Foreign Direct Investment and the Environment

LESSONS FROM THE MINING SECTOR
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FOREWORD

Foreign direct investment (FDI) is one of the forces fostering closer economic interdependence among countries and a major catalyst for development. Over the last decade, FDI flows have grown rapidly, propelled by the progressive liberalisation of investment regimes. This rapid growth has generated a debate on maximising the net environmental and social benefits of FDI. More specifically, public interest has focussed on the mining sector, where the environmental and social impacts of FDI are perceived to be particularly significant.

While metals and minerals are vital for the economic development of developing countries, mining operations have sometimes resulted in severe social and environmental disruption, particularly in the adjoining communities. However, important lessons have been learned about the measures that can help to prevent or minimise these impacts. The challenge is to find ways of disseminating these lessons, of ensuring that they are applied to all mining operations, and of building the capacities in host countries, mining operators and civil society organisations to do so.

As a follow-up to an earlier conference held in The Hague in 1999, the OECD organised a conference on “Foreign Direct Investment and Environment – Learning Lessons from the Mining Sector” in Paris on 6-7 February 2002. A major objective of this event was to examine the empirical evidence, and to deepen the understanding among stakeholders in OECD and non-OECD countries and economies, of the main challenges in ensuring that environmental and investment policy goals in a specific sector be mutually supportive. The conference papers and discussions helped to clarify the key environmental challenges in the mining sector, and identified some of the policies, voluntary corporate initiatives and other measures that can be used to mitigate them, taking account of economic and social considerations. There was recognition that good public governance and capacity building at all levels are essential for balancing economic, social and environmental interests. Participants also identified issues which merit further analysis and which will guide the OECD’s future work in this area.

As part of the OECD Global Forum on International Investment (GFII), the event was jointly organised by the OECD’s Environment Directorate and the Directorate for Financial, Fiscal and Enterprise Affairs, under the auspices of the Organisation’s Centre for Co-operation with non-Members (CCNM). It brought together government officials from OECD Members and non-Members, as well as from other multilateral organisations, business executives and NGO representatives. The GFII is one of eight “Global Forums” managed by the CCNM. Their aim is to deepen and extend relations with a larger number of non-OECD economies in fields where the OECD has particular expertise and global dialogue is important.

This volume presents some of the edited conference papers. The views expressed are those of the individual authors and do not necessarily reflect those of the OECD, its Members, or other participants in the meeting. It is published on the responsibility of the OECD Secretary-General.

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Foreign Direct Investment and the Environment: Lessons from the Mining Sector

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Mining is an important sector for the economy, particularly in many developing countries, and one where environmental concerns have frequently been voiced. A key challenge is to develop policy options for making foreign direct investment (FDI) and environment objectives mutually supportive in the mining sector.

In this context, four major issues can be identified. The first is whether FDI in the mining sector contributes to sustainable development. We have come to recognise in recent years that the flows of capital, technology and information associated with globalisation promise to spread wealth and well-being to a greater number of people around the world. Yet the levels of poverty in the world are unacceptable and represent a real threat to our security and prosperity.

FDI is widely recognised as a driving force of globalisation, a major catalyst for achieving development and global integration. Despite the relatively small share of mining in world investment flows, FDI within this sector represents a substantial part of capital formation and GDP in many developing and emerging economies. FDI can therefore have significant impacts, positive, as well as negative. This is particularly true for the environment. Preliminary evidence suggests that under appropriate framework conditions, foreign investments in mining frequently have higher environmental performance compared to domestic operations, due to new technologies and practices they bring with them. On the other hand, when these framework conditions, such as effective environmental regulation and transparent public governance, are not in place, there is a risk that serious environmental and social damage can occur.

A second key issue concerns the role of governments in maximising the benefits of FDI in mining. The challenge of “getting policies right” will require efforts on many fronts. In the OECD, we have been examining the range of policies and instruments that can help to integrate economic and environmental policies for more than thirty years. Last May, Environment Ministers from OECD countries adopted an Environmental Strategy for the First Decade of the 21st Century. At about the same time, a major three-year study of Sustainable Development, involving virtually all parts of the Organisation, was concluded.

Policy options for minimising environmental impacts in the mining sector include assessing potential environmental impacts before operations begin, designing integrated packages of measures to mitigate potential impacts, monitoring the effectiveness of control measures and adapting them as needed, requiring adequate provisions for mine closure, reclamation and clean-up, taking local populations’ concerns into account and ensuring that environmental requirements are applied fairly, without discrimination, to all investors.

While environmental policies and institutions are important, the broader enabling economic and institutional environment for investment, whether foreign or domestic, is equally crucial. OECD experience shows that areas deserving special attention include public administration, police and judicial systems and other channels of influence on private behaviour. All these policy options have benefits but also entail costs, as governments have to build capacities to design and implement them.
Cost-benefit evaluation, designing cost effective policies and capacity building are central issues on which this conference should shed further light.

A third key issue relates to the contributions of multinational enterprises. While governments have primary responsibility for providing the right policy framework for business operations, mining companies, for their part, can be expected to engage as reliable and consistent partners in the development process. Indeed, the mining industry has addressed concerns about its on-ground performance by implementing a range of voluntary measures to better manage environmental and social issues arising from its operations and by communicating these to the public. These measures include codes of conduct, environmental management systems and environmental reporting. In fact, the mining industry is currently conducting a major review of experience in this and related areas and we look forward to learning more about this initiative during the conference.

With its multi-stakeholder consultation and consensus-building procedures, the OECD Guidelines for Multinational Enterprises can usefully reinforce and complement private business initiatives undertaken by the mining industry. The OECD Guidelines are recommendations addressed by governments to companies operating in or from 36 adhering countries. They provide voluntary principles and standards for responsible business conduct in a variety of areas, including environment.

A final point is that donors and international organisations also have a key role to play. Clearly, there is an acute need to work together in an effective and coherent way towards FDI capacity-building in host countries. Donors, international financial institutions and other international organisations can help strengthen capacity in those developing countries that lack regulatory capacity or even basic governance systems. International financial institutions and donors can play a catalytic, demonstration role in financing mining investments, even though they finance only a small share of the total. Beyond this, international organisations can assist developing countries through policy dialogue, sharing experience and identifying best practices.

Our shared aim is to advance the discussion and partnerships on how to better integrate investment and environmental policy in the mining sector and more generally. The OECD for its part is prepared to assist in these efforts, in order to ensure that FDI in the mining sector is supportive of poverty reduction, environmental protection and sustainable development.
Rapporteurs’ Report

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Background

At the end of the 1990s, the debate on foreign direct investment (FDI) and the environment was polarised and polemical. Some commentators were concerned that competition for FDI between countries would lead to a “race to the bottom” in environmental standards (the pollution haven hypothesis). Others thought that FDI would promote the establishment of higher environmental standards through the transfer of technology and management expertise (the pollution halos hypothesis). An OECD conference on FDI and the environment held in The Hague, January 1999\(^1\) reviewed the evidence available at the time and recommended:

- A broader analytical focus beyond the issues of pollution “havens” and pollution “halos”. More emphasis should be given to monitoring the net environmental performance of investments, including their cumulative and scale effects;
- A better understanding of sectoral differences. The resource-using sectors (e.g. mining, forestry) merit priority attention in view of their environmental, economic and social importance in many FDI-host countries; and
- A need to strengthen policy and institutional frameworks for integrating investment and environmental policy goals. The development and promotion of appropriate environmental standards/policies for FDI is particularly necessary in those FDI-host countries where existing environmental policies and standards are either low or poorly enforced.

In light of these recommendations, the OECD organised a follow-up conference on 7\(^{th}\) and 8\(^{th}\) February 2002 in Paris. The focus of the meeting was the mining sector. Key aspects of the mining sector that motivated this choice were:

- *The important role that mining FDI plays in many developing country economies.* Global FDI flows, totalling US$1.3 trillion in 2000, overwhelmingly (80%) occur between OECD Member countries. This situation is also reflected in the mining sector. While overall FDI flows into the mining sector of developing countries are small, however, representing no more than 4-5% of total FDI flows to these countries, they can represent a significant share of overall FDI in some regions and for individual countries. For example, in the Southern

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African Development Community (SADC) 23% of FDI flows into the mining sector\(^2\). In Ghana, FDI into gold mining represents 55% of total FDI and the share of exports attributed to mining is 45%. In Indonesia, state revenues from mining account for more than US$800 million per year\(^3\). In many countries, a large share of state revenue depends on the mining sector. Generally, FDI into the mining sector represents only a small share of GDP and employment. In Ghana for instance, mining represents only 1.5% of GDP\(^4\). In Indonesia, it represents about 0.1% of total employment\(^5\). Thus, even in countries where mining represents a significant share of FDI inflows, its overall contribution to the domestic economy remains relatively limited.

• The potential environmental costs and benefits that mining FDI can generate. Empirical evidence suggests that the environmental effects of FDI in the mining sector can reduce or increase pressures on the environment, as compared with domestic investment, depending on the geographical location and whether regulatory, technology or scale effects are considered. In Chile, for example, foreign investment into copper mining has facilitated a significant inflow of environmentally sound technologies, such that foreign investors’ environmental performance is often better than that required by local regulations and standards. In that country, foreign investors have outperformed domestic operators for the last two decades\(^6\). However, there are also cases where foreign mining investors have exerted downward pressure on environmental requirements. For example, foreign investors in Ghana are pressuring the government to allow exploration and mining in forest reserves, despite a 1996 national moratorium on such activity in these areas\(^7\). In Zambia, foreign investors are exempt from environmental liabilities for past activities and can defer compliance with environmental standards\(^8\).

• The potentially important environmental and social impacts generated by the mining sector, and its relatively poor past record on these issues. Historically the most important environmental impacts of mining have included the discharge of toxic substances into river systems, large volume waste disposal, the inadequate disposal of hazardous waste as well as long run environmental impacts resulting from poorly planned mine closure. Standards have risen, particularly among the larger companies but environmental damage continues to occur. Social impacts include the displacement of people and the destruction of local communities’ livelihoods. A United Nations Environment Program (UNEP) survey suggests that despite the increased scrutiny of the environmental performance of the mining sector, the number of annually reported serious mining accidents has not decreased. Cyanide spills

\(^8\) Ibid.
from gold mines into river systems in Romania and Papua New Guinea are some of the most serious recent examples.9

- **The threat to the mining sector of losing its “social licence to operate” in a number of countries.** Because of the sector’s poor environmental and social record, civil society’s support for mining has significantly decreased. The mining industry, along with the tobacco and chemical industries, receives the lowest public ratings. As a result, it has become increasingly difficult for the mining industry to develop new deposits in states with strict planning requirements.

- **The increasing reluctance of financial institutions (public and private) to provide finance to the sector.** In parallel with increasing public scrutiny of the mining sector’s environmental and social performance, financial institutions involved in mining have come under increasing pressure to decline projects that could have adverse social and/or environmental impacts. For a number of years there have been demands from environmental non-governmental organisations (NGOs) that the World Bank disengage from financing mining projects. Similarly, the number of commercial financial institutions providing equity or loans to the mining sector has continued to decline. This is also related to the low rate of return from the sector.10

- **An important initiative by mining industry chief executive officers (CEOs) to address concerns about sustainable development in this sector.** In response to an array of mounting pressure, and in the context of preparations for the World Summit on Sustainable Development in Johannesburg in 2002, CEOs from leading mining companies launched in 1999 a Global Mining Initiative to identify how mining and the minerals sector can better contribute to sustainable development.11

While the mining sector has attracted a lot of attention in recent years, its relative size should be kept in perspective. The combined market capitalisation of the ten largest mining corporations is less than half that of British Petroleum. At the same time, the average financial return in the mining industry is currently about 2% due in part to low commodity prices. This comparatively low rate of return puts considerable pressure on companies to reduce costs.

**Themes from the Conference Discussion**

**Policy and Institutional Responses to the FDI and Environment Challenge**

Good governance is an important prerequisite for the effective management of the mining sector. This implies predictable, transparent policy making, decision making based on the rule of law, the presence of a bureaucracy imbued with a professional ethos, an executive arm accountable for its actions and civil society institutions with real opportunities to participate in public affairs.

Well-designed environmental requirements and their enforcement are important. Many avoidable environmental impacts of mining occur due to regulatory failures. While landscape change is an inevitable consequence of all mining (save for the most advanced open cast mines), other impacts relating to discharges, biodiversity loss and waste disposal are avoidable. In some developing

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11 See <<http://www.iied.org/mmsd>>
countries, weak governance and in particular in the areas of environmental regulations and their administering institutions has enabled substandard mining to occur. Even when countries established a credible system of rules and regulations to manage the environmental impacts of mining, enforcement institutions and procedures were inadequate in instances. The case of the Baia Mare mine in Romania and the release of more than 120 tons of cyanide into the nearby river system was only one among many examples reported on during the conference. In this context, the need to strengthen FDI-host country environmental management systems is clear.  

Local communities require particular attention because the impacts of mining occur principally at this level. These communities often receive only a small part of the benefits resulting from mining operations, while carrying the major share of the environmental and social costs. For example, in Chile only about 10% of the tax revenue contributed by the mining sector is channelled back to regions hosting the mines, with much of it spent in an uncoordinated manner. Mechanisms that help local communities secure an adequate share of mining benefits are needed. Opportunities include earmarked taxes, local mineral development funds or direct company contributions. In South Africa, local communities are frequently involved in the management and ownership of a mine. Some participants proposed support for civil society groups through the establishment of an international, transparent information system about the royalties from mining and their distribution.

The implications of allowing mining in protected areas merits further consideration. Pressure to extend mining into protected areas such as natural reserves may endanger at-risk species, habitats and landscapes. “No-go zones” might be identified according to certain criteria (e.g. areas classified according to the International Union for the Conservation of Nature (IUCN) or other authorities). One participant proposed that the mining industry should make a voluntary declaration on “no-go zones”. It was also suggested that violations of the principles of such a declaration should be sanctioned by government and be subject to enforcement at the international level.

A particular challenge for the design of environmental regulation in the mining sector is the non-discrimination principle in investment policy. While it was accepted that foreign and domestic investors should be treated equally, the implementation of the principle in the mining sector appears to have posed difficulties. Whether a government decision with a discriminatory impact has been taken for legitimate environmental reasons or with a discriminatory intent, or both, may be difficult to determine given the problem of identifying “like circumstances” of mining operations. One factor is that the environmental and geological specificity of each mining site results in the use of different mining processes and technologies. The long-term nature of mining operations is an additional factor. The need to identify clearly the environmental rationale for government decisions remains undiminished, however. At the same time, an overly rigorous application of the non-discrimination principle in the mining sector could unduly constrain environmental policy makers in their efforts to protect the public from the environmental impacts potentially associated with this activity.

There was unanimous recognition of the need to strengthen environmental and mining institutions in developing countries. Capacity building to enhance enforcement capability is a priority. A number of measures exist that governments can implement without the need for external assistance, however.

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12 International Task Force for Assessing the Impact of the Baia Mare Accident, op. cit.
13 Borregaard, op. cit.
They include information disclosure requirements, effective anti-corruption measures and designing frameworks and instruments to better manage the integration of mining and environment policies.\(^{17}\)

Beyond the public sector, capacity building in civil society and the business community is also needed. This will facilitate the fuller participation of civil society in stakeholder processes and in carrying out effectively a “watch dog” function. Disclosure policies would ensure that all affected groups (trade unions, local communities and governments) have regular and understandable data about a mine’s environmental performance. This would help civil society groups to identify non-compliant behaviour more easily. For business, there is a need to build additional capacity to cope with situations where governments are weak and to assist small and medium-sized enterprises (SMEs), which often have trouble in complying with regulatory requirements.

Capacity building efforts in developing countries are impacted by the steadily decreasing levels of official development aid (ODA), however. If the benefits of globalisation are to be more equitably distributed, there is a need to strengthen capacity in areas like trade and investment. The recent WTO Doha declaration explicitly identifies the need for capacity building for investment.

International financial institutions (IFIs) and export credit agencies have an important role to play. IFIs can help build capacity in developing countries and in providing finance with environmental conditionality attached to mining projects. While IFIs usually provide only a small share of the overall finance for mining projects, export credit agencies typically play a more important role. In the case of the Antamina project in Peru, for example, export credits accounted for more than half of the total project finance.\(^{18}\) Work is underway in OECD to reach agreement on common approaches for environmental assessments of projects supported by export credit agencies. Conference participants called on export credit agencies to integrate such approaches into their operations as soon as possible.

Given that commercial financial institutions provide most of the capital for mining investment, some participants proposed that liability for environmental damages should extend to these agencies. If this included extra-territorial liabilities this would increase the incentives for financial institutions to monitor the environmental aspects of their investments more carefully and help compensate for the possible weakness of regulatory systems. Some participants emphasised the challenges of developing such an initiative. They suggested that a voluntary negotiated agreement among financial institutions on environmental requirements in their operations could be a more practical step forward.\(^{19}\)

**Voluntary Approaches**

Existing voluntary initiatives have not led to the expected results. When regulatory systems are weak and basic principles of good governance are not in place, the role of business in ensuring sound environmental and social practice gains added importance. Mining companies have attempted to improve their environmental performance through the adoption of codes of good practice, environmental management systems, environmental charters or other forms of voluntary initiatives. Generally, to date the efforts in the mining industry have been insufficient to improve the sector’s “social licence to operate”. The main reasons are the problem of free-riders, the frequent lack of a set of clearly defined targets, inadequate monitoring and enforcement procedures and the absence of external, independent verification.

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\(^{18}\) Digby, op. cit.

A new generation of voluntary environmental performance codes is required. They should be science-based, measurable and comparable, rigorous in design and transparent in reporting. The cyanide code developed by major gold producers, UNEP and the International Council on Mining and Metals to address urgent cyanide management needs is an important step forward. Given the claims and counter-claims about the environmental impacts of mining, consideration might be given to establishing an international mining technology centre providing independent assessments.

The OECD Guidelines for Multinational Enterprises, which have been approved and signed by 36 OECD and non-OECD governments, are an important complement to existing regulatory frameworks in developing countries. Their generic character makes them applicable to a wide range of sectors. The effectiveness of the guidelines depends on whether national contact points, who are in charge of their promotion and monitoring of their implementation, act as “honest brokers” in the case of complaints. In the mining sector several cases, spanning a range of issues (e.g. disclosure of information, resettlement, environmental health and safety), have already been forwarded to national contact points.

Voluntary initiatives can be a useful complement to regulatory systems. The effectiveness of such initiatives depends on the implementation of good governance practices. For this reason, and because the key incentive for business to be involved in voluntary initiatives is to protect its reputation, they are not a substitute for sound government regulation. Voluntary initiatives have proven to be relatively ineffective within the SME sector, where companies do often not have a public image to protect.

**Areas for Further Work**

Participants identified several priority areas for future work:

- While there are numerous case studies documenting the economic, social and environmental implications of mining, further research to identify the aggregate impacts of mining-related FDI on developing country economies is needed. In particular, the distribution of costs and benefits among different groups within the host country and externally merits further attention. An extension of this approach to other industrial sectors would provide useful cross-sector comparisons.

- Good governance is a prerequisite for mining and other foreign investments to contribute positively to sustainable development. Where governance systems function poorly, it is difficult to deal adequately with the complex environmental and social problems posed by mining. Many of the sustainable development challenges related to the mining sector are linked to weak governance frameworks in FDI-host countries. Regulatory weaknesses and failures underlie many avoidable environmental impacts of FDI in the mining sector. There is a need to strengthen FDI-host country policy and institutional frameworks to manage the mining sector. Improving enforcement capability is a priority. Greater involvement of non-governmental organisations and community groups in the process of public decision making.

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23 Gordon and Pestre, op. cit.
on mining operations would support such effort. Civil society groups can play an important role in monitoring the environmental performance of mining operations but need support to develop appropriate capacities.

- FDI-source countries, and in particular OECD Member countries, can support these efforts in several ways. They can work with multinational enterprises and encourage them to apply best practices in their overseas operations (e.g. adherence to the OECD Guidelines for Multinational Enterprises). They can tie financial assistance provided through export credit agencies to the implementation of adequate environmental and social assessment procedures. And they can provide assistance for capacity building in FDI-host country institutions and organisations. A review of experience from the perspective of FDI-source and host countries would provide a useful comparison between the intent of these initiatives and their actual performance.

- Technical standards for environmental protection developed by the World Bank, and promoted through its financial mechanisms, are emerging as the major international environmental benchmark. However, the legitimacy of these standards to play such a role has been questioned. The World Bank standards have been developed largely through an expert process and are designed primarily for use by the Bank. Some developing countries are concerned that they are excluded from discussion of externally developed environmental standards applied within their territory. At issue is whether a more widely agreed set of standards is needed and how they should be developed. The Mining, Minerals and Sustainable Development Project led by the International Institute for Environment and Development is analysing this issue.

- A particular challenge for the design of environmental regulation in the mining sector is the non-discrimination principle in investment policy. Clearly, the environmental rationale for any decision that has a discriminatory impact should be clearly stated. However, this may be difficult to do in practice (e.g. defining like circumstances). The risk is that an overly strict application of the non-discrimination principle could unduly constrain environmental decision making. Work to follow-up the WTO Doha Declaration should take up this issue.

- The role of financial institutions (public and private) in helping to ensure positive environmental and social outcomes of mining was considered. IFIs and export credit agencies, and to a lesser extent commercial financing institutions, are increasingly attaching environmental requirements to the finance that they provide to the mining sector. While this has led to some improvements, it has not prevented a number of severe mining accidents occurring. Further work should be carried out on the possible development of an international legal instrument addressing the liability of financial institutions for the environmental impacts of their operations. A voluntary agreement on environmental risk assessment and management could be a more practical option in the short term.

- Going beyond the usual debate on voluntary approaches (VAs) versus other environmental policy instruments, participants recognised that they are one element in a policy mix. Within an appropriately designed policy framework, voluntary business initiatives can help to improve the environmental performance of companies. How voluntary initiatives complement other policy instruments is under-researched, however. Further work is needed to assess how different policy tools can contribute cumulatively to improving verification and arbitration of voluntary initiatives. A review of the implementation of the OECD Guidelines for Multinational Enterprises was also recommended.
• Given the difficulties of including environmental and social objectives effectively into corporate governance systems on a voluntary basis, consideration might be given to including them into company law instead. This could have the advantage of creating a level playing field by encouraging all companies to incorporate public good aspects into their decision making. The practicalities of this should be further investigated.