THE WORLD BANK

UNCTAD COMMODITIES BRANCH

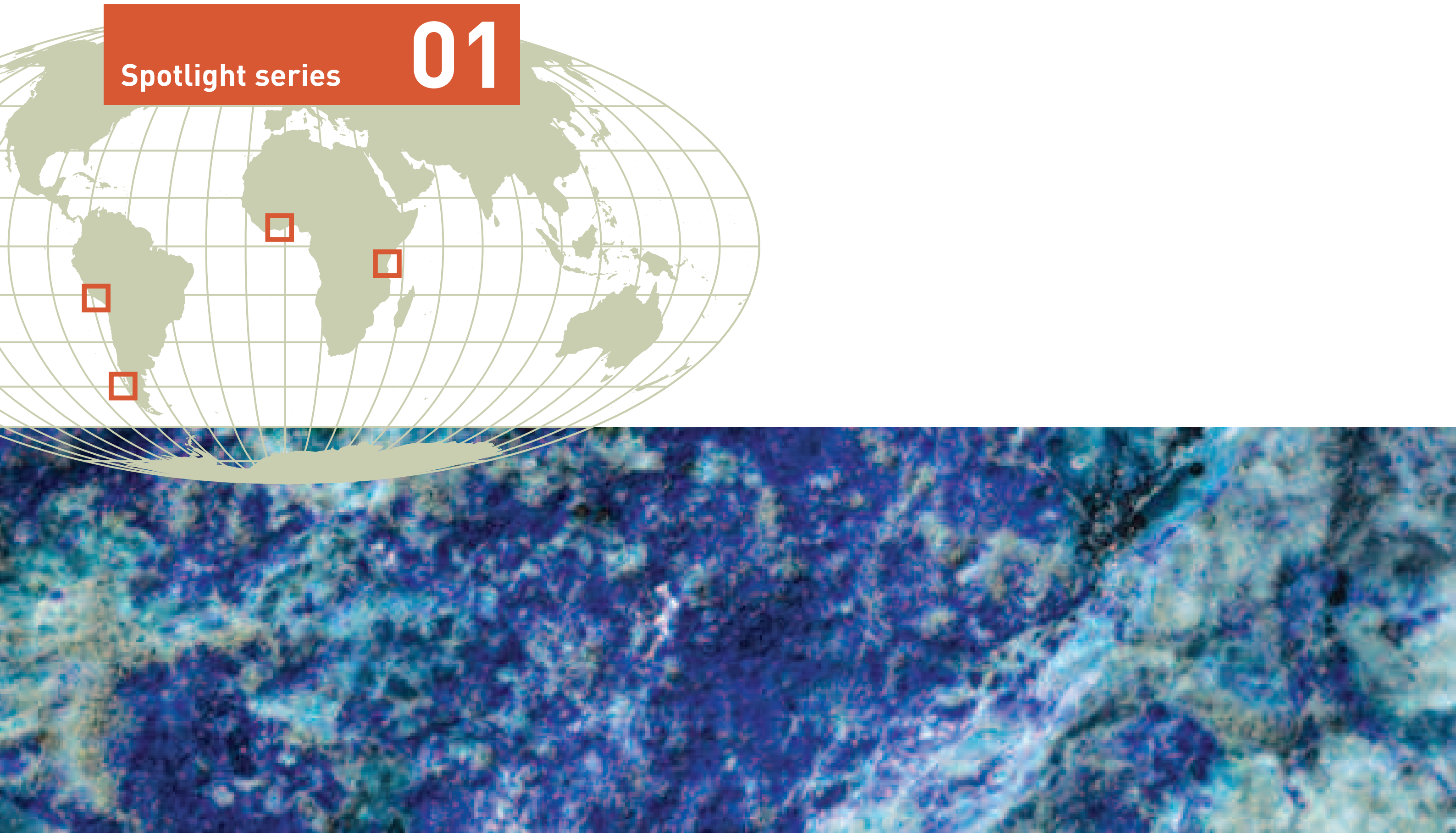
ICMM International Council on Mining & Metals

The Prize

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

April 2006

Spotlight series 01



The Prize

There is now strong evidence that mining can provide an important, and sometimes critical, contribution to economic development and poverty reduction in developing countries – provided the underlying conditions are right

Few inhabitants of the town of Obuasi in Ghana would say their lives had been cursed by mining, and many would justifiably describe it as a blessing. A prosperous town (by Ghanaian standards), Obuasi has been a center of gold mining for over a century. Today, the Obuasi mine – controlled by AngloGold Ashanti – is Ghana's single largest private sector employer. It has also been the focus of one of the case studies for ICMM's[1] Resource Endowment[2] initiative[3], and illustrates the potential for positive impacts that the (independently-overseen) study has found.

Without doubt, there are complaints from the local community in Obuasi – about the conditions of the town's roads, for example, about the activities and treatment of the thousands of local artisanal miners, or *galamsey*, and also about environmental problems (though these appear to have much improved). Some townspeople not employed by AngloGold Ashanti express concern about the higher standards of housing and education enjoyed by the mine's employees. Others say they wish that Obuasi had more grand buildings like, say, Johannesburg, as they believe this would be more befitting for a successful gold mining town.

The latter complaint, however, is telling. For all its problems, Obuasi and indeed Ghana as a whole provides a useful example of how mining can actually contribute to lifting a region – and a nation – from poverty. For a start, AngloGold Ashanti's operations have brought various local benefits: 6,700 direct employees and contractors (almost all paid well above national average wages), indirect employment of some 30,000, plus a value-added contribution to the national economy of around $70 million per year. The company's social investments, in addition, have included building local schools and hospitals, and supporting electrification and water infrastructure.

More significantly, those regions in Ghana which have a high level of mining activity (such as Obuasi) have been found to have lower levels of poverty than other regions outside Accra, the capital. Figures show that since 1991 these mining regions have also experienced faster declines in poverty. This is against the background of general improvements in poverty levels at the national as well as at the regional level. There has also been an overall correlation between a revival of Ghana's economic fortunes and a boom in mining investment in the country: over $5 billion has been invested in new mining projects since 1986, just as real GDP growth has run at almost double the average rate for Sub-Saharan Africa for much of this period (following a disastrous period for Ghana's economy prior to that).

In other developing countries, of course, mining investments have not underpinned such positive outcomes. The challenges of translating mineral wealth into long-term development need to be better understood. Spotlight series 02 'The Challenge' highlights the findings of ICMM's Resource Endowment initiative in this respect.

The core insight from the research highlighted in this Spotlight, however, is that successful outcomes from mining are possible and can be a critical contributor to pro-poor growth – particularly for countries just emerging from periods of chronically poor economic performance and re-engaging in the global economy. The theory of the 'resource curse', which implies that resource-rich countries are condemned to underdevelopment, has received considerable attention in academic circles in recent decades. While it highlights some real challenges, if the theory is used simply to discourage countries from developing their resources it may actually help condemn some of them to yet continuing poverty.

The approach taken by ICMM's initiative differed from some of the existing academic analyses in this area in other ways too: rather than focusing on cross-country, statistical comparisons (a well-trodden approach), the emphasis of its analysis was on concrete case studies. It also placed weight on understanding institutional factors as well as economic issues. Finally, as a piece of 'action-research', its aim was to set out and take forward practical recommendations which were designed with participation from the study's partners, which included governments, labor and voluntary organizations.

Hard evidence

The initiative's research began, however, with a review of the theoretical debate around the impact of resource endowments. For example, there is now a broad consensus around the macroeconomic policies (such as sound management of exchange rates and the establishment of stabilization funds) which can help countries avoid potential adverse economic effects from resource booms. There is also a growing literature on how resource extraction can sometimes encourage different forms of political 'rent-seeking', including corruption.

Nevertheless, it was noted that, missing from much of the literature, were coherent arguments that explain *why* it is that some countries suffer such problems, or fail to implement appropriate economic policies, while others achieve positive outcomes. Certainly, the project's initial analysis of 33 mining-dependent countries found wide and often difficult-to-explain variations in performance. To understand the root causes of better performance, four of the more successful countries in this sample – Ghana, Peru, Chile and Tanzania – were thus chosen for in-depth case studies in the main phase of project research.

Each of the case studies began by documenting the basic performance of the countries concerned. They went on to analyze the drivers of this performance and outstanding challenges – see Spotlight series 02. From this, it emerged that mining, at a minimum, had helped support broadly positive outcomes.

In all four countries economic and policy reforms had led to significant national economic growth and had also coincided with an increase in mining investment. Given the complexity

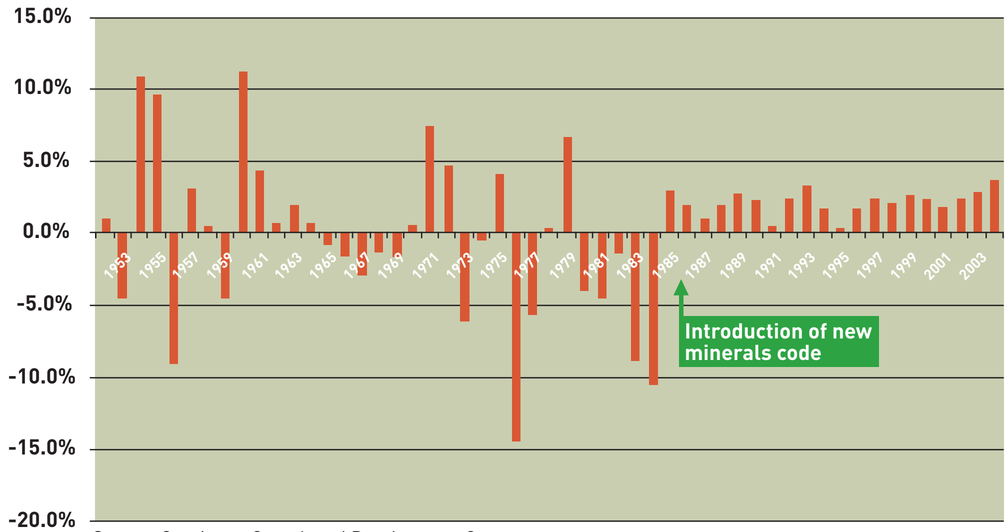
> ‘mining can provide a critical ‘kick-off’ for growth’

of the development process, it was not possible to prove that mining, as distinct from other factors, was a *cause* of economic revival (especially since mining comprised only 5-8% of GDP, and other changes were also underway). Nonetheless in all cases mining investments were clearly an important part of the story as they were among the few significant early productive investments during the period of economic revival. Figures 1 and 2 indicate how, for both Ghana and Tanzania, the timing of new, investor-friendly mining legislation coincided with the start of a period of more sustained GDP growth.

In terms of poverty reduction, Ghana and Chile both recorded significant gains at both national and local levels during the period of mining's resurgence. In Peru, by contrast, poverty levels appear not to have changed significantly, indicating clear room for improvement in social development policies; Tanzania's mining boom has been too recent for any major shifts to have registered in poverty statistics at the national level – although local level analysis showed significant mining company contributions to most of the seven main Millennium Development Goals.

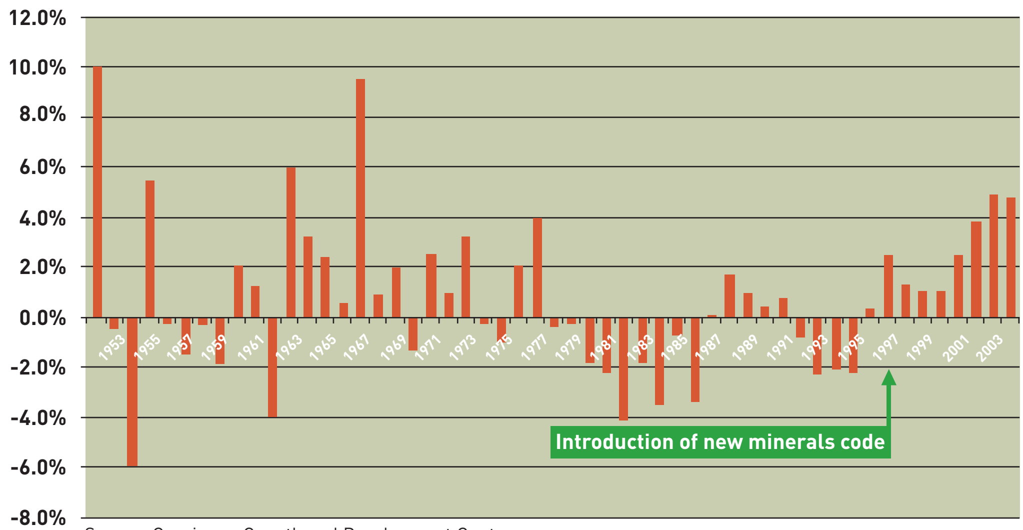
There were three main factors driving these outcomes: reformed (and more predictable) mineral legislation, significantly improved macroeconomic management, and improvements in some dimensions of governance. In terms of the latter, most countries had raised their governance scores to a degree (measured against six composite governance indicators compiled by the World Bank); so mining had at the least not held back some gains in this

Figure 1: Ghana Per Capita Growth Rates: 1950 – 2003 (PPP 1990$)



Source: Groningen Growth and Development Centre

Figure 2: Tanzania Per Capita Growth Rates: 1950 – 2003 (PPP 1990$)



Source: Groningen Growth and Development Centre

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.

ICMM, 19 Stratford Place, London W1C 1BQ
Telephone: +44 (0) 20 7290 4920 Email: info@icmm.com

respect. The case studies also threw up other encouraging findings:

- In **Ghana**, for example, in addition to the benefits noted above, there is evidence that mining was able to respond more quickly to the economic and governance reforms started in 1983 than most other industries. This may be because gold mining, in particular, needs relatively little in terms of established physical infrastructure or a robust domestic market because the gold is mostly exported. Whatever the reason, mining has been the biggest source of foreign direct investment (bringing in over $5 billion since 1986, and constituting 10-17% of tax revenue) and has also overtaken cocoa as the leading export earner.
- In **Chile**, where mining accounted for a third of foreign direct investment (FDI) from 1974 to 2004, there have been both major gains in prosperity and falls in poverty (the number of people living in poverty has almost halved since 1990). Importantly, poverty reduction has been greatest in mining districts: in the Antofagasta region, for example, there was a 60% drop between 1990 and 2003. The mining industry has also established unusually strong linkages with the local economy, with a flourishing local supplier base (partly the result of deliberate policies by the mining firms and the government to encourage such a 'mining cluster').
- In **Peru**, where $8.9 billion has been invested in mining since 1992 and the industry employs some 350,000 people directly or indirectly, the evidence suggests that mining has had a significant role in kick-starting the economy since the early 1990s. While other industries have struggled to become established, basic macroeconomic and policy reforms, as in Ghana, have allowed mining to become a successful industry, with firms also contributing to infrastructure development and basic services in their areas of operation.
- Finally **Tanzania** has followed a similar pattern, albeit with reform begun at a later stage: a basic package of macro-economic stabilization together with reform of mineral legislation has recently encouraged significant new mining investment (mining has comprised over 75% of FDI since 1996). During the same period, mining added 0.3-0.4% extra GDP growth each year. Non-mineral growth in Tanzania has also been both positive (as in the other case-study countries) and also higher than other countries in the region.

In this way, the case studies have bolstered findings from other research about the significant potential for mining to bring benefits. It has often been noted, for example that, from a historical perspective, many of the world's now-leading economies – including Canada, Australia, and the United States – developed at least in part through exploiting their mineral resources. In Australia, for example, gold rushes and mining booms from the mid 1800s onward helped drive not just population increases, and the growth of cities, but also the development of infrastructure such as railways and ports. These factors in turn facilitated the expansion of other industries, including agriculture and manufacturing. Conflicts and tensions also characterized this centuries-long process of development, of course. But the eventual outcome for Australia has without doubt been one of prosperity and sound economic governance.

There is additional evidence that for many current mining investments, too, development objectives have been achieved: a recent independent evaluation of International Finance Corporation mining projects[4] showed that 60% had economic rates of return exceeding 10%, although the report in question also noted that more attention should be paid to protecting people and their environment. In South Africa, meanwhile, research has shown that mining around Johannesburg has led to 'cluster' effects: a wide range of economic activities have been stimulated by the industry and have the potential to create a virtuous cycle of further economic development[5].

At the same time, there is also clearly a need for more analysis, given the critical importance of mineral resources to many economies. A Resource Endowment Toolkit, developed as part of the initiative, should prove useful in this respect. This is a pragmatic and robust methodology for documenting impacts from mining projects at local, regional, and national levels and understanding factors which may prevent their full potential benefits from being realized. It provides a comprehensive survey of both positive and negative impacts from mining and includes a taxonomy setting out potential linkages between mining operations and broader governance issues. The case studies for the project were in fact developed by applying the toolkit, thus contributing to an initial test of its validity. ICMM welcomes interest from its members, as well as others in the industry, in further applying and refining the toolkit to the diverse contexts in which mining projects are planned and implemented.

Without doubt, though, the research from the project has already demonstrated that mining benefits *can* generate a significant socio-economic 'prize'. It has also contributed to a new phase in the literature which is focusing on how the 'resource curse' can be exorcised[6].

In particular, the initiative's research has shown that for those low-income developing countries just beginning to reform their economies, mining can provide a critical 'kick-off' for growth, since standards of governance and infrastructure at that stage may be insufficiently advanced to attract much investment in other sectors. This in turn highlights a flaw in an argument recently made in policy debates that mining investments should be withheld before governance is fully reformed. For the actual effect of this could be to prevent countries with few other development options from starting to lift themselves out of poverty.

Without doubt, once mining investment does begin to flow, the focus should then be on ensuring that governance and macroeconomic management improvements are sustained, and that broader based growth and investment also takes place – just as was achieved in, say, Australia, over the centuries. The prosperity of modern-day Australia certainly shows the 'prize' can be glittering – but winning it can also be a complex, long-term challenge.

[1] The International Council on Mining and Metals.
[2] The Challenge of Mineral Wealth: using resource endowments to foster sustainable development.
[3] The initiative is managed by Kathryn McPhail, Principal, ICMM.
[4] Extractive Industries and Sustainable Development: An Evaluation of World Bank Group Experience, OED/OEG/OEU, 2003.
[5] See Chapters 1 and 4 of the Analytical Framework.
[6] See, for example, "Exorcising the Resource Curse" by Gavin Wright and Jesse Czelusta (Stanford University, 2002) and "Mineral Resource Endowment: Poison or Growth Elixir?" Roger Baxter, South African Chamber of Mines.