

Transparency of Extractive Industries: High Stakes for Resource-Rich Countries, Citizens, and International Business

TESTIMONY

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Introduction

The International Council on Mining Metals (ICMM) presents the following testimony on the transparency of extractive industries. ICMM is the industry's peak CEO-led organization dedicated to sustainable development. It comprises 16 of the leading international mining and metal companies as well as regional, national and commodity associations (see Annex A). A number of major US-based mining companies (Alcoa, Freeport-McMoRan and Newmont) and the National Mining Association are members. ICMM's mission is two-fold – to distinguish its members as industry leaders and to make a contribution to raising standards across the industry as a whole.

This testimony covers three topics: an overview of the socio-economic performance of mining dependant economies; what are the key factors influencing different outcomes including the role of revenue transparency; and how can positive outcomes be achieved in more countries.

The performance of mining economies

In 2004 ICMM, in partnership with the World Bank and UNCTAD, commenced a research project to better understand the socio-economic performance of mining dependent countries¹. The primary purpose was to identify more successful countries and the reasons for their success, thus enabling policy improvements to be adopted more broadly.

The study had two main components. Firstly, we identified 33 mineral dependent economies globally based on ores and metals making up 20% or more of a country's merchandise exports on average over the 38 years between 1965 and 2003. We then assessed national economic performance by looking at six variables and comparing the results for individual countries with

¹ That is excluding those dependent on oil and gas.

their global income group and region [so for instance, Chile was compared with all “upper middle” income countries and with the Latin America region]. The variables used were:

- Economic growth- GDP per capita for 32 years [1970-2002];
- Economic diversification- non-mineral GDP growth [1980-2002];
- Poverty alleviation as measured by infant mortality rate, Human Development Index, and two Millennium Development Goals, namely, proportions of national populations below the goals for minimum dietary requirements and access to drinking water.

The results are summarized in Table 1 and details are given in Annex B. The most striking finding is that performance is very mixed: about 45% of countries have done relatively well but the remainder, a slight majority, performed relatively weakly. Better performers include Chile, Botswana and Malaysia, while the poorer performers include Bolivia, Liberia and PNG. The key messages are: there is plenty of room for improvement and that the quality of national governance is fundamentally important - this, not resource dependency, has the greatest influence on socio-economic outcomes.

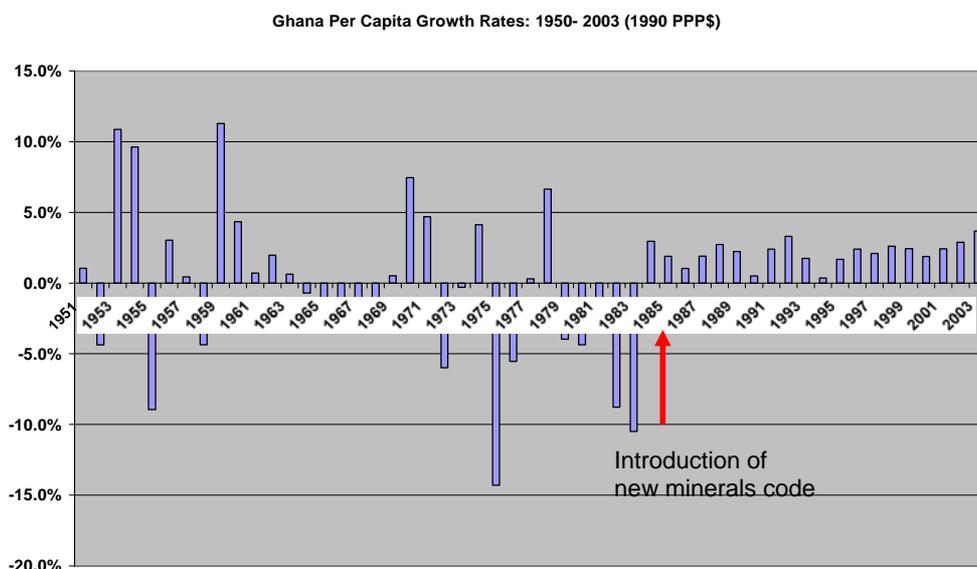
Table 1: Summary of Country Performance

Better Performers		Weaker Performers	
Better Performers	Generally Better Performers	Weaker Performers with relatively better performance in a few economic (E) and social indicators (S)	Clearly Poor Performers
Chile Botswana Malaysia Tunisia Ghana Mexico	Colombia Guinea Jamaica Mali Morocco Mozambique Namibia Senegal	South Africa (E) Tanzania (E) Guyana (E) Mauretania (E) Gabon (E + S) Peru (S) Suriname (S) Togo (S) Jordan (S) Zimbabwe	Bolivia Central African Republic Congo Liberia Niger PNG Philippines Sierra Leone Zambia

The second part of the study was detailed examination of four developing countries (Ghana, Tanzania, Chile and Peru) which provide more specific guidance on positive use of resource endowments. These studies examined the countries' economic records over the past fifty years. All four have been characterized by volatility, fluctuating economies, high poverty and radical shifts in governance from autocratic to democratic. However, following implementation of economic and policy reforms all experienced significant economic growth in which mining played an important role.

In Ghana, since the Economic Recovery Program was introduced in 1983, there has been an unbroken 20 year period of economic growth (see Figure 1). Investments in mining have exceeded USD 5 billion, minerals are the country's leading export commodity, mining is the main source of tax revenue [up to 12% of the total] and mining accounts for 5.2% of GDP.

Figure 1: GDP Growth in Ghana



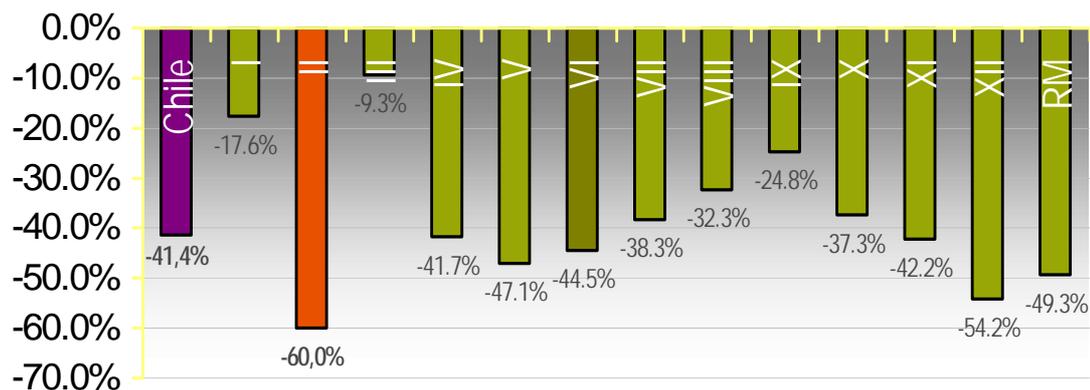
In Peru, since 1992, USD 8.9 billion has been invested in mining, the industry now pays 29% of income tax to the national government, it employs some 350,000 people directly and indirectly, and mining accounts for 6% of GDP. Similar stories were found in Chile and Tanzania.

In terms of social and poverty alleviation outcomes, the results were more mixed. In Ghana the national poverty head count has been reduced by 12% [from 52 to 40%] over the eight years to 1999, while at the same time poverty rates in sub-Saharan Africa generally remained stagnant (at about 46%). In Chile, an even greater fall occurred with an impressive 41% reduction in the fourteen year period up to 2003. Importantly, poverty reduction has been greatest in mining

districts with the fall in Chile's Antofagasta region, for instance, being 60% between 1990 and 2003 (see Figure 2).

However, poverty alleviation has not occurred in all countries with both Peru and Tanzania showing no significant changes over the period of growth in mining activity [although limited local reduction has occurred in major mining districts].

Figure 2: Changes in Income Poverty in Chile by Region - 1990-2003



Source: Groningen Growth Centre

The overall conclusion is clear: mining investment can be one of the first sectors to produce economic growth when basic policy and institutional reforms occur, and, this can lead to significant poverty alleviation. Proponents of the resource curse would suggest that the reverse will occur with a variety of problems emerging: economic stagnation, corruption, Dutch disease and declines in governance standards. The studies show that these risks can be avoided when sound policies are adopted. Summaries of the case studies are given in Annex C.

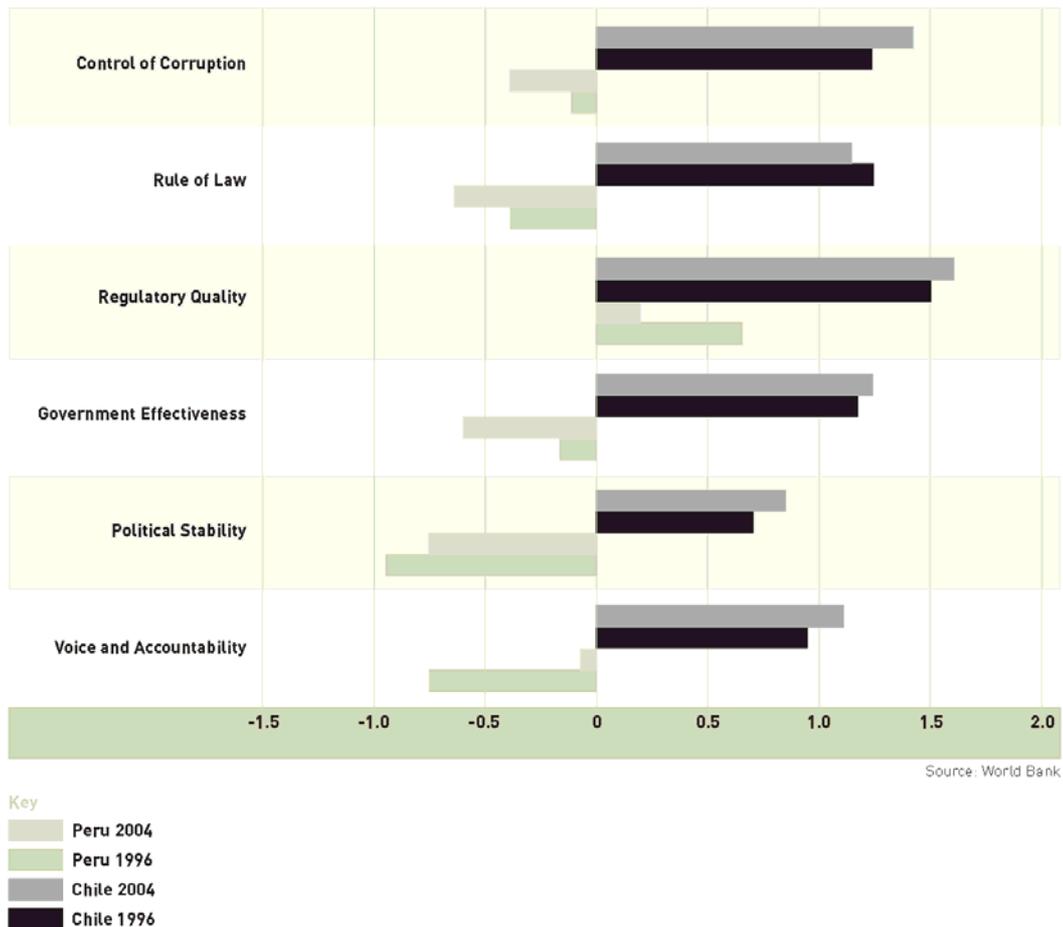
The role of transparency

ICMM's research also covered changes in national governance in mining dependent economies. The World Bank measures governance quality using six indicators (voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and corruption control). In the country case studies we found that governance generally improved along with mining related economic growth as shown in Table 2 and Figure 3.

Table 2: Governance Indicators Compared – 1996 and 2004

Indicator	Peru (96)	Peru (04)	Chile (96)	Chile (04)	Tanzania (96)	Tanzania (04)	Ghana (96)	Ghana (04)
Voice and Accountability	-0.73	-0.04	0.93	1.09	-0.77	-0.35	-0.35	0.39
Political Stability	-0.90	-0.68	0.75	0.89	0.02	-0.38	-0.10	-0.06
Government Effectiveness	-0.18	-0.58	1.20	1.27	-1.18	-0.37	-0.07	0.17
Regulatory Quality	0.65	0.17	1.52	1.62	-0.52	-0.55	-0.14	-0.28
Rule of Law	-0.35	-0.63	1.26	1.16	-0.70	-0.49	-0.12	-0.16
Control of Corruption	-0.10	-0.35	1.28	1.44	-1.03	-0.57	-0.47	-0.17

Figure 3: Governance of Peru and Chile



Unfortunately, the bank’s indicators do not provide a direct measure of transparency but its ‘control of corruption’ indicator gives a guide. Reference to the four country case studies shows

that performance against this indicator was reasonably weak (-1:03 to - 0:10) in three countries (Tanzania, Peru and Ghana) and good (1.28) in only one – Chile. This suggests that high levels of transparency are not a pre- requisite for the initiation of socially beneficial mining investment, being overshadowed by the aforementioned macro economic and legal factors.

Notwithstanding, an important recent publication (Escaping the Resource Curse - Humphreys, Sachs and Stiglitz, 2007) suggests a strong link between transparency and a range of governance improvements both nationally and for corporations. These include:

- Greater competition between firms seeking exploration and development rights;
- Enhanced efficiency in negotiation processes between governments and mining companies;
- Enhanced credibility about governments' contract decisions and increased ability to guarantee the security of deals;
- Improved political stability, leading to better access to capital markets for governments and greater incentives for responsible government spending;
- More positive attitudes by populations about their governments; and
- Improved accountability generally that is for governments, corporations and NGOs.

We conclude that in creating prosperous communities the key initial factor is a strong commitment to economic and legal reform. Transparency is a part of this, particularly in removing the layers of secrecy that can characterize the resources sector and in improving accountability and effectiveness more generally. The main message is that transparency is an essential component of reform programs but the agenda is much broader than transparency alone.

What are the key success factors?

The single most important variable is host countries' commitment to economic and institutional reform; the successful countries have progressively built an adequate institutional and policy framework normally over a period of some decades, coinciding with increasing mineral investment. An appropriate framework has three components, as follows:

- Policies to encourage resource investment:

- sound macro-economic management and effective property, mineral and contract laws;
- Policies to encourage social cohesion and investment security:
 - transparency in resource allocation decisions and revenue flows, (here the Extractive Industries Transparency Initiative, EITI, is an important positive step)
 - effective and equitable use of increased economic activity, including public revenues;
- Policies to foster effective use of resource revenues:
 - realistic forecasting of increased revenues;
 - clear understanding of priority development needs [e.g. physical infrastructure, human capital or long-term social spending;
 - effective, coordinated and accountable responsibilities for planning and implementation [i.e. intra-government coordination and government-company coordination; and
 - focus on investment for priority needs, not consumption.

What is the way forward?

The mining world has changed dramatically in recent years and three changes are particularly relevant to the prospects for reform. Today:

- Developing countries are much more important, both as sources of minerals and as producers of metals [both more than 50% of global production];
- Sources of investment have diversified substantially. Major international mining companies are now domiciled in China, India, Russia, Chile and Kazakhstan as well as in traditional centres; and
- Demand has grown rapidly in a context of constrained supply, thus there is a scramble for resources and host countries are now able to choose their investment partner rather than fighting to attract any investors at all.

This is a challenging environment in which to foster governance improvements as research shows that reform is most likely under conditions of economic need rather than buoyancy. Nevertheless, leverage exists because the public good is served by positive economic outcomes and there is much room for improved outcomes. Communities expect benefits from exploitation of their non-renewable natural capital; investments are secure when communities perceive

equitable benefits and reputations [both corporate and governmental] are protected through good governance.

The challenge is how to bring about reform? Here the key leverage point is national governments in host countries - they decide who get access to resources and under what conditions. Governments need support from two important groups - international agencies to develop capacity and civil society to ensure accountability. In relation to the former, the World Bank has a crucial role, it is the development agency with the greatest experience in building countries' minerals' governance capacity; it must be encouraged to pursue capacity building because the resources sector is the only significant source of private investment in poor countries and the bank's participation is essential for it to fulfill its poverty alleviation mandate. Thus, it is of great concern that many of the bank's country offices are shying away from involvement in the resources sector because of political and other challenges. Companies also have an important role - to make the case for good practice by demonstrating superior outcomes on the ground. In this regard ICMM's Sustainable Development Framework which commits member companies to public disclosure in accordance with the Global Reporting Initiative with independent assurance of reporting, is a significant step in improving accountability and public trust.

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Annex B: Ranking Mining Countries by Performance in terms of Growth and Poverty Alleviation

All 12 indicators given equal weight		All 8 growth indicators given equal weight		All regional comparisons (growth and poverty) given equal weight		All income-group comparisons (growth and poverty) given equal weight		All social indicators given equal weight	
Country Score	12	Country Score	8	Country Score	6	Country Score	6	Country Score	4
Chile	12	Botswana	8	Chile	6	Chile	6	Chile	4
Botswana	9	Chile	8	Ghana	6	Malaysia	6	Ghana	4
Tunisia	9	Mozambique	8	Mexico	6	Botswana	4	Malaysia	4
Ghana	8	Tunisia	6	Namibia	6	Mozambique	4	Mexico	4
Malaysia	8	Colombia	4	Tunisia	6	Tunisia	3	Colombia	3
Mexico	8	Ghana	4	Botswana	5	Colombia	2	Tunisia	3
Mozambique	8	Guinea	4	Colombia	5	Ghana	2	Guinea	2
Colombia	7	Guyana	4	Guinea	5	Jamaica	2	Jamaica	2
Guinea	6	Jamaica	4	Mali	5	Mexico	2	Jordan	2
Jamaica	6	Malaysia	4	Morocco	5	Guinea	1	Mali	2
Mali	6	Mali	4	Senegal	5	Jordan	1	Morocco	2
Morocco	6	Mauritania	4	South Africa	5	Mali	1	Namibia	2
Namibia	6	Mexico	4	Guyana	4	Morocco	1	Peru	2
Senegal	6	Morocco	4	Jamaica	4	Peru	1	Senegal	2
South Africa	5	Namibia	4	Mauritania	4	Senegal	1	Suriname	2
Guyana	4	Senegal	4	Mozambique	4	Suriname	1	Togo	2
Mauritania	4	South Africa	4	Tanzania	4	Bolivia	0	Botswana	1
Tanzania	4	Tanzania	4	Gabon	3	Central African Rep	0	Gabon	1
Gabon	3	Gabon	2	Malaysia	2	Congo DR	0	South Africa	1
Jordan	2	Zimbabwe	1	Togo	2	Gabon	0	Zimbabwe	1
Peru	2	Bolivia	0	Zimbabwe	2	Guyana	0	Bolivia	0
Suriname	2	Central African Rep	0	Jordan	1	Liberia	0	Central African Rep	0
Togo	2	Congo DR	0	Peru	1	Mauritania	0	Congo DR	0
Zimbabwe	2	Jordan	0	Suriname	1	Namibia	0	Guyana	0
Bolivia	0	Liberia	0	Bolivia	0	Niger	0	Liberia	0
Central African Rep	0	Niger	0	Central African Rep	0	Papua New Guinea	0	Mauritania	0
Congo DR	0	Papua New Guinea	0	Congo DR	0	Philippines	0	Mozambique	0
Liberia	0	Peru	0	Liberia	0	Sierra Leone	0	Niger	0
Niger	0	Philippines	0	Niger	0	South Africa	0	Papua New Guinea	0
Papua New Guinea	0	Sierra Leone	0	Papua New Guinea	0	Tanzania	0	Philippines	0
Philippines	0	Suriname	0	Philippines	0	Togo	0	Sierra Leone	0
Sierra Leone	0	Togo	0	Sierra Leone	0	Zambia	0	Tanzania	0
Zambia	0	Zambia	0	Zambia	0	Zimbabwe	0	Zambia	0



Chile

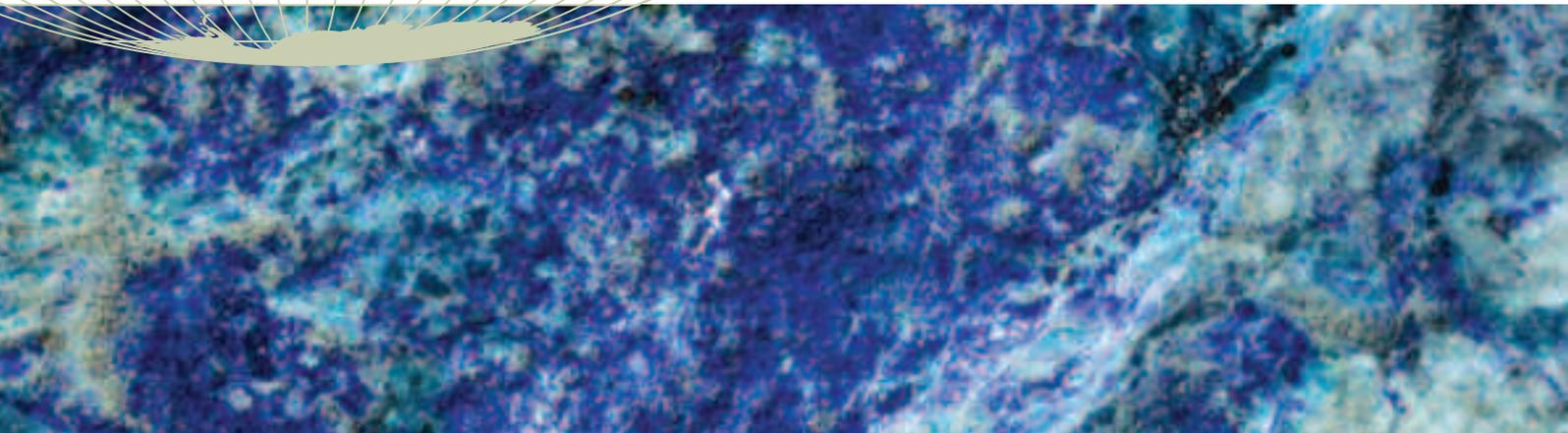
Executive summary

The Challenge of Mineral Wealth: using resource endowments to foster sustainable development

October 2006

Spotlight series

06



Chile

Chile provides striking evidence of the contribution that mining can make to economic growth and poverty reduction. Chile's government has used taxes and royalties from the industry to effectively deliver social development (while also keeping taxes on mining competitive so as to attract investment). Mining has also led to significant job creation, both directly and indirectly. Prudent macroeconomic policies and good governance have underpinned the local and national benefits

In contrast to its modern-day successes, Chile's history provides a warning of the economic challenges sometimes associated with mineral dependence. In the early twentieth century among Chile's main exports were nitrates, dug from the Atacama Desert, and used worldwide in fertilizers and explosives. But during World War I, new synthetic industrial processes were developed to manufacture nitrates, leading to a collapse in the global market which depressed Chile's economy for more than ten years.

In recent decades, however, Chile has not only avoided such economic problems, but has used its mining industry (dominated now by copper production) to help fuel significant increases in national wealth as well as falls in poverty. Chile is now among Latin America's wealthiest countries. The region of Antofagasta (Chile's 'Region II') in which mining is the dominant industry, moreover, has more than twice the per capita GDP of the country as a whole¹, and has witnessed particularly rapid declines in poverty.

Chile is one of the four country case studies of ICMM's Challenge of Mineral Wealth initiative, which was conducted in collaboration with UNCTAD and the World Bank. This Spotlight describes the main findings of the Chile case study, outlining mining's impacts both at the national level, and around the Escondida copper mine (Chile's largest mine) in particular, and also exploring some of the factors behind Chile's success. The aim of the overall Challenge of Mineral Wealth initiative is to identify ways to improve mining's socio-economic impacts – and Chile may hold some lessons for other, so far less successful mineral-rich states in this respect².

It should be emphasized that all the elements of the Challenge of Mineral Wealth initiative were overseen by an independent advisory group, so as to help ensure the objectivity of the research, and stakeholders were widely consulted on its findings (please see Spotlight series 04 'Process and Feedback'). The government of Chile was also invited to review the Chile case study. "The ICMM project underlines the importance of the positive experience of our country's mining resources", commented Cochilco, the Chilean Copper Commission, in its response.

¹ Based on 2003 figures.

² The full case study (as well as the other three country case studies) will be published by UNCTAD following Government review.

Copper-bottomed benefits

Disentangling the effects of mining from other drivers of economic performance is difficult. Nonetheless mining has clearly had important impacts in Chile in recent decades. Accounting for 8% of GDP in 2003, mining also dominates the country's exports (42% of the country's exports were minerals and metals in the same year) and two state-owned companies alone accounted for nearly 6% of government revenue between 1994–2004. With an increase in foreign investment since the early 1990s, the sector has grown rapidly with major increases in copper production (during the period 1991–2003, total foreign mining investment was some US\$15.5 billion).

Though production has expanded over time, the importance of mining has actually declined in a relative terms as Chile's economy overall has grown significantly too (over the period from 1990 to 2003 average annual GDP growth was 5.4%). Chile has also succeeded in broadening its exports, and has become an important exporter of such products as fruits and some manufactured goods.

In this respect, Chile has successfully avoided a problem sometimes associated with resource extraction: this is that the economy becomes narrowly focused on minerals, with other tradable activities becoming uncompetitive as mining exports cause an appreciation of the real exchange rate or bid up prices for scarce production factors (part of an overall phenomenon sometimes described as the 'resource curse'). In Chile this has largely been avoided in recent years. In previous decades it had been a problem; also the recent large increases in the price of copper and the consequent rapidly rising export income could potentially pose a renewed macro-economic challenge. Even so, with the exception of a currency appreciation and subsequent economic crisis in the early 1980s, there appear to have been no signs of a 'resource curse' since the economic reform process extending from the early 1970s and continuing to the mid 1980s. A major mining industry in Chile, in short, has co-existed with – and also appears to have helped drive – impressive economic growth (thus by 2003, for example, Chilean GDP per head was the highest in South America).

Similarly Chile's overall performance on social and governance indicators has been broadly, and in many respects strikingly, positive. Chile currently holds one of the highest rankings on the Human Development Index in Latin America and the Caribbean. Poverty has also fallen dramatically (in 1990, some 39% of the population was considered to live below the poverty line as defined by the World Bank; by 2000 the proportion had fallen to 21%). While these outcomes are impressive, some challenges still remain: for example, Chile's income distribution remains among the most unequal in Latin America.

In terms of governance, Chile's performance is also strong. The World Bank uses six composite indicators of the quality of governance. Chile performs well above Latin American averages across all of these, with a strong lead, for example, on the indicators dealing with 'rule of law', 'control of corruption' and 'regulatory quality' (please see Figure 1). Clearly aspects of governance – such as what would now fall under the 'voice and accountability' indicator – were

seriously flawed during the period of military government of General Pinochet from 1973 to 1990. Now, however, well after the return of democracy, Chile performs relatively well in this area too. Between 1996 and 2004, the only period for which data on the World Bank indicators is available, there were some shifts in each of the measures, but trends were again broadly positive. On the issue of governance, in short, as with Chile's economic performance, it would be hard to argue that mining has held back, or somehow 'cursed', the development and progress of Chile's society and institutions.

Focusing on the effects of mining in Chile's Region II, where the Escondida mine is based, provides encouraging evidence too. Driven by rapid mining expansion, Region II's economic growth has been faster than across Chile as a whole (which explains how GDP per head reached US\$11,996 in 2003, double the national average). Statistics for 2000 also show Region II had the lowest poverty rate in the country, having as mentioned experienced particularly rapid declines in poverty. Literacy and education levels in the region are also the highest in the nation.

The Escondida mine itself is located in the Atacama desert, 170 km to the southeast of Antofagasta, the nearest major town. But the mine's remoteness belies its economic significance. Total investment in the mine, which began construction in the 1980s, had reached some \$4.2 billion by 2004. The mine is jointly owned by BHP Billiton (the majority shareholder and operator), Rio Tinto, a Mitsubishi Corporation-led consortium, and the International Finance Corporation. BHP Billiton, Rio Tinto and Mitsubishi Materials Corporation are all ICMM members.

In addition to directly employing 2,810 people in 2004, induced employment from the mine in the same year is estimated in the case study to be over 9,000. Escondida accounted for 1.7% of Chilean GDP in 2003 and over 3.5% in 2004. Significant economic benefits are also clearly retained

nationally and locally. 99% of direct employees are Chilean nationals, for example, while 80% of the mine's procurement requirements are met from within Chile, and almost half from Region II (albeit a portion of the domestic procurement is likely to consist of imported goods bought from local agents). Escondida also has a policy of investing 1% of pre-interest and pre-tax profits annually in support of local community initiatives.

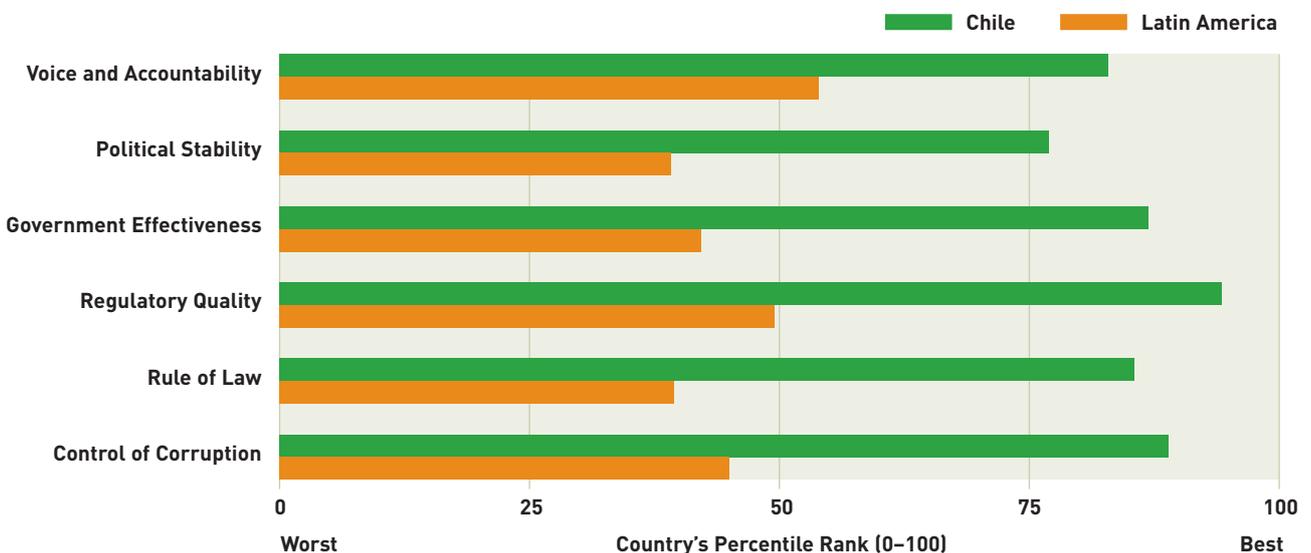
Causes of success

What then are the explanations for these broadly positive outcomes from mining in Chile? And can these be replicated by other mineral-rich countries? While the case study did not provide definite answers to these questions, various points are worth noting here (please also see Spotlight series 03 'Ways Forward').

The fundamental, albeit broad, explanation highlighted by the case study is the commitment of successive Chilean governments to economic, policy and institutional reform. Without doubt, Chile's favorable geology, its infrastructure (such as port capacity), and tax regime, have all helped attract mining investment. At the same time, mining's overall economic potential has only been realized through a set of broader policies, institutions and governance processes.

In terms of macro-economic policies, for example, in recent decades governments have generally placed strong emphasis on fiscal prudence, and also used sound monetary policy to control inflation and to avoid real exchange rate appreciation. Over time, Chile's integration in the global economy has been accelerated with encouragement of exports and trade liberalization, while state intervention in the economy was reduced as part of the neo-liberal reforms beginning in the 1970s. Taken together these policies helped Chile avoid potential macroeconomic 'resource curse' effects from mining, while creating a strong enabling environment for the

Figure 1: Six Governance Indicators for Chile compared to Latin America averages, 2004



Source: D. Kaufmann, A. Kraay and M. Mastruzzi 2005: Governance Matters IV: Governance Indicators for 1996-2004

This document is one of a series of publications produced by ICMM under its Resource Endowment initiative, which aims to better understand how large scale mining activity in low and middle income countries impacts the socio-economic development of host countries. This action-research project is being done together with UNCTAD and the World Bank Group, with broad stakeholder engagement. For the latest information on the initiative, including details of publications, activities and partners visit www.icmm.com

The International Council on Mining and Metals (ICMM) is a CEO-led organization comprising many of the world's leading mining and metals companies as well as regional, national and commodity associations, all of which are committed to improving their sustainable development performance and to the responsible production of the mineral and metal resources society needs.

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growth of the private sector, leading to significant job creation.

In addition, mineral tax revenues – mainly from state owned companies, but increasingly from privately owned firms – were over time effectively channeled into social development. Escondida is the largest private tax payer in Chile: paying US\$1.1 billion for the period January-June 2006. This phenomenon is currently a challenge to the Government in terms of managing these additional –transitory in nature– funds on one hand and the expectations of the people on the other. A range of macroeconomic tools are being put in place for addressing the first challenge. A Copper Stabilization Fund has played a crucial role in this respect in smoothing fluctuations in government expenditure, thus helping both to maintain macroeconomic stability and to provide the steady levels of funding necessary for sustainable social programs (The Fund is replenished by saving all copper revenues from the state-owned mining company Codelco above a long-term reference price for copper). Together, these macro level policies and processes helped drive down poverty nationwide.

On a local level, the impressive development trends noted in Region II have been driven by economic growth processes, in which the mining sector – supported by government policies – has stimulated a range of other economic activities. Redistribution of mining tax revenues has played less of an important role here (state revenues from mineral production are not earmarked for redistribution to mining regions, unlike in some other mining countries). On the other hand, Chile has developed stronger linkages between the mining industry and other sectors of the local economy than have many other mining countries. Suppliers to the industry have flourished, partly as a result of deliberate fostering on the part of the mining firms, particularly Escondida. Also, mining companies and the government have in recent years jointly supported the establishment of a 'mining cluster', a key part of which has been to provide finance for suppliers seeking to obtain ISO 9000 and 14000 certification.

In general, successive Chilean governments have pursued all these positive macro- and micro-level policies with some persistence. The democratic governments which followed the end of military rule in 1989, for example, broadly maintained the market friendly economic reforms of the previous regime and also reversed its neglect of basic freedoms and human rights. Without doubt, various economic policy errors were made by Chilean governments since the 1970s – though lessons were learned and mistakes not repeated.

It is now important of course that the economic reform process be kept on track. The Chilean copper industry, for example, needs to remain internationally competitive (one current issue here is escalating wage demands: Escondida, for example, faced a tough collective labor negotiation including a 25 days strike in August). In terms of taxes and royalties levied on mining, it should be remembered that positive economic outcomes have been achieved so far in Chile under a fiscal regime relatively favorable to mining firms (although modified in 2005 with the introduction of a royalty regime): what matters most in this respect appears

to be less the level of taxes, and more how they are used by the government.

But if the fundamental factor behind the success of mining in Chile so far has been the policies and reforms pursued by its successive governments, what is the underlying explanation for such long-lasting commitment to reform on their part? Clearly the overall quality of Chile's governance (as noted previously) is an important driver. So too, is the high quality of the civil service and the leadership (for example, in terms of commitment to fiscal prudence) shown by individual politicians. Of course, the precise reasons why Chile made sound policy choices will depend on the particular issue and time period in question. It may be, however, that one other underlying factor is Chile's consensual style of policy development, underpinned by the country relative social cohesion.

Certainly Chile's institutions enjoy sufficient public legitimacy to effectively manage potential issues arising from mining which in other less well-governed countries have led to deeper societal tensions. The case study notes in general the atmosphere of cooperation and compromise in Chile both across the political spectrum and between different actors in society. This is most important and visible between government and industry, but also exists with other parts of civil society, including universities and associations in crucial supporting roles.

The United Nations University 'World Governance Survey' also suggests that Chile has established a specific pattern of policy consultations and that this type of collaboration between public institutions and the private sector has been an important factor contributing to the country's economic success. At a national level, Chile has certainly enjoyed an unusual degree of policy stability and political consensus by Latin American standards. This is partly a function of the constitution and electoral system which encourages coalitions and consensus-based policies. Since the end of military rule, for example, Chile has been governed by four successive governments of the centre-left Concertación coalition. At a local level, meanwhile, the joint work between the government and companies in support of Region II's 'mining cluster' – or put another way, in maximizing the positive economic linkages from mining – is a further illustration of such a collaborative approach.

While such factors may not be easy to replicate in other mining countries, the importance of collaboration is certainly a theme of the recommendations from the overall Challenge of Mineral Wealth initiative (again please see Spotlight series 03). At a minimum, Chile indicates to other countries that partnerships between governments, companies and other actors may be needed to unlock mining's full benefits.

ICMM would like to thank all the individuals, governments and organizations that contributed to the study, full details of which are included in the main report. In particular, ICMM appreciates the cooperation and support of: the Government of Chile, including authorities in Santiago and Antofagasta as well as representatives of local government in Antofagasta; Escondida management in Santiago and Antofagasta (Mauro Valdes and Jorge Zeballos); BHP Billiton (Holly Lindsay); management of the Escondida foundation; representatives of the Escondida labor unions; local NGOs and community groups; national universities in Santiago and Antofagasta, business associations and representatives of the small scale miners association.



Ghana

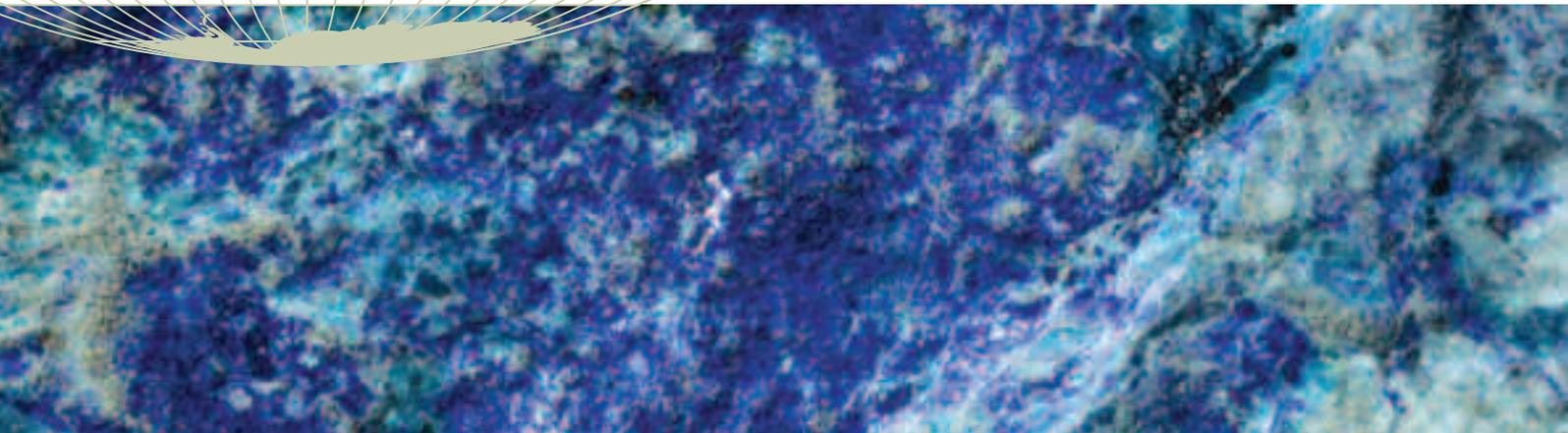
Executive summary

The Challenge of Mineral Wealth: using resource endowments to foster sustainable development

October 2006

Spotlight series

07



Ghana

The example of Ghana suggests mining can provide an important kickstart to previously-struggling economies as well as help to drive down poverty. It also, however, illustrates the challenges for both companies and governments in ensuring the potential benefits from mining are fully realized

Mining has long been important to Ghana's development. From the 8th century onwards, the area of present day central Ghana derived most of its power and wealth from gold mining (and from related trading along trans-Saharan routes with Arab merchants from North Africa). As a British colony known as the 'Gold Coast', Ghana also had a significant mining sector: the gold mine of Obuasi, which is still one of the world's richest goldfields, for example, dates from the 1890s.

But, more importantly, what does Ghana's post-independence period indicate about the contribution – or otherwise – of mining to the nation's development? This is a key question tackled in the Ghana case study – one of four country case studies – of ICMM's¹ Challenge of Mineral Wealth initiative, which aims to identify ways to improve mining's socio-economic impacts. This executive summary describes the main findings of the case study².

The short answer to the question is that a resurgence of mining investment in Ghana from the mid 1980s appears to have made an important contribution to turning around the national economy, and to reducing poverty. At the same time challenges persist around mining in Ghana: for example, the case study reported perceptions among local communities that they receive insufficient economic benefits from mines. The case study indicates that there is room for improvement in how companies manage their broader impacts in this respect – and also that governance and the effectiveness of public institutions may need to be further improved, particularly at the regional and local level.

To help ensure its objectivity, the overall research for the Challenge of Mineral Wealth initiative was overseen by an independent advisory group, and key findings were reviewed at two multi-stakeholder workshops. Ghana's Mineral Commission, a government agency, also reviewed and provided comments specifically on the Ghana case study.

Material recovery

Starting with the impacts of mining at the national level, these were not easy to isolate given that mining – despite its long and influential history – has typically been a small part of Ghana's economy (although comprising a much bigger portion of exports). The national economy remains dominated instead by agriculture, with cocoa a particularly important crop.

The approach taken by the case study was to contrast the way in which the economy performed in the period from just after independence in 1957 until 1983 (the point at which the country's 'Economic Recovery Programme' was launched), with the period after 1986, during which mining enjoyed a resurgence. In the earlier period both the Ghanaian economy and the mining sector were essentially stagnant. In the latter period both have performed much more strongly.

The poor performance of Ghana's economy in the early post-independence years is striking. For example, at the time of independence Ghana had a real per capita GDP of over US\$450 (in 1995 prices). This was, for example, more than 40 percent higher than in Botswana. By 1985 Ghana's per capita GDP had declined to only US\$313 and Botswana was substantially richer. During the years of economic collapse, mining suffered along with other industrial sectors (for example not a single new gold mine was opened).

Since the mid 1980s, by contrast, economic growth has been both higher and more stable. Ghana is now considered one of the more successful African economies – and mining appears to have been an important element of the recovery (see Figure 1). The economic reforms of the 1980s and 1990s included a new, investor-friendly minerals code. Between 1986 and 2001 over \$5 billion was invested in new mining projects and mining has overtaken cocoa as the leading export earner (although reforms in the cocoa sector are now leading to increased exports there). Minerals still accounted for only around 5% of GDP in 2004. Even so, mining has also been the biggest source of foreign direct investment, and is now a significant contributor to the government's budget.

Can it be said that mining was actually a catalyst of the post-1983 economic growth? A direct cause and effect is difficult to prove. Clearly, though, the fortunes of mining have been closely linked with those of the economy at large, with the policies and improved governance that stimulated the overall economy also helping to unlock mining's revival.

Importantly, the Ghana case also suggests that mining, and gold mining in particular, may be one of the first sectors that can sustain growth in a previously failing economy once some minimum package of economic and institutional reforms have taken place. In some ways this is logical – unlike many other productive sectors gold mining needs quite a limited institutional and infrastructural base to be able to prosper. Key requirements include sound property rights, a realistic real exchange rate and taxation that is not punitive. Conversely, gold mining does not need, for example, a robust domestic market (given that the gold is exported). Nor does it need a sophisticated transport and communications infrastructure (typically gold ore goes through an initial refining process at the mine site, before being flown overseas for final refining).

In terms of poverty reduction, too, the evidence suggests mining has made an important contribution. Ghana, it should be emphasized, remains a very poor country: its recent economic spurt began from a low base. Nonetheless, since 1991 household poverty has declined substantially, suggesting that growth has been benefiting a wide cross-section of the economy. Moreover, those regions that have a

¹ The project was also conducted in collaboration with UNCTAD and the World Bank.

² The full case study (as well as the other three country case studies) will be published by UNCTAD following Government review.

high level of mining activity have both lower absolute levels of poverty, and have experienced faster declines in poverty levels than other regions.

Focusing on the effects of specific mining projects in Ghana also indicates some broadly positive outcomes. The mine chosen for in-depth analysis as part of the case study was actually the historic Obuasi mine mentioned previously. This is now owned by AngloGold Ashanti, an ICMM corporate member, and is both the largest mine in Ghana, and the nation's largest private sector employer.

Obuasi was a greenfield site when the mine was established in the nineteenth century, but today a town of 150,000 to 200,000 has grown up around the mine. The mine itself employs about 6,750 employees and contractors, almost all of whom earn well over national average wages. Many other jobs have also been created indirectly by the mine. Though the numbers here are difficult to estimate, total employment generated by the mine in the area is between 28,000 and 72,000, according to the case study calculations.

The mine also provides housing for a large proportion of its employees, and runs schools and a hospital for its employees and their families. One area where impacts are relatively modest is in procurement, with only a small proportion of procurement spending being sourced in the Obuasi area. Value added to the Ghanaian economy (i.e. contribution to GDP), however, is estimated to be in the order of \$70 million a year, which is equivalent to just under a half of total turnover. AngloGold Ashanti also has a long track record as a supporter of community projects (for example, it built the municipal hospital and gave it to the government). Other contributions include providing free power to relocated communities and supporting the provision of water infrastructure and electrification. At the national

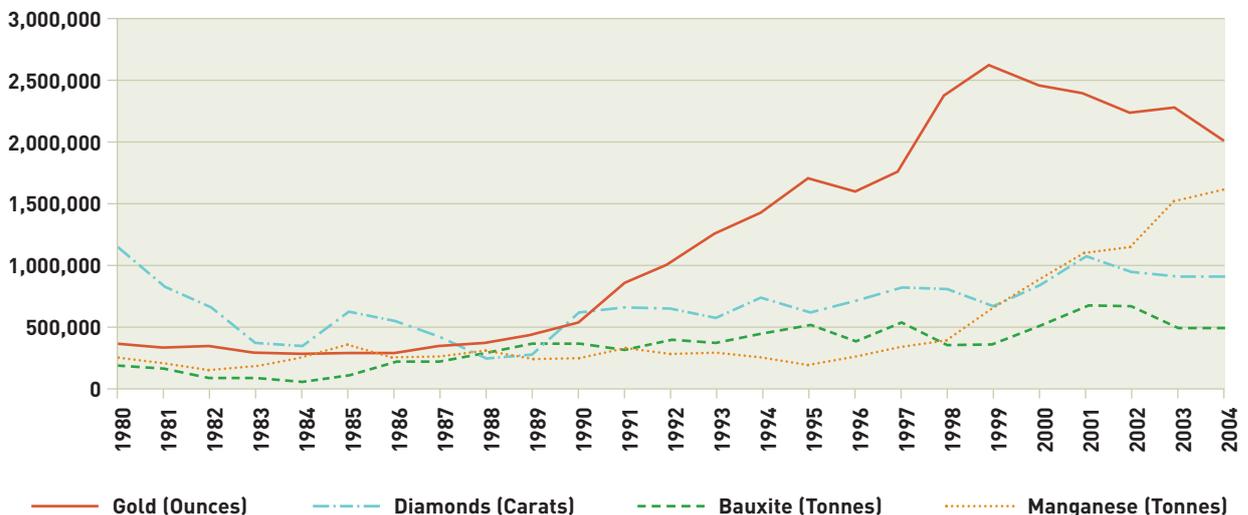
level, AngloGold Ashanti has also been involved in a number of economic diversification initiatives, including support for establishing Ecobank, a merchant bank which is now a major player in the West African financial sector.

Critical context

In spite of these benefits, however, the case study also highlighted challenges, and ongoing political and public debates, around the impacts of mining in Ghana. This dovetailed with a point made at one of the stakeholder workshops held by ICMM on the overall Challenge of Mineral Wealth initiative: that popular perceptions of mining often require closer investigation³. In Obuasi, for example, there is some dissatisfaction among communities, in spite of the impacts mentioned above. Some local people have criticized the mine for not doing enough, complaining about the condition of the roads, for example, or inadequate water supplies.

Another local issue is the active artisanal mining population in Obuasi. Artisanal miners or *galamsey*, as they are known in Ghana, are common across Ghana's goldfields. In Obuasi *galamsey* cause relative minor disruption to AngloGold Ashanti operations (although several staff have been violently assaulted by *galamsey*). However, their environmental impact is considerable, not least because of their inadequately controlled use of mercury. Some other problems have also been attributed to *galamsey*, including the use of child labour and the sort of social order issues often associated with large groups of itinerant male workers. Conversely, the *galamsey*, supported by some local NGOs, have made allegations of unjustifiably heavy-handed behavior by government and mine security personnel. These allegations have been refuted by the company, all parties – including AngloGold Ashanti, the government, and NGOs – recognize the need to tackle the broad issues raised by artisanal mining.

Figure 1: Mining Output in Ghana



³ For more information about the 24 October 2005 workshop proceedings please go to www.icmm.com

This document is one of a series of publications produced by ICMM under its Resource Endowment initiative, which aims to better understand how large scale mining activity in low and middle income countries impacts the socio-economic development of host countries. This action-research project is being done together with UNCTAD and the World Bank Group, with broad stakeholder engagement. For the latest information on the initiative, including details of publications, activities and partners visit www.icmm.com

The International Council on Mining and Metals (ICMM) is a CEO-led organization comprising many of the world's leading mining and metals companies as well as regional, national and commodity associations, all of which are committed to improving their sustainable development performance and to the responsible production of the mineral and metal resources society needs.

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On a national level, an open question is whether the economic benefits captured from mining, while already significant, might have been even greater. The World Bank has noted that these are not as large as might be expected. This is because of the high import content of the mining sector and, as new mine projects come on stream, the repatriation of profits. Raising the tax take on mining is not necessarily the answer here, however, given that this could deter further investment in the sector.

A related concern is whether mining regions are benefiting as they should from taxes raised from mineral production. A common complaint reported in the case study is that little of the tax from mining appears to find its way back to mining communities, in spite of a formal system – the Mineral Development Fund – set up to address this matter. Certainly, the impacts of mining are viewed broadly positively by many stakeholders, the case study notes. But other specific concerns have also often been raised: for example, over environmental impacts and accidents, the treatment of resettled communities, and also the way in which mine closures are managed.

Without doubt, mining companies share responsibilities for many of these issues. For example, the procurement budgets of mining firms do not appear to be benefiting local and national suppliers as much as they might. There is also evidence that some corporate social investment could be targeted more effectively on poverty alleviation; and that in Ghana more generally, some resettlement projects have been poorly handled. At the national level, corporate involvement in poverty reduction strategy processes could be stepped up.

The case study also indicates, however, that governance and institutional weaknesses may lie at the root of number of the concerns. The case study analyzed such issues using a taxonomy developed in an earlier phase of ICMM's initiative to understand the links between different aspects of governance and key drivers of development. A basic point of context here is that Ghana is still a centralized country – in part a legacy of its history of colonial rule. There are several regions, but no strong regional government, and at the local level there are districts and municipalities, plus traditional 'Stools', presided over by traditional chiefs. Neither the municipalities nor districts have adequate capacity, resources or revenue raising powers to effectively address local development issues.

Partly for this reason, the capacity of regional institutions to translate mining revenue redistributed via central government into development at the local level is at best work in progress. Recent general improvements in budget management have not filtered down adequately to resolve these problems, and nor have the donor sponsored programs such as the Heavily Indebted Poor Countries Initiative.

This helps explain at least some of the dissatisfaction around mines such as Obuasi. With local public bodies sometimes failing to deliver basic services such as water, sewerage and good roads, communities turn instead to mining firms to provide these essentials. Certainly the case study found evidence of dependency on AngloGold Ashanti

'Ghana's experience indicates the importance both of encouraging investment in the mining sector, and then also of following this through with further governance improvements.'

for community development projects, and a lack of local capacity to relieve the company of some of these expectations.

This in turn indicates the need for an explicit and careful development of local administrative and planning capacity, supported by somewhat larger and also more reliable fiscal revenue streams. This could gradually result in greater local empowerment as well as coherent local and regional frameworks in which education and health could be provided more effectively, and also the long term economic future of the region could be charted (factoring in possible mine closures, among other changes). Capacity building efforts could be supported by the mining companies, and co-financing of particular projects could involve local governments, the national government and international donors, as well as the companies themselves.

To emphasize, none of this is to detract from the benefits brought by mining in Ghana, and its arguably critical contribution to the national economic revival. What it indicates rather is that the macro-level governance and policy reforms that jump-started this revival in the 1980s, have been insufficient as yet to fully capture mining's potential benefits and help resolve all the dilemmas and controversies around its impacts. Put another way, Ghana's experience indicates the importance both of encouraging investment in the mining sector, and then also of following this through with further governance improvements.

More detail on the recommendations from all four cases studies of the Challenge of Mineral Wealth initiative can be found in the Spotlight series 03, 'Ways Forward'.

ICMM would like to thank all the individuals, governments and organizations that contributed to the study, full details of which are included in the main report. In particular, ICMM appreciates the cooperation and support of: the Government of Ghana, including the Ghana Minerals Commission (the government agency responsible for regulating and promoting investment in the mining sector), Ghanaian Environmental Protection Agency (EPA), Ministry of Finance, representatives of the Select Committee on Energy and Mining of the Ghanaian Parliament, Member of Parliament for Obuasi, the Ghanaian Central Bank; and AngloGold Ashanti management in Accra, Obuasi and Johannesburg (and in particular Alan Fine, Paul Hollesen, Gertrude Makhaya and John Owusu).



Peru

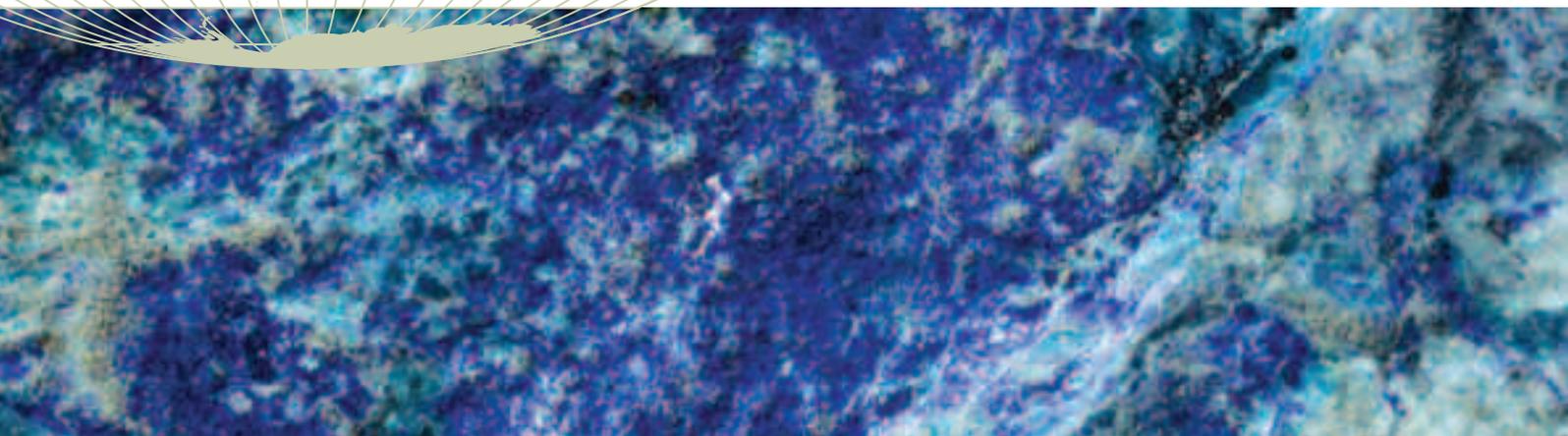
Executive summary

The Challenge of Mineral Wealth: using resource endowments to foster sustainable development

October 2006

Spotlight series

08



Peru

A surge of mining investment in Peru since the early 1990s has brought benefits to the national economy. Yet poverty and inequality have remained high, with trickle-down benefits held back partly by incomplete governance reforms. This has in turn intensified social tensions around mining

Government policies towards mining became a hotly-debated political issue in the run-up to Peru's presidential elections in 2006. But at the root of many of the social tensions surrounding the industry are local, rather than national, political dynamics. In particular, it has often proved difficult at the local level around mines in Peru to strike long-lasting compromises between company and community interests.

An example of this is the experience of the Tintaya copper mine, owned by BHP Billiton, an ICMM corporate member¹. Following local criticisms over the environmental and social impacts of the mine, an innovative dialogue process was established between the company, the local communities and a number of NGOs, which led to an agreement by the company to return land to communities and to increase spending on local development, as well as to implement other community-friendly measures. The dialogue had been generally perceived to be a success. Even so, tensions later re-erupted: in 2005, a crowd of over 2,000 protestors broke into the mine, demanding an increase in local development funding from the \$1.5 million originally agreed to \$20 million.

This executive summary provides an overview of the Peru case study – one of four country case studies – of ICMM's² Challenge of Mineral Wealth initiative. An underlying cause of tensions between companies and communities such as at the Tintaya mine, the case study has found, is governance and institutional weaknesses, particularly at the local level. Without public agencies able to act as a trusted mediating and enforcing authority, compromises struck between the various parties are more likely to prove short lived, and conflicts may quickly re-emerge.

According to the case study, institutional and governance problems also help explain why – in spite of the considerable economic benefits brought by mining investment in Peru – poverty and other social problems often remain acute. If these problems could be overcome, the case study argues, larger socio-economic benefits could be delivered from mining, social tensions mitigated, and operational risks reduced. Importantly, the research of the Challenge of Mineral Wealth initiative was not just overseen by an independent advisory group: the Peru case study was itself reviewed by the government of Peru. "The study is particularly helpful in pinpointing key issues and aspects that deserve special attention", Peru's Minister of Mines and

Energy, Glodomiro Sánchez Mejía, wrote in a letter to ICMM in March 2006.

Wealth and poverty of the nation

Focusing first on the national-level impacts of mining, there is little doubt that these have been positive in economic terms. Between 1992 and 2004 domestic and international mining companies in Peru made total investments of about US\$9.8 billion. This investment surge was triggered by significant policy changes towards the sector. With the start of the Fujimori Presidency in the early 1990s the underlying philosophy for governing the economy took a complete U-turn. Following a previous period of state dominance of the mining sector, private sector involvement, especially foreign direct investment, was actively encouraged and state-owned mining assets were privatized. Regulatory changes provided legal and fiscal stability for companies.

Some basic figures can be used to illustrate mining's recent economic contribution to Peru. Mining and metals exports now comprise roughly half the country's merchandised exports, according to government figures. In 2004 mining contributed about 6.9 % of GDP (the figure for 2003 was 6.8%). While direct and indirect employment from mining relative to the economically active population is small (in total about 3.5%), this is due to the capital intensive nature of the industry. Broader indirect effects, however, are believed to be large. Of the \$1.5 billion of inputs delivered to the industry, an estimated two-thirds are supplied from within Peru (this includes imported goods delivered by Peruvian suppliers). In 2003 the mining sector paid for about 4% of government's actual spending and contributed slightly more than 5% to government's total tax intake (making the sector one of the largest overall taxpayers in the country).

Contrary to the theory of the 'resource curse', there is no evidence that mining has detracted from broader economic development in Peru. In fact, its resurgence has coincided with a period of greater economic stability. Liberal economic policies have led to a relatively stable exchange rate, decreased inflation and official reserves at comfortable levels. Over the past 15 years, the macro-economy has been well understood and competently managed. Within this improved policy framework, mining has clearly played a kick-starting role in boosting a previously ailing economy.

Unfortunately, however, this positive macroeconomic picture has not been mirrored by improvements in many social indicators. An exception to this is that over the period from the 1960s to 2002 three key social indicators - infant mortality, life expectancy and literacy rates - have generally improved. Nonetheless the 2004 Report on Human Development for Peru from the United Nations Development Programme finds that the country has been unable to reduce social inequality and very significant disparities in income and regional development. More than half of Peru's population continues to live in poverty and nearly a quarter lives in extreme poverty, with the problem often particularly acute for rural, indigenous communities. In this respect, Peru differs from the other case studies: in Chile and Ghana, for example, poverty levels have fallen as mining investment has increased. Peru also retains one of the most unequal patterns of income distribution in Latin America.

¹ The International Council on Mining and Metals. Also please note that in 2006 BHP Billiton agreed the sale of Tintaya to Xstrata, another ICMM member.

² The project was also conducted in collaboration with UNCTAD and the World Bank.

Within mining areas in Peru, moreover, it is difficult to pinpoint any particular regional effects of the industry's activities on poverty reduction. Available data shows no clear patterns. One important development whose effects are only beginning to play out, however, is that since 2002, 50% of corporate income tax collected from mining companies is redistributed to regions, municipalities and districts where mines are located (the figure was previously 20%). This mechanism – the *Canon Minero* – allows these sub-national state bodies more independent expenditure decisions. Although the *Canon Minero* transfers in 2003 constituted only a small proportion of total actual government spending, they can be highly significant at the local and regional level, and have recently risen dramatically (see Figure 1). The rules for redistribution of the transfers have been changed three times in the past four years, reflecting the highly controversial nature of the criteria. While increased transfers to mining areas should in theory improve local poverty reduction (an issue discussed again later in this executive summary), many of the changes are simply too recent to show up in the data.

A less ambiguous message, on the other hand, comes from analyzing the direct and immediate economic impacts of individual mines in Peru: the case study involved a detailed examination, for example, of the country's largest operational copper and zinc mine, the Antamina mine in the Andean region of Ancash, which has clearly made some significant economic contributions. Owned by a consortium of BHP Billiton, Mitsubishi, Teck Cominco and Falconbridge, and with operations begun in 2001, the mine has an expected lifespan of around 20 years.

The company operating Antamina – La Compañía Minera Antamina – has set out a number of explicit sustainable development goals including, for example, the provision of 100% access to basic services such as water and electricity for communities in the area of impact, and 100% increase

in per capita income also in the area of impact. The mine's social investment budget for 2005 was around \$7.5m, with the local population involved in the design and implementation of projects. More significantly the mine contributed some \$662m to the Peruvian economy in 2005, the case study calculated, including taxes paid, goods procured, either locally or nationally, and jobs created (a total of around 9,000 – 12,000 jobs are estimated to have been created by or depend, directly or indirectly, on Antamina).

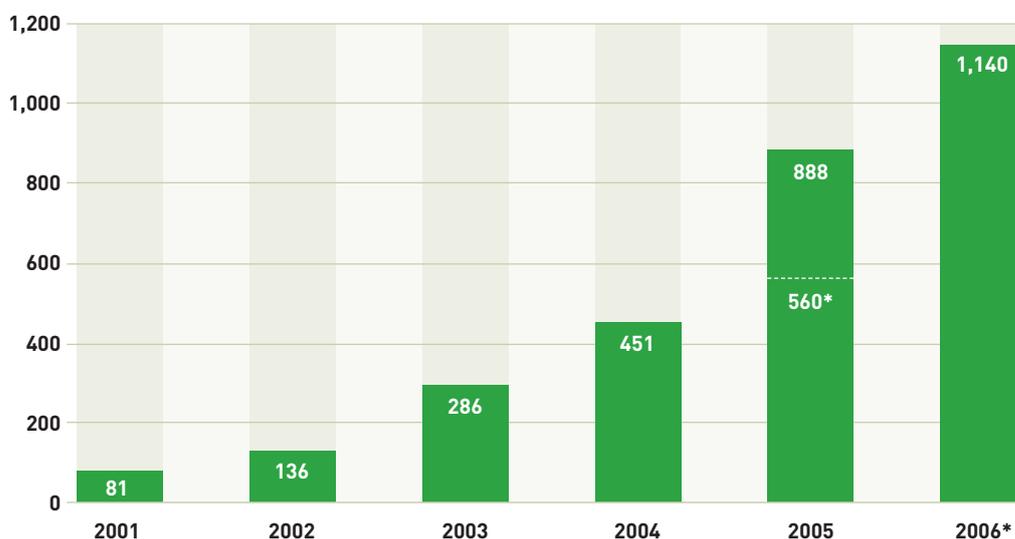
Digging for the cause

So what explains this overall situation in which mining has brought national economic benefits, in which mining companies are contributing economically as a result of their individual operations, yet in which poverty and other social outcomes remain in need of urgent attention?

Without doubt there is room for improvement in the way companies manage their broader socio-economic impacts. With regard to Antamina, for example, the case study indicated that that the company could have improved the way in which it consulted with communities – in particular, early indications of employment for local people raised expectations which have yet to be fully met (in spite of the company's local employment initiatives.) There is also a need to integrate the company's efforts into coherent local or regional government development plans.

However, this is arguably only an aspect of the problem, with governance issues playing a deeper role. Certainly, Peru's performance on those governance indicators conventionally measured by the World Bank has been weak. Recent changes have led to more participation and trust of society in the political process and have improved political rights. However, real improvements in the workings of the public service and administration and the legal system have remained outstanding.

Figure 1: Canon Minero Transfers 2001–2006 (Million Nuevo Soles)



* Budget as approved at the beginning of the fiscal year Source: MEF; Elaboración: CAD Ciudadanos al Día
Source: Ciudadanos-al-Día (2006) (updated)

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More specifically, the main factor that has constrained mining from making much greater contributions, the case study argues, is that national-level macroeconomic and structural reforms (which set the stage for the surge in mining investment from the 1990s) have not always been matched by equal improvements in institutional capacity and in political-administrative processes at the regional and local level. This is particularly important given the higher levels of funding now flowing to sub-national state bodies under the *Canon Minero*.

Evidence from the case study pointed, for example, to a lack of organizational capacity on the part of local governments to manage the impacts of mining. Proactive arrangements are needed where local and regional governments have very weak political-administrative capacities. Public agencies would be better able to serve the development needs of communities and deliver basic social services if there were strengthened approaches to strategic planning, more effective public expenditure programs and better monitoring of results.

Such improvements are needed to ensure the *Canon Minero* funds actually deliver commensurate advances in living conditions. The transfers certainly represent a significant opportunity for development (for example, they often far exceed companies' own social investment budgets), but unless spent effectively, they may turn out to be a mixed blessing. A related danger is that because *Canon Minero* funds must be spent on capital projects (described eloquently in the case study by one interviewee as "anything that involves cement"), as opposed to say capacity-building programs, spending plans will not sufficiently take account of cost implications for future years.

Similar problems beset efforts to build local supply chains and to foster economic diversification in mining regions: the case study found that, whatever the particular company approaches in this area, institutional and governance arrangements supporting this remain weak. If the policy objective is to encourage new poles of private sector development (which are naturally localized in the case of mining) this again will depend on building competent local and regional authorities which have reasonable endowments of financial resources (either through their own tax revenue base or predictable and reliable central government transfers) and also of human resources and general administrative capacity.

Finally, governance weaknesses also appear to underlie many of the social tensions surrounding mining in Peru. With local and regional government bodies often struggling to provide basic public services, such as healthcare, water or electricity, communities often turn instead to companies for such goods (which reinforces what might be described as a paternalistic, rather than sustainable development, model for mining). In many instances the firms have responded positively and provided additional resources. But communities still often perceive such corporate social investments as insufficient. Though often understandable given the pressing nature of local needs, such expectations may persist irrespective of amounts spent, and the fact the companies have neither the capacity nor the mandate for such a governmental role.

'The Peru case study highlights, in short, the critical importance of improved governance and institutional arrangements for translating the financial resources brought by mining into more effective development – as well as for reducing the social tensions it may trigger.'

With public agencies lacking the capacity to mediate and enforce agreements between companies and communities, meanwhile, companies have often chosen to negotiate directly with communities over their additional local contributions. These arrangements have in turn sometimes led to a bidding process in which agreements reached in the short run have proved unstable in the long run. It is precisely this dynamic that appears to be at the heart of the recent tensions at the Tintaya mine mentioned at the start of this note, as well as at other mining projects in Peru.

The Peru case study³ highlights, in short, the critical importance of improved governance and institutional arrangements for translating the financial resources brought by mining into more effective development – as well as for reducing the social tensions it may trigger. This is easier said than done of course, and is likely to require increased partnerships between companies, governments, communities and other key stakeholders. Please see Spotlight series 03, 'Ways Forward', for a summary of the practical recommendations derived from all four of the case studies in this respect. This note also describes how ICMM plans to take forward its own work in this area.

³ The full case study (as well as the other three country case studies) will be published by UNCTAD following Government review.

ICMM would like to thank all the individuals, governments and organizations that contributed to the study, full details of which are included in the main report. In particular, ICMM appreciates the cooperation and support of: the Government of Peru, including various ministries and semi-autonomous agencies; and Compañía Minera Antamina S.A management in Lima, Huarmey and at the mine (and in particular Steven Botts and Gerald Wolfe).



Tanzania

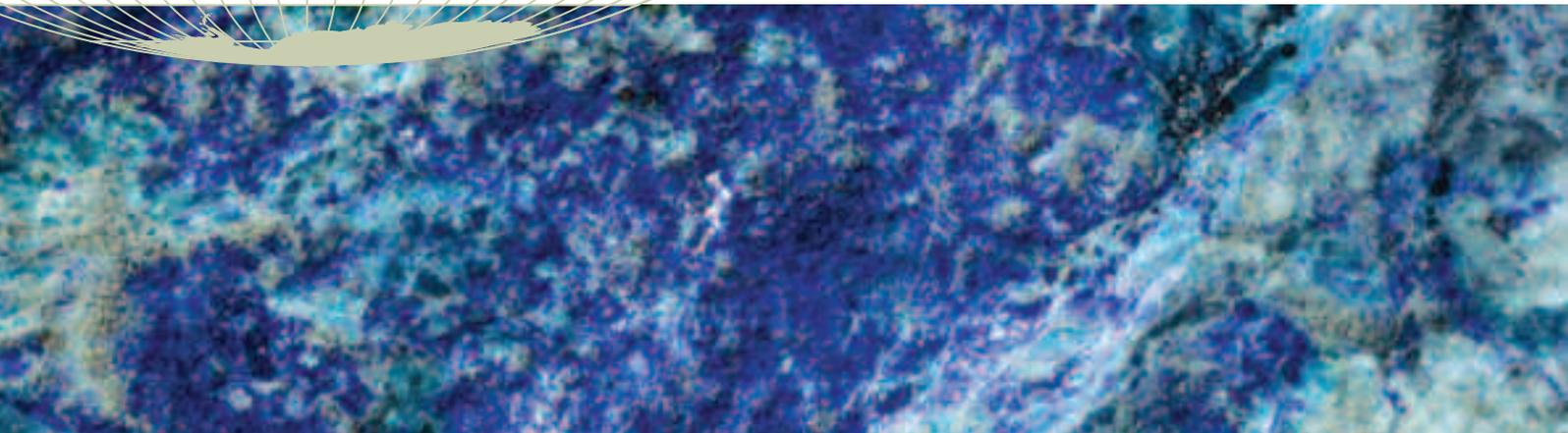
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09



Tanzania

Rapid expansion of mining in Tanzania has brought economic and development benefits but also some social tensions including, for example, conflicts between small-scale and major commercial miners. A deepening of governance reforms at the regional level could help overcome such problems as well as further enhancing mining's economic impacts

Two sorts of private-sector mining activity have boomed in Tanzania in recent decades. First, the ending of Tanzania's state monopoly over mining at the end of the 1980s presaged a rapid growth in artisanal and small-scale mining. By 1995, an estimated 550,000 Tanzanians were earning some of their income from such mining (albeit this boom proved relatively short lived: the small mines often soon dug as deep as they could using their basic technology). Second, the opening of the economy to foreign firms and new and more attractive mining legislation has more recently led to a major expansion of investment in large-scale mining. This has attracted an estimated \$1.3 billion in investment since 2000: easily the largest source of FDI to the country.

On both counts, the economic impacts have been broadly positive. The mining sector as a whole now accounts for over 40% of the country's exports as well as around 3% of its GDP. The rapid growth in artisanal mining in the late 1980s meanwhile appears to have had a 'startling' impact in relieving rural poverty, in the words of a USAID study in 2001. At the same time, however, both booms have led to some tensions. For example, there have been conflicts directly between large-scale and artisanal miners over land use (with the latter sometimes operating in areas legally claimed by the former, and alleged violence sometimes erupting as a result). Recently, there has also been a national political debate over the taxes and royalties levied on the commercial mining firms, with calls for the companies to make bigger payments.

This Spotlight provides an overview of the findings of the Tanzania case study – one of four country case studies – of ICMC's¹ Challenge of Mineral Wealth initiative. As well as examining commercial mining's impacts in Tanzania at the national level, the case also analyzed the impacts of a particular large operation – Placer Dome's² North Mara mine in the Tarime district in North Western Tanzania. While the case study indicated that mining's impacts have been positive on balance, it also sought to understand the deeper drivers of both the benefits, and tensions which mining has brought³. A key issue in this respect, it was found, was the quality of governance. Improvements in economic policies and governance have helped create a sound national policy environment for mining; but remaining governance weaknesses, particularly at the regional and local level, underlie at least some of the tensions – and may also have

prevented the full potential benefits of mining from being realized.

In this way, the case study contributes to the overall aim of ICMC's initiative: to identify ways to improve mining's socio-economic impacts. To strengthen its rigor and credibility, all research for the initiative, including the Tanzania case study, was undertaken by independent consultants and overseen by an independent advisory panel. The main findings from the initiative were also reviewed by different stakeholder groups, including civil society organizations, academics, and international donors. Please see Spotlight series 01 – 04 for an overview of the initiative. The rest of this Spotlight sets out the main points of the Tanzania case study.

Mining for data

On a national level in Tanzania, there is little doubt that mining has contributed to an economic turnaround in recent years. As mentioned the commercial mining industry has recently revived (with most of the new investment going into five major mines, including North Mara). Supported by Tanzania's long-delayed macroeconomic and structural reforms in the mid-1990s, and radical new mining legislation in 1998, gold production has soared. The mining sector now accounts not just for a large proportion of the country's exports, but also for around 75% of its foreign direct investment, and a rising, albeit smaller, share of government tax revenues (currently 3.6%).

Significantly, the performance of Tanzania's economy has also improved during this period of mining resurgence. During 1996-2003, average annual GDP growth was 4.8%: generally higher (and certainly much more stable) than anything seen in the previous decades since the country's independence in the early 1960s.

How exactly has mining contributed to this overall economic revival? The sector is estimated to have contributed about 0.3% of this average annual GDP growth of 4.8% during the period 1996-2003 (or some 6% of the total). On the one hand, because commercial mining is such a capital intensive activity, it has contributed less to Tanzania's employment and value-added (and so to GDP) than might be expected given the scale of the recent investments.

On the other hand, mining has been able to deliver its contribution at a critical, early stage in the process of national reform, when other private sector activity has proved more difficult to stimulate. Tanzania has had a long history of poor macroeconomic management; and clearly a fragile country run for years on strict socialist lines does not easily make the transition to a market-based economy. Commercial mining, however, has shown itself to be unusual in this respect, capable of operating successfully in an environment that is still only partly reformed and in which the support structures usually necessary for private sector growth – such as physical infrastructure and an overall business culture – are still weak. The case study did not conclude that mining *per se* caused Tanzania's improved growth performance. But it did find that mining was one of the few and main sources of early investment in response to a broader package of improved policy and other developments that together explained the positive outcomes.

¹ The project was also conducted in collaboration with UNCTAD and the World Bank.

² Placer Dome was acquired by another Canadian company, Barrick Gold, in 2006, after the case research was completed.

³ The full case study (as well as the other three country case studies) will be published by UNCTAD following Government review.

In terms of mining's social impacts, the case study also examined the sector's contribution to Tanzania's overall progress towards the UN Millennium Development Goals (MDGs)⁴. On the one hand, household survey data in Tanzania (based on the latest available figures from 2001) suggests that the country's recent economic revival has not as yet led to significant falls in its – very high – rates of poverty since the early 1990s. However, the case study did find some basis for cautious optimism about mining's social contribution.

In particular, the extra growth that has been associated with the boom – even if small on the national canvas – is large for those communities actually living in mining areas. In terms of the main MDG, the eradication of extreme poverty, for example, the economic activity generated by mining has had positive local effects. As well as employing and providing work through contractors to almost 8,000 workers in total (see Figure 1), commercial mining firms in Tanzania have also helped create good quality jobs through their procurement activities (some 45,000 additional jobs, according to an estimate in the case study). Much of this work has gone to people in the mining areas themselves.

The major mining firms have also often committed to sustainable development agendas that are advanced compared with national industry norms, adopting relatively progressive approaches to issues such as gender empowerment, environmental management and community development. At the North Mara Mine, for example, the case study found that Placer Dome had adopted active measures to enhance levels of local employment and business development. It had also funded various health, education and infrastructure projects, including clinics and schools (and in this way had contributed to other MDGs, such as those relating to education and health).

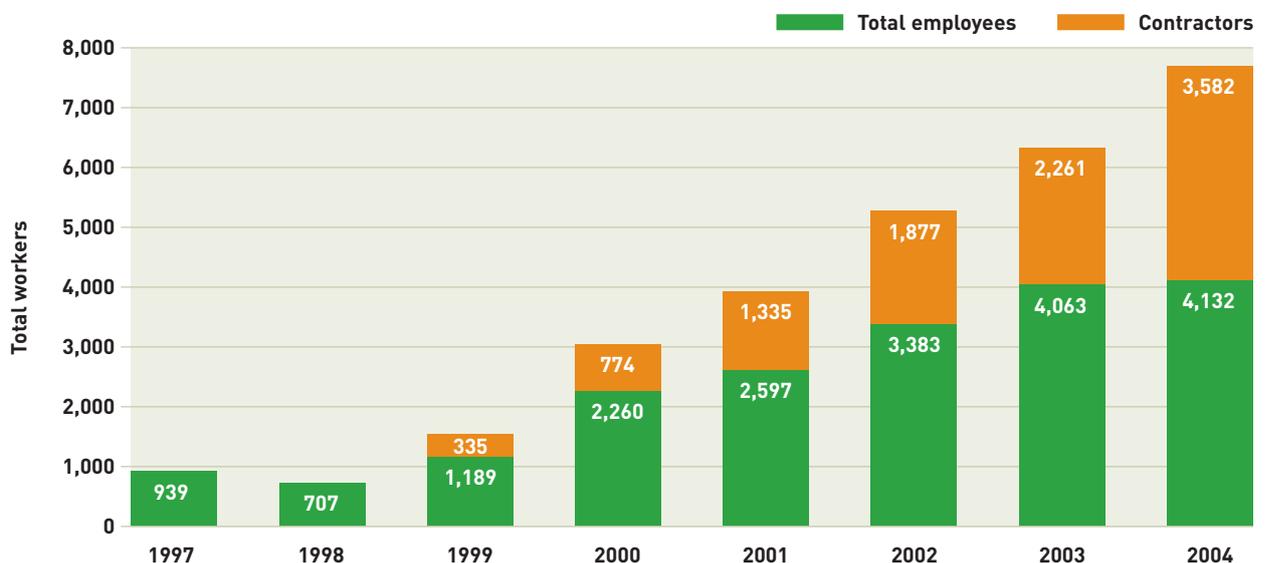
At the same time, however, it is clear that mining's local impacts are not without problems – nor as positive as they might be. As noted previously, the activity of artisanal and small-scale mining (ASM) workers has sometimes been restricted by the granting of leases to large operations (albeit many ASM jobs might not have survived longer term in Tanzania in any case given the inherent limitations of this type of mining). In terms of relationships between the mines and local communities, these clearly need to be stronger if all the potential positive impacts of mining are to be realized. Yet the companies generally recognize that this goal has not been fully achieved – in spite of their efforts, for example, on community development. Related to this, the economic trickle-down effects from mining in terms of stimulating other productive activities are recognized to be still limited and certainly much less than those seen in more mature mining economies such as South Africa.

Lessons of gold

So there is potential to improve further the impacts of mining in Tanzania. But what are the underlying explanations for the success that has been achieved so far? And what reforms are needed to create more positive outcomes?

The study suggests that Tanzania's overall success in reviving its commercial mining sector – and the national-level economic benefits this has brought – can be attributed to three broad factors. The first is Tanzania's reform of its mineral legislation, which helped attract a new wave of large commercial investors from 1999 onwards. While critics argue that the 1998 mineral legislation has been slanted too much in favor of the mining companies (hence the recent calls for them to pay more tax and royalties), the firms point out that the country's tax regime still represents a significant deterrent to investment compared with countries that compete for the same investments. This is borne out by

Figure 1: Employment in the large scale mining industry in Tanzania, 1997–2004



⁴ See www.undp.org/mdg/ for explanations of the Millennium Development Goals.

This document is one of a series of publications produced by ICMM under its Resource Endowment initiative, which aims to better understand how large scale mining activity in low and middle income countries impacts the socio-economic development of host countries. This action-research project is being done together with UNCTAD and the World Bank Group, with broad stakeholder engagement. For the latest information on the initiative, including details of publications, activities and partners visit www.icmm.com

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independent comparative reviews of mining regimes across the world⁵.

The second factor is Tanzania's recent policies of macroeconomic stabilization and structural adjustment. The country has achieved lower and more stable inflation and also a fiscal balance that is more easily financed without inflation than in the past. Even more important, for a decade now, Tanzania has sustained a reasonably reliable commercial regime that has reduced the earlier substantial risks to investors of undertaking payments and receipts in foreign currency – a key factor in the viability of commercial mining. Serious real exchange rate misalignments have also been avoided, in contrast with previous decades when such misalignments were chronic.

The third component is what appears to have been an improvement in key aspects of Tanzania's governance since 1996. A critical element here has been the establishment of a stronger, and more effective, central executive power – arguably necessary to achieve the improvements in national economic policy. The reforms of the past few years also now ensure a reasonable degree of delivery of publicly-stated objectives – including poverty-reduction programs – through the budgetary process. Similarly, the government is also now reasonably well equipped to make good use of those revenues that it raises from mining (and future participation in the Extractive Industries Transparency Initiative would be a confirmation of the standards of transparency already achieved in this regard).

At the same time, however, Tanzania's governance does remain weak in many of the areas measured by the World Bank's governance indicators (even though the country's scores against these indicators have improved over the last decade). Public management systems and their implementation remain problematic in some respects and significant financial leakages are still occurring. The control of corruption, although much improved, remains a part of this. This point does cast doubt on the argument sometimes made in policy debates that a comprehensive improvement in governance should be a pre-condition for mining investments⁶. In Tanzania, mining has contributed to a macro-economic revival in spite of some major ongoing flaws in a broadly improving system of governance.

However, the study also argues that the incomplete nature of governance reforms holds the key to enhancing further the positive impacts of mining, as well as tackling some of the local tensions that have arisen. In particular, the case study points to the need for an extension of the governance improvements already achieved at the national level to local government. Conflicts between artisanal and large-scale mining would be easier to resolve, for example, if local authorities had more substantial administrative and financial capacities – and were also better placed to adjudicate fairly between conflicting claims (and in a way which also upheld national legal agreements).

Also, in terms maximizing the local impact of the significant corporate social investments of the five major new investors, a key problem is how to embed these contributions into mainstream public provision. Most of the companies have realized that they need to combine forces with government and social service providers and are seeking guidance over how such arrangements might be structured.

The chances of achieving such goals would be raised if local authorities had stronger management and other capabilities to work as equals alongside the mining companies. The alternative is for the companies to rely too much on the central government which will likely have less detailed knowledge of local problems and priorities. While the present system of local authority financing is improving, it does not yet provide a satisfactory basis for bottom-up planning and financing of economic and social development. Nor does it provide sufficiently equipped interlocutors for the mining companies in local and regional administrations. Skilled public-sector intervention is important to help maximize the local benefits from mining (including stimulating a local economy which is not overly dependent on the industry).

None of this is to detract from the critical role of the national government – for example, in ensuring mineral taxes are spent effectively on a national basis, and in fostering skills and broader employment generation from mining. Nonetheless strengthening local state capacity is an important factor too. Relevant to this is that the Tanzanian government has so far explicitly refrained from providing any preferential treatment to mining areas in redistributing the large mining revenues it receives. So local areas that generate these revenues have less scope to address the many and varied problems and opportunities resulting from the presence of large scale mining. A change in this policy could provide the funds for improving local governance (although other countries, such as Chile, have stimulated development in mining areas without such a fiscal arrangement).

Certainly, the mining companies in Tanzania can only do so much on their own to ensure their potential economic contributions are maximized. Adequately resourced and effective local and regional (as well as national) authorities are an important prerequisite in this respect. Interestingly, a number of the other country case studies examined as part of the Challenge of Mineral Wealth initiative came to a similar conclusion. Please see Spotlight series 03 'Ways Forward' for the overall recommendations flowing from this finding.

ICMM would like to thank all the individuals, governments and organizations that contributed to the study, full details of which are included in the main report. In particular, ICMM appreciates the cooperation and support of: the Government of Tanzania, including representatives of Tarime District Government, Geita District Executive Director; the Tanzania Chamber of Mines and Energy (Emmanuel Jengo), Barrick Gold, who acquired Placer Dome in 2005 (Peter Sinclair); Placer Dome (Jim Cooney, Jonas Kipokola, Ila Temu, Greg McNee and Reward Tenga); North Mara Mine; and local interviewees for the Social Impact Assessment (SIA) including 753 households in the project area, 304 individuals who participated in 20 focus groups, focus group participants in 5 other communities in Geita District and 13 businesses in Nyangoto village.

⁵ In particular the reviews regularly conducted by the Fraser Institute in Canada. See, for example, The Fraser Institute (2005), *Annual Survey of Mining Companies, 2004/05*, Vancouver, Canada.

⁶ See, for example, the *Extractive Industries Review* commissioned by the World Bank.