Investment in Developing Countries

# IFC Impact



Spring

# Fiery Times in Asia

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*IFC is a member of the World Bank Group supporting private sector development in member countries through investment, advisory services, and technical assistance.*

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# IFC Impact

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**Cover:** A shadow puppet of Hanuman, monkey hero of the "Ramayana," c. 1900. Denpasar Museum, Bali, Indonesia.

All references to dollars are U.S. dollars unless otherwise indicated.

# Mailbag

## To the Editor

**Gleanings from Gabon**

I was very pleased to receive the last issue of *Impact*. The article which provoked me to write was the one on the privatization of the water and power company in Gabon (*SEEG Money: A Triumph of Transparency*), because it is very much relevant to the ongoing privatization process in Pakistan.

Since the 1980s the government of Pakistan has gradually adopted the policy of liberalization and started implementing the policy of "3D" (denationalization, deregulation, and decentralization). Initially under this policy industrial units (mostly those that were nationalized in early 1970s) were privatized, with a marked reduction in red tape and regulation to encourage participation of the private sector in financial and industrial growth. These policies were highly appreciated by both domestic and foreign investors, although time and again cases of nepotism, kickbacks, and bribery came to the surface.

Initially the populace of the country was not much concerned about these policies, although many appreciated them under the assumption that increased participation by the private sector would create more job opportunities and result in increased income levels across the board. On the other hand people also believed that increased private participation would increase productivity and competition, thus both improving the quality of the products and services produced and decreasing prices. But the experience in Pakistan was entirely opposite. Industrialist-formed cartels emerged (either due to lack of any regulatory framework or to weak penalties and implementation of laws) that resulted in lower quality products and services and increased prices.

The issue of privatization and private sector participation in Pakistan has lately become most controversial, especially in the case of the water and power sector. In Pakistan every year since 1984, peak demand for electricity has exceeded dependable capacity. In 1993 the shortage reached its maximum level of 1,588 MW, forcing the government to look for some means to avoid the infamous load shedding.

Due to fiscal constraints the government could not use its own resources to finance new projects. One of the main reasons it had to give lucrative incentives to private investors in the power sector was the high losses that were building up every year. This includes purchase of 60% of installed capacity (at the rate of 6.2 U.S. cents per unit) by the Water and Power Development Authority (WAPDA), which used to be the only agency controlling the water and power sector in Pakistan. WAPDA also used to be one of the most profitable institutions in Pakistan, making a profit of over 15 billion rupees per annum just a few years back. Last year it made a net loss of Rs 17 billion, and its losses may shoot up to over Rs 50 billion in the next two years.

The main flaw of the agreements signed with the Independent Power Projects (IPPs) was that agreements were signed only for power generation. No attention was paid to transmission and distribution. The result can be seen in the closing of WAPDA's generating units to buy power from IPPs. The other reasons for WAPDA's fiscal imbalances are inefficiency, subsidies to various sectors and non-payment of bills by its consumers, especially the public sector. Due to all these factors the power tariffs in Pakistan in the last few years have gone up by more than 100%. In the near future they will likely increase by another 40%!

The government is planning to privatize the Karachi Water and Sewerage Board (KW&SB) and the Karachi Electric Supply Corporation (KESC) in the near future. With the past experience in power generation, there is a fear that privatization of transmission and distribution of basic utilities will also result in a hike in tariffs, with no improvement in quality of service and expansion to more people and other regions. This fear is due to the fact that after the involvement of the private sector in the power sector in Pakistan since 1994, there has been virtually no improvement in quality of service. The general public in Pakistan still faces the infamous load shedding, especially in hot summers, even though the tariffs have gone up by more than 100% in last two years or so. Another implication of privatization has been the large number of layoffs, which also created socioeconomic problems for the affected in particular and the country in general.

Therefore, the article on privatization of Gabon's water and power company SEEG could be an eye opener for our policymakers. It is wiser to emphasize improving quality and reducing prices than to go for the highest bid. Higher bids may generate large sums for the government, but consumers will have to pay high prices for basic utilities for the rest of their lives. After all, shouldn't the role of government be to make life for the general populace more comfortable, and not more arduous?

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*But we might edit them.*
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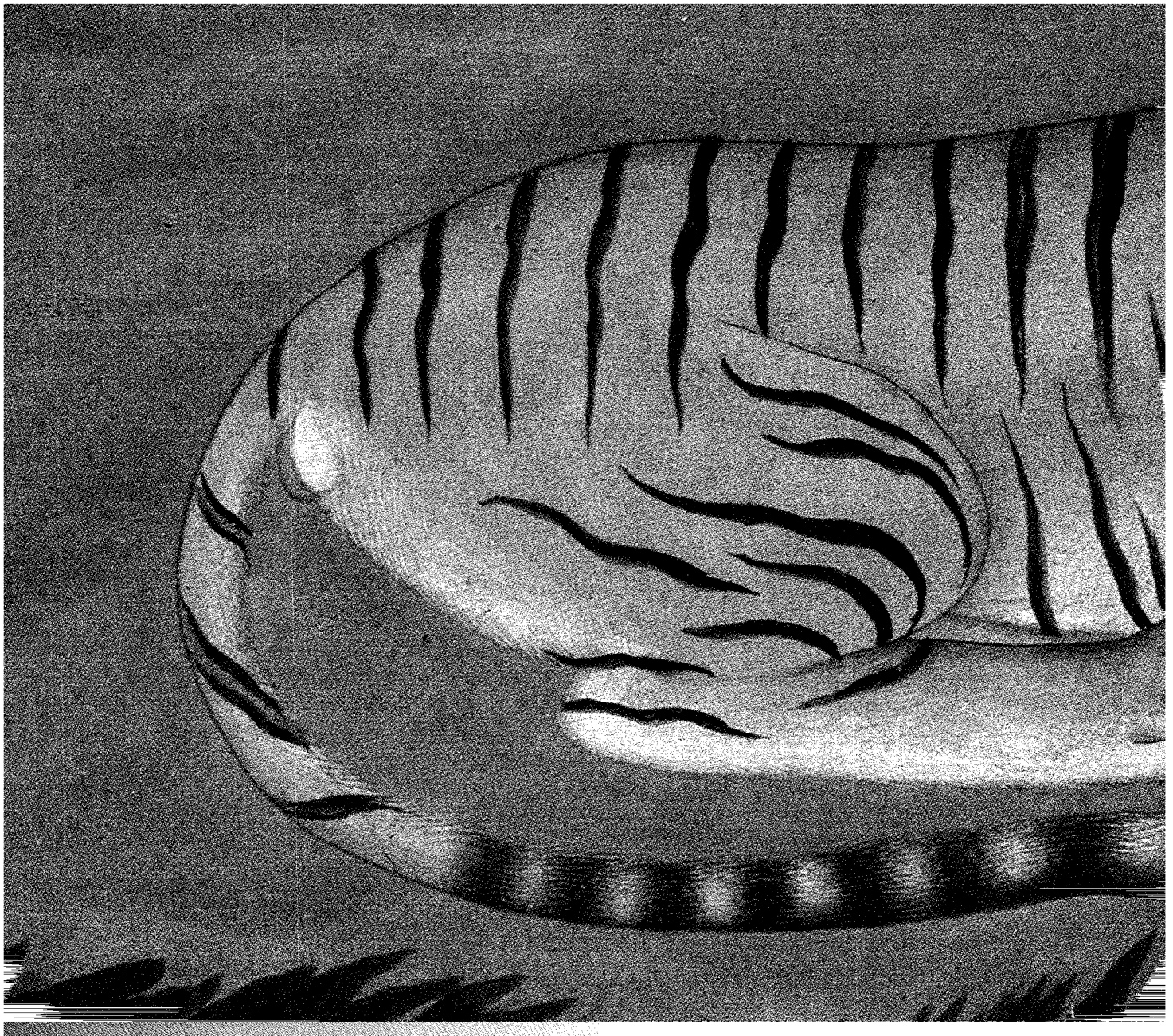


# Tigers Tamed: Asian Danger, Asian Opportunity

By Teresa C. Barger, *IFC Capital Markets Department*

**Financial Fiasco in the Pacific Rim — Making Sense of the Mess —**

The "Asian miracle" was, and is, quite real in many aspects of development. But recent events have shown that it never extended to finance. Indeed, if there is any one particular lesson that can be learned from the crisis of 1997–98 in some Asian tiger economies, it is that the financial sector's importance to development cannot be overstated.

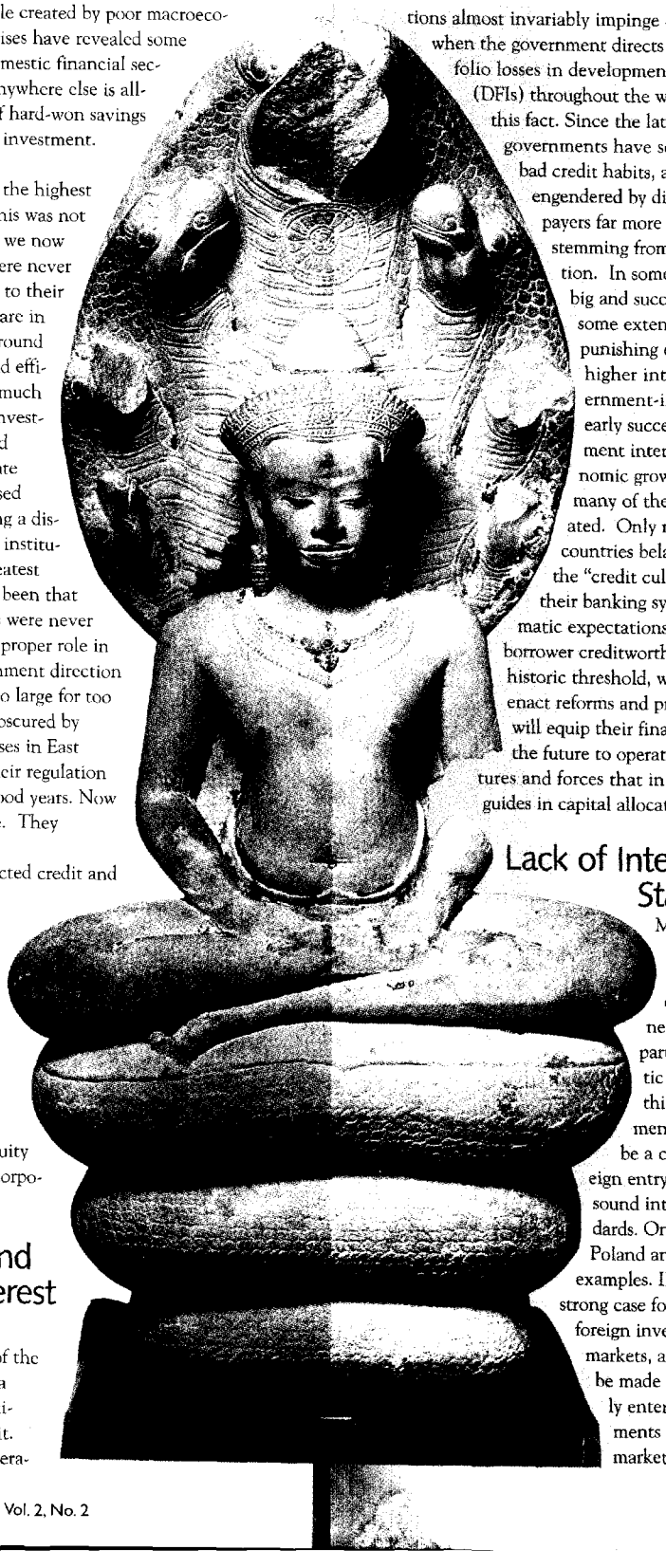
Many of the East Asian economies have excellent savings records. They have also made enormous strides in investing in human resources and in raising living standards. But they have lagged behind other developing countries in building robust financial sectors, a broad variety of financial products, and top-flight financial sector regulation and supervision. The consequences of these omissions are now painfully evident.

A short commentary such as this cannot dissect the various developing Asian markets' every financial sector problem. Financial historians will likely be busy with this task for many years to come. But the recent upheavals in Korea, Thailand, Indonesia, and, to a lesser extent, in the Philippines and Malaysia, are not out of keeping with the lessons IFC has learned in its financial sector operations in many different parts of the world over the years. Clearly, exchange rates pegged at unrealistic parities played a key role in precipitating the downward spiral in East Asia. The dollar's 50% appreciation against the yen between 1995 and 1997 left export-based economies highly vulnerable, quickly eroding much of the competitiveness on which years of rapid growth had been based. Had exchange rates not been administered, local currencies would have been allowed to fall as the dollar rose, easing adjustment and keeping exports more competitive over time. All the while, some countries had been running current account deficits, only to see them increase to perilous and unserviceable levels when the dollar rose. Another critical factor was the risky but rational decisions by local corporations to borrow abroad at cheaper interest rates than were available locally to fund projects that often did not generate foreign currency and did not match the tenor of the borrowings. This was matched, of course, by the questionable eagerness of foreign lenders to lend at low spreads under these conditions. For many, this loanfest led only to an unbearable dollar debt burden once the tsunami of devaluations hit East Asia's shores.

But in addition to the debacle created by poor macroeconomic choices, the recent crises have revealed some basic flaws in the region's domestic financial sectors, whose role in Asia or anywhere else is all-important: the channeling of hard-won savings into prudent and productive investment.

The Asian tigers had among the highest savings rates in the world. This was not their problem. The problem, we now see, was that these savings were never properly allocated, never put to their most productive use, as they are in other successful economies around the world with free, open, and efficient financial markets. Too much savings, it is now clear, was invested in overheated, illiquid, and speculative domestic real estate ventures whose values collapsed when the bubbles burst, taking a disastrous toll on local financial institutions, loan portfolios. The greatest problem of all may well have been that the domestic financial sectors were never allowed to play their full and proper role in the marketplace, since government direction and intervention remained too large for too long. Like active volcanoes obscured by clouds, these critical weaknesses in East Asia's financial sectors and their regulation were hard to see during the good years. Now they stand out as never before. They include:

- problems arising from directed credit and administered interest rates
- the lack of international standards in regulation, accounting, and operating policies
- poor and non-transparent supervision
- the lack of medium- or long-term local currency debt markets and
- the scarcity of adequate equity in both the financial and corporate sectors.



## Directed Credit and Administered Interest Rates

Policymakers in most regions of the world have known for at least a decade that government is ultimately a poor allocater of credit. Why? Political or social considerations almost invariably impinge on the lending process when the government directs credit. The resulting portfolio losses in development finance institutions (DFIs) throughout the world give stark testimony to this fact. Since the late 1980s and 1990s most governments have seen that poor portfolios, bad credit habits, and sloppy management engendered by directed credit cost the taxpayers far more than any social benefit stemming from government credit allocation. In some East Asian countries, the big and successful export push was to some extent driven by rewarding and punishing exporters via lower or higher interest rates given by government-influenced banks. The early success of this kind of government intervention and the high economic growth rates probably masked many of the underlying problems created. Only now are some of these countries belatedly struggling to create the "credit culture" long missing from their banking systems, one based on automatic expectations of prudent scrutiny of borrower creditworthiness. They now stand at a historic threshold, with the opportunity to enact reforms and promulgate practices that will equip their financial sectors far better in the future to operate within the market structures and forces that in the end are the best guides in capital allocation.

## Lack of International Standards

Many of the Asian countries (including, notably, the region's largest capital creator, Japan), have never allowed full foreign participation in their domestic financial sectors. While this is a choice many governments make, there appears to be a correlation between foreign entry and the adoption of sound international operating standards. One need only look to Poland and Hungary for successful examples. IFC has long made a strong case for the positive effects of foreign investors in domestic equity markets, and a similar one can also be made in banking. IFC generally enters into banking investments in newly reforming markets together with foreign

technical partners for one simple reason: they bring important new and complementary skills into the market. Foreign participants also bring with them many of the elements of their home-country regulation such as worldwide auditing standards, capital adequacy norms, conservative and realistic provisioning criteria, and asset-liability mismatch controls. Often these banks can contribute to the demand for better domestic regulation in the emerging market itself. Increasingly, IFC sees that international capital markets are a source of pressure to create high regulatory standards. In a perfect world, countries with worse regulation should receive worse credit ratings on their international bond issues, as increasingly they do. Here again, the export and economic growth history of the Asian tigers probably compensated for the shortcomings in regulation in the mind of many credit analysts — at least until the flaws were revealed.

## Poor and Non-transparent Supervision

In any market the financial sector must be regulated. There is virtually no such thing as an entirely "free market" in finance, especially in segments that take consumer deposits. But regulation is only as good as the enforcement behind it. The East Asian countries are not alone in their plight. Inadequate supervision is an Achilles' heel in many, many banking and brokerage markets throughout the developing world. Some Asian countries, however, may be poorer than average in the transparency of their regulation. Cozy relations between financial regulators and financial institutions are not unknown in some Asian countries, and many of them find this habit difficult to break, despite the damage it has done to their economies.

## Inadequate Local Debt Markets

Precious few emerging markets have the macroeconomic stability required to create medium-term debt markets, much less long-term ones. They lack the benchmark government securities needed to create a reliable yield curve and have few investors willing to invest beyond a year or two due to expectations of large macroeconomic swings that may leave them with underperforming assets. Ironically, some Asian markets had more potential for developing medium-term instruments and debt securities markets than any other region in the developing world. Some had a history of macroeconomic stability (which turned out to be built on unrealistic exchange rates), governments with the ability to issue bonds with a range of tenors, institutions willing to buy debt securities, and corporations with large enough borrowing programs to justify the initial costs of bond issues. A regional short-term debt securities market was already emerging in pre-crisis Asia, and IFC itself was involved in commercial paper and securitization projects. With hindsight, had governments maintained realistic exchange rates and economic policies that in turn encouraged reasonably low interest rates and sound local debt markets in both banking and securities assets, the problems and consequences of excessive indebtedness in foreign currency at imprudently short tenors would have been avoided.

## Scarcity of Equity

Taking a cue from its neighbor Japan, Korea in particular maintained an economic regime based on exceedingly high debt-to-equity ratios. IFC even maintained a "Korean exception" for its own


investments. Its leasing investee had debt-to-equity ratios up to five times the average allowed by the operating policies in its other leasing investments. This was based partly on the belief that a "convoy economy" could sustain cyclical shocks in specific businesses, and partly on a successful past history. But in the light of recent events, the convoy economy model, in which group companies can steady a weakened member until it regains its footing, may not work when the entire economy suffers a shock, and when it becomes apparent that a "chain" economy is only as strong as its weakest link. Also, excessive indebtedness was tolerated by an equity market that declined to exercise appropriate corporate governance pressure. The Korean and Thai stock markets had unusually severe restrictions on the entry of foreign investors and may not have benefited from the discipline that international institutional investors can bring to a market. Indonesia also suffered from inadequate regulation and a history of direct government involvement in the stock market. Now, as these countries rebuild their economies, they sorely need equity in the capital of financial institutions and in the corporate sector. It is clearly a time to get their equity securities markets up to speed by adopting international standards of regulation, supervision, operation, and disclosure.

Financial crises are in no way unique to developing Asia. Indeed, in the past decade they have even occurred, and been largely overcome, in the United States (savings and loans) and in Japan (bank-

# Responding

[illegible] Central Bank [illegible] at the bank's book of business and an [illegible] international standards. Credit Committee. Although the regulatory climate in the Philippines is considered sounder than many others in Asia, he was still able to identify several future banking risks. IFC used these findings to compare FEBTC's performance with that of its peers and to recommend necessary changes. As a result, IFC's loan provides unique incentives to encourage FEBTC to adopt stricter provisioning policies, limit asset-liability mismatches, and adopt prudent, well-defined risk management facilities for its emerging derivatives business. To encourage the bank to increase its transparency, the IFC loan carries a pricing innovation through which spreads can be adjusted up or down in according to incremental changes in the credit rating FEBTC plans to obtain from an internationally recognized credit rating agency. Until now the bank has not been rated.

IFC's package consists of a loan for its own account of $45 million and a loan for the accounting of participant banks of up to $15 million. It is financing that FEBTC asked IFC to arrange as a follow-up to a $75 million credit line to FEBTC approved in June 1997, shortly before the Philippine peso began to fall. Of that total, $50 million was co-arranged by Sakura Finance Asia Ltd., with Dai-Ichi Kangyo Bank, Mitsubishi Trust and Banking Corp., and Mitsui Trust and Finance Ltd. as lead managers.

FEBTC, which was established in 1960, has been a pacesetter in the local financial market. One of the few banks in the Philippines not controlled by a single family, its principal shareholders include Sakura Bank of Japan (25%), the general public (22%), the Gokongwei family of local conglomerate J.G. Summit Group (20%), and Philamlife, local subsidiary of U.S. insurance giant AIG (8%).

**Illustrations**
*Pp. 2-3: Detail from untitled painting, perhaps painted for William Fullerton, c. 1760-63. Victoria & Albert Museum, London.*
*P. 4: Buddha on Naga. Lop Buri School. (stone) National Museum, Ayuthaya, Thailand.*
*P. 5: Buddhist temple, Bangkok.*

ing), Scandinavia (banking) and many other developed countries. The fact remains that East Asia's development potential and progress have many other remarkably sound underpinnings such as high savings, public investment in education, outward focus, adoption of advanced technology, and poverty alleviation through broadly shared growth. Unfortunately, the Asian miracle has not yet encompassed finance. If it now does so, the region will have a much sounder basis for even stronger performance in years to come. ■


## Wisdom of the E

*The Chinese word for* ***cri***
*(wei ji, above) combines the*
*characters for* ***danger***
***opportunity.***

## Uzbekistan: Three of a Kind

Agriculture is the heart of the Uzbek economy. It accounts for about 30% of GDP, contributes about 60% of export earnings, and directly employs about 40% of the labor force. The country is the world's fifth largest producer of cotton and the second largest cotton exporter after the United States.

Uzbekistan's industrial base is also centered around processing agriculture-based raw materials and manufacturing related machinery such as cotton harvesters and textile machines. But the sector is facing a critical shortage of farm equipment, with the available stock largely outdated in design and operation. Farms also cannot obtain the long-term credit they need to acquire more modern equipment. As a result, production has declined in the last two years, and crop losses at harvest are substantial. In 1996 cotton harvesting losses partly related to under-mechanization were estimated at 20% of the crop, or US$140 million.

To address the situation, IFC has provided $60.4 million to help finance the launch of three interrelated companies in Uzbekistan, each a joint venture between Uzbek entities and a subsidiary of Case Corp. of the United States. They will introduce new technology, management know-how and market forces to Uzbek agriculture and accelerate the country's transition to a market economy.

The manufacturing component (UzCaseMash) will produce cotton pickers and grain headers for combines specially suited for local conditions to improve harvesting productivity and efficiency. The service component (UzCaseService) will ensure proper maintenance of equipment through a network of 13 service centers. The leasing component (UzCaseagroleasing) will mitigate the shortage of term credit by providing a new financing mechanism to enable farmers to acquire new equipment and machinery. In time it is expected to be a model for the establishment of similar leasing institutions in Uzbekistan and throughout Central Asia.

The project marks the first time IFC has taken an integrated, multicomponent approach to address the needs of a country's key economic sector.

*— Ketki Bhagwati, Raymond Chiu, and Per Kjellerhaug*
*IFC Central Asia, Middle East & North Africa Department*
*and Paul Crystal, IFC Corporate Relations Unit*

## Tanzania: Uplink

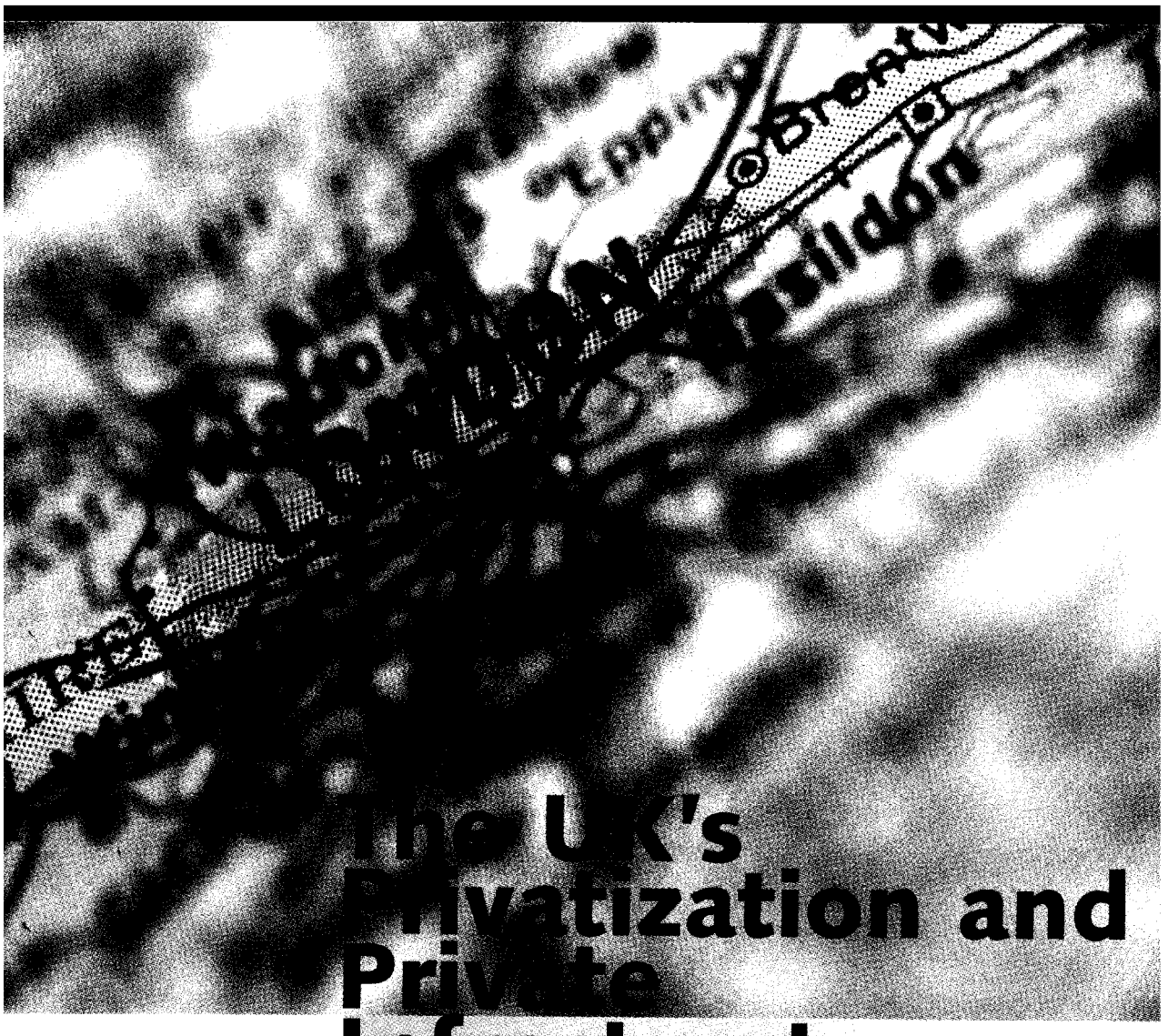
Tanzania has one of the world's thinnest telecommunications networks. It has fewer than 100,000 lines for a population of 29 million, a call completion rate of only 35%, and little ability to serve the country's current needs for data communications. Quick exchange of information and financial resources is vitally needed to spur domestic and foreign investment throughout the promising tourism, infrastructure, and agribusiness sectors.

To help fill this gap, IFC has recently approved a $2.25 million loan and $507,000 equity investment for Datel Tanzania Ltd., which will establish, install, operate, and maintain a national data communications network. A joint venture between Nexus International of France and state-owned Tanzania Telecommunications Company, Datel will invest a total of $10 million to introduce Very Small Aperture Terminal technology and wireless systems that will operate independently from the existing network.

By providing much-needed data transmission services and Internet access, Datel will greatly increase business efficiency. For example, in the banking sector most money transfers currently take a minimum of 30 days, hampering security and confidence in the banking system. Reducing the time frame for transfer of money will result in a higher rate of mobilization of domestic savings and will serve to increase domestic economic efficiency. Early positive results have been achieved with the Bank of Tanzania, which has already interlinked its five branches through Datel. Another Datel client is French oil company Total, which now can exchange market and operational data with its headquarters in Paris.

IFC's proactive role in this project began in 1994 when it used trust funds from Finland to engage consultants for early design work. Through an open and competitive international bidding process, Nexus International was selected from five international telecommunications operators. In 1996, IFC used trust funds from Norway to retain consultants to study the network's technical viability and update market conditions. With observer status on Datel's board, IFC will continue to play a neutral and balancing role in looking after the future best interests of the company.

*— Omari Issa, IFC Telecommunications, Transportation and Utilities Department and Paul Crystal, IFC Corporate Relations Unit*



# The UK's Privatization and Private Infrastructure Programs: Lessons for Emerging Markets

Adrian A. Montague, *Chief Executive, Treasury Taskforce, London*

**Power, Transport, Telecom and More...**

Governments throughout the world face mounting demands on scarce public resources. At the same time the pressures of international competition mean that they want efficient enterprises, capable of competing directly with, or delivering cost-effective services to, others. In developing countries, growing populations and the need to provide an attractive environment for business require improved infrastructure. In developed countries there is a continuing demand for higher standards in the provision of services, whether healthcare, electricity and telecommunications, or transport, and whether provided to the public or to business. Yet everywhere governments are under pressure to keep control of public finances.

The disparity between the demands on the public purse and the resources available to meet them is leading government to look at how infrastructure can be developed, services provided, and enterprises modernized in partnership with the private sector. This partnership can take a number of forms:

- Using private sector finance and skills to develop, construct, and operate new infrastructure, in return for operating concessions for the asset (known as the Private Finance Initiative, or PFI, in the UK)
- Partial sales of existing enterprises, either to a single strategic investor or to institutional or retail investors via trade sales or public flotations or
- The complete transfer of enterprises to private investors.

As well as securing financial benefits for the public sector, these mechanisms can introduce new management, working practices, and techniques from the private sector, thereby promoting the introduction of international best practice into less efficient companies. Through any associated industrial restructuring, they can help continue the development of a more dynamic and competitive economy. They can increase investment in infrastructure and related services compared to the levels that could be afforded by government alone. In addition, they allow government to focus on specifying the required standards of a service, rather than on providing the service itself.

## A Worldwide Phenomenon

Privatization is now being pursued by governments in many countries across the world. It takes many forms, from the wide-ranging voucher privatizations in former Soviet Union and other East European countries, to the granting of concessions to operate water supply and sewage treatment services in India. OECD figures show that the cumulative value of privatization sales worldwide reached some $88 billion in 1996, with total privatization revenues in 1997 estimated to have reached some $260 billion. The UK was among the first countries to adopt privatization, and UK firms are now recognized as leaders in this field, having helped transform privatization from an academic concept into a practical policy that has been applied throughout the world — not necessarily following the UK model in all respects, but drawing on the lessons learned there and elsewhere, and on the experience of key UK-based participants.

## Track Record

In the course of the UK's privatization program, UK advisers have developed a number of new techniques that have been adopted, and in some cases further developed, in sales around the world. These have included:

- The restructuring of industries to create financially viable and commercially focused companies, for example, the extraction of the oil exploration company Enterprise Oil from the state-owned British Gas Corporation
- The restructuring of other industries to improve (and in some cases to create) competition — between market participants, for example, in creating National Power and PowerGen, the competing fossil-fuel generating companies, from the monopoly Central Electricity Generating Board (CEGB)
- The creation of new regulatory structures and supervisory bodies (OFTEL, OFGAS, OFFER, OFWAT, and the Office of the Rail Regulator, ORR), with the aim of safeguarding the consumer interest where local or national monopoly suppliers still exist
- The invention and refining of large-scale public offers, a technique now adopted for sales outside UK (for example, Deutsche Telekom, Electricidade de Portugal, the Indonesian telecom company PT Telkom, the Polish copper mining group KGHM, and the Australian airline Qantas)
- The development of legal structures for sales by installments, allowing investors to pay for shares over an extended period — now adopted overseas, including the recent offers of shares in Commonwealth Bank of Australia and Telstra
- The introduction of "bookbuilding" techniques into privatization offerings, allowing the vendor to obtain better pricing information from the market, so increasing value to the taxpayer
- The refining of concession structures to allow continued subsidies from the public sector while introducing private sector management techniques and working practices
- Through the PFI, creating structures that allow private sector operators to deliver improved services by constructing and managing infrastructure and other projects that have traditionally been the province of government.

## Structures

Privatization programs tend to have three stages. Broadly, these phases can be defined as the initial, commercial stage; the more complex, utilities phase; and the third phase, involving the less commercial industries, possibly including those reliant on continuing state subsidies to operate socially desirable or necessary services.

The UK's experience suggests that it is important to plan privatization as a program. Initially the vendor government may require early and high-profile successes, and in some cases short-term proceeds. Such individual, proceeds-driven, sales may be carried out on a case-by-case basis. However, a shift in emphasis, considering and implementing sales as part of a more coherent and planned program, can have significant benefits. Within a longer-term framework it is possible to plan forward and prepare for the later phases of the program, including the complex re-examination and restructuring of entire sectors that is often required to ensure success.

## The Commercial Stage

The commercial stage may involve the sale of companies that, although state-owned, are free-standing and already operate in a competitive fashion, whether domestically or internationally. UK examples include the sales of Amersham International, the radioactive materials manufacturing group; Britoil, the state-owned oil exploration company; and British Airways and Royal Ordnance. Companies of this nature can be transferred to the private sector largely in their existing form, although governments may want to consider before sale whether their balance sheets are appropriate for their new status. Such companies may be strong candidates for trade sales to third parties in the same business sector, although to encourage competition there are often advantages in establishing the companies as stand-alone entities and selling via flotation.

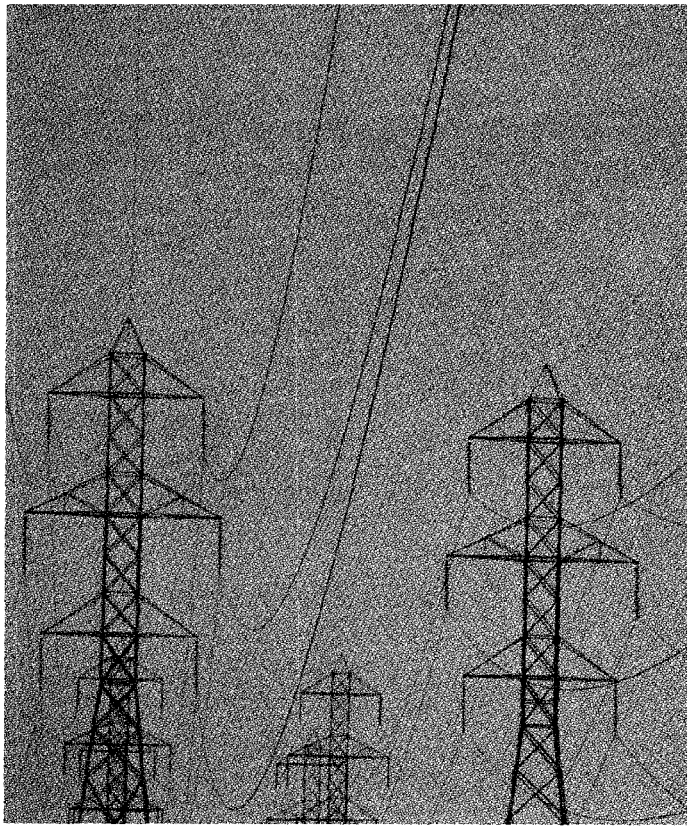
## The Utilities Phase

The second, utilities, phase is likely to require an examination of the role of the state in providing key services, including telecommunications, power generation and supply, and water and sewerage services, where there will often be monopoly elements. This phase may also involve restructuring the existing monopoly operation to create new, competitive, markets, and competing companies to operate both within that market and internationally. It may require the creation of a regulatory system and a regulatory body to oversee the new market and, through price and service regulation, to protect the needs of consumers. The regulatory system may also provide a means of improving levels of service and increasing investment. Key UK examples of companies that, because of the monopoly nature of parts of their businesses, were sold subject to a regulatory regime, were British Telecom, British Gas, the Regional Electricity supply and distribution companies, and the Water and Sewerage companies in England and Wales. Utilities of this kind are likely to be large companies, and this usually makes them candidates for sale by public flotation. This approach was adopted for the majority of UK companies included in this phase, although a few (including the electricity generating stations in Northern Ireland) were privatized via trade sales.

## The Public Service Phase

The third phase has involved the sale of companies that do not operate in a wholly commercial environment, for example, because they operate socially desirable services, often reliant on subsidy from government. In order to privatize such companies successfully, new relationships between the public and private sectors may need to be established, for example to target subsidy only at those services where direct support is essential. The nature of these businesses has meant that in some cases companies have been franchised, allowing private sector operators to manage public transport services while still receiving subsidies from central government for socially necessary, but otherwise uneconomic, routes. In the UK, this structure was applied to the train operating companies, while Railtrack, the rail infrastructure operating company, was sold by flotation.

The UK also had to develop structures to deal with the circumstances of particular industries. The flotation of British Energy, the electricity generating company that owns and operates nuclear generating stations, involved creating a long-term, ring-fenced, funding structure to allow the company to provide for the liabilities associated with decommissioning nuclear power stations. And the privatization of some central government functions entailed the government providing the businesses with a guaranteed workload in the short to medium term, so as to enable them to adjust to their new environment before having to tender competitively for contracts from government and new work from other sources.



## Trade Sales and Concessions

Although the UK's privatization program has mainly involved the listing of companies on the London Stock Exchange, and share offers to institutional and retail investors, it has also sold a large number of companies via *trade sale*. This mechanism has largely been used for smaller companies or those that may face particular challenges to their business in the near term, or where the business's track record is too short to meet flotation requirements. This mechanism is used to a greater extent outside the UK, reflecting the smaller scale of the companies involved, the perceived need to introduce strategic investors and management changes to effect a swift change in the company's performance, and the lesser emphasis placed on the retail investor elsewhere. Interestingly this pattern has been changing in recent years, particularly where sales of the larger utility companies have been undertaken, with European and some Latin American countries focusing sales towards retail investors to a greater extent and drawing heavily on the UK's initiatives in this area. Outside the UK, trade sales often take the form of sales to *strategic investors*, with a significant stake in the business sold to a third party investor — usually an international company active in the same business sector — subject to commitments from that purchaser to fund significant investment for expansion or system improvements.

Such strategic investment sales can be a useful way of bringing new management and expertise into a company. They are often,

although not exclusively, linked to a disposal of part of the company's share capital to its employees — which may be seen as a form of compensation for the change in their status (from public to partially-private sector staff) — and to a simultaneous or subsequent listing of a percentage of the company's share capital on local or international stock markets.

Sales through *concessions* are now becoming more widespread internationally, with the public sector using this method to introduce private sector management and investment into companies over a medium-term period, while still retaining the ability to re-let the contracts to manage these services after the expiry of the concession period. In some countries, concessions are let over very long periods — for example, the 50-year concessions let by the Australian government to manage their main airports, and by the Mexican government to operate sections of the Mexican rail network. However, it is possible for concession arrangements to be offered for shorter periods, depending on the nature of the contract and the service involved. For example, in the UK, concessions have been let for somewhat shorter periods, normally 5 years, in the case of bus services, and between 5 and 15 years in the case of rail services, dependent on the routes involved and the proposed levels of investment offered. Concessions in the UK have tended to feature most heavily in the transport sector. Elsewhere, the concession technique has been applied to other areas, for example water and power services.

One notable feature of the concession mechanism is that it allows the transfer from government control of industries that remain reliant on public subsidy. The mechanism used in the UK has offered the right to run services, awarded partially on the basis of the amount of subsidy required, although the relative quality of services offered (assessed against a minimum service requirement specified by the government) and other, predominantly investment, criteria, are also taken into account. Crucially, the contractual agreement that underpins the concession agreements specifies the amounts of subsidy to be paid to the operator over the life of the concession agreement. This will require a contractual commitment from government to a long-term, and inviolate, funding stream, which may or may not be higher than that which existed under state control, but which will in any case not be subject to short term variation.

## Regulation

More complex companies, such as utilities, present particular difficulties that need to be addressed. Where governments are considering the privatization of large or monopoly utility companies, they may wish to consider how to restrict the market power of the privatized body, and to ensure that there are sufficient incentives for the industry to become more efficient. The UK aimed to develop competition wherever possible, but this could not be achieved in all sectors. Geographic and investment constraints give some industries, in particular those with substantial networks, a significant degree of natural monopoly. In these instances, and a number of other cases where the introduction of competition could not take place immediately, regulation has been used to replicate, as far as possible, the effects of competition by enforcing both restrictions on prices and higher service standards. In the UK, the various sectoral regulators, although appointed on a fixed term by the government, act independently, at arm's length from government.

Regulation may also be used to allow the relative performance of companies in the same business sector to be compared where direct competition is not possible, so providing a mechanism to spread best cost and service practice within the industry. This "yardstick regulation" is applied in the UK to the regional electricity and water companies.

In some cases regulation can act as a temporary substitute for competition while facilitating its development, for example, in the UK electricity sector, where the regional companies' local monopoly in the supply of electricity has been progressively reduced, so that smaller users of electricity have been able to purchase their power from different suppliers over time. Conversely, at the time of the privatization of British Telecom in 1984, only two national operators were licensed, and the government made clear that this duopoly was expected to last until at least December 1990. As a result of direct experience of the development of the telecom market, the government was able to allow open, licensed, competition in telecom in the UK (implemented in 1991).

In the electricity generation sector, the UK split the state-owned monopoly CEGB into a number of smaller, competing generators in 1990 and sold shares in the two fossil-fuel generating companies (National Power and PowerGen) the following year. A third company, comprising the nuclear generat-

ing assets of the former CEGB, was withheld from sale in 1991 following concerns about the decommissioning liabilities associated with the nuclear industry. The more modern nuclear generating stations were themselves privatized, as British Energy, in 1996, while a state-owned company continues to own and operate the older nuclear generating assets.

Such restructuring is not restricted to the electricity sector; nor is it confined to the UK. Internationally, New Zealand, some Australian states, Argentina, and Hungary are among those who are considering, or have already implemented, the separation of the generation, transmission, and supply sectors of the electricity industry. Similarly, the separation of rail infrastructure and operation is now required under European Union (EU) law, with the particular model pioneered in the UK being followed in Austria, Denmark, and the Netherlands; and outside the EU also in the Australian state of New South Wales, and New Zealand.

## Regulation of Monopoly Activities

Systems of regulation need to:

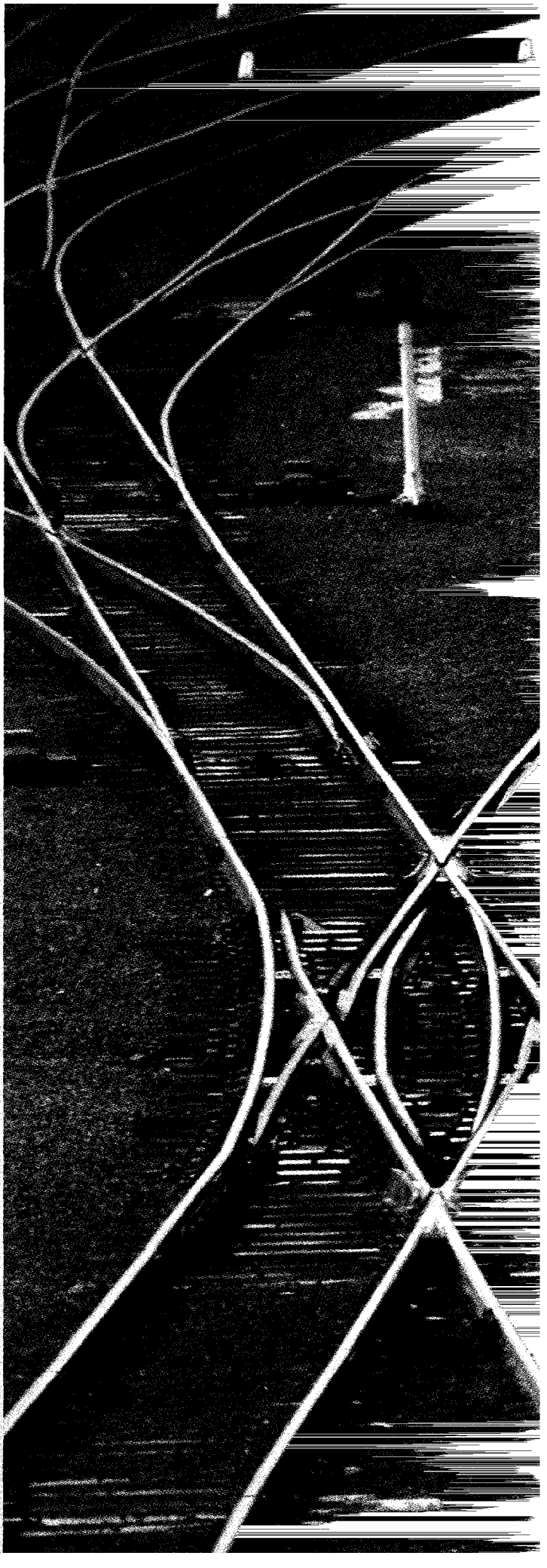
- incentivize companies to increase efficiency
- strike a fair balance between returns to shareholders and prices and services delivered to the consumer
- deliver the level of investment necessary to maintain and enhance service standards in the longer term and
- give the regulator access to commercially sensitive information on performance, productivity, and investment.

The exception has been water, where prices have included an allowance for investment in the water and sewerage infrastructure, required by EU laws on water quality.

In summer 1997, the UK government announced a windfall tax to raise £5.2 billion from regulated companies privatized by flotation, in recognition of windfall profits made by those companies since their privatization. The government also announced a review of the UK regulatory system to take account of experience since privatization. The government's objective for the review is to set a long-term, stable framework for utility regulation that is seen as fair by all the interest groups involved, particularly consumers, and to ensure that the framework delivers value, quality, and choice to consumers, while providing incentives to managers to innovate and improve efficiency.

## Results

Privatization in the UK has led to greater commercial freedom for companies no longer controlled by the government, allowing them to raise funds on the capital markets and to make decisions on staffing levels, investment requirements, and the management of their particular business on a commercial basis. They are no longer subject to political control that may delay or distort investment. In the majority of cases, restructuring, competition, and price regulation have led to reduced utility charges — and in those cases where competition is most firmly established, for example the telecommunications industry, the falls in costs have been most significant. Most indicators of service quality have improved despite the price reductions.



The move to more commercial operation has often been accompanied by reductions in the size of the workforce, or the outsourcing of functions previously carried out within the organization. This has applied particularly in the electricity, gas, and telecom sectors, where technological developments have also promoted productivity and efficiency and contributed to falls in employment. However, experience has been different in different industries, and across time, with some industries (for example, British Airways) increasing employment following an initial fall in staffing levels. The introduction of competition has also meant that reduced employment in former monopoly companies has been accompanied by increased employment opportunities in new, competing, firms.

This is not to understate the human problems that can arise from the restructuring of previously state-owned businesses. In certain areas where high concentrations of unemployment have developed, for example, in former coal-mining or steel-working areas, it is possible to ameliorate the impact through enhanced redundancy packages, community and business support grants, and training and re-skilling programs. Nevertheless, focusing on the short-term job losses directly associated with privatization looks only at part of the picture. The pressures to improve efficiency would have existed even if the industry had remained in the public sector. And privatization should be seen as part of a wider program of economic reform, which can create a more competitive economy and future jobs.

## Government and Business

The partial or total privatization of businesses provides the opportunity for governments to review the nature of their relationship with those businesses. In particular, it allows the state to alter its role, from provider of services to that of overseer of the market. It may therefore be able to withdraw from the *input* side of the industry (taking no further role in commercial decisions such as investment, staffing levels, and pay) and concentrate instead on defining the appropriate *output* — prices, customer service standards, and environmental criteria. Such a move may entail surrendering control over certain aspects of the management of "strategic" or "nationally vital" assets — a process that may be problematic for historic or political reasons. However, it may also allow the state to ensure greater accountability on the part of the company, both to the state itself (via regulation) and to its shareholders.

In contrast to privatization, the PFI was designed for those capital-intensive services where government recognizes it has a role to play but where it wishes to harness private sector management and expertise, and private sector financing in the delivery of public services.

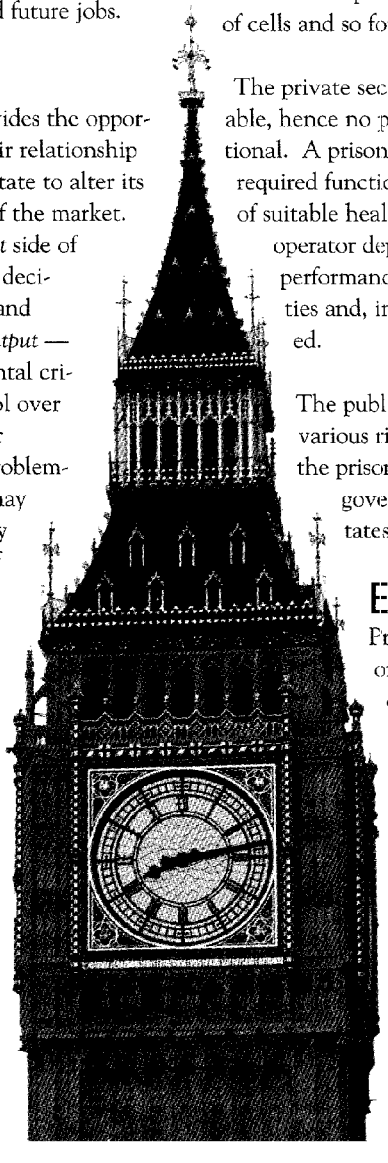
The switch from *inputs* to *outputs* is a key component of the PFI. Under the PFI, the public sector decides on the service it wishes to provide. The private sector is invited to bid for the deal, using its skill and capacity to innovate to find the best way to design, build, finance and then operate that service. The successful bidder is paid as the services are delivered. Any PFI deal must satisfy two basic criteria: that there is a genuine transfer of risk to the private sector operator where it is best placed to manage the risks, and that the project represents value for money when compared with other available public sector options.

Under the PFI, the hidden costs that come from design faults, project delay, and poor performance are managed by the private sector. Because the private sector partner has to live with the project it has designed and built, and because it has its own money at risk, it has every incentive to get the project right from the beginning.

## Experience of the PFI

Over £7 billion of PFI deals have been agreed in the UK. These include deals in almost every area of the public sector, including transport, health, prisons, defence, education, housing, urban redevelopment, and government accommodation.

A good example includes the deals to design, construct, manage, and finance private sector prisons. The contracts run for a 25-year period, at the end of which the prisons revert to public sector ownership (not always the case under the PFI). The public sector specified what it wanted (custodial services) rather than how it wanted those services to be provided (by building a prison with a certain number of cells and so forth).



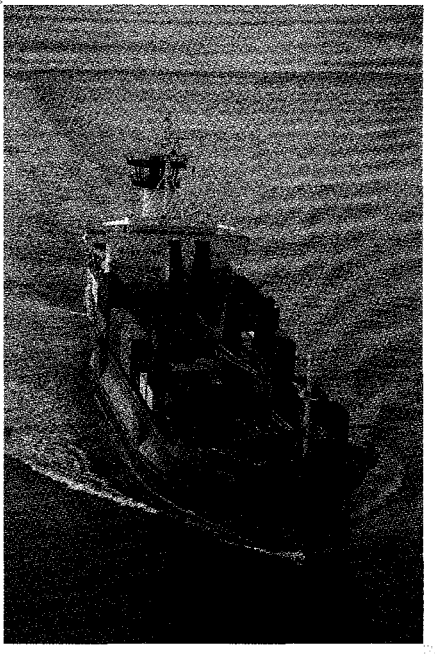
The private sector is paid a daily rate for prison places made available, hence no payment is made until the prison is fully operational. A prison place is not seen as just a cell but as a series of required functions including adequate staffing levels; the provision of suitable health care services; and food. Payments to the prison operator depend on performance — if there is persistent poor performance the operator will be exposed to financial penalties and, in an extreme case, the contract could be terminated.

The public sector, on the other hand, takes responsibility for various risks, including the number of prisoners occupying the prison, since this is dependent on the way in which the government allocates prisoners and the policy that dictates their numbers.

## Emerging Markets

Programs for the private development and financing of infrastructure have been introduced in many emerging markets. Reflecting the needs of the local economies, they tend to focus on projects required to sustain the rapid rates of economic growth being achieved (including gas and power projects, which are sectors that have been completely privatized in the UK). In the UK, from its early beginnings in the transport sector, the PFI has recently tended to concentrate in areas of social infrastructure, such as health and prisons with an increasing emphasis on the education sector. But the techniques involved in structur-

ing and financing projects in the PFI and in emerging markets involve many common features.

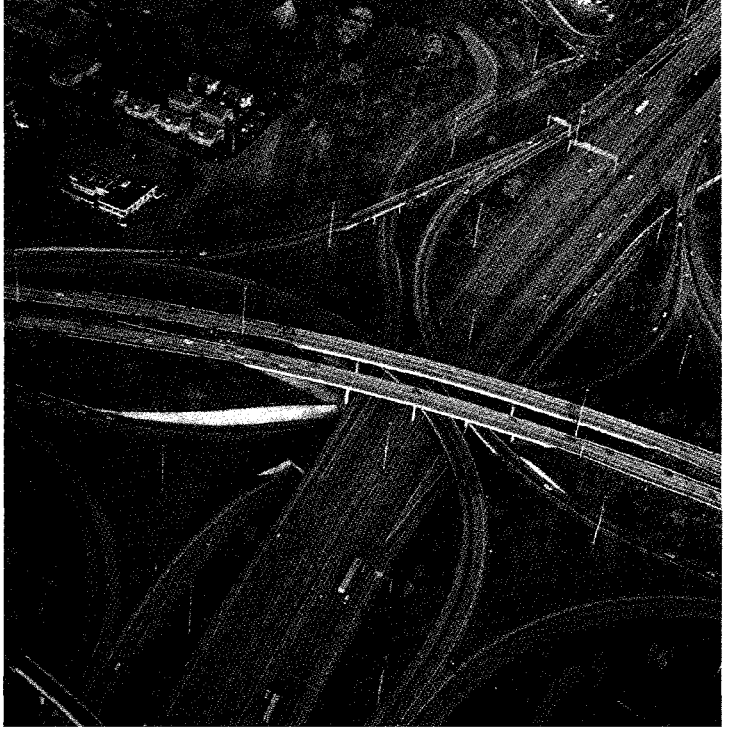


At the heart of PFI projects are long-term operating contracts with the public sector (25–30 years is a fairly typical length for a contract). PFI projects are only financeable because the private sector is confident that the UK government is willing and able to pay them for services over such a period. Projects in emerging markets are often perceived as having a higher risk profile, either because of the risk of political instability or because of exchange rate volatility. It is often necessary to seek external guarantees for these risks in order to attract the support of international capital markets for the provision of the long-term debt financing that underpins most privately financed infrastructure projects.

The process is not always straightforward. Policies have to be developed, legislation passed, industries restructured, regulatory regimes put in place, and transactions completed. The process requires focus, commitment, and skill. However, the technical skills are available. The unparalleled experience of the UK gives others an opportunity to learn from the UK's experience and draw on the skills of UK firms in developing their own approach to these issues.

For its part, the Treasury Taskforce is always willing to share with governments in emerging markets its experience of the PFI and to provide further information about public private partnerships, the UK's experience of privatization, the regulation of privatized industries, and the contribution that the London securities and financial markets can make to a successful privatization program. ■

*Adrian Montague is the Chief Executive of the Treasury Taskforce, a department within HM Treasury, established by the new Labour Government in 1997 to become the focal point across government for all privately financed infrastructure projects. He has a private sector background and was previously co-head of global project finance at Dresdner Kleinwort Benson.*



# The Sustainable CEO

MONSANTO

*Food · Health · Hope*™

*Monsanto used to be known as a leading U.S. chemical company, mentioned in the same breath with DuPont and Dow, with successful products ranging from acrylic fibers and phosphates to window guards and water treatment solutions. No more.*

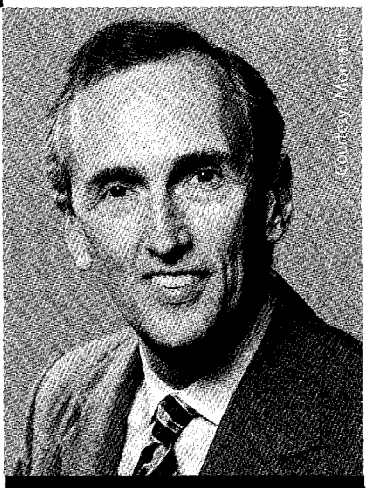
*Dashing 96 years of history, the company last year spun off its chemical business and renamed it Solutia. There is no longer any connection between the two firms. Freed from its past, Monsanto is now focused instead on something else entirely into which it has been growing for a decade, and that it sees carrying far greater long-term profit potential: applying biotechnology and other evolving "life sciences" to meet the food and healthcare needs of a fast-growing world.*

*Record financial success has accompanied the change in direction. The company's market value has more than quadrupled in the past five years. Profits from core businesses have allowed it to invest $2 billion in recent biotech-related acquisitions with no effect on the corporate credit rating. Many of these transactions were specifically designed to help the company move more rapidly into emerging markets.*

*Perhaps most remarkable about the new Monsanto is the way it has integrated environmental principles deeply into its corporate strategy — even to the point of making sustainable development one of its four global businesses along with agricultural seeds and chemicals, pharmaceuticals, and food ingredients. It is a strategy that says soon the world's limited natural resources and waste-absorption capacity will no longer be able to meet the demands of an ever-increasing population, creating a collision course that opens vast business opportunities for those that can provide solutions — especially in the developing world, where most of the world's population growth will occur and its battle for sustainable development will be lost or won.*

*This new thinking has taken the company into many surprising new activities. They include major commitments to steer farmers big and small around the world towards soil conservation and use of environmentally sound herbicides and pesticides, to offer training programs to counter slash and burn agriculture in tropical forests, and even to collaborate with non-governmental organizations specializing in microfinance.*

*By the company's own admission, it has not all been successful. In 1978, it passed up the chance to be a major early investor in Genentech, now the world's third-largest biotechnology firm. More recently, European consumer groups have protested vocally over introduction of Monsanto's genetically enhanced soybeans as food ingredients, fearing they may contain hidden health dangers. Nevertheless, in its annual report the company commits itself to finding ways "to help people*



Courtesy Monsanto

## On the record

**Name:** Bob Shapiro
**Title:** Chairman and Chief Executive Officer, Monsanto (since April 1995)
**Born:** August 4, 1938, New York
**Businesses:** Agricultural seeds and chemicals; pharmaceuticals; food ingredients; sustainable development
**Employees:** 21,900
**Monsanto Revenues:** $7.5 billion (1997)
**Monsanto Net Income:** $294 million (1997)
**Recent Transactions:** Spun off Monsanto's former chemical business to existing shareholders as a new company called Solutia with revenues of $3 billion; spent $1.4 billion to acquire seed companies Holder's Foundation Seeds (US), Corn States Hybrid Services (US) and Sementes Agroceres (Brazil); other smaller acquisitions in Brazil (pharmaceuticals), Argentina (pharmaceuticals); launched joint ventures with local partners in Argentina (cotton seeds), India (genetically enhanced cotton), and Russia (pharmaceuticals).
**Other Affiliations:** On boards of Citicorp, Silicon Graphics, U.S.-Japan Business Council; Co-chairman, International Microcredit Movement's Council of Corporations, received U.S. President's Award for Sustainable Development for "pioneering sustainable technologies."
**IFC Ties:** Monsanto is an investor in Southeast Asia Venture Investments Co., an IFC-backed regional venture capital fund based in Singapore.

*around the world lead longer, healthier lives, at costs they and their nations can afford, and without continued environmental degradation." Monsanto releases a self-critical report each year tracking its own performance in meeting these goals. "All we know is that we don't know enough," says its co-director of sustainable development business, Jan Novak, who looks for opportunities in needs like biodiversity conservation and increased supply of affordable water in arid, low-income countries.*

*One of the company's primary advisers in developing this intriguing new stance is biologist Peter Raven, director of the Missouri Botanical Garden and a world-renowned expert on tropical ecosystems. "A fairly small handful of major international companies have realized that to continue to be profitable they have to live within the bounds of sustainability in all their processes," he says. "The list includes British Petroleum, Unilever, Monsanto, ABB, Volvo, maybe a few others. These companies are making profound contributions to defining sustainability, and laying very sound foundations for their own future, because sustainability is not any kind of fanciful concept but something that is very much in their own interest. If the countries of the world are going to accomplish their common goals, multinational corporations can be the most important tool imaginable in helping them do so by appropriate transfer technology, or they can be one of the worst detriments possible. That's why this is so important, and why I spend so much time advising them."*

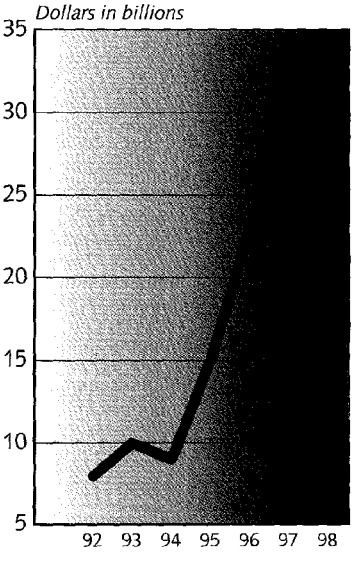
*As Monsanto looks to the future, it already has a formidable product line led by the world's most popular herbicide (Roundup, with estimated annual sales of $2.2 billion) and artificial sweetener (aspartame, sold commercially as NutraSweet, Equal, and Canderel, with estimated annual sales of $725 million). But when* Impact *met Monsanto CEO Bob Shapiro in his Chicago office, that was not what came to mind. Nor did his company's push to bring other potential blockbusters to market, such as the planned anti-arthritis medication Celebra, which Morgan Stanley projects could produce more than $1 billion in revenues five years hence. Instead, it was the combined opportunities of two great forces. One: a biotechnology industry he feels will revolutionize life, yet is still in the early stages of commercialization, doubling its ability to identify and apply genetic technology in a host of industries every two years and currently turning out products that are merely "the equivalent of Intel's four-bit microprocessor in 1971: very useful, but no more than the tip of the tip of the iceberg." The other: a planet's desire for better living standards — more productive farms, a sounder environment, safer and more abundant water, and higher incomes overall.*

**IFC:** "Sustainable development" is a phrase usually heard from development institutions, governments, and environmental groups, not multinational corporations. Yet you have made it a central part of your business, with remarkable financial success. What's going on?

**Shapiro:** It comes down to how you think about markets. I try not to be romantic about markets, nor assume that they automatically will take care of the world's ills any time soon. But I do think that markets are powerful institutions through which people can express their wants, their preferences, and their aversions. People can also do that through other institutions, political ones being the most obvious, but also the voluntary institutions like the nongovernmental organizations. But markets are important, and the question to ask is, "What do you think people want?"

It is truly easy to make a great deal of money dealing with very primary needs: food, shelter, clothing, and some kind of Maslow hierarchy of wants and other needs. Money can be made meeting those needs, and is, routinely. The only thing that puts our view a little ahead of the pack is that we think the world will want sustainable development, even though, at this point, most of the world doesn't even know the term.

**Monsanto:** Rise in Market Capitalization




*Source: Monsanto 1997 Annual Report*

*NOTE: Adjusted to represent today's Monsanto only (factoring out former chemical business)*

**IFC:** How can you tell that people want something they aren't aware of?

**Shapiro:** We just think the reality of a more sustainable economy — one that satisfies peoples' needs in ways that also provide for a spiritually and aesthetically pleasant environment that can continue to sustain life — is a need that can be expressed in the marketplace. Therefore, someone (and probably lots of someones) will make a living by trying to meet those needs. What we fundamentally are is a technology company. Our role has to be to use good science to try to create products and services that are consistent with what we think will be an emerging and increasing need for sustainable development.

**IFC:** How does that translate into new markets for you?

**Shapiro:** You can spot opportunities in almost any part of our economic system. Energy, water, waste — all of them offer economically interesting, plausible potential for making money by doing things that move us toward sustainability. Look at food and the process by which food is grown, manufactured, and distributed. There's plenty of opportunity to produce more efficient, more productive, more bountiful agriculture while at the same time reducing the burden on earth's system.

**IFC:** This kind of thinking inevitably would seem to require changing Monsanto from what has traditionally been a U.S.-

focused company into a globally focused one. How do you think you're doing at that?

**Shapiro:** We are trying, but it is incredibly difficult. In the classic multinational model, a firm starts by selling products in its home country, then selling more or less the same products in lots of other places as well. But we are really trying to figure out a new model.

The conventional model says, "We are a company of X country, where we do our research, where we think about the world, and where we make our decisions. If in the process we develop things that can be sold elsewhere, we'll sell them elsewhere, maybe even make them elsewhere." That's the old model, and it's very hard to break out of — but we're trying.

The new model of a corporation would be a truly global one, although, I don't know that global companies really exist yet. If you really probed into any company I know of, it would still tend to see faraway places as markets. Not as sources. Not as places where their next-generation products are going to be invented. Not as places where their next CEO is coming from. Yet if you really ask what a global company is going to be, you see that it will be one where it doesn't make any difference where you come from — your ideas, your prospects, and your ability to influence outcomes are the same, and there is no inherently privileged nationality or culture. I feel we at Monsanto have taken the first steps on a very long road in this direction.

**IFC:** Did any one global economic force affecting your long-term competitiveness force you to undertake this change?

**Shapiro:** The fundamental global force is "How do you really optimize around the things you think you are good at?" The problem with having business as divergent as our chemical business on one hand, and what has become our life sciences business on the other, was that we ended up making cultural compromises that suboptimized both. It is less a matter of finance, or even a matter of operations, than it is a matter of culture.

**IFC:** Why?

**Shapiro:** The difficulty with having a single company that has very divergent cultures within it is that you have a hard time explaining to one part of your business why you treat another part very differently. For example, the kinds of people who are important to a life sciences business are rather different from the kinds of people who are important to a chemical business. Not only do they have different educational backgrounds, but they also think differently. One group thinks more about creating blockbuster new products, the other more about operational excellence and customer focus.

**IFC:** What happens as a result?

**Shapiro:** You end up making a set of trade-offs that don't allow you really to get the best out of both. A chemical business ought to be managed like a chemical business, and that's what Solutia is about. A life-science business ought to be managed according to its imperatives. That's what we're trying to do as Monsanto.

**IFC:** So you split into two companies. How has the market reacted to that decision?

**Shapiro:** It has said the parts are worth more than the sum of the whole. Solutia's share price is already up almost 50% since the split last September. That's not bad. We've probably gone up about that much ourselves since we announced the split. The market is clearly saying, "You tend to suboptimize different businesses when you manage them under a common structure." When you allow each business to say "What's right for me? I don't care what's right for some other business," you get more aggressive management and better performance. Could those things be done in a single company? In principle, I don't see any reason why not, but in practice I've never seen it done.

**Sustainable Ag:** *Monsanto encourages use of horse-drawn seeders (above) and its environmentally sound herbicide Roundup as an alternative to plowing. The combination can bring major savings to developing-country farmers and reduced degradation of farmland through soil erosion.*

**IFC:** Yet at the same time you were shedding businesses you were also buying them. And much of what you've bought lately has been in the emerging markets. Why?

**Shapiro:** Most of the acquisitions have been in agriculture. The underlying belief inside Monsanto is that we have entered a remarkable and very rich moment in an agricultural history that is 10,000 years old. The reasons for that have to do with technology, economics, the environment, and a global trade regime that is quite different from anything that has happened in the past. It is all coming together to challenge world agriculture to find some nontraditional ways of organizing itself to take advantage of the opportunities that are just now emerging. I'm talking now about the whole agricultural system, not just the part we've been dealing with. In the past we've supplied agricultural inputs to help farmers grow crops, and we have a worldwide business in doing that. Increasingly, we're looking instead at creating value throughout the chain, running from seed and inputs all the way through to consumers. The new techniques that biology offers let us make products that appeal to consumers, particularly products that improve their likely health outcomes. We have to deal with the whole chain, not simply the farm.

We acquire seed companies not to sell traditional seed but because seed is the vehicle for making genetic change real. To the extent that we're talking about genes, it is to help farmers change the nature of their crops so that at the end of the day consumers get something they want, like a tastier tomato or oils that will produce healthier car-

# Bio·tech·nol·o·gy, n. The use of microrganisims or biological systems in pharmaceutical and environmental problem solving.

diovascular outcomes. The whole system of commodity-based agriculture has to change to deliver that. This means the corn you grow is going to be different from the corn I grow. Your corn may be designed for high-protein animal feed, and mine may be designed for heart-healthy oils, but the whole system by which we plant, grow, and market our products has to change.

**IFC:** We're having this conversation in Chicago, which is probably the world's biggest trading center in the commodity-based system of agriculture that, as you say, has predominated for the last 10,000 years. Are you saying that agriculture is changing from a commodity-based to an information-based industry?

**Shapiro:** That's exactly the way to put it.

**IFC:** But no one would say that farmers are knowledge economy-based workers.

**Shapiro:** Except that farmers increasingly see themselves that way. That's the theme of our latest annual report — that the ongoing cascade of breakthroughs in biology is forcing every biology-related field, including agriculture, to become a knowledge-based industry akin to information technology.

**IFC:** You often refer to the world as standing on the threshold of incredible change because of biotech. What do you mean by that?

**Shapiro:** If I had to put it in a couple of sentences, I'd say the confluence of technologies today opens a new set of possibilities for addressing some very large and difficult problems, as happened in the semiconductor industry in the 1960s and early 1970s. In the semiconductor industry, it was the limitations on processing and memory that prior magnetically oriented technologies had. It wasn't one key invention that did it, but a series of events that led to a cascade of information technology. It all made possible many things that now are deeply built into the fabric of the way we live and work — so many, in fact, that life would be almost unrecognizable without them. The same thing is happening in biology. The areas we think are going to be most immediately affected over the next few decades are agriculture, food, nutrition, and health. This new set of tools offers exciting possibilities for dealing with subjects, including sustainability, that simply wouldn't be possible without them.

**IFC:** In that light, tell us a little about your $240 million 1996 acquisition of Asgrow Agronomics from Mexico's Empresas La Moderna (ELM), which the Wall Street Journal has called one of the few emerging market companies that has transformed itself into a globally competitive player in its industry. ELM also seems to be one that has changed along the same lines you're talking about.

**Shapiro:** Exactly. We bought Asgrow because we wanted a seed vehicle for delivering genetics into soybeans and some corn. Soybeans are very interesting crops for us. In the first generation, we've been able to design soybeans in ways that dramatically reduce farmers' herbicide costs by allowing them to use our product Roundup on their soybeans in ways that improve weed control and yields. But further down the road, soybeans are a wonderful crop for a lot of nutritional reasons. Asgrow will help us bring improved genetics to this crop. They have excellent germ plasm. To that, we're bringing our ability to find and introduce new genes that will confer other benefits on that germ plasm. It's the combination of the traits that we can produce through agricultural biotechnology and the germ plasm that companies like Asgrow bring that creates value for the farmers. Our genes by themselves are worthless. We can't sell genes. But we can splice them into seeds.

**IFC:** So commercially speaking, what new abilities do you get from acquiring this Mexican-owned U.S. company?

**Shapiro:** The ability to help you do the things you grow soybeans for, differently and better. Nobody grows soybeans for the fun of growing soybeans or because they're pretty. They grow soybeans because they produce meal and oils that are useful in many ways. Our genetic modifications can make them more useful in a greater variety of ways.

**IFC:** Developing a new profit center like genetically enhanced seeds we can understand. But as a company, you are simultaneously also taking an active interest in microfinance — hosting a conference last year that brought together companies and non-profits, and committing yourself to support one microcredit project operating by the end of this year in every area of the world in which you operate. Why?

**Shapiro:** What appeals most to us about microcredit is that it works. As the World Bank knows better than anybody else, there have been a lot of approaches to dealing with very poor people over the years, and many of them have not worked.

This one seems to have a remarkable record of actually producing lasting economic benefit for the world's poorest people. That's exciting to us. Some of our people have just come back from meetings in Bangladesh with Grameen Bank with some interesting ideas on projects we could do together.

**IFC:** What have you learned from Grameen?

**Shapiro:** That it works, but boy is it complicated! To make it work, it is critical to understand in fine grain the details of village life in the places you are trying to deal with. It's not the kind of thing a multinational is likely to be very good at. We have to work with people like Grameen and other microcredit practitioners like them around the world. In the world economy today, the multinational corporation is the principal vehicle for translating global-scale technology for local use. But when you really get down to details at the local level, to what a particular village needs, multinationals tend not to be great at that. Microcredit, however, does that brilliantly.

**IFC:** How can something as locally driven as microcredit attain the global economies of scale that multinationals like yours have?

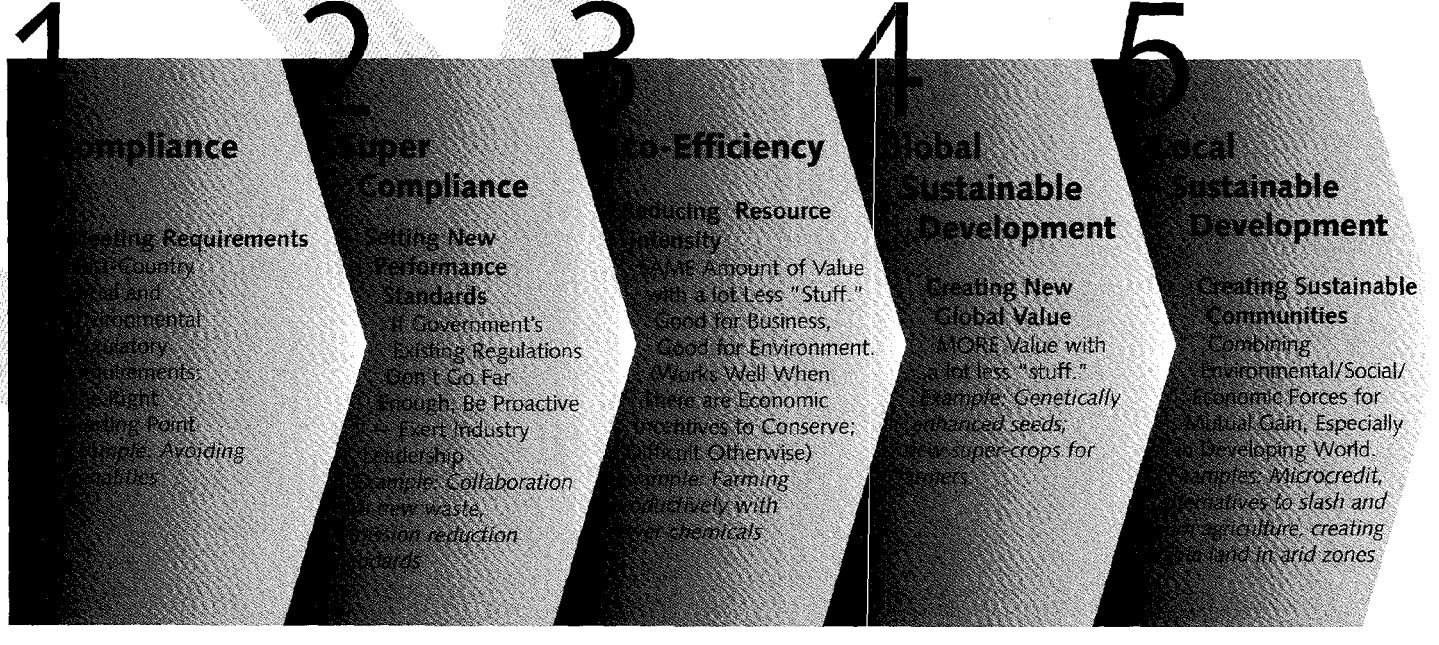
**Shapiro:** My guess is that what will evolve over time is a Web-based set of connections between microenterprises that will have the advantages of "globality" on one hand and real local knowledge on the other. This is a powerful and pervasive form of economic organization on a global basis somewhere down the road. This is not this summer's project, but I can sense a potential there that is quite remarkable. What is needed is a more vigorous base for microenterprise, in all our countries, everywhere in the world.

**IFC:** You are taking Monsanto in lots of interesting new directions. But is there a risk that getting into these new things — microcredit, sustainable agriculture, and the like — will take management attention off the existing businesses that are so profitable?

**Shapiro:** Sure there's a risk. Anytime you add to what you're doing, there's a risk of adding things that will require more attention. But there is also the opportunity of enriching what you are doing by the new activity, by the insights that come from it, or by the network that it opens up to you. People like me have been wrong about lots of things in the past, and it may be that everything I'm talking about will be a complete laughingstock five years from now. That's certainly a possibility. Lots of things could go wrong. But having said that, I've been around business for a while and have had a chance to look at a lot of ideas as they have evolved, and I've never seen anything as exciting as the possibilities that these new biological technologies create. They are possibilities that apply not only in the most obvious short-term commercial ways, but in long-term ways that apply to issues confronting the planet as a whole and give us possibilities that simply weren't there before. That's thrilling work. ■

## The Sustainability Continuum

### Five Phases of Business Helping Itself and the Environment




*Source: Sustainable Development Business Sector, Monsanto*

# The Power to Compete (East of Moscow)

By Denis Clarke, *IFC Power Department*

Despite its enormous strides toward building a market economy in the last seven years, Russia is still sometimes criticized for having few internationally competitive private companies. Raw materials such as oil, gas, and minerals dominate its exports, and few locally owned manufacturers of value-added goods can hold their own in today's global marketplace. Some 600 km northeast of Moscow, however, there is a company that bucks this trend: steel producer AO Severstal.

Privatized in 1993, Severstal has become the largest steel company in Russia and the sixth largest in Europe. Without any foreign strategic investor, its new management team, led by 34-year-old CEO Alexei Mordashov, has restructured and developed a clearly defined business strategy focused on flat-rolled steel products with high value-added. Specialization has enabled Severstal to take advantage of its low operating costs to amass $1.2 billion in annual exports. These sales abroad now account for nearly half of the company's revenues — among the highest ratios of any Russian manufacturer.

The recent devaluations stemming from the Asian crisis have brought down the prices of Severstal's Korean competitors, but all signs are that the company's newfound marketing and distribution savvy will leave it in good shape for years to come. Nevertheless, like any company in today's global economy, it must constantly make new investments to strengthen itself. This spring IFC is providing a $92 million financing package to help Severstal maintain one of its key sources of competitive advantage — low-cost power.

Severstal already meets some of its own power needs with a cogeneration plant inside its main steel mill in Cherepovets, a city of 320,000 in the Vologda Region. In looking for cost-effective sources of power, the

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# The New Russia

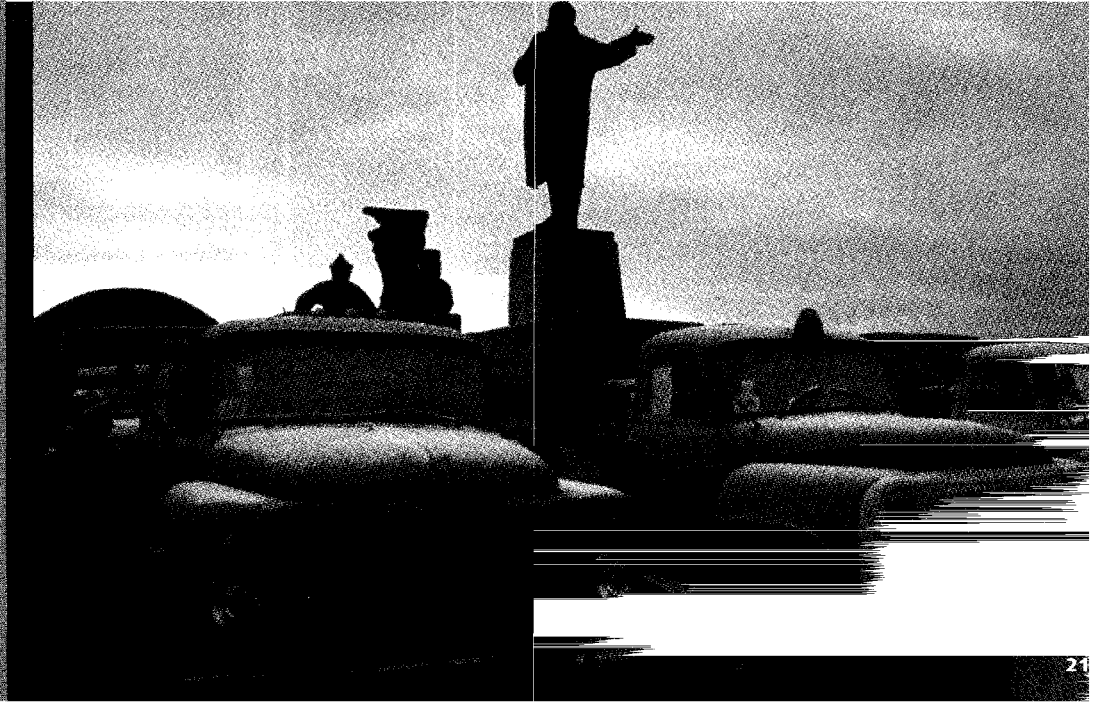
**Name:** AO Severstal
**Industry:** Steel
**Location:** Cherepovets, 600 km northeast of Moscow
**History:** Founded 1955 as state-owned enterprise; privatized in 1993 through sale to management, employees, and pensioners
**Ownership:** Management 51%, government 20%, employees, pensioners, and general public 29%
**Employees:** Approximately 50,000
**Annual Sales (1997):** Approximately $2.5 billion (7.3 million tons of steel), of which $1.2 billion comes from exports, primarily to Southeast Asia, the USA, and Latin America
**Rise in Exports Since Privatization:** 220%
**Net Income (1997):** $117.2 million
**Key Sources of Competitiveness:** Low operating costs; minimal debt burden; investment in new technologies (liquid steel-making capacity, electric arc furnaces); development of international distribution network; comprehensive system of cost and quality controls; improved financial and accounting processes; new incentive programs for employees
**IFC Role:** Approved $67 million financing package for new 80 MW cogeneration power plant March 1998; also facilitated company's introduction to domestic power supplier RAO UES, environmental engineering consultants Dames & Moore (USA), and steel industry consultants Sargent & Lundy; promoted used of International Accounting Standards in company's financial statements.

company realized that its own unused industrial waste gases offered an excellent choice, able to provide additional electricity at a much lower price (2.5 U.S. cents/KWh) than it currently pays the local distribution company. This price is also likely to remain well below those that will prevail in the new competitive Russian power sector that is just now emerging. The company's decision to proceed through a combination of purchases from national utility holding company RAO UES and "inside the fence" generation, instead of buying more power from its own local distribution company, shows that market forces and competition now exert a powerful influence on the sector. To achieve such a favorable rate, however, Severstal had to obtain loans at longer-term maturities than are available in Russia. So it has turned to IFC, whose financing for this project represents a significant step in promoting competitive power generation in Russia and increases the likelihood that other private power investments will soon be made there.

Severstal's mill only had enough industrial waste gases to support construction of a new 80 MW captive cogeneration plant inside the steel mill, comprising a combined cycle gas turbine facility to include a natural gas-fueled turbine, a heat recovery steam generator with supplemental firing using waste steel mill gases, and a steam turbine. Because of the potential impact on the local environment, including the possibility of increased $NO_x$ and CO emissions, IFC arranged for the international environmental engineering firm Dames & Moore to advise the company on an air emissions reduction program. As a result, the new power plant will reduce the mill's emissions by 90% in the year 2001, providing a huge improvement in the region's air quality. It will also produce 121 MW of steam for use in the steel mill and 52 MW of hot water for the district heating network in Cherepovets.

Once these considerations had been addressed, IFC made available an up-to-$25 million, 11-year loan to Severstal for its own account, with plans to syndicate another loan of up to $67 million for the account of commercial banks. The syndication is expected to play an especially important role in familiarizing major private international lenders with the opportunities posed by Severstal's mainstream steel business and other emerging blue chip companies in Russia. ■

**Growth:** *A few years ago, IFC was supporting small scale trucking privatizations (below) in Russia. Now it is financing major industrial producers there, including Severstal.*



# Housing Finance in Latin America: **Building a Base**

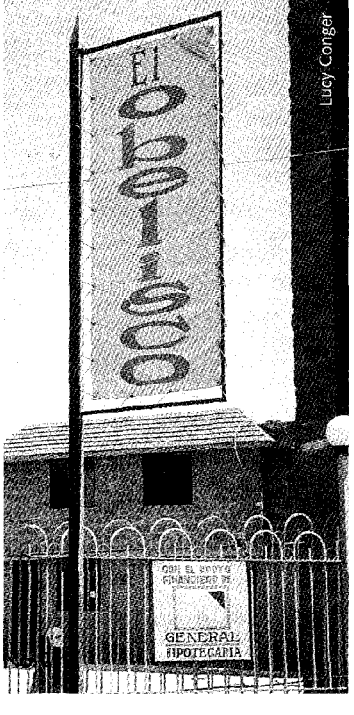
By Lucy Conger

**Mexico City**

From his first sight of them, Carlos Zuñiga Villarse liked the townhouses at El Obelisco, a new housing development on the northern outskirts of Mexico City designed specifically for lower middle class families like his. But it was the financing, not the appearance, that clinched his recent decision to buy a home there.

At the age of 39, self-employed ceramics painter Zuñiga has just bought a home for his family for the first time. He could do so because of the affordable terms of his long-term mortgage. The mortgage was made possible by a combination of government credits for middle-income housing construction and a guarantee, shared evenly by the Mexican government and the country's fledgling mortgage banking industry.

The capital for the mortgages for El Obelisco's homeowners comes from the government's Housing Operation and Bank Finance Fund (FOVI) for lower income housing. These mortgages and others like them are issued and supervised by General Hipotecaria, a new IFC client mortgage bank that pays a commission to use FOVI funds and disburses them to developers who build the housing units and employ sales representatives to identify prospective buyers. Finite public sector resources, however, will never be enough to meet the demand for housing in Mexico or anywhere else, which is why IFC is also working to help General Hipotecaria and other Latin American lenders build a truly market-driven housing finance system.




Lucy Conger

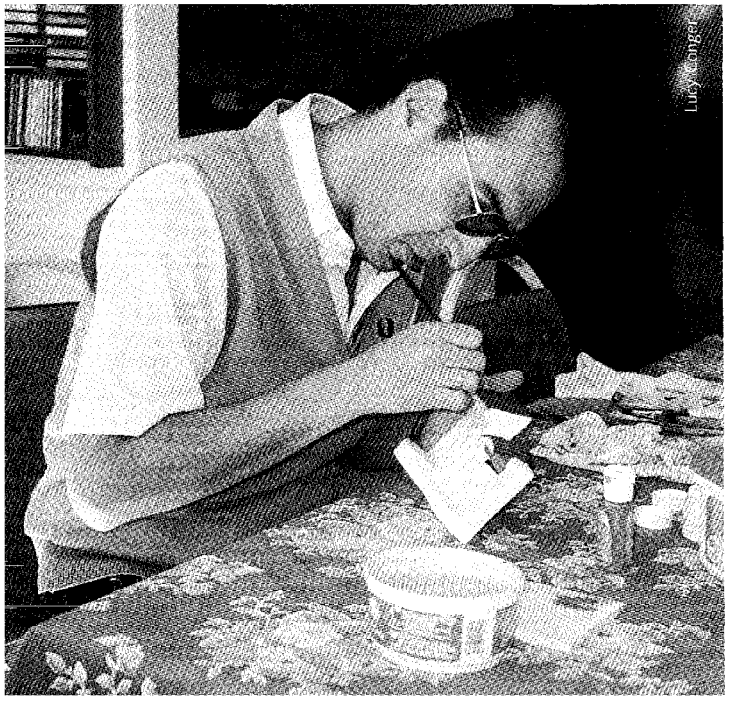
## Sold!

With a combined annual family income of between 60,000 and 72,000 Mexican pesos ($7,200 to $8,760), the Zuñigas qualified for a FOVI mortgage from General Hipotecaria, a specialized mortgage bank formed in 1995. After making a 10% down payment, they got a 30-year, market rate FOVI mortgage requiring a monthly payment of $157, which only can be raised if there are increases in the government-set minimum wage. Today, Carlos and his wife, a bilingual secretary, are proud owners of an $18,000 two-bedroom, one-bathroom townhouse. They have already improved it by putting in new flooring and carpeting on the stairway. "The living room is restful and the bedrooms are not so small," said Zuñiga, working at the dining table on the decorative ceramic items he paints and sells. Later, he hopes to add

another bedroom to the 55-square-meter home, which has skylights designed to be knocked out and replaced by a staircase to a new third story with another bedroom and bath.

Another 366 families like the Zuñigas have snapped up all the homes in El Obelisco, a modest development built on a dirt field in the far northern edges of ever-expanding greater Mexico City (estimated population 18 million). The demand for housing among the professionals, merchants, and self-employed people whose family incomes qualify them for mortgages there is so keen that the entire development was sold nine months after construction began. The developers know that access to financing was the key factor behind the sales boom. "The possibility of this type of credit helps a lot. Payment terms here are stable, with less variation than inflation," said Marcos González Torres, a young salesman at the development, which gets as many as 100 prospective buyers on the weekends.
The speed with which El Obelisco sold shows the voraciousness of the market for moderately priced homes in Mexico. There is a sizable shortage of affordable housing nationwide, with an estimated 30 million people living in substandard conditions. Every year the amount needed increases by about 300,000 units. Most of this demand is after adjusting for the low-income families, who have no chance of qualifying for mortgages from the commercial banks that had to stop offering housing loans after the December 1994 peso crisis. But as greater numbers of innovative programs at specialized housing finance institutions are developed, more people in the lower end of the income spectrum will be able to afford mortgages to improve their housing conditions. "More than competing with commercial banks, we complement them" said José Manuel Rivero, president of General Hipotecaria. "The needs of the Mexican market are so great that there is room for everybody."

Solutions remain difficult, but by helping build institutions that increase private home ownership among the middle and lower middle class, IFC can make an important contribution. Last year, General Hipotecaria and Mexico's nine other specialized mortgage banks financed the construction of 28,780 homes. They expect to finance another 50,000 this year. IFC is working to expand and accelerate the availability of housing finance with an equity investment of up to $3.7 million, or 25%, in General Hipotecaria. This will help increase the bank's capital, and allow it to enlarge the pool of mortgages it administers for people like the residents of El Obelisco. The investment is also intended to help General Hipotecaria gradually increase the supply of purely private sector housing finance. There is considerable room for growth, since the thin local capital markets have provided mortgages for only 16% of the existing houses in Mexico and demand for mortgages is growing by 25% a year.


**A Renter No More:** *Artisan Carlos Zuñiga is a first-time homeowner, thanks to a mortgage from IFC-supported General Hipotecaria.*

## Secondary Markets

In the future, IFC will advise General Hipotecaria on the establishment of a secondary mortgage market that would vastly increase resources for housing finance. But a cautious, step-by-step approach to developing private sector housing finance is needed in Mexico. "What we liked about General Hipotecaria is that they understand the markets and have a vision for the future, and in this connection have not sought to jump right into securitization. They will first build up a strong balance sheet with sound repayment rate," said Eric Cruikshank of IFC's Latin America and the Caribbean capital markets division.

In the two years since it began operations, General Hipotecaria has done just this: only 0.22% of its mortgages are nonperforming. It supervises its credits tightly by maintaining offices in each development that handle collection and follow-up with borrowers. Mexico's lax credit culture of the early 1990s taught lenders a painful lesson in December 1994, when the peso lost more than two-thirds of its value and interest rates soared to more than 100%. "You have to be very close to the client-consumer" and establish permanent and fixed rules for the mortgages, said Luis Contreras, director general of General Hipotecaria. Yet despite the risks, his business has proven highly profitable, posting a 78% return on capital in 1997. As

part of its future, increasingly market-driven strategy, the mortgage bank intends to reduce its reliance on FOVI to 50% of total funding and shift to alternative funding sources by tapping Mexico's new private pensions funds (AFOREs) and other local savings institutions.

Participation in General Hipotecaria is part of a new IFC drive to invest in the mortgage markets of Latin America's leading economies. These transactions build on IFC's earlier experience with more modest equity participations in mortgage banks in Trinidad-Tobago and the Eastern Caribbean. "We try to play a catalytic role so the market can work," said Cruikshank. "We want to improve efficient mortgage finance, but within the context of broader capital markets."

## Extending the Reach

To make the markets work — and to expand private sector participation in housing finance — lending mechanisms that don't need lots of government support are required, as are broader sources of funding and more transparent and homo-geneous mortgage loans. The strategy of many developed countries, and now of IFC, is to mobilize funds for housing finance by creating a secondary market for mortgages. This means creating a market where mortgages are traded, and in Latin America the favored route will be to create packages of mortgages that can be securitized — that is, issuing a security that is much like a bond, but that is backed by mortgages — and offered to investors who are seeking a fixed return on long-term paper.

In the Caribbean, 13 years after IFC began funding local mortgage banks, these institutions are beginning to raise money from financial markets by launching securitized mortgages. Today, in the leading Latin American economies, IFC hopes to jump-start that process. The financial and technical support of IFC to institutions such as General Hipotecaria will generate packages of mortgages with the same terms, tenor, and solid credit record and develop institutions that can sell them on local markets.

Securitized mortgages have grown explosively in the United States in the last 15 years, with new issues of mortgage-backed securities there topping $500 billion in 1996. Latin American economies, too, are thought to be well positioned to raise vast amounts of capital for mortgage-backed securities because the newly created pension fund systems are captive buyers looking for long-term investments. With proper guarantees on packaged mortgages, a robust secondary mortgage market can lower the interest rates charged on home loans and improve borrowers' access to capital.

**Going Fast:** *With attractive financing available, middle class developments like El Obelisco in Mexico City sell almost as fast as they are built.*

Once more housing finance becomes available in Latin America, the market will be there. The developer of El Obelisco in Mexico, Yomtov Béjar, is looking to design and produce housing for the much larger market segment of people whose family incomes are far below that of the Zuñigas. For them, the cost of a home would have to about 97,000 pesos (US$11,829) and, after making 10% down payments, the monthly payment would average about 652 pesos ($80). The challenge of creating lower income housing is tough. Costs must be reduced, and Béjar must meet his own goal of creating low-cost units that still offer his clients a decent home and a product that gives him a source of pride. But the incentive to find a solution to these problems is great. "It's a much bigger market," he said. ■

*Lucy Conger is a Mexico City-based journalist whose work has appeared in* Institutional Investor, Emerging Markets, U.S. News & World Report, Jornal do Brasil, *and other publications. She has lived and worked in Latin America for 17 years.*

# MBS: More Brazil Securitizations

Different countries require different solutions. So while it supports Mexico's primary mortgage market by working with General Hipotecaria, IFC is also planning to invest up to $5 million in Cibrasec, a new private sector entity helping build Brazil's first secondary market for real-estate backed securities. Taking this important if indirect step will generate more capital to finance homes in a country where the housing deficit among middle and lower income groups tops 5 million units

Through its stake in the São Paulo-based company, IFC will assist in launching the first mortgage-backed securities (MBSs) in a country where they are virtually unknown. These packaged debt instruments play a critical liquidity-building role in developed-country housing markets But they are almost nonexistent in the developing world — Argentina and Colombia have been the most active to date, but their combined MBS issues have only totaled the equivalent of about $570 million, far less than is needed.

Cibrasec is a product of the fast-changing economic environment in Brazil, where new legal and regulatory provisions are providing greater security to housing loans than in the past A sharp drop in inflation and gradually falling interest rates are also stimulating demand for mortgages in Latin America's biggest housing market.

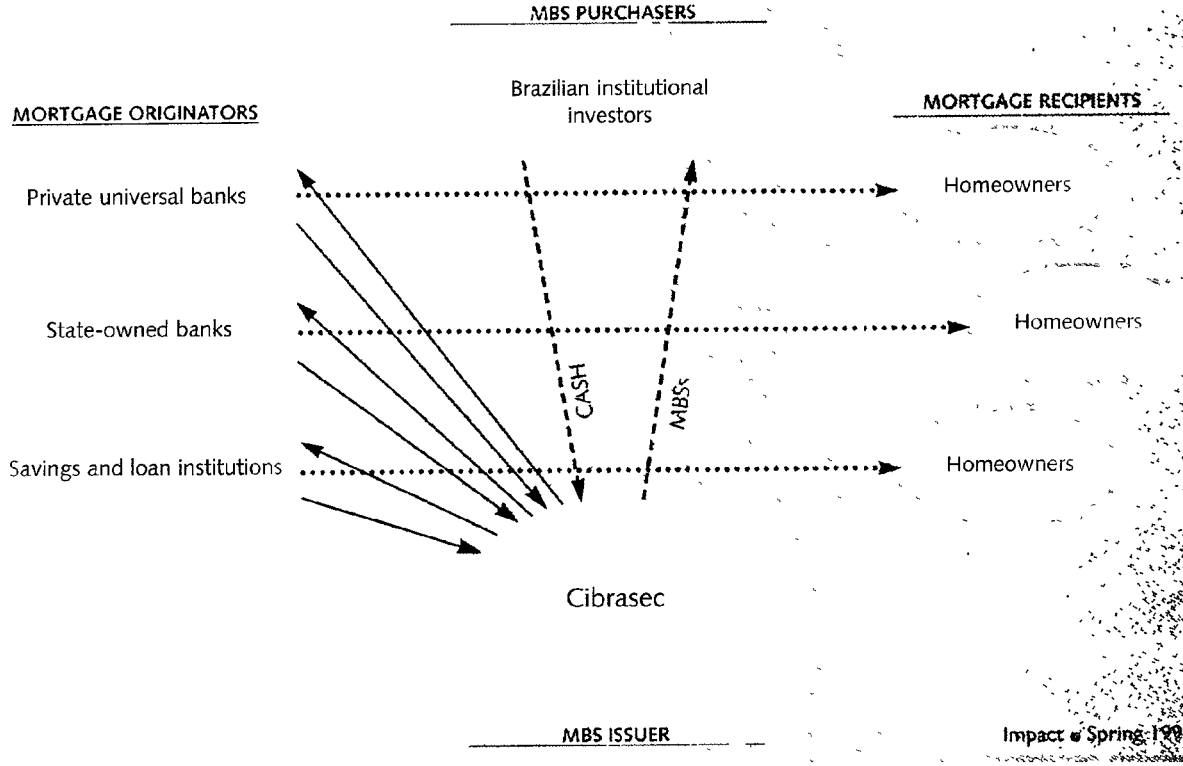
Seizing the moment, 36 shareholders, led by top Brazilian banks Banco Bradesco, Unibanco, Banco de Crédito Nacional, and government-owned savings bank Caixa Economica Federal, created Cibrasec in July 1997. Its mission: purchasing pools of residential mortgages and then issuing securities backed by them. "We will finance finished homes," said Luis Eduardo Pinto Lima of Cibrasec. "We want to get receivables similar to a secondary mortgage market."

With initial capital of $50 million, Cibrasec is a non-bank financial institution that is starting out modestly but expects explosive growth. Its business plan projects assets rising to about $480 million by year end, growing to $3 billion within four years and to $60 billion by 2008. Construction of Cibrasec-assisted properties is expected to create 600,000 jobs within five years.

Cibrasec also expects to contribute to improving both housing finance and construction in ways that will lower the cost of mortgages and residences to homeowners. By buying up originators' mortgages and packaging them into enough high-quality financial instruments to stimulate the secondary mortgage market, thus meeting the long-term investment needs of domestic institutions, Cibrasec will free up more of the capital of local savings and loan associations. This, in turn, will allow them to finance the building of more homes.

In Brazil, the opportunities for building up and expanding a secondary mortgage market are vast. The private sector has, so far, played only a limited role in providing mortgage financing, and with government sharing at the federal, state, and local levels, a niche for private financing has emerged. The key factor that will determine if Cibrasec and others succeed in making this market succeed is how their vast potential combines with macroeconomic stability in a country where interest rates and inflation have been notoriously volatile in the past.

— Lucy Conger




**Market Magic:** *By buying up existing assets from Brazil's various classes of mortgage lenders and repackaging them for sale as securities to local investors, IFC-backed Cibrasec will free up the resources needed to increase the supply of housing finance.*

# Local Currency Lending: Reaching a Whole New Market

Solomon Asamoah and Papa Ndiaye, *IFC Africa Capital Markets Division*


It's 5:00 pm on a Friday. Quitting time in Soweto.

Cyrus Tshabalala leaves his factory job and heads home. Home, to the modest brick house at the end of a dirt road where he lives with his wife and four children, 90 minutes on a rickety bus from his job in Johannesburg.

After 14 years in these cramped conditions, things are beginning to brighten up for the Tshabalalas. A new extension on the home that will give the children their own bedrooms and bathroom is nearly complete, as are gates, walls, and window bars that will make the home safer — a key consideration, with robberies so frequent in the neighborhood. As a blue-collar worker with a tight family budget, Cyrus used to think he would never be able to live so well. But a few months ago a local bank specializing in the low-income market made a presentation at his workplace, and he was glad to discover he would qualify for one of its seven-year secured housing loans. This repayment period was just long enough to allow him to afford improvements on his home that he used to only dream about.

An hour away, a new locally owned tissue paper mill will soon be built. It will add 260 permanent jobs to an economy long blighted by high unemployment, root cause of a crippling national crime epidemic. Without a special arrangement, the plant could not be built. It cost more than the sponsors had, and local banks could not provide the needed long-term loans.

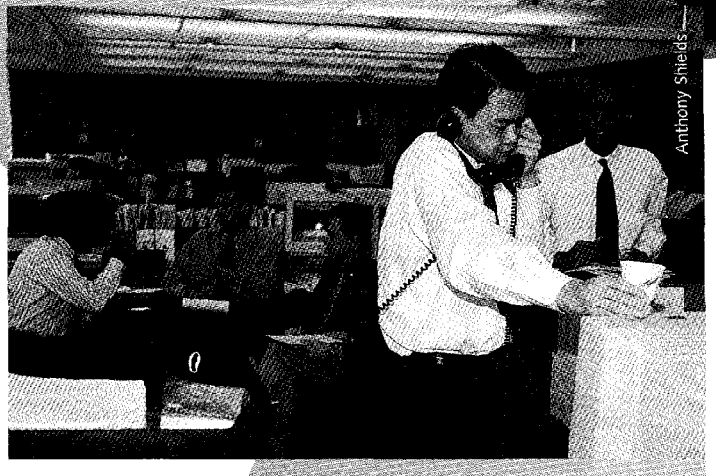
Meanwhile, half a continent away in the Sahel, entrepreneur Tidiani Tall has just bought nine second-hand trucks for his company, a leader in Mali's trucking industry. With air freight expensive and railroads unreliable, the country's recent economic revival has created a solid opportunity for expansion. But he, too, found that no local bank offered the kind of loan he needed. Without some help in breaking the logjam, he would have been stuck.

All these cases have something in common: developing-country local banks rarely make long-term local currency loans, and if they do, it is usually only to their largest blue-chip clients. Fearing possible downturns in the macroeconomic environment, they prefer to concentrate on the shorter term end of the maturity spectrum, where risks are lower. Private sector development suffers as a result.

Finding solutions to these problems is IFC's business. In each case, it has responded in a new way, providing financing in the African borrowers' local currency. This is a significant departure, since until now almost all IFC lending worldwide has been in hard currencies such as dollars, francs, or German marks and often for export-oriented projects.

Like any other bank, IFC cannot afford to lend too many dollars to borrowers who earn revenues in local currency, especially since most of its loans extend 5, 10, or more years. Devaluation during the lifetime of a loan could force borrowers into painful rescheduling or even default. But in each of these cases, IFC is trying new techniques

Robin Weissman



Anthony Shields

**Modern Alchemy:** *The well-developed rand swap markets steer loans from IFC (left) to South African companies like Sharma Group (above) without foreign exchange risk.*

to manage currency risks and lend directly in either rand or CFA francs. Thus it can begin to reach borrowers in the large non-export segments of Africa's economies, broadening its range of support for private sector development on the continent.

## Swaps

Unique among African currencies, the South African rand has a sophisticated long-term swap market that allows foreign lenders to convert their hard currency holdings into rand and efficiently hedge the foreign exchange risk. In December 1997, IFC's board approved two investments that will use this market to provide IFC's first rand-denominated financings. Under the structure being used, IFC enters into contracts with a swap counterparty, normally an international commercial bank, whereby IFC agrees to swap rand principal and interest payments for dollar principal and interest payments, with the counterparty taking the exchange rate risk. In doing so, IFC agrees at disbursement to swap the future payments of rand principal and interest that it will receive from its client. The pricing of the swap is the basis for the pricing of the loan.

A $10 million, 10-year IFC loan to a local for-profit lender targeting the low-income market, Cashbank, is being swapped into rand. The deal will allow Cashbank to increase the volume of financing it offers, enabling borrowers like Cyrus Tshabalala to upgrade their housing. A three-year-old institution owned by a consortium of leading South African financial institutions and IFC, Cashbank expects to lend to 62,000 South Africans this year, up from 42,000 in 1997. The new bank is making an important contribution in a country that is considered upper middle income in per capita terms, but has one of the world's widest gaps between rich and poor — the top 13% of the population enjoy a first world lifestyle and most of the rest live in substandard conditions. This creates income inequality that is the second worst in the world, trailing only Brazil. The disparities are especially seen in the housing sector, with whites having an average of 33 square meters of floor area per person, but blacks only 9 square meters.

By all accounts the country faces a housing crisis that has become one of its most pressing development challenges. Government subsidy programs can't stretch far enough, and it is vital that more South Africans gain access to home loans from their country's large formal financial sector than the small minority that has historically done so. This is why a local nongovernmental organization, Group Credit Corp., has teamed with such leading national banks as Nedcor and Investec, top local insurance companies, and IFC to create Cashbank, which offers low-income housing loans that workers secure by the assets in their pension funds and repay with irrevocable payroll deductions. Most of the borrowers earn less than R2,000 ($425) a month. The loans can be for as much as R45,000 ($9,600 equivalent), but repayments cannot exceed 25% of a borrower's gross income or 50% of net disposable income, and the bank's sound credit management has kept net write-offs to less than 1% of the outstanding portfolio. Once IFC's new $10 million loan is swapped and reappears locally in the form of rand, Cashbank will be able to increase its volume of low-income housing loans, setting a new example of the private sector's ability to meet basic human needs in South Africa.

## Trash to Cash

By accessing these same international swap markets, IFC can also now lend directly to South African small and medium enterprises' local currency-generating projects. The first exam-

**Source of Supply:** *The poor are not scarce in South Africa. IFC client Sharma Group will pay them to find waste paper, then recycle it into tissue at its new mill outside Johannesburg.*

ple is a $47 million tissue paper mill sponsored by Sharma Group Ltd., an established family-owned business with operations in several Southern African Development Community (SADC) countries. Sharma Group is number three in a local tissue market that is growing at close to 8% a year. Needing to cut production costs, the company decided to combine two things it knew about South Africa. One was the 30% national unemployment rate that offers an abundant supply of labor. The other: the country has one of the world's lowest paper recycling rates, reusing only about 37% of its waste paper (compared to 50% in developing countries) and having almost no demand for recycled newspapers and magazines. So Sharma Group has designed its new Unicell mill to use waste paper as its primary raw material, which will be collected primarily from low-income "hawkers." In addition to the mill's 260 jobs at all skill levels, the company expects to create 100 indirect jobs by relying on these informal collectors. The labor-intensive activity of waste paper collection will provide employment for the unskilled, who will need only a few bags and a pushcart to start business.

Sharma Group will recycle this newly collected paper into tissue and sell it inexpensively in the local market. But even with a substantial equity investment, the company found that as a small business, it could not get long-term loans from the big Johannesburg banks. And with revenues in rand, it did not want to take on the hard currency debt that external development finance institutions generally offer. To bridge this impasse, IFC is stepping in with a $12 million eight-year loan of its own and a $15 million one for the account of participant banks, both of which are to be swapped into rand.

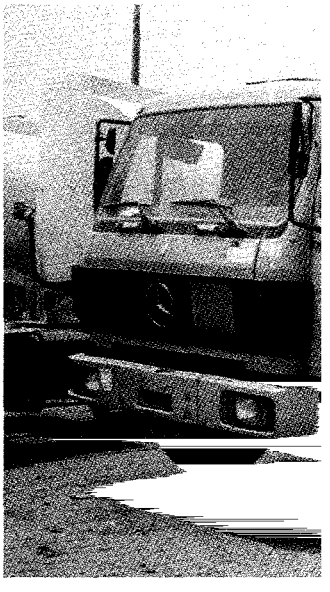
With the financing gap filled, the Unicell project is under way and on target to begin operations in 1999. It is expected to cut Sharma Group's operating costs well below those of others in the competitive tissue paper market, providing stable employment for the workers it will recruit from the apartheid-era "townships" surrounding Johannesburg.

"IFC was quick to appreciate the contribution this project would make toward creating employment and a cleaner environment by recycling waste paper," said Sharma Group's Parakash Sharma. "We were especially impressed by the flexibility and innovation shown by IFC in the financing structure to address our concerns on hard currency borrowing when revenue streams were in rand. This structure has taken away from Unicell the uncertainties of the foreign exchange markets and has ensured its continued viability."

The Sharma Group and Unicell transactions may become models for future IFC local currency operations, not only in South Africa but in surrounding countries as well. There is considerable potential appetite in the region for rand financing, given the 1:1 peg between the rand and the Namibian dollar, the Lesotho maloti, and the Swaziland Lilangeni, and the Botswana pula is also 75% pegged to the rand. In addition, the main trading relations between South Africa and the surrounding countries such as Zimbabwe and Mozambique also increase the relevance of long-term rand financing for companies in the region.

## Keep on Truckin'

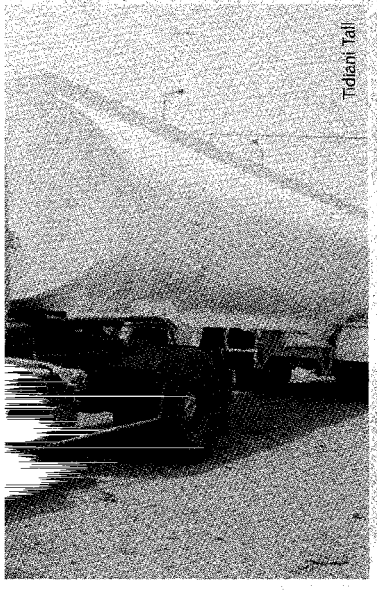
Similar demand for this kind of financing exists among entrepreneurs elsewhere in Africa. So far, IFC is concentrating in the francophone countries of the CFA zone, where the local currency is pegged to the French franc at a rate of 100:1, but small business owners are reluctant to take on hard currency loans out of fear that the



process of European Monetary Union might lead to another devaluation. Since the same kind of long-term swap market does not exist for CFAs that does for rand, IFC cannot lend directly. Here, the instrument of choice is a guarantee of CFA loans, which enables sound local banks to lend to local entrepreneurs at longer maturities than they otherwise could.

That means more financing for local entrepreneurs like Tidiani Tall, 27-year-old owner of a small trucking business in Mali, Timbuktu Trading & Transport, or "3Ts." It trucks petroleum products up from Abidjan for local affiliates of Shell, Mobil, Elf, and Total, which are barred

by Malian law from operating their own trucks. Started from scratch in 1996 with one truck and total capital of CFA 1.5 million ($2,679), the company soon won customer loyalty by offering more reliable delivery schedules than its competitors. It did so well in its first two years that it simply had to grow, but, with clients paying in CFA, did not want to take on dollar debt. The owner soon identified European dealers who could provide him nine well-maintained


Tidiani Tall

**Kings of the Road:** *A small business in Mali was able to import these used trucks from Europe with a local currency loan carrying a partial IFC guarantee.*

used trucks at affordable prices, but he needed long-term CFA financing. He could not repay the entire purchase price within the one-year maturities offered by Bamako banks. To meet his needs, IFC worked with Credit Initiative, a local financial institution affiliated with the European Investment Bank. It is lending 3Ts CFA 110 million (about $196,000) for five years, but covering two-thirds of the total with an IFC guarantee. This allows it to lend the company more than it otherwise could. As long as the project stays on track, the trucking company's only obligation to IFC will be a guarantee fee, but if it ever defaults, IFC will immediately pay Credit Initiative the outstanding amount.

So far all signs are positive. The trucks have arrived in Bamako, and with them, 20 new jobs for drivers and maintenance workers. A local African entrepreneur has the financing he needs for a growing business.

"Getting these nine trucks was enough to make us a big player on Malian terms," he said. "Since Mali is a landlocked country twice the size of France, I figure there will always be a need for a good trucking and transportation company."

The same model is now being considered for a trucking company planning a larger expansion project in neighboring Burkina Faso. Since no one in Ouagadougou would offer the necessary amounts at the five-year maturities the owner wants, IFC is teaming up with its investee bank there, Ecobank-Burkina, in a similar transaction. The financing is expected to enable the company to buy 15 used trucks, providing jobs for about 20 new skilled drivers. More efficient movement of goods that will result can only benefit an economy that may be poor, but growing at a healthy 5% a year.

The local currency guarantee is becoming increasingly common in IFC operations in the CFA Zone, having recently been used to support other small projects in Benin, Côte d'Ivoire, and the Gambia. It is also under consideration for application to microfinance institutions in the region, which could use this new instrument to increase their volumes of lending to even the smallest entrepreneurs. ■

Courtesy: Ecobank

**Echoes of a Bank:** *IFC has recently invested in this new Burkina Faso bank, a potential channel for long-term local currency loans.*

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