by requiring information disclosure to the public and putting in place an appropriate policy framework to uphold the functionality of social mobilization.¹²⁴ In addition, internal governance tools such as environmental auditing and reporting, environmental management systems and independent certification give force to voluntary self-regulation programs.

4.4. The Role of Civil Society

Environmental activists, non-governmental organizations (NGOs) and communities play a crucial role in environmental protection initiatives. “NGOs appear to be key actors in moving societies away from current trends in environmental degradation and toward sustainable economies.”¹²⁵ They pressure government authorities to work for environmental well-being in various ways, such as through demanding disclosure of environment-related information to the public.

NGOs can influence environmental policies through promoting support or opposition.¹²⁶ They can promote communication, monitor information, and publicize non-compliances. They easily catch media attention, create networks with organizations working for similar objectives, and lobby for policy change. Moreover, international environmental activists try to put pressure on state officials at international conferences in support of

¹²³ Buhmann, *supra* note 120.

¹²⁴ See Brown & Woods, *supra* note 119.

¹²⁵ Princen, T. and Finger, M., *Environmental NGOs in World Politics: Linking the local and the global*, Routledge, New York, 1994, p. 11, [hereinafter Princer & Finger].

¹²⁶ Princen, T., NGOs: Creating a niche in environmental diplomacy, in Princen, T. and Finger, M., *Environmental NGOs in World Politics: Linking the local and the global*, Routledge, New York, 1994, p. 34, [hereinafter Princen].

environmental protection measures.¹²⁷

Environmental activists' focus is not limited to the actions of governmental authorities. They watch over business entities and expose the social and environmental externalities of their activities to the public.¹²⁸ NGOs raise public awareness about the trends and consequences of economic activities, including investment. When companies fail to comply with their own codes of conduct, they influence them to work for improvements.¹²⁹ In response to pressure from activists, companies scrutinize their undertakings with a view to preserving their reputation.

Princen and Finger label NGOs "agents of change" for two reasons.¹³⁰ First, organizing provides the opportunity to effectively challenge the actions of government authorities as well as companies, and to come up with creative solutions. Second, the failures of governments to undertake the responsibility to steer companies away from environmentally harmful behaviors provides NGOs with the opportunity to assume this critical role.

There are times when the state, instead of governing environmental effects properly, becomes an agent of environmental degradation and creates obstacles for behavioral changes. "Relative to actors in the governmental and business sectors, in the environmental realm NGOs are perceived as defenders of values that governments and corporations are all too willing to compromise."¹³¹ In this respect, NGOs must act independently and free of interference. As Princen and Finger explain, "[T]o simultaneously reach up to

¹²⁷ Wapner, *supra* note 72, p. 3.

¹²⁸ Buhmann, *supra* note 120, pp. 188-202.

¹²⁹ *Id.*, pp. 189-190.

¹³⁰ Princen and Finger, *supra* note 125, p. 11.

¹³¹ Princen, *supra* note 126, pp. 34-35.

the states and international institutions and down to the local communities, such agents must establish themselves as independent actors.”¹³²

Environmental impact assessment (hereinafter EIA) is another important tool that allows the public to engage in regulating the environmental impacts of investment. This policy measure helps to control the adverse environmental impacts of investment. By requiring proposed investment projects to pass through the process of EIA, states will be able to know potential impacts and decide whether to grant or deny permission for particular projects. It helps to take precautionary measures: “[T]he EIA process can encourage consideration of less environmentally harmful alternatives, or identify ways in which a project’s design may be altered in order to lessen environmental impact.”¹³³

Based on the information acquired during the assessment, states determine whether there is a need to place conditions on the project’s operation. Government authorities entrusted with the power to handle EIA process are required to inform the public that may be affected about the proposed project and its potential impacts. The authorities also provide the public with an opportunity to give comments, which provides a way for the public to put forward suggestions for improvements. Before making a final decisions on the project, the authorities must take into account the comments made by the public. If there is procedural irregularity, for example a failure to inform the public about potential environmental effects, decision makers will be held accountable.

Public participation is a basic principle in environmental protection efforts. It requires that environmental decision makers consult and engage the

¹³² Princen and Finger, *supra* note 125, p. 11.

¹³³ Goldenman, *supra* note 91, p. 80.

community whose interests might be affected in the decision making process. Principle 10 of the Rio Declaration underscores that “environmental issues are best handled with the participation of all concerned citizens, at the relevant level.”¹³⁴ The role that public participation plays in environmental protection and development initiatives can be considered from three perspectives.¹³⁵ First, it helps to legitimize decision-making, and thereby reduces the level of conflict. Second, it gives the government the opportunity to obtain additional ideas and information directly from the public and this may contribute to the quality of the decision. Informed and accountable environmental decision-making requires the integration of expert opinions and public views. This helps to overcome uncertainties and limitations in scientific knowledge. “Including the views of ordinary citizens in environmental policy-making helps to avoid the dangers of ‘technocratic decision-making’, where policy formation is based on expert assessment only, rather than on expert knowledge combined with stakeholder views.”¹³⁶ Third, it enables citizens to learn about the environmental problems that they might face. Thus, public participation serves as an instrument to protect the interest of stakeholders.

The functionality of public participation depends on several factors. First, the law must guarantee the right of the public to participate in environmental decision-making and describe the duties of public authorities.

¹³⁴ Rio Declaration, Principle 10.

¹³⁵ Coenen, F. H., *Public Participation and Better Environmental Decisions: The Promise and Limits of Participatory Processes for the Quality of Environmentally Related Decision-making*, Springer, 2008, p. 2.

¹³⁶ Welp, M., Kasemir, B. and Jaeger, C., Citizens’ Voices in Environmental Policy: The Contribution of Integrated Assessment Focus Groups to Accountable Decision-Making, in Coenen, F. H., *Public Participation and Better Environmental Decisions: The Promise and Limits of Participatory Processes for the Quality of Environmentally Related Decision-making*, Springer, 2008, p. 22.

Public participation presupposes the availability of information concerning the environment and the planned activities. Principle 10 of the Rio Declaration requires states to “facilitate and encourage public awareness and participation by making information widely available.” Apart from this, states must guarantee citizens’ right to have access to justice where there are irregularities. Governments must also put in place a supportive legal environment to allow NGOs and the community to engage in regulating the environmental impacts of investment. Where there is suitable environment, they can act as constructive and independent partners in the effort to achieve sustainable development. National laws must also guarantee freedom to organize and the right to free speech.

Conclusion

Most developing countries aspire to achieve development through attracting investment. Investment promotion now occupies a prominent place in the development policies of many countries. Countries put in place incentives in various forms in order to guarantee the continuous flow of investment. Though investment can serve as one potential source of funds for development, it may also pose challenges for the achievement of sustainable development through increasing over-exploitation of natural resources as well as pollution. Lack of institutional capacity to regulate investment in developing countries exacerbates the problem. Moreover, competition among countries to attract investment may result in weak environmental protection standards in these countries. A development policy that targets only economic development, through attracting investment, cannot be sustainable. The quest for sustainability necessitates that a country’s interest in economic development be reconciled with environmental protection goals, and that the

government should strive to achieve these two objectives simultaneously. For this reason, effective regulatory mechanisms must be put in place.

This article highlighted the challenges that direct investment poses for the environment, and major factors that create difficulties for certain governments to effectively regulate the environmental impacts of investment. Countries' anxiety about remaining competitive in attracting foreign investment, coupled with the assumption that companies always prefer to invest in jurisdictions with lax regulation, leads them to disregard the protection they should accord to the natural environment. But as the discussion about the correlation between strict environmental regulation and firm competitiveness indicated, it is not appropriate to conclude that firms' economic performance is always negatively affected by environmental regulation. A legal duty may encourage firms to engage in innovation that enables them to use resources more efficiently and appropriately and thereby enhance their performance. Furthermore, it is simply a fact that less strict legal regulation is not among the major considerations for firms' decisions about where to invest—although there are exceptions here, for instance, with companies that are reluctant about environmental and social impacts of their operations. It is important to remember that an investment that is attracted by a weak environmental regulatory system will not bring sustainable development to the host country. Finally, this article has pointed out the importance of introducing an environmental governance framework that allows different actors—governments, NGOs, the community, and business firms—to work towards the goal of environmental protection in developing and least developed countries. Within this framework, all of these actors must have a role in

changing environmentally harmful behaviors into environmentally responsible ones. Environmental protection policies that encourage companies (investors) to take part in environmental protection efforts and minimize the impacts of their operations can ease developing countries' stress. Collaboration between different actors, more than unilateral action, helps to achieve the goal of environmental protection. The effectiveness of governmental environmental regulations and voluntary programs can be enhanced through creating conducive environment for the involvement of NGOs and communities. Host countries, in addition to strengthening their environmental laws and enforcement systems, need to create a legal environment that ensures the participation of NGOs as partners in the effort to achieve sustainable development. In addition, states must encourage flexibility, rather than sticking to the traditional command-and-control mechanisms, in order to allow companies to regulate themselves.