Strategies to attract new investment for African mining

John Strongman
Africa is well endowed with mineral resources. The continent is a major producer of bauxite, cobalt, copper, diamonds, manganese, rutile, and uranium. The region's mining potential is much greater than realized, and new exploration and mining development have lagged behind that in other parts of the world. But Africa is now beginning to mobilize the risk capital and investment funds needed for sound and orderly mining development.

Mining companies spend an average of US$2.5 billion a year on exploration and US$40 billion a year in capital investment. But during the 1970s and 1980s Africa attracted less than 5 percent of such funds. Consequently, Africa is relatively unexplored.

Large, well-established private mining operations in such countries as Botswana, Gabon, Ghana, Guinea, Namibia, Sierra Leone, and Zimbabwe have contributed to the economies of those countries for decades. And in the past five years new private mining operations have started up in Ghana, Mali, and Zimbabwe. International mining companies will invest in African countries that have good mineral potential and that match the investment conditions in the rest of the world.

African countries can attract a substantially increased share of world mining investment. Greater investment is the necessary condition for revitalizing mining in Africa and returning to strong sustained growth. But because of the long neglect of exploration, the number of viable projects ready for development is small. The few advanced projects are in countries that performed well in the past.

Most African countries with mining potential should substantially increase exploration expenditures to attract major new mining projects. Exploration expenditures of US$400–500 million a year by the end of the 1990s are feasible if African countries establish an attractive investment environment. This expenditure level would be close to current levels in Canada and Australia.

**Attracting private capital**

African mineral growth has been achieved mainly by the private sector. Future growth will depend on attracting high-risk capital from foreign mining companies with the technical and managerial capability to find new deposits and develop new operations.

Mining investments are capital-intensive, usually involving time horizons of ten to twenty years or more. Investors require competitive terms and conditions, and solid assurances that the investment environment will be stable and that the "rules of the game" will not change.

An exploration agenda requires a clear mining development policy, a reduced role for state mining companies, and attractive conditions for private investors. As long as state companies dominate the local mining industry and control large tracts of prospective land, new exploration investment will be severely limited.

Investors consider country risk to be much lower where there is an explicit commitment to and a demonstrated track record of support for private investment. They believe that countries with such characteristics better appreciate the concerns of investors and are more motivated to respond to them. Investors perceive country risk to be greatest where there is no commercial mining tradition.

**Role of government**

Efficient and rapid mineral development requires governments to allow private companies to take the lead in operating, manag-
ing, and owning mineral enterprises. Governments can encourage mineral development by restricting their role to regulator and promoter, leaving operations and management to private enterprise. Countries wishing to attract high-risk private exploration and mineral development funds should support or develop:

- A legal framework that adequately defines the investor's rights and obligations
- Security of tenure to give the investor assurance of the fruits of success
- A fiscal package that shares the rent of profitable production equitably between the government and the investor
- Guarantees of access to foreign exchange at market rates for repayment of debts, repatriation of capital and profits, and purchase of essential inputs.

Without these essential conditions, new investment is unlikely.

**Benefits to African countries**

Mining generates more than 20 percent of merchandise exports and more than a third of non-oil exports for Sub-Saharan Africa. For nineteen countries, each with mineral production exceeding US$25 million a year, it accounts for about half of exports and a third of taxes.

Governments can obtain a fair share of economic rent from mining through stable fiscal arrangements that are fair to both parties. They can increase their share by making the investment environment safer and thereby lowering the risk premium and returns required by investors and lenders. This requires clear mining development strategies and sound institutional structures. Governments should emphasize earnings-related taxes rather than royalties (or input- or output-related taxes).

Accounting rules along the lines of those used in industrial countries must be adopted. Investors should act responsibly, ensuring arm's-length transactions consistent with accepted international practice.

Country assessments prepared by World Bank staff indicate that at least twenty-five African countries have attractive mineral potential warranting increased exploration expenditures by the private sector (see list below and map on page 3). In Category 1 countries, the geological potential extends across large areas. Each of these countries has sufficient geological potential to warrant expenditures of US$10–20 million a year by private companies. Countries in Category 2 warrant slightly lower expenditures—US$5–9 million a year each. In Category 3 countries, good geological potential is limited to one or two specific regions. Category 3 countries warrant private exploration expenditures of US$2–4 million a year each. Even in these countries, world-class mineral deposits can be found. More countries will undoubtedly be added to the list in the next several years.

**Countries warranting private sector exploration**

<table>
<thead>
<tr>
<th>Category 1</th>
<th>Category 2</th>
<th>Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>Botswana</td>
<td>Burundi</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Burkina Faso</td>
<td>Central African Republic</td>
</tr>
<tr>
<td>Ghana</td>
<td>Gabon</td>
<td>Republic</td>
</tr>
<tr>
<td>Namibia</td>
<td>Guinea</td>
<td>Côte d'Ivoire</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Madagascar</td>
<td>Kenya</td>
</tr>
<tr>
<td>Zaire</td>
<td>Mali</td>
<td>Liberia</td>
</tr>
<tr>
<td>Zambia</td>
<td>Mozambique</td>
<td>Niger</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>Sudan</td>
<td>Nigeria</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rwanda</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sierra Leone</td>
</tr>
</tbody>
</table>
Priority zones for mineral development: precious metals, base metals and diamonds
LES SONS
FROM COUNTRY
EXPERIENCE

Chile
Chile has been highly successful in attracting foreign mining investment. There is no discrimination between local and foreign private investment. One foreign investment law covers all sectors, including mining, and provides for international arbitration in the event of dispute.

All mineral rights are reserved by the state. Mining rights have all the attributes of property rights, being freely mortgageable, transferable, and constitutionally protected against confiscation.

The Chilean Mining Code recognizes prospecting, exploration, and production. Prospecting is open to all persons on any land not covered by an exploration or production concession, subject to payment of compensation to the landowner. This promotes prospecting and protects landowners.

Procedures for granting and transferring concessions are based on technical criteria and are insulated from bureaucratic arbitrariness. Applications are reviewed by the Mining Technical Service, which makes recommendations, and approved by judges. All disputes are settled in the courts.

Effective income tax rates are low. Taxes are levied only on the distribution of profits or dividends. This rewards reinvestment.

Ghana
The Minerals and Mining Law of 1986 allows foreign companies and partnerships registered in Ghana exclusive rights to prospect, explore for, and produce minerals other than construction materials and industrial minerals.

The Mining Law specifies that mineral deposits are owned by the state and grants one agency the power to negotiate, grant, revoke, suspend, and renew licenses and mining leases.

Ghana's tax regime uses a combination of income taxes and sliding-scale royalties based on companies' operating performance.

The foreign exchange regime permits companies to retain up to 80 percent of their foreign exchange earnings in overseas accounts.

Indonesia
In Indonesia, mining companies sign contracts of work with the state and act as "contractors" mining on its behalf. The government has established a strong track record of

Mali—Taking its place in the world mining industry
The landlocked country of Mali in West Africa has a centuries-long tradition of artisanal gold mining. In the twelfth through fourteenth centuries Mali was at the center of West African gold trade. But until recently there were no commercial gold mines in Mali. In 1990 BHP, one of the world's largest mining companies, started production at the Syama open-pit gold mine. Today Syama produces 100,000 oz of gold a year, providing about 25 percent of Mali's exports and 15 percent of its tax revenues. After initial development, BHP is now undertaking a major expansion expected to increase production to 200,000 oz a year. In the meantime, other investors have identified a world-class gold deposit that may contain 3 to 10 million oz of gold reserves, according to preliminary estimates. If the reserves are confirmed and development proves viable, a new mine three times the size of Syama could result.
contractual stability. Ownership of minerals is vested in the state, which regulates all aspects of mining. The Foreign Investment Law guarantees protection of private property and access to foreign exchange. Contracts of work define the rights and obligations of the investor and the government, including financial obligations. Access to foreign exchange, land, and markets and protection against adverse changes in the laws are guaranteed.

Ghana—Attracting foreign investment for gold mining

Ghana’s gold mining industry has experienced a dramatic turn-around in performance since the introduction in 1986 of new mining laws that opened the industry to foreign capital and expertise. Australian mining companies have taken the lead in bringing in new capital and management and in introducing low-cost technology to Ghana, including heap-leaching surface mines. The first wave of investments is taking place in known mines and deposits. Golden Shamrock has a controlling interest in Ghanaian Australian Goldfields, producing 123,000 oz a year. Pioneer has taken over the Teberebi mine and increased production to more than 164,000 oz a year. Ranger Minerals and Kiwi Goldfields are also financing small developments. Other foreign companies investing include Billiton (Netherlands), the majority owner of the Bogusu mine (94,000 oz a year), and Cluff Resources (UK), which is developing a gold mine at Ayanfuri (30,000 oz a year). The government is developing plans for further surveys to encourage private exploration and a second wave of investment in greenfield projects in new areas.

The government is also divesting its interest in the State Gold Mining Company. Goldfields of South Africa is taking over the Tarkwa mine, and Continental Mining and Construction is taking an interest in the Dunkwa mine. The government is reducing its holding in Ashanti Gold Mines, which is operated by Lonrho (UK), from 55 percent to 31.3 percent by floating part of its shareholding on the London stock market. The government is expected to obtain more than US$300 million from the share float. Ashanti, one of the world’s lowest-cost gold mines, has cut costs and increased production from 242,000 oz a year in 1986 to 766,000 oz a year in 1993. It is also implementing an investment program that should raise production to more than 1 million oz a year by 1995.
**ATTRACTING NEW INVESTORS**

**Actions needed**
Many foreign companies are willing to explore or develop projects in Africa. They operate global exploration strategies and will consider working in any country that has mineral development potential. But they are more likely to invest in countries that meet certain needs.

- **Infrastructure**—with the exception of precious metals and gemstones, mineral exploration and development is more likely in areas that are accessible.

- **Mining rights and fiscal terms**—Africa must compete with other regions to attract private investment in mining. Only the African governments can create a policy environment that will attract private investors. Governments must also obtain a fair share of the economic rent through fiscal arrangements that are stable and fair. They need to provide:
  - a guarantee of mining rights in advance of exploration
  - a well-established mining code
  - contractual stability
  - a guaranteed fiscal regime
  - the right to repatriate profits
  - access to foreign exchange
  - the right to import necessary goods and services
  - the right to export
  - protection against losing mining rights or legal title through undue termination or expropriation.

- **Information**
  Most mining companies hesitate to do grassroots exploration. They prefer specific targets or highly prospective regions. They are more likely to be attracted to countries whose governments provide:
  - basic geological data
  - legislative, economic, and fiscal data.

**Actions to be avoided**
Similarly, foreign companies are more likely to invest in countries where certain risks and requirements can be avoided.

- **State ownership and control**
  - mandatory local majority participation, either government or private
  - mandatory provision of social services, restrictions on negotiating wages, and limitations on expatriate personnel.
  (But minority local participation and mandatory training of nationals can be positive.)

- **Political and economic risks**, including the risk that the government may:
  - change the tax regime
  - impose price controls on inputs, outputs, or both
  - insist that the company undertake marginal investments that are not commercially viable
  - require excessive employment
  - require infrastructure or community or social investments not originally agreed to.
Mining code
A modern mining code or a satisfactory project agreement is a prerequisite for exploration and investment by major companies.

The power to grant mineral rights should reside with one authority. Close coordination with the economic and administrative reforms affecting the nonmining sector will be needed.

Most countries assume public ownership of minerals. Virtually all African states exercise permanent sovereignty over their mineral resources. This does not prevent the allocation of secure title to mining rights to private parties, nor does it imply that rights cannot be traded. But it establishes that the state can charge for access to resources and has a legitimate interest in the manner of exploitation. A mining code outlines the interaction between the state and the mining company.

An effective mining code
- Applies equally to all investors
- Clearly specifies the ownership of mineral resources
- Contains explicit criteria for the allocation of rights and allows them to be transferable and saleable
- Ensures that land is either actively explored and worked or relinquished
- Prescribes procedures for settling disputes in the courts or by arbitration.

Twin principles of mining codes
- The investor should have the right to explore for and mine minerals in return for making specific commitments that can be assessed and monitored.
- The investor should have secure and long-term title to mining rights.

What are the choices for mining codes?
- Detailed legislation with a minimum of ministerial discretion, or
- Specific project agreements backed by general legislation
- Gradual adjustment, or
- An immediate shift to another fully elaborated framework.

For countries with a large, established mining industry or with considerable development potential, the recommended approach is a comprehensive mining law with rights granted according to explicit criteria rather than ministerial discretion, and obligations fully specified in the law. For smaller countries where there may be only one or two large mining investments, an alternative is specific project agreements backed by general legislation. Project agreements may also be useful as an interim measure while modern mining legislation is being prepared and enacted.
Few investors incur exploration expenditures without assurance that they can proceed to mine if they find an attractive deposit. The joint interests of companies and governments in the award of mining licenses can be advanced by:

- Providing that only the exploration license holder may be granted a mining license
- Specifying the criteria under which an investor is entitled to a mining license.

**General principles of licenses**

Licenses should:

- Allocate to private parties secure title to mining rights
- State terms for retention of mining leases and the suspension or termination of operations
- State that the mineral rights holder must explore or develop land or release it for others
- Allow rights to be traded
- Allow companies the right to market their product freely
- Clearly specify reporting obligations.

**Types of licenses**

A mining license—issued typically for twenty to thirty years with a similar renewal period—grants an exclusive right to extract minerals.

An exploration license—issued typically for three years with one or two possible renewals for the same period—grants an exclusive right to explore for and prove up mineral deposits. Such licenses:

- State minimum work commitments or surface rental or both
- Establish minimum expenditure commitments in place of a government-designed work program
- Permit the declaration of a "discovery area" at any time
- Establish the conditions under which a mining license will be granted.

A single-license system such as Chile's, under which the license grants the concession holder the right both to explore and to develop and operate a mine, is also possible.

The Botswana Mines and Minerals Act of 1976 provides that the holder of an exploration license who has established the existence of a commercial deposit has a statutory right to a mining license. The investor must submit "a proposed program of mining operations," and the Minister of Mineral Resources and Water Affairs is entitled to impose certain conditions. But if the program meets the criteria set out in the mining code, the license must be granted.
**General principles of investment agreements**

Investment agreements can reduce country-related risk for the investor while protecting the interests of the host government.

Investment agreements formalize the details of:
- Arm's-length pricing
- Satisfactory debt structure for the project
- Reasonable limits for tax-deductible payments to associated companies
- Retention, suspension, and termination issues
- Taxation arrangements
- Omissions or ambiguities in the applicable general legislation
- Safeguards for the investor and the government that may not be adequately set forth in the law.

Investment agreements can also ensure fair and appropriate conduct by investors by securing protection against attempts to reduce tax obligations by:
- Underpricing mineral products sold to affiliate companies
- Overleveraging the project's financial structure
- Making excessive payments to parent or affiliated companies
- Making shareholder loans with above-market interest rates.

Many countries use model agreements as a basis for negotiations. These models help investors familiarize themselves with a country's legal, regulatory, and fiscal environment, form a clear picture of the structure of a deal, and review the guarantees and safeguards that will underpin it.

**Content of investment agreements**

- Clarification of mineral rights: investment agreements may provide assurances regarding such issues as size of exploration and production licenses, duration of rights over successive periods, extensions, and required area relinquishments.
- Obligations of the titleholder: agreements may specify work or expenditure obligations, infrastructure provision, employment, training, health, safety, reporting and accounting requirements, and environmental obligations.
- State participation: agreements may specify whether state participation is optional or mandatory, the timing, structure, level, and financing terms of participation, and the allocation of managerial responsibility and operational control.
- Fiscal provisions: fiscal provisions are best included in a country's fiscal law. Agreements may, however, provide assurances that taxation provisions will remain stable over the life of a mine.
- Financial considerations: agreements may detail foreign exchange arrangements, provisions for debt repayment and dividend and capital repatriation, escrow accounts, minimum debt-equity ratios, and criteria to regulate intercompany transfers, such as charges for management services.
- Legal safeguards: agreements may include arrangements for settlement of disputes, including the use of arbitration, force majeure provisions, and guarantees against improper termination or confiscation.
Tax policy

Tax policy not only determines how rent is to be divided between governments and investors, but also establishes conditions for investment and rent creation. Mining companies strongly prefer earnings-based taxes to royalties because of large fluctuations in profitability.

A sound tax regime will provide incentives for investment while ensuring adequate compensation to the country for the resources extracted. At the sectoral level, tax policy should maximize tax revenues over the long term (ten to twenty years).

Fluctuations in mineral revenues should be dealt with by appropriate macroeconomic policy measures, not by special taxes. Suitable macroeconomic policies normally would be superior to a tax system that generates lower but more stable revenues.

Governments should:

• Use mineral revenues to achieve economic and social aims rather than forcing the mining industry to pursue these secondary objectives
• Establish earnings-based taxes since such taxes do not distort investment and production decisions
• Not require local purchasing of supplies
• Not oblige, or offer incentives for, mining companies to use employment-increasing techniques.

Tax packages

The structure of the tax system, as well as the size of the tax burden, will have a strong influence on investor decisions. Profit, dividend, and cashflow taxes are more attractive to investors and will cause less distortion to investment and operating decisions than input- or output-related taxes.

• Mineral taxes should be consistent with domestic tax arrangements. If Africa is to attract investments from international mining companies, its tax regimes must be comparable with those of other countries.
• Mineral taxes should be fixed and stable over the long term.
• The tax regime should apply equally to foreign and local investors, and to private and state-owned enterprises.
• Double taxation and the sacrifice of tax revenue to foreign tax authorities should be minimized.
• Accelerated depreciation should be considered as a way to promote the rapid recovery of exploration and development expenditures.
• If state participation is sought, this should be taken into account in designing a tax package.
In countries where mining is an important economic sector, an effective institutional framework comprises five main building blocks. The principal building blocks are the Ministry of Mines and the Geological Survey, which need reconstruction to carry out the core regulatory and promotional tasks. In countries with little mining tradition, temporary administrative devices will be important until permanent institutional arrangements are established.

**The Ministry of Mines**

This channel through which investors deal with the government when preparing projects and negotiating agreements is responsible for:

- Broad policy direction
- Coordination with other ministries
- Organization and negotiation of mining agreements
- Supervision of mining sector agencies.

**The Department of Mines**

This subunit within the Ministry of Mines:

- Licenses and administers exploration and mining rights
- Monitors compliance with work or expenditure requirements and health and safety standards
- Assists companies with project coordination
- Compiles production statistics and general industry information.

**The Geological Survey**

This independent government agency under the general supervision of the Ministry of Mines carries out:

- Mineral reconnaissance
- Geological mapping and publication and dissemination of maps
- Compilation of a modern and accessible geological and exploration data base.

**Mineral Promotion Agency**

Some countries may set up a small independent government agency, with no decision-making authority, to act as:

- An introductory and facilitating agency providing a key point of contact for prospective investors, especially those with little knowledge of the country.

**Environmental Office**

This agency, which oversees the environmental performance of the mining sector:

- Sets environmental standards
- Monitors exploration and mining operations
- Enforces compliance with established standards
- Reviews environmental assessments for new projects.

**Institutional capabilities and skill development**

Skill development in Africa’s mining sectors has tended to concentrate on technical education in geology, mining engineering, and related disciplines. But skill formation for regulatory functions has been much less effective. Most African countries have difficulty fielding mining lawyers, contract negotiators, financial analysts, mineral tax specialists, and public administrators experienced in mining law.
ENVIRONMENT

In comparison with such global and national environmental issues as deforestation, desertification, and climate change, the effects of mining are generally localized, identifiable, and specific, and adequate technology is available to deal with them. But mineral beneficiation and processing can involve the use of toxic materials, and it is essential that satisfactory operating practices are enforced. The necessary measures to safeguard the environment and the health and safety of the population and the workforce can be incorporated in legislation and regulations.

New plant and equipment usually provide both improved efficiency and superior environmental performance. Improved physical environments are conducive to improved productivity in the mines and plants and in the community at large.

Standards and policies
African governments need to:
- Set appropriate environmental, health, and safety standards
- Establish procedures for reviewing performance and monitoring compliance
- Ensure that new projects are designed and developed according to acceptable standards.

Many industrial countries have adopted standards set by neighbors with similar environments, or have adopted the U.S. Environmental Protection Agency standards. African countries may need to modify such standards for local conditions. They can also adapt health and safety standards from industrial countries.

Procedures and agreements
Some mining agreements and environmental codes give governments the power to suspend operations they consider environmentally damaging. The criteria for taking such action must be clearly defined to prevent greatly increased risk to the investor. Both governments and companies have an interest in ensuring that such power need not be used.

Existing mines
International companies are improving their environmental standards, but many state companies are lagging behind. A suitable approach could be to:
- Identify problems at existing mines and take initiatives to address them
- Agree with the company on a realistic timetable for priority actions
- Establish specific sanctions to be applied if the timetable is not met
- Require companies to take prompt measures to deal with emergencies
- Consider expenditure on such emergencies as ordinary operating costs.

Compensation and reclamation
A reclamation fund under independent or joint control could be built up through tax-deductible contributions by a company in proportion to the estimated depletion of the ore reserve. The eventual target value of the fund would be regularly reappraised.

Alternatively, a government and a company could fund agreed-on reclamation expenditures in proportion to the share of the cash flow each has derived from the mine. As in the United States, a carryback of tax losses could be introduced to allow companies to recover reclamation expenditures against past tax payments.

Allowing companies to make tax-deductible provisions is a problem for jurisdictions observing English tax law since deductions normally cannot be taken until expenditures are made. The funds provided would remain under the exclusive control of the companies.
Background

Performance of state mining enterprises
During the 1960s and 1970s many countries nationalized previously private mining enterprises and focused on public sector intervention. The objective was to maximize returns to the state and the people. In most cases the results have fallen far short of this goal. State-owned enterprises have been poorly managed, have become progressively undercapitalized and technologically outdated, and have been outperformed by private mining companies in Africa in the past thirty years.

From 1960 to 1989 the value of mineral production by privately controlled mining companies more than doubled, from US$3.9 million to US$8.2 million. By comparison, in the same period the value of production by state-controlled companies increased from US$2.5 million to US$3.4 million (all figures in 1989 terms). Production by state mining companies has been steadily declining—and in some cases has ceased—in Ghana, Madagascar, Sierra Leone, Tanzania, Uganda, Zaire, and Zambia. Production by most privately controlled mining companies has remained steady or increased.

Objectives
State-controlled companies are expected to fulfill multiple objectives. Private mining companies have one principal objective—to generate profits. Objectives such as promoting regional development, creating employment, and generating foreign exchange often conflict with profitability. Given these competing objectives, state-controlled companies must carry out a broad range of activities—such as providing education and health care and managing townsites—in addition to the core business. Private companies focus on the core business of mining.

State-controlled companies typically are centralized, with limited authority and managerial autonomy. Private companies are often decentralized, giving them flexibility, authority, and managerial autonomy.

Governance
There are also important differences with respect to corporate governance and cash flow distribution. In a state-controlled company board members and senior managers are often appointed based on political reasons and are subject to political pressures. Cash flow distribution is decided according to the needs of the economy, and companies may have insufficient funds for exploration and investment. In private companies directors and officers are selected for their business talents, and the commercial needs of the firm determine how much of the available cash flow is distributed to shareholders and how much is retained for capital expenditures.

Different organizational structures, managerial autonomy, and focus give private companies an edge in responding to change. Not surprising, they are more cost-efficient and productive than their state-controlled counterparts.

Reform options

Overview
If state mining companies are to operate efficiently, they must operate more like private enterprises. There are two broad approaches to achieving a private sector management style. One is reform from the inside—commercialization. This involves clear commercial goals, firm budget constraints, and increased accountability and autonomy for managers, with clear rewards and sanctions linked to performance. It requires solid government
commitment and discipline.

The second approach is total or partial privatization, placing the strategic and operational control of the company in the hands of a technically and financially qualified private sector partner (or partners) with a major stake in the company's successful performance. Privatization typically is a more complex process than commercialization and may require the involvement of outside specialists.

The commercialization option
Attempts to commercialize public entities in Africa have been discouraging. Most African countries are characterized by serious macroeconomic, financial, and social problems, limited, often ineffective, and corrupt administrations already struggling to implement reform programs, and a fragmented society with a longstanding political focus on wealth distribution rather than wealth generation. Too many conflicting interests must be resolved for commercialization to succeed, and no amount of financial engineering is likely to overcome these conflicts overnight.

Management contracts have had only limited success as an intermediate way to push commercialization. The contractor has an insufficient stake to operate freely and remains dependent on the owner.

The privatization option
Given the political and social realities of most African countries today, reform of state mining companies will require partial or complete privatization. Management and operational control of companies should be given over to private stockholders. Privatization does not require management to prepare and implement a plan, which would surely contain elements against its interests. Indeed, privatization of a parastatal company may never be realized if the process is placed in the hands of company officials. Instead, privatization requires the government, as owner of the company, to make policy decisions within its normal political realm.

The privatization process
Preparation
Although preparation of a detailed plan will require the assistance of consultants with experience in both mining and privatization, establishing the necessary legal, financial, and investment conditions remains the sole prerogative of the government. Privatization involves:
- Assessing the enterprise
- Preparing it for sale
- Carrying out the sale transaction.

Several factors should be borne in mind during this process:
- Government policies on privatization
- The company's strengths and weaknesses
- The company's position in the international marketplace.

Prerequisites for successful privatization include clear agreements on:
- Overall regulatory and fiscal framework for the mining sector
- Employment reductions
- Financial liabilities
- The treatment of existing environmental problems.

Mining-specific features
The mining industry has several unique features that distinguish its privatization from that of other industries. In most countries mineral deposits are owned by the state and "leased" to the enterprise; thus, issues of national patrimony are often involved. Mines are often located in remote areas and incur heavy social responsibilities, for town-
ships and other infrastructure. Mining operations are, by their nature, harmful to the environment. For state-owned mines, this problem is complicated because they have largely lacked the capital to invest in new environmentally benign technologies. Finally, many state-owned enterprises are integrally linked to local industries, in particular small mines that depend on state enterprises for such services as smelting and refining.

Role of technical experts
Maximizing the value of the sale of a state-owned mining enterprise is not simply a financial exercise. Mines have specific technical considerations that can make or break a deal. These can be brought to light only through deliberate evaluation of the operations by technical experts. The value of the mineral deposit is the defining variable in most privatizations of mining enterprises. After the comprehensive technical review has been completed, an investment bank can proceed with preparing prospectuses, surveying potential buyers, and developing a divestiture strategy.

Enhancing the value
The value to the government of the sale of a state-owned mining enterprise can be enhanced through the identification of “hidden” assets, such as undeveloped ore bodies or unexploited reserves. Sometimes selling the enterprise as a group of assets rather than as a business or as a going concern will enhance the value. In many cases it is necessary to remove certain liabilities from the company’s balance sheet—by reducing the labor force, transferring social facilities to municipal authorities, and providing indemnification for environmental liabilities.

Various commercial aspects of privatization should also be recognized. Mineral prices are highly cyclical. More interest in the potential sale of an enterprise will be generated if the relevant markets are robust. The assessment of a company’s competitive position on international markets should be strictly objective. Many state-owned entities have no competitive position and will face great difficulty in attracting investor interest.
The World Bank Group consists of several related organizations. The International Bank for Reconstruction and Development (IBRD) makes loans to governments (a) to support economic stabilization and adjustment ("policy" lending); (b) to help finance specific projects ("investment" lending); and (c) to strengthen government institutions and capabilities ("technical assistance" lending). The International Development Agency (IDA) provides soft "credits" for the same purposes to the poorest countries and to noncreditworthy countries. The International Finance Corporation (IFC) makes loans to and provides equity investments for private sector projects and also provides investment advisory and privatization services. The Multilateral Investment Guarantee Agency (MIGA) provides loan guarantees against noncommercial risk including currency transfer and convertibility, war or civil disturbance, expropriation, and breach of contract.

The World Bank Group is working to assist various African countries to encourage new private sector exploration and mining investment. Activities include measures to improve the policy and regulatory environment and to mobilize financing for exploration and mining projects.

**Policy and regulatory reform**

- Support sound macroeconomic policies
- Help establish clear mining policies with updated legislation and fair and competitive fiscal terms
- Support development of strong institutional capabilities to administer the mining code and negotiate agreements
- Design model investment agreements and assist in negotiations with investors
- Assist with analysis of environmental issues and design and implementation of environmental standards and safeguards
- Provide technical assistance for the privatization of state mining companies.

**Exploration and investment promotion and financing**

- Help geological surveys to assemble and reevaluate information using modern techniques and to publish geological and other maps
- Support training efforts and introduce computer technology for geological database preparation and information systems
- Design and support promotional activities, including brochures and promotional events
- Participate in mobilizing the necessary financing for selected mine and infrastructure investments
- Provide guarantees for loans for new mine and infrastructure projects.

John Strongman is Principal Minerals Economist, Industry and Mining Division, Industry and Energy Department, Finance and Private Sector Development